

Guide to 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 revised data about six months later. In principle, the FFA is revised retroactively once a year.

The FFA is a matrix showing financial transactions among various economic entities, and corresponding stock data on financial claims and liabilities of them. It records movements of financial assets and liabilities among institutional units called sectors, such as financial institutions, corporations and households, for each financial instrument called transaction items such as deposits and loans. 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. Therefore, in using the FFA, it is necessary to accurately understand its features.

To help users fulfill their needs better, the Research and Statistics Department publishes a booklet explaining the overall concept of the FFA; it also defines individual sectors and items.

The booklet is comprised of the following chapters. The first chapter outlines the FFA, and chapter two explains considerations to be made from a statistical viewpoint. Then, chapter three and four describe definition and scope of each figure by sectors and by transaction items. Compilation method of the FFA is outlined in chapter five. Chapter six details the relationship between the FFA and other statistics in order to provide better understanding of the framework of the FFA.

The booklet mainly focuses on set of principles and concepts underlying the FFA, and has not provided detailed explanation on how each figure is estimated. For estimation method of individual figure, please refer to "Compilation Method of Japan's Flow of Funds Accounts."

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Chapter 1 Overview of the Flow of Funds Accounts

Chapter 1 Overview of the Flow of Funds Accounts

The Flow of Funds Accounts

The flow of funds accounts (hereafter the FFA) is a statistic that records the financial transactions and the resulting claim/debt held by each economic entity such as households, enterprises and the government. When any economic entity engages in economic activity, it initiates various financial transactions in the form of flows of cash, deposits and other funds.

Even in cases where no actual transactions in goods occur, such as when an economic entity makes a withdrawal from its deposits in order to purchase shares or bonds, changes take place in the financial assets and liabilities held by the economic entity in question. The FFA therefore provides an overall view of all the financial activities.

For example, when a household receives a salary payment from a company, if the company pays through a bank deposit, its deposit will decrease while the bank deposit of a household increase. In this case, financial assets of the company decrease while that of a household increase. On the other hand, when a household purchases a company's products, cash held by the household will transfer to a company in exchange for its product. The decline in the financial assets of the household is therefore matched by a corresponding increase in those of the company.

Alternatively, take the case of a company that makes an investment in plant and equipment. When the amount of the investment exceeds the company's earned fund flow, the company will raise funds by making loans from a financial institution, or by issuing bonds or shares for the investment (excess investment = financial deficit). On the other hand, if the amount of investment is within the earned funds flow, the surplus is invested as financial assets or used to repay its liabilities (excess net savings = financial surplus).

Statistical Framework

In the FFA, the above movements of funds are shown on a matrix where individual economic entities make up the vertical columns and the financial asset and liabilities make up the horizontal rows.

The matrix consists of three tables. "Financial Transactions" (hereafter flow table) records flow of funds within a certain period and shows increase and decrease of assets and liabilities of each economic entity as a result of financial transactions. Through this flow table, movement of fund raising and financial investment by economic entities within a certain period can be grasped. "Financial Assets and Liabilities" (hereafter stock table) is a matrix that records the outstanding assets and liabilities held by economic entities at the end of a certain period. Generally, stock data are accumulation of flow data, but for loans, bonds, and shares (both quoted and unquoted) are evaluated in market value or fair value,

as assets and liabilities are recommended to be evaluated on market prices or market-price equivalents.

Therefore, for those transaction items, when price change occur during the period, difference between the amounts outstanding at the beginning of the term and those at the end does not match the transactions for the corresponding period. To record this discrepancy between the stocks and flows, "Reconciliation between Flows and Stocks" (hereafter reconciliation table) is prepared. The figures recorded in the reconciliation table are designed to reconcile the differences between the flow table and the stock table, but also, the table makes it possible to ascertain the holding gains and losses arising from change in the market values of financial assets.

Contents of the Matrix

In the matrix used for the FFA, the columns into which economic entities are classified are known as "sectors." They are broadly divided into six sectors, such as "financial corporations," "nonfinancial corporations," "general government," "households," "private nonprofit institutions serving households," and "overseas." These sectors are further broken down to sub-sectors. For example, under "financial institutions," there are "depository corporations," "securities investment trusts," "insurance and pension funds," and "other financial intermediaries" etc., while, "nonfinancial corporations" are divided into public or private nonfinancial corporations.

The items in the horizontal lines into which financial instruments (transactions, or assets and liabilities) are classified are known as "transaction items." They consist of totaled items such as "currency and deposits," "loans," "debt securities," "equity and investment fund shares," and "insurance, pension and standardized guarantees" etc., and their sub-items.

In creating sectors and transaction items, the FFA places importance not on conventional rules and laws but on economic function and substance. As Table 1 and 2 (the end of Chapter 2) show, sectors and items are broken down as much as possible. Including sub divisions, there are 50 sectors (Data series of "postal savings" and "private life insurance companies" are available only until the third quarter of 2007) and 57 transaction items and are very detailed even in international standard. Such detailed classification allows users to rearrange¹ the classifications in various ways in order to obtain different perspectives of the flow of funds.

¹ This method of publishing detailed items and preparing statistics that users can rearrange as they wish is known as the "building block approach."

Position of the FFA

The FFA is based on the System of National Accounts 2008² (the 2008 SNA), a new international standard for national accounts that includes the FFA and Monetary and Financial Statistics Manual and Monetary and Financial Statistics Compilation Guide (the IMF Manual³), compiled by the IMF, to standardize financial statistics. The 2008 SNA and the IMF Manual set the classification criteria for sectors and transaction items that will be common in various countries, which the FFA has basically embraced. Therefore, the FFA conceptually contributes to part of the macro statistic (the SNA) that records a country's economic activities, and its basic concept of statistics is consistent with that of the national accounts in Japan. As for relations between the *Balance of Payments Statistics* (hereafter the BOP), the BOP and the FFA are both used as source data of Japan's national accounts, since they are statistics that record Japan's economic activities. Moreover, in compiling the FFA, the BOP is used as source data.

For relations between other financial statistics such as the *Money Stock Statistics*, the FFA records financial activities of a country as a whole and, with respect to its scope, most financial statistics constitute part of the FFA. In short, the FFA utilizes many various financial statistics as source data⁴.

Using the FFA

The FFA shows financial activities and structure in Japan, and the real economy that is reflected in such activities and structure as well.

Fund-raising activities and financial investment movements by economic entities within a certain period can be grasped through the flow table. For example, when a company makes an investment in plant and equipment that exceeds its cash flow, the amount of fund raising exceeds the amount of financial investment, and when a household refrains from consuming and increases savings, the amount of financial investment rises. The difference between the amount of fund raising and financial investment during the term is recorded as "financial surpluses or deficits" in the flow table. "Financial surpluses or deficits" show the total financial surpluses or deficits that occurred in each sector, and also make it possible to analyze trends in the real economy such as how much investment or outlay in real assets were made against income.⁵

Outstanding assets and liabilities held by economic entities at the end of a certain period can be grasped through the stock table. In the household sector, for example, when a household's outstanding financial assets are seen vertically (along

² The 2008 SNA adopted in 2009 in the United National Statistics Division is the latest basis which follows the 1968 SNA and the 1993 SNA. It can be obtained from the United Nations Statistics Division website (<https://unstats.un.org/unsd/nationalaccount/sna.asp>).

³ Both of them can be obtained from the IMF website (<https://www.imf.org/external/index.htm>).

⁴ For relations between the FFA and other statistics, please refer to Chapter 6.

⁵ Financial investment and fund raising during the term reflect savings and investment activities in the real economy. Therefore, financial surpluses or deficits is conceptually the same as net lending(+)/net borrowing(-) in the national accounts. In other words, a financial surplus equals net lending and a financial deficit equals net borrowing. Consequently, it is possible to analyze trends in the real economy from the financial side using financial surpluses or deficits of various economic entities as shown in the FFA.

the columns), the FFA gives the aggregates of financial assets amounting to 2,000 trillion yen. It also gives the allocation of those assets in detail. And in the case of liabilities of corporations and governments, the FFA clarifies the financing methods used by them. On the other hand, the FFA on a transaction item basis - which is seen horizontally (along the line) - gives a clear picture of the issuing/holding amount of each financial instrument. For example, holders of Japanese government bonds can be obtained by looking along the asset side (horizontally) of "central government securities and FILP bonds" of each sector. Furthermore, as shown on the next page, a bird's-eye view of a country's financial intermediary structure can be drawn based on the stock table by placing financial institutions in the center and connecting assets and liabilities between sectors. This shows how the financial institutions are involved in financial investment and fund raising in the nonfinancial sectors; it's done by looking at which financial institution raised funds by what kind of instruments (such as deposits and securities) and in what type of assets they hold (loans, securities, etc.)

Moreover, the movement in long-term time-series data of flow table and financial assets/liabilities shows the changes in Japan's financial structure and features⁶. That is, looking at the FFA on a sectoral basis makes it possible to obtain a clear picture of changes in fund raising/financial investment, financial surplus/deficit, and financial assets/liabilities of economic entities. Looking at the FFA on a transaction item basis gives a clear picture of the activity and development of each financial instrument. Furthermore, it will also be useful in analyzing changes in financial intermediary structure by comparing the movement of sub-sectors of financial intermediaries.

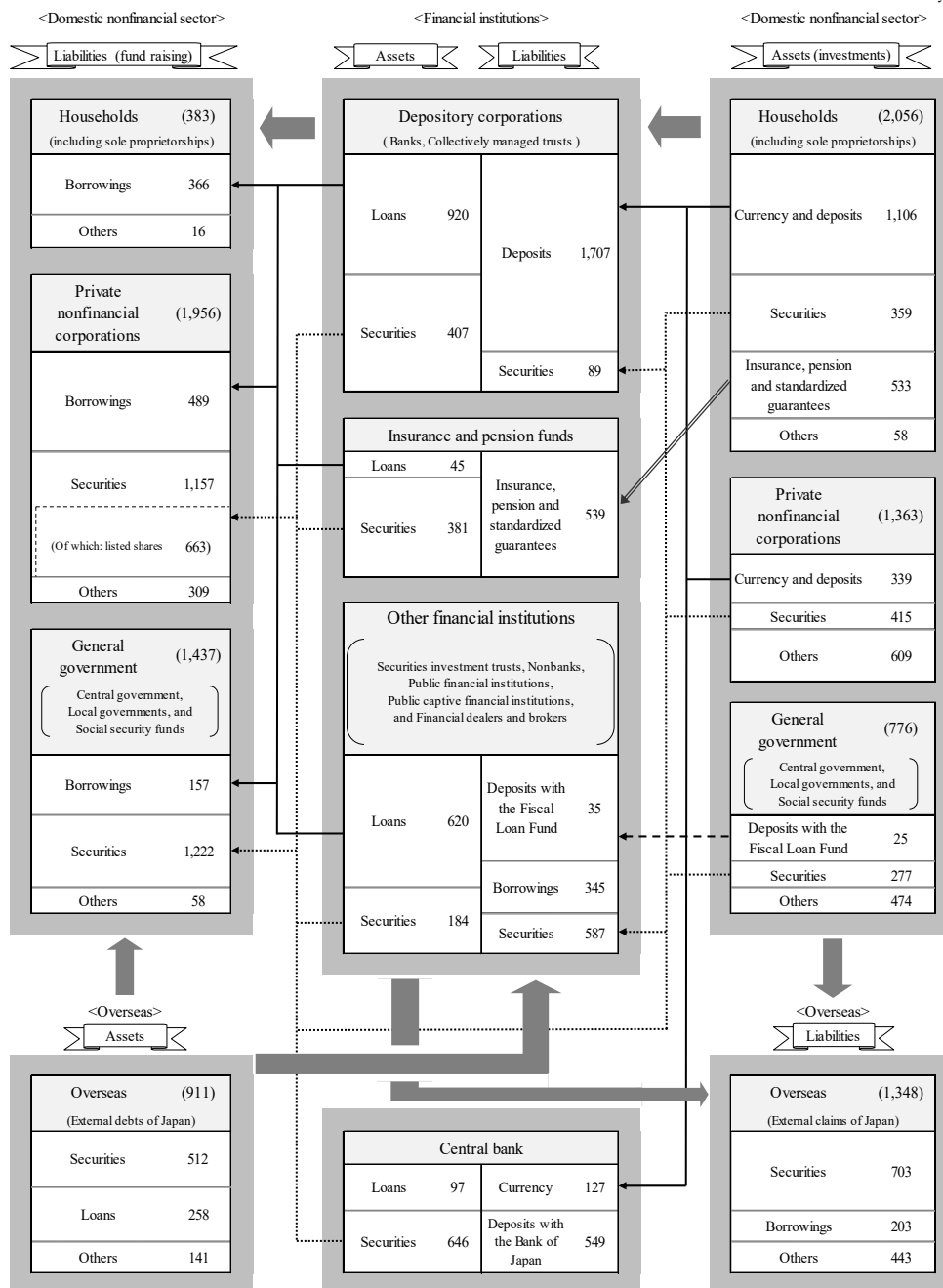
The FFA has various usages as shown above⁷.

⁶ Long-term time-series data are available from the Bank of Japan's website.

⁷ Because the FFA is based on the 2008 SNA and the IMF Manual, international comparison is possible. Please refer to "Overview of Japan, the United States, and the Euro area of the Flow of Funds Accounts," for an example of international comparison analysis.

Financial assets and liabilities by sector (end of March 2023)

Unit: trillion yen



Notes: 1. Major sectors and transaction items are selected to show the overview of the Flow of Funds Accounts.

2. Loans and borrowings include "Bank of Japan loans," "call loans and bills," "loans by private financial institutions," "loans by public financial institutions," "loans by the nonfinancial sector," "installment credit," and "repurchase agreement and securities lending transactions."

3. Securities include "equity and investment fund shares" and "debt securities." The latter consists of "central government securities and FILP bonds," "bank debentures," "industrial securities," "trust beneficiary rights," etc. (Securities in external claims of Japan is "outward investment in securities.")

4. The sum of the transaction items which are not shown individually is represented by "others" in the above chart.

Reference data and relevant statistical data using the FFA

For the FFA of Japan, "Reference data of Flow of Funds Accounts" and relevant statistical data using the FFA are released in addition to the three matrices (flow table, stock table, and reconciliation table).

The "Reference data of Flow of Funds Accounts" is the detailed data indicating the relationship between financial instruments not shown in the matrices directly, and shows "household saving outstanding by types of financial institutions," "deposits by financial institutions and call loans outstanding by types of financial institutions," "financial institution loans outstanding by types of borrowers," "from-whom-to-whom presentation of domestic debt securities by issuer sectors," and "from-whom-to-whom of loans." The FFA matrix shows assets and liabilities of each financial instrument by sector, but does not show who finances whom and by means of which financial instrument⁸. "Reference data of Flow of Funds Accounts", using the data in process of calculating the FFA or the data reclassified the FFA, makes it possible to grasp such relationships. For example, "Reference data of Flow of Funds Accounts" tells us lending by Banks to which sector the loan was directed, borrowing by enterprises from which financial institutions, and the information of holding sectors of debt securities issued by general government.

Relevant statistical data using the FFA include "Basic Figures," "Overview of Japan, the United States, and the Euro area," "Amounts Outstanding of Securitized Products," and "Loans, Debt Securities, and Deposits by Maturity." First, the "Basic Figures" uses the data of the FFA to show in the chart the time-series of financial assets and liabilities, and financial investment and fund raising by major sectors including households, private nonfinancial corporations, and general government. Second, the "Overview of Japan, the United States, and the Euro area" uses the FFA of the United States and the Euro area⁹ in addition to those of Japan to conduct an international comparison of financial assets and liabilities and financial surplus or deficits by major sectors. Moreover, "Amounts Outstanding of Securitized Products" shows changes in the amounts outstanding of securitized products and their breakdown for Japan as a whole by expanding the basic data used to compile the "structured-financing special purpose companies and trusts" in the FFA. Finally, in order to ascertain the differences in the maturity composition of assets and liabilities, the "Loans, Debt Securities, and Deposits by Maturity" is compiled by calculating the ratio of long-term and short-term loans, debt securities and deposits (1 year and less, more than 1 year), and multiplying it with the outstanding amount for the corresponding sector in the FFA, based on the data reported by banks and financial institutions in non-banking sectors such as life insurance ("Survey on balance by maturity").

⁸ Since transactions items are detailed in itself, information on matrix can also reveal to a certain extent the trading partner (for example, loans are divided into loans by private financial institution and loans by public financial institution and therefore it is possible to distinguish whether the corporation borrowed from a private or public financial institution). However, while bank loans include loans to households, corporations borrow not only from banks but also from life insurance companies and non-banks. Therefore, many items such as loans outstanding from banks to corporations cannot be obtained directly from the matrix.

⁹ The data source for the United States is the "Financial Accounts of the United States" published by the FRB. That for the euro area is the "Euro Area Accounts" published by the ECB/Eurostat.

Points for consideration in using the FFA

The FFA is not entirely compiled directly from primary sources (such as financial statements and financial market statistics) and estimates are used when there are no available primary data¹⁰.

For example, there are cases where quarterly data have to be estimated since source data from financial statements are only on an annual basis. Also, when there is a delay in obtaining the source data, previous data are used, and when breakdowns of the total figure is not available, such figures are estimated by applying certain allocation ratio. As such, estimates are used in quite a number of instances.

Since the FFA is a "secondary statistics"¹¹ that is compiled through estimating and processing various statistics, certain estimation errors are included in the released figures.

Releases of the FFA

The FFA is quarterly statistics. The Bank of Japan releases preliminary figures for the surveyed quarter approximately three months later, and a revised report approximately six months later. All the released data, which are vast amounting up to approximately 9,000 series, are uploaded to the Bank's website (<https://www.boj.or.jp/en/statistics/sj/index.htm/>) on the day of its release.

Data of the FFA date back to 1954 for flow table and end-1953 for stock table¹². However, since the second quarter of 2005 (fiscal year 2004 on the fiscal year basis) and end of March 2005 (end of fiscal year 2004 on the fiscal year basis), the standard for compiling the FFA changed from the 1993 SNA to the 2008 SNA¹³. Also, since the first quarter of 1998 (fiscal year 1980 on the fiscal year basis) and end of December 1997 (end of fiscal year 1979 on the fiscal year basis), the standard for compiling the FFA changed from the 1968 SNA to the 1993 SNA.

As such, time series data of the latest basis are inevitably short by the revision. Therefore data based on the 2008 SNA in "BOJ Time-Series Data Search" are connected to data based on the 1993 SNA, although definitions are not the same, for the convenience for users of the long time series¹⁴.

¹⁰ For details on compilation and accuracy of FFA, please refer to "Compilation Method of Japan's Flow of Funds Account" Research and Statistics Department, Bank of Japan.

¹¹ The National Accounts is a typical example of such secondary statistics. On the other hand, statistics that compile the original data are known as "primary statistics."

¹² Reconciliation table is not compiled for the 1968 SNA based figures. Nevertheless, it is easy to compile reference table using flow table and stock table.

¹³ The Bank of Japan made a major revision to the FFA changing its standard from the 1993 SNA to the 2008 SNA in March 2016. Refer to Page 1-9 (reference) for the comparison.

¹⁴ Due to the change in the standards upon which the FFA is based, from 93SNA to 08SNA, there are some sectors with figures that are not continuous between the amounts outstanding at the end of Q4 2004 and the end of Q1 2005, in regard to each item of pension entitlements, claims of pension funds on pension managers, and accounts receivable/payable. In addition, due to the change in estimation methods, there are sectors with figures that are not continuous for the same period with regard to each item of currency, loans by private financial institutions (consumer credit, loans to companies and governments), annuity entitlements, trade credits and foreign trade credits, outward investments in securities and other external claims and debts. Therefore, these changes need to be taken into account when using the data based continuously upon 08SNA from the data based upon 93SNA.

Because the FFA is compiled by using various data, the FFA is revised retroactively in principle once a year even after the release of revised report when new source data are obtained or estimation methods are changed for improving statistical accuracy.

Time series of Flow of Funds Accounts
(Flow table)

	the 1968 SNA basis	the 1993 SNA basis	the 2008 SNA basis
1954 	Calendar year/Fiscal year (1954-1998)	No retroactive data	No retroactive data
1979			
1980 	Quarterly (Q1 1964 - Q1 1999)	Fiscal year (FY 1980-2014)	No retroactive data
1998			
1999 	data do not exist after Q2 1999	Quarterly/ Calendar year (Q1 1998 -Q3 2015)	Fiscal year (FY 2005-) Calendar year (CY 2006-)
2004			
2005			
2006 		data do not exist after Q4 2015	Quarterly (Q2 2005-)
2015			
2016 			

(Reference) Main differences between the FFA based on the 2008 SNA and the 1993 SNA

1. Revision of sector classification

(1) Introduction of Public captive financial institutions

"Public captive financial institutions" is introduced as a sub-sector of Financial institutions, transferred from "government financial institutions."

(2) Introduction of Financial holding companies

"Of which financial holding companies" is introduced as a sub-sector of Financial auxiliaries.

(3) Introduction of Defined benefit schemes and Defined contribution schemes

"Defined benefit schemes" and "defined contribution schemes" are introduced as sub-sectors of Corporation pensions.

(4) Introduction of "standardized guarantee institutions"

"Standardized guarantee institutions" is introduced as a sub-sector of Nonlife insurance.

2. Revision of transaction items

(1) Pension entitlements of corporate pensions

- For pension entitlements (stock) of defined benefit schemes, the amount of future pensions to be received by households is recorded on an accrual basis, and estimated for the overall corporate pensions including those of unlisted companies.
- Pension entitlements (flow) of defined benefit schemes are estimated by deducting the amounts of pension paid from the sum of service costs and interest costs.

(2) Claims of pension funds on pension managers

- A new item, "claims of pension funds on pension managers," is recorded on the asset side of the corporate pension sector for the total amount of liabilities exceeding the total amount of assets in the sector.

(3) Retained earnings and distributions from investment trusts

- For investment trust beneficiary certificates (flow) of investment trusts, in addition to the actual net fund inflow (deducting amount of cancellation and redemption from those of purchase by investor), retained earnings derived from income gains from investment trusts are also added to the amounts of transactions distributed to investors as income at first, and then reinvested.
- Furthermore, distributions from capital gains and the principal are deducted from such flows as withdrawals by the investors of investment trust beneficiary certificates.

(4) Provisions for calls under standardized guarantees

- Provisions for calls under housing loan guarantees and public credit guarantee programs provided by standardized guarantee institutions are introduced and recorded as "provisions for calls under standardized guarantees."

(5) Employee stock options

- "Employee stock options" are introduced as a sub-item of "financial derivatives and employee stock options."

(6) Listed shares, Unlisted shares, and Other equity

- "Shares" was renamed "listed shares."
 - Shares that are not listed are recorded as "unlisted shares."
 - Equities of membership companies and various kinds of corporations other than in the form of corporation for which transfer of equities are restricted in principle are recorded as "other equity."
- (7) Withdrawal of equities by government
- "Other equity" held by government are recorded in Fiscal Loan Fund, Postal savings (Postal Savings Services of the Japan Post), and Public nonfinancial corporations (Special Operations Accounts for Japan Railway Construction, Transport and Technology Agency).
 - Transfer of reserves from Fiscal loan fund to Central government is recorded as Withdrawal of equity in the flow.
- (8) Separate showing of former Insurance reserves and former Pension reserves in the Insurance sector
- Former Insurance reserves in the Insurance sector is divided into "non-life insurance technical reserves" and "life insurance reserves."
 - Former Pension reserves in the Insurance sector is shown as "annuity entitlements."
- (9) Reclassification of Reserves for outstanding claims and Unearned premium reserves in the Insurance sector
- Reserves for outstanding claims and Unearned premium reserves are transferred from Accounts receivable/payable to "non-life insurance technical reserves" and "life insurance reserves."
- (10) Direct investment
- Reinvestment of earnings from outward direct investment is added in the scope of "outward direct investment," in addition to Equity.
 - Reinvestment of earnings from inward investment in securities is also added in the scope of "equity."
- (11) Call loans and bills
- The transaction item "bills purchased and sold" has been abolished and integrated into "call loans and bills."
- (12) Deposits by financial institutions and Call loans
- Outstanding of Deposits by financial institutions and Call loans by sector have begun to be provided.
- (13) Mortgage securities
- The transaction item "mortgage securities" has been abolished and integrated into "structured-financing instruments."
- (14) Provision of seasonally adjusted figures
- The Bank has started to provide seasonally adjusted figures for quarterly figures of financial surplus or deficit in the four major sectors (household, private nonfinancial corporations, general government, and overseas).

Chapter 2 Basic Idea behind the FFA

Chapter 2 Basic Idea behind the FFA

In the FFA, economic entities are called "sectors" and financial instruments (financial assets and liabilities) are called "transaction items" which comprise the columns and rows respectively on a matrix where figures are shown. There are numerous ways as to how these sectors and transaction items are classified, and how the respective figures are recorded and shown on the classified matrix.

As mentioned before, the FFA in Japan is compiled in line with the international standard for statistics. This chapter will explain the basic ideas behind how sectors and transactions items are actually classified and how the figures are recorded.

1. Sectoral Classification Based on Economic Function and Substance

The 2008 SNA and the IMF Manual set the classification criteria for sectors and transaction items that will be common in various countries. For this purpose, it places emphasis on the common economic function and substance, rather than on each country's economic system and rules of law. Therefore, it is the basic idea of our FFA's sectoral classification that it also places importance on economic function and substance.

Adopting sectoral classification of the SNA

Along with the Japan's national accounts, sectoral classification of the FFA is based on the 2008 SNA, and are largely classified into financial institutions¹, nonfinancial corporations, general government, households, private nonprofit institutions serving households, and overseas. This would ensure consistency with related statistics such as Japan's national accounts and the *Balance of Payments Statistics*², and enable to relate to activities of each sector in real economy.

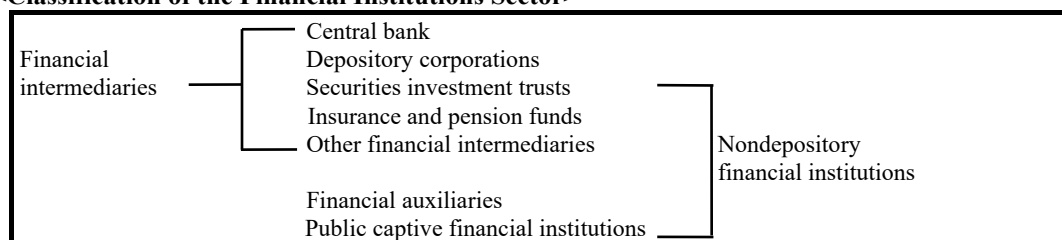
Classification of financial institutions

Following the 2008 SNA and the IMF Manual, financial institutions are largely classified as follows. First they are divided into "financial intermediaries" and "financial auxiliaries," focusing on functions of financial intermediation.

¹ Scope of "financial institutions" is considerably large compared with other financial statistics (for details, please refer to Chapter 6).

² For relations between the FFA and other statistics (SNA and *Balance of Payments Statistics*), please refer to Chapter 6.

<Classification of the Financial Institutions Sector>



[Financial intermediaries and financial auxiliaries]

"Financial intermediaries" are institutions that by incurring liabilities on their own account, it (1) accepts risk on their own account and (2) transforms the nature of funds in terms of factors such as liquidity and market risk. The FFA defines the concept of "financial intermediaries" in relatively broad terms. Since securities companies and nonbanks accept risks on their own account in raising and managing funds to transform the nature of funds, they are considered as financial intermediaries. And, although pension funds are not closely associated with daily life, they are one of the most important financial intermediaries, as an institutional investor.

On the other hand, "financial auxiliaries" are institutions that provide services (i.e., financial auxiliary activities) that are closely associated with the financial intermediary business. Stock exchanges and credit guarantee institutions, foreign exchange brokers, and financial holding companies are classified as "financial auxiliaries."

[Public captive financial institutions]

2008 SNA recommends that a new sub-sector, "captive financial institutions" is introduced under the sector "financial institutions."

These "captive financial institutions" are "entities providing financial services, where most of either their assets or liabilities are not transacted on open financial markets." Specifically, it covers "subsidiaries providing financing to business groups" and "public financial institutions which provide loans from the funds supplied by one sponsor such as government." Since these institutions have weaker financial intermediation functions than other financial institutions, it seems to have been deemed desirable that they are classified separately under the 2008 SNA.

In Japan, Government financial institutions include those which raise funds only from specific entities such as government and are not expected to raise funds from markets, as well as those which raise funds from markets but only invest in a limited group of destinations or operations. Accordingly, by classifying them as an independent institutional sector of "captive financial institutions," it will become possible to analyze financial institutions by their degree of financial intermediary functions.

For captive financial institutions, 2008 SNA envisages private institutions such as subsidiaries providing financing to business groups and special purpose companies other than securitization vehicles. However, since we cannot confirm their existence by available data in Japan, we have included only public institutions in captive financial institutions, and not private sector

entities.

With regard to "financial intermediaries," there are following sub sectors. "Depository institutions" which includes banks and other institutions accepts deposits and extend loans³. "Securities investment trusts" manages funds from investors as stocks or bonds, etc. "Insurance and pension funds" manages insurance and pension related funds. "Other financial intermediaries" includes securities companies, nonbanks, governmental financial institutions and other financial intermediaries, and "central bank." Such classification makes it possible to focus on financial intermediary activities by each sub sector.

Furthermore, by establishing such detailed sub sectors, users are able to reallocate the sectors according to their interest. In this regard, sub sectors such as banks, life insurance, and stock investment trusts that are familiar in Japan are also established. We also establish standardized guarantee institutions which provide guarantees for housing loans and credit guarantees, and public financial institutions. As such, while basing our FFA on an international standard, considerations are also made to the users' needs specific to Japan. Furthermore, we establish defined benefit schemes and defined contribution schemes as a sub sector of corporate pensions because of utility of analysis while it is not required by 2008 SNA.

[Classification of holding companies]

2008 SNA and the IMF Manual recommend that holding companies are classified in detail according to the functions of holding companies and the sectors to which their group companies (subsidiaries) belong. Specifically, among holding companies, (1) since those without headquarter functions (not involved in management of subsidiaries) are deemed to be conducting financial transactions for their business groups, it is recommended that they are classified as "captive financial institutions." On the other hand, among those with headquarter functions, (2) if the major business of subsidiaries is finance, holding companies are deemed not to have financial intermediary functions, and it is therefore recommended that they are classified as "financial auxiliaries," and (3) if the major business of subsidiaries is nonfinance, it is recommended that holding companies are classified as "nonfinancial corporations."

In Japan, (1) holding companies without headquarter functions cannot be identified with the data at least among listed companies; we have only included those falling under (2) and (3). Moreover, for (2) holding companies whose subsidiaries' major business is finance, we have established a sub-sector "of which financial holding companies" in "financial auxiliaries" to enable analysis of developments in financial assets and liabilities reflecting the actual situation more closely.

³ Besides banks, postal savings and agricultural cooperatives are classified under the same "depository corporations" as they are also financial institutions that raise funds through deposits and other similar instruments.

Conceptualized institutional units and the "segregation of accounts"

In the 2008 SNA and the IMF Manual, basic units of economic entities that are classified as sectors are regarded as those with corporate status that engage in economic activities independently from both the economic and legal aspects ("institutional units"⁴). However, when classifying according to economic function and substance, there are cases where it is appropriate to treat each account within the entity as individual economic entity.

The 2008 SNA and the IMF Manual also note that entities without corporate status may be considered to be independent economic entities. In light of actual conditions in Japan, this treatment, the "segregation of accounts" concept, is adopted relatively widely. More specifically, internal corporate accounts such as trust accounts in trust banks are treated as economic entities. National Special Accounts and contracts concluded by corporations, such as contract-type defined benefit corporate pensions, are themselves regarded as economic entities⁵.

[Examples]

(a) Banking accounts and trust accounts of trust banks

Banking accounts of trust banks are classified as "domestically licensed banks." However, since trust accounts have the aspect of asset management and their functions differ from banking accounts, they are segregated from the "domestically licensed banks" sector and their assets are consolidated to sectors to which final investors belong. Exceptions are collectively managed trusts and monetary claims trusts, both of which are classified into independent sectors⁶.

(b) Fiscal loan fund

The Special Account of Fiscal Investment and Loan Program Fund (Fiscal Loan Program Fund Account) is an institutional unit and it is an independent sector.

(c) Contract-type defined benefit corporate pensions

In the case of contract-type defined benefit corporate pensions, the trust contracts among corporations, trust banks, and life insurance companies themselves are regarded as economic entities that constitute pension funds. This is based on the fact that contract-type defined benefit corporate pensions

⁴ Institutional units are essentially units that are capable of owing goods and assets, incurring liabilities and engaging in economic activities and transactions with other units in their own right, and are economic entities in social accounting. The classification method that takes "institutional units" as its basic units can be alternatively explained to be a method that focuses on economic entities with corporate status, which fulfil the above definition. If economic entities fulfill the above definition even if they do not strictly have corporate status, they are also regarded as institutional units. They are called quasi-corporations.

⁵ As explained later, the concept of "segregation of accounts" also applies to public institutions, such as special corporations in sectors other than financial corporations. In the case of the central government also, the "general account" and "special accounts" are classified as independent entities according to their functions; this can also be described as a "segregation of accounts."

⁶ Monetary claims trusts in trust accounts is classified under the "structured-financing special purpose companies (SPCs) and trusts" sector. Trusts managed by nonfinancial institutions—whose business started following the enforcement of the revised Trust Business Act in December 2004—are also estimated and included.

are established for corporate employees who make installment contributions outside the company, and its assets and liabilities are managed separately from those of the corporations.

Qualified retirement pension plans (repealed in March 2012) is also the same as above.

Consolidation of accounts

In order to classify sectors according to economic function and substance, "consolidation" of accounts is used besides "segregation of accounts."

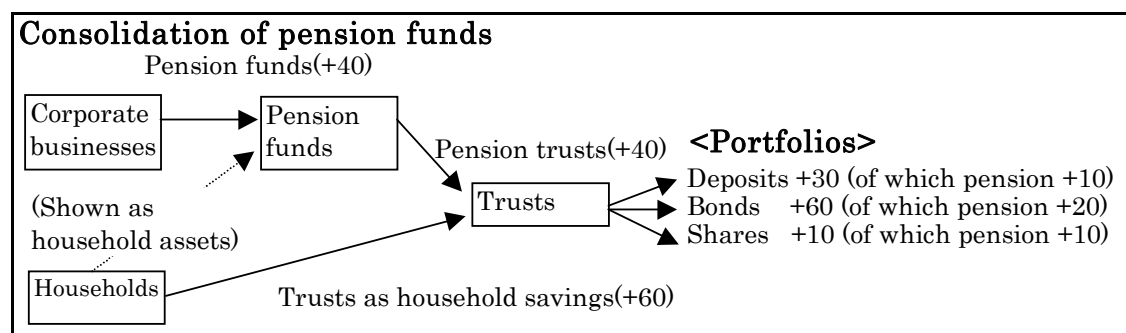
For example, even if contract-type defined benefit corporate pensions are treated as independent entity called "pension funds," if its assets are simply recorded as "trusts," contents and substance of pension funds' managed assets cannot be grasped. On the other hand, when segregating "trusts" accounts from banking accounts in order to treat them as individual entities, there are also cases where the real investor that makes the actual decision-making on asset investment and receive economic gain is not the trust banks, but an investor that trusted assets such as pension funds.

For instance, noncollectively managed trust accounts hold financial assets and liabilities on their balance sheets, but, in substance, function as investment agents that passively manage their assets under the investors' control. In such cases, accounts of the trustees and the real investing entity are "consolidated." Specifically, managed funds held by the trustees are treated as asset of the real investor (investing entity). This would clarify the creditor/debtor relationship and as a result, it would further clarify what kind of activities pension funds are engaging in as financial intermediaries.

[Examples]

(a) Noncollectively managed trust accounts

Among trusts accounts, those pension trusts, securities investment trusts and other trust accounts that serve as mere trustees are "consolidated" with the original investing entities, such as pension funds and securities investment trust management companies. In other words, offsetting and eliminating the investing entity's trust beneficiary rights (assets) against the trust account's trust beneficiary rights (liabilities) allows the investment assets of the pension trust account to be posted in the "pension funds," and the investment assets of the securities investment trust account to be posted in the "securities investment trusts" (see chart below).



(b) Investment assets of investment advisory companies

Investment assets of investment advisory companies are managed through investors' directions and therefore, investment advisory companies do not shoulder any investment risk or transform such risks (incomes of investment advisory companies are only premiums related to management advice to investors). Therefore, such assets are treated as those held not by investment advisory companies, but by the entity that give them discretionary management powers, and are posted as investing entity's assets.

Classification criteria for public institutions

In the FFA, public institutions are classified into general government, public nonfinancial corporations and public financial corporations sectors. Despite the fact that there is no clear social understanding on the criteria for public institution, considering that there are numerous corporations with special status in Japan, it is necessary to have, to a certain extent, clear criteria for its classification.

In this regard, the FFA adopts the same criteria with Japan's national accounts so as to maintain consistency. For some institutions, the idea of segregation of accounts is adopted, which classifies individual accounts within an institution to different sectors.

[Classification criteria for public institutions]

The FFA and the national accounts classify public institutions such as corporations with special status as follows, so that the scope and sectors used for public institutions conform to those used in the national accounts.

(a) Institutions—whose sales of 50% or more are attributable to financial intermediary activities or financial auxiliary activities—are classified as "financial institutions."

(b) Nonfinancial institutions—whose sales account for 50% or more of production costs and are regarded as market producers—are classified as "nonfinancial corporations." Others are classified as "general government" or "private nonprofit institutions serving households."

(c) Institutions that are controlled by the government, either through the ownership of a majority of their voting rights or the ability to appoint /

remove a majority of their board members through legislation, are classified as "public institutions." Others are classified as "private institutions."

[Segregation of accounts of public institutions]

As a result of the reorganization of public institutions, there are a number of cases where business functions of the former institution remain in the new institution as independent accounts and each of them maintain those activities independently. In such cases, when the functions of the individual accounts differ greatly (for example, accounts that hold financial function and those without), the concept of "segregation of accounts" applies and they are treated as independent economic entities, thereby ensuring consistency with the national accounts in each case.

Distinction between domestic sector and overseas sector

Distinction between domestic sector and overseas sector is based on the criteria used in "residents" and "nonresidents" in the *Balance of Payments Statistics*. Here, the concept of residence is not based on nationality or law, but based on the economic territory. Residents are defined as entities that have its center of economic interest in a country's economic territory, and conduct certain volume of economic activities.

[Treatment of banks' offshore accounts]

The 2008 SNA proposes that the concept of residence should be based on the "economic territory" where an institutional unit has its center of economic interest, in respect to the importance of economic substance. In line with this⁷, the FFA treats banks' offshore accounts as domestic institutions (depository corporations). Consequently, nonresidents' transactions via offshore accounts are treated as crossborder transactions, thus maintaining consistency with the *Balance of Payments statistics*.

⁷ Since profits on offshore accounts mainly revert to Japanese financial corporations, economic interest from offshore accounts can be considered to be domestic.

2. Transaction Items Based on Economic Function and Substance

The 2008 SNA and the IMF Manual also define common criteria for categorizing transaction items based on economic function and substance, which the FFA has basically embraced. More specifically, the FFA has adopted almost all the main items such as "currency and deposits," "loans," "debt securities," and "equity and investment fund shares."

One of the distinctive points of those criteria is that the scope of existing transaction items such as "loans" and "securities," has been broadened, while introducing other items such as "financial derivatives," "life insurance reserves," "pension entitlements," and "provision for calls under standardized guarantees."

Concept and Scope of "loans"

In conformance with the 2008 SNA and the IMF Manual, scope of "loans" is broadly defined as financial assets that are created when a creditor lends funds directly to debtor and that are non-negotiable (negotiable assets are classified in "securities"). That is, besides typical lending transactions (cash loans for consumption) such as lending and borrowings between banks and corporations, repurchase agreements and securities lending transactions with cash collateral are included as "repurchase agreements and securities lending transaction" as a sub item of "loans." This is because repurchase agreements and securities lending transactions with cash collateral actually function as financing through loans with securities collateral⁸.

Also included in "loans" are deferred payment credits from selling merchandise and finance leases. Both are considered to be claims and liabilities with the same function as bank loans; this aligns with the ideas adopted in the 2008 SNA and the IMF Manual. Regarding their classification into subitems of "loans," deferred payment credits to households are included in "consumer credit," and deferred payment credits to corporations and finance leases are included in "installment credit (not included in consumer credit)".

[Treatment of finance leases]

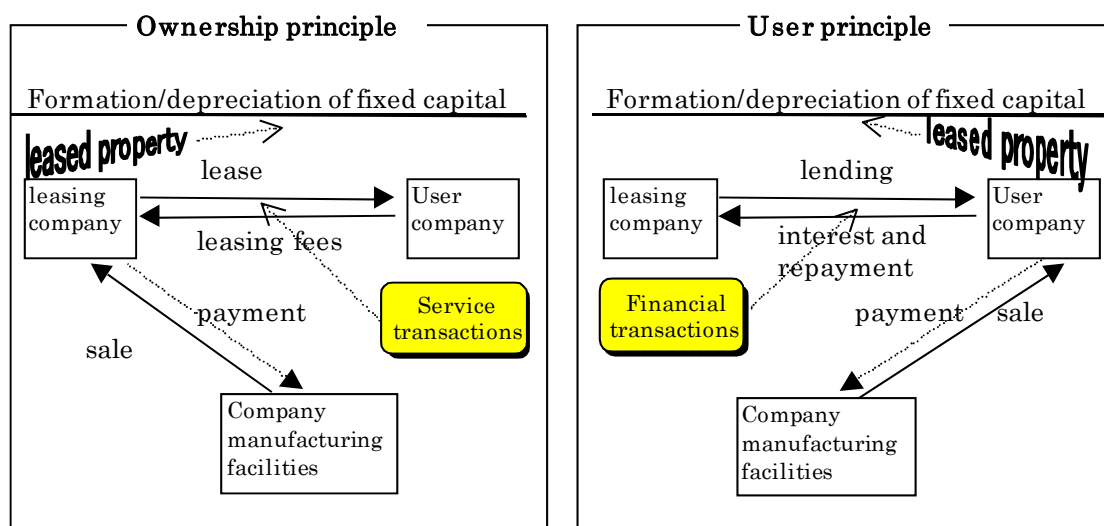
Finance leases are leasing contract that the users essentially use up the leased assets, and cannot be cancelled in mid-term. Therefore, although finance leases do not necessarily accompany transfers of ownership in the legal sense, it is actually a credit for consumption of the goods to the user (lessees) granted by the legal owner (lessors).

Whether emphasis is placed on the legal owner (ownership principle) or the actual user (user principle) gives a different outlook (refer to the following chart). In this respect, the 2008 SNA and the IMF manual proposes "user principle" in light of the economic function of finance leases.

As the new leasing accounting standard ("Accounting Standard for Lease

⁸ Corporate accounting also treats repurchase agreements and securities transactions as financial transactions, according to accounting standard for financial instruments and its operating principle that came into effect in fiscal year 2000.

Transactions") was applied from fiscal 2008 (the second quarter of 2008) and onward, the FFA has recorded those finance leases as financial assets. Until then, because of source data limitations, it has recorded only finance leases that are shown as such in corporate accounts ("ownership-transfers finance leases⁹") as financial assets¹⁰.



Concept and scope of "securities"

The 2008 SNA and the IMF Manual classify securities into "equity and investment fund shares" and "debt securities" and the classification is also adopted by our FFA. Securities category includes securitized monetary claims as negotiable financial instruments.

However the 2008 SNA and the IMF Manual classify "certificates of deposit" as "debt securities" in view of its negotiability, but since its economic function is closer to deposits, the FFA classifies "certificates of deposit" as "deposits."

⁹ Since 1995, the leasing accounting standard has been adopted for corporate accounts, and in principle, finance leases are recorded based on the "user principle." However, the process by annotation had been allowed for finance leases other than "ownership-transfers finance leases (leases with an article to transfer the legal ownership of the leased assets to the lessee at the end of the leased period)." For details please refer to *Lease torihikino kaikeishori oyobi kaijini kansuru jitsumushisin* (available only in Japanese; Association of Certified Public Accountant of Japan, 1994). However, in the new leasing accounting standard applied from fiscal 2008, finance lease transactions that do not transfer ownership have to be accounted in a similar manner with ordinary sales and purchase transactions and have to be recorded on the balance sheet of financial assets and liabilities in the new leasing accounting standard. Refer to "Guidance on Accounting Standard for Lease Transactions" for details on the practical treatment of the lease accounting (The Accounting Standards Board of Japan, 2011).

¹⁰ Source data are limited not only on the part of FFA, but also on the real economy side. Considering that finance leases are regarded as financial transactions in accordance with the 2008 SNA and the IMF Manual, user corporations that use the leased assets need to post fixed capital formation and consumption of fixed capital. However, source data to grasp the leased assets do not exist at present. Against such background, user principle concerning finance leases is not adopted in Japan's national account.

Treatment of financial derivatives

A financial derivative is a financial instrument that is linked to a specific financial instrument. As its value derives from the price of an underlying item, its future profits and losses fluctuate largely depending on terms and conditions (the profit to be gained by holding or using the financial derivatives is not clear beforehand). However, as they can be traded in their own right in financial markets, and its market value could be objectively estimated, the 2008 SNA and the IMF Manual regard the market value portion of financial derivatives as financial assets, while the specified underlying items (notional principal) are not.

[Treatment of contingent liabilities]

Under the contracts for financial transactions, debtors generally have obligations to pay creditors, with the assets of fixed amount to be paid. However, under some contracts, financial assets and liabilities are recognized only after certain conditions are fulfilled. These conditional claims and liabilities are called contingent liabilities.

The 2008 SNA and the IMF Manual do not treat contingent liabilities as financial assets in principle. This is because merely concluding contracts does not give them actual economic value and their owners may not derive economic benefits by trading them in the market. For example, even if guarantee contracts are concluded with regard to monetary liabilities, it is inappropriate to treat them as claims and liabilities existing between economic entities because there is no certainty that the guarantee contracts will be fulfilled.

Nonetheless, as seen above, since financial derivatives can be traded in their own right in financial markets, and their market value can be objectively estimated, these international standards treat them as financial assets, separate from contingent liabilities. Moreover, among guarantee contracts of financial liabilities, standardized guarantees (guarantees issued in large numbers for fairly small amounts along identical lines) are treated as financial assets distinguished from contingent liabilities, since the expected value of calls under guarantees can be estimated rationally by combining a certain amount of cases even though occurrence of calls is uncertain.

In the FFA based on such thinking, while contingent liabilities, including individual guarantees and commitment lines¹¹, are not treated as financial assets, financial derivatives and standardized guarantees are treated as financial assets.

¹¹ They become loans if executed but the credit lines themselves (unused portions) are not regarded as financial assets.

Insurance, pension and standardized guarantees

As noted earlier, the FFA establishes "insurance and pension funds" as a sector, and at the same time, "non-life insurance technical reserves," "life insurance reserves," "annuity entitlements," and "pension entitlements" as transaction items to record liabilities of insurance and pension funds (which are mainly assets for the households).

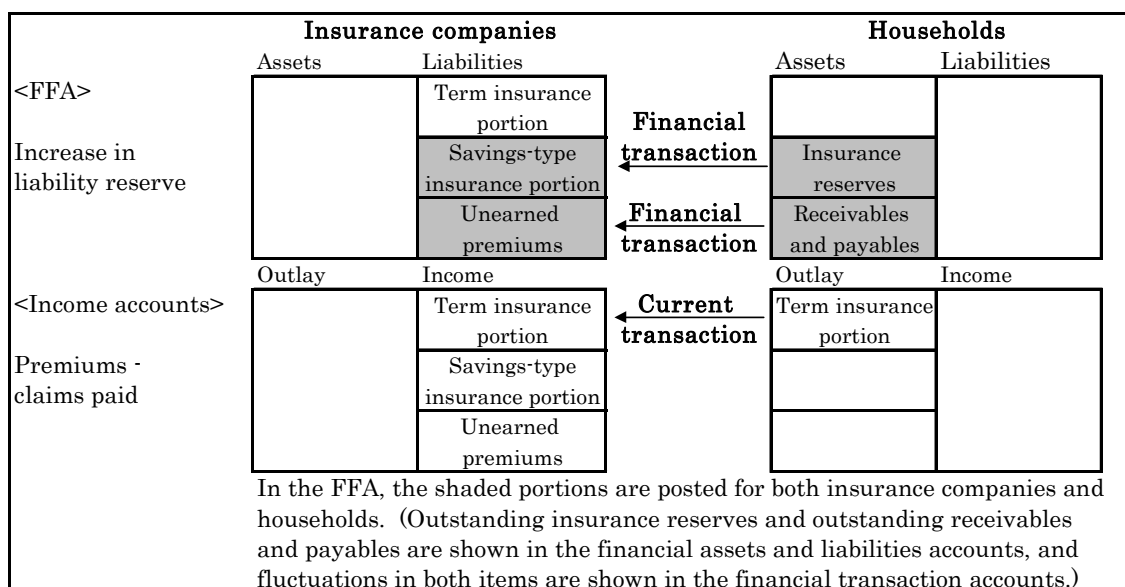
Although it is controversial whether the liability reserves of insurance companies are financial assets for the insured, it can be said that the liability reserves associated with savings-type insurance and individual annuities are financial assets in the sense that they fulfill an economic function by preparing for refunds that will certainly arise in the future. Therefore, these are recorded in "non-life insurance technical reserves," "life insurance reserves," or "annuity entitlements" as financial assets for the insured (mainly households) and financial liabilities for insurance companies.

[Treatment of insurance and pension reserves under insurance companies]

The liability reserves of insurance companies are accounted for as an element of accounting procedure to prepare for future payment, and do not signify additional liabilities to the insured persons. Seen from this point of view, insurance reserves should not be recorded in the FFA because they do not possess the nature of financial assets.

In savings-type insurance and individual annuities, most of the paid insurance fees are funded as the company's assets to meet future claims arising to the policyholders. Therefore, the related liability reserves take the function of preparing for the definite future payment. These reserves are computed using actuarial calculations for insurance and pensions and could be seen as payment obligation for that specific amount at each point in time. For this reason, the FFA records these liability reserves respectively as financial assets and liabilities.

With regard to insurance other than saving-type insurance and individual annuity, on the other hand, future repayments are uncertain, therefore it is possible to regard payments of insurance premiums as consideration for insured services. Consequently, the FFA does not see liability reserves associated with those insurance as financial assets and liabilities, but as the retained earnings of insurance companies (please refer to the following chart).



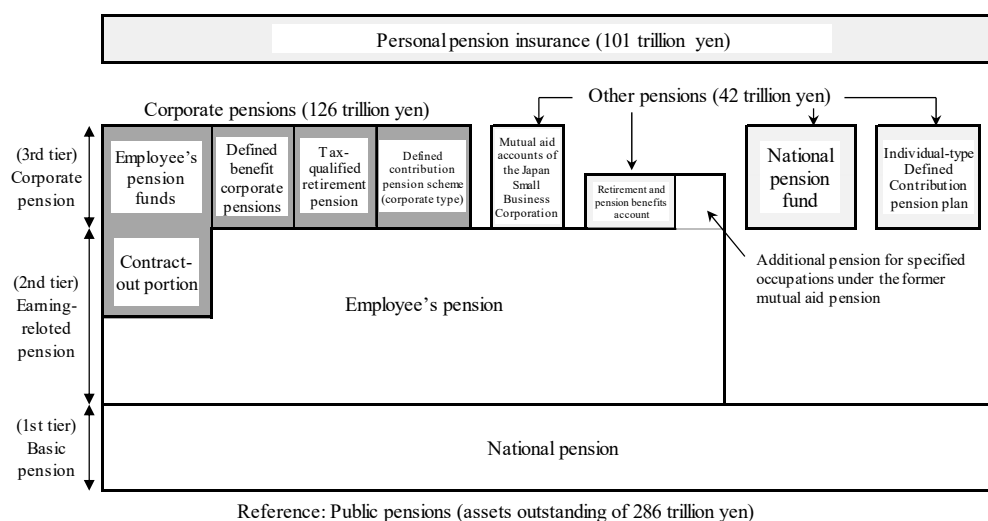
[Treatment of pensions]

Pension schemes vary among countries but in every country, it can be classified into social security schemes (public pensions) and private pension schemes. In the 2008 SNA and the IMF Manual, as public pensions which the government (Social security funds) pays each time under pay-as-you-go systems are considered as transfer benefits, their liabilities of pensions are not recorded. While corporate pensions whose contributions and payments are related to employments and personal pensions insured optionally are treated as financial assets for households and financial liabilities for pension funds. This is because corporate pensions and personal pensions are not compulsory insurance under the country's social security scheme.

The pension system in Japan is a so-called three-tier system. In addition to two-tier public pensions, consisting of the national pension (basic pension) which is given commonly to all Japanese nationals, and employee pensions (employees' pension and former mutual aid pension) which provide an additional earnings-related pension in addition to the national pension, there are private pensions such as corporate pensions (the Employees' Pension Fund, former Qualified Retirement Pension Plans, defined benefit corporate pensions, and defined contribution schemes (corporate type)), other pensions (the National Pension Fund etc.), and personal pensions. In the FFA, corporate pensions, other pensions and personal pensions are included in the financial assets of the household sector.

On the other hand, since employees' pension and former mutual aid pension are mainly based on pay-as-you-go systems in Japan, their liabilities of pensions are not recorded in the government (Social security funds), and pension entitlements corresponding to their liabilities are not recorded as assets in households.

<Types of pension plans and their outstanding>



- Notes:
1. In the FFA, shaded areas are recognized as pension assets of households and other areas (public pensions) as assets of social security funds. Corporate pensions include claims of pension funds on pension managers.
 2. The tax-qualified retirement pension plan was abolished at the end of March 2012.
 3. Figures of annuity entitlements are used for personal pension insurance.
 4. Figures are those of March-end 2023.
 5. The additional pension for specified occupations under the former mutual aid pension is paid according to the period of coverage up to October 2015, and outstanding amounts of this pension will be decreased in the future.

3. Evaluation Using Mark-to-Market Accounting and Recording Using Accrual Accounting

To show economic substance, the FFA uses mark-to-market accounting for evaluations and accrual accounting for recording. This is basically in accordance with the 2008 SNA and the IMF Manual. But with regard to loans, the FFA adheres to market-price equivalent value accounting over international standard.

Mark-to-market accounting of financial instruments

Valuation according to mark-to-market accounting for financial assets held by economic entities is the basic principle of social accounting since the 1968 SNA came into effect. The FFA too, evaluates both assets and liabilities on a market value. This identifies and shows the financial position of assets and liabilities held by individual economic entities in a manner that reflects their actual state, considering a major impact the market price of financial assets can have on the economic entity. For example, the increase in the market price of financial assets will boost its purchasing power.

Mark-to-Market accounting is applied not only to financial assets but also to liabilities, specifically, while shares that are held as assets are evaluated on a market value, at the same time, the corresponding share for corporation's capital are evaluated on the same basis. Even for liabilities which economic entities are obliged to repay at face value, such as corporate bonds, the FFA adjusts the valuation amount on the liability side to maintain consistency with the use of mark-to-market accounting for assets. The adjustment makes it possible to reflect the actual situation in transactions designed to reduce liabilities or capital at market price, such as purchasing redemption of bonds or stocks, while at the same time balancing assets and liabilities.

Although there are some controversy, loans are evaluated on real values as much as possible for the purpose of reflecting economic substance. Furthermore, write-offs and write-downs of nonperforming loans are not recorded as transactions but as changes in outstanding assets and liabilities resulting from changes in values of assets and liabilities.

[Valuation method]

There are several methods to evaluate fair value of financial assets and liabilities such as market value method (market price method) and discounted present value method. The FFA basically uses market value method (market price method) with which evaluations are made on financial instruments whose market values can be identified. These instruments include shares (listed and OTC-registered shares), and bonds (central government securities, local government securities, public corporation securities, industrial securities and bank debentures). The market price method is used because: (1) market prices can be considered to have factored in all available information concerning the assets in question; and (2) it is relatively easy to obtain objective source data. For unquoted shares whose market price quotations are not available, its market-equivalent value is estimated using market value of quoted shares.

It is more difficult to value the market prices of loans. However, because they are prone to fall in values that simply cannot be ignored, such as when they become nonperforming, their real value is calculated by deducting the amounts of allowances for individual uncollectibles.

In this regard, the 2008 SNA and the IMF Manual recommend that the valuation of loans should be based on creditors' outstanding claim without adjusting expected loan losses at book value. This is because it is difficult to grasp its market value and moreover, even if the value depreciates on the lender side, there still remains payment obligation at face value on the borrower side. However, considering the requirements and usefulness for financial stability purpose, they recommend that depreciated value of loans, that is, data on the basis of the expected realizable value of loans, be shown as reference information.

[Treatment of receivable write-offs and write-downs]

In the FFA, changes in outstanding amounts resulting from write-offs and write-downs of loan assets are treated not as financial transactions but as reconciliation amounts (please refer to the next section on the role of the reconciliation table)¹². This is to maintain consistency with the 2008 SNA and the IMF Manual. That is, the 2008 SNA and the IMF manual treat debt reliefs and modifications of loan under the agreement between creditors and debtors as financial transactions (capital transfers from creditors to debtors), while they treat write-offs conducted by creditors because their claims must be impossible to be collected as not financial transactions but reconciliation amounts (other change in the volume of assets). As a result, write-offs and write-downs of nonperforming loans do not affect either the savings-investment gap or financial surpluses and deficits.

The role of the Reconciliation Table

Under the mark-to-market accounting principle, changes in stocks are derived from changes in values as well as normal financial transactions like acquisitions and disposals of financial assets and liabilities. While the FFA records transaction amount occurred from normal financial transactions in its flow table, changes in values are shown as reconciliation amounts in the reconciliation table. By combining the two, consistency is maintained with the changes in stock data

¹² In regard to write-offs of receivables, the 2008 SNA and the IMF Manual propose that those resulting from falls in the market value of claims be posted in the "revaluation account," while those resulting from bankruptcies and the like be posted in the "other changes in the volume of assets account." In other words, when a receivable's value falls but still exists, it is treated as a decline in assets resulting from revaluation, but when a receivable's value is completely lost, it is treated as a decline in assets for other reasons. However, write-offs of receivables arising from bankruptcy can also be treated as cases where the value of the receivables are reassessed at zero, making them extremely difficult in both practical and conceptual terms to differentiate between losses in value arising from revaluations and those arising for other reasons. Consequently, the FFA treats write-offs of receivables as reconciliation amounts irrespective of whether they result from direct or indirect write-offs.

shown in the stock table¹³.

As the name suggests, the reconciliation table reconciles the term-on-term difference between flow and stock figures. Since it is also possible to identify holding gains and losses from the figures shown, these data are informative in themselves as well.

<The relationship between flows and stocks>

Stock in period t-1 + financial transaction flow in period t + reconciliation amount for period t (change in market value, etc.) = stock in period t.

(Examples)

Assume a situation where a household with shares worth 1.0 million yen at the end of the preceding term bought shares worth an additional 0.3 million yen during the current term, but ended up holding shares with a market value of 1.5 million yen at the end of the current term. In the FFA, 0.3 million yen is posted as current-term financial transactions, and 1.5 million yen is posted as the balance of financial assets at the end of the current term. At the same time, subtracting the current-term transaction amount of 0.3 million yen from the 0.5 million yen difference between the balance at the end of the current term and the preceding term (1.5 million yen - 1.0 million yen) yields 0.2 million yen, which is posted as the reconciliation amount.

In this case, the reconciliation amount arises from a rise in share prices, that is, from an increase in asset prices unrelated to transactions.

Recording on accrual basis

The general principle in the 2008 SNA and the IMF Manual is accrual accounting. This is an accounting method that records transactions at the time when debtor/creditor relationship generates and not when cash actually moves (this is called cash-basis accounting against accrual accounting). The FFA also uses accrual accounting, and it is shown in recording methods typically for "installment credit (not included in consumer credit)," "trade credits and foreign trade credits," and "accounts receivable/payable."

The 2008 SNA recommends that pensions, for which cash-basis accounting has been adopted exceptionally under the 1993 SNA, also be recorded based on accrual accounting (not the amounts actually contributed or accumulated but the

¹³ The reconciliation amount may also result from mergers and spin-offs of corporations, changes in sectoral classifications accompanying changes in the nature of the business, discontinuities arising from changes in samples of source data, and other factors. Based on the 2008 SNA, these would be reconciliation amounts that resulted not from "revaluations," but from "other changes in the volume of assets." The FFA does not distinguish reconciliation amounts arising from "revaluations" and "other changes in the volume of assets," but for the most part it is possible to identify which reconciliation amount arose from which individual item (please refer to Chapter 5).

amounts of future pensions to be provided by companies).

[Recording based on accrual accounting for pensions]

Under the 1993 SNA, the amounts to be recognized as financial assets and liabilities for pensions were based on the amounts actually contributed or accumulated. Accordingly, the liabilities of pension funds are determined by the amounts of assets owned, regardless of the types of pensions.

However, the 2008 SNA separates corporate pensions into two different types, namely defined benefit schemes and defined contribution schemes. For defined benefit schemes in which benefits will not change depending on reserves, it recommends that flows and stocks of pension entitlements acquired by employees (retirement benefits obligations) are recorded by the actuarial calculation based on accrual accounting, using the length of service, salary, and developments in interest rates.

In response to these changes, the Bank has improved the usability of the FFA by also recording actuarially calculated retirement benefits obligations in liabilities of corporate pensions, while establishing defined benefit schemes and defined contribution schemes sectors as sub-sectors of the corporate pension sector.

Pension entitlements, as a result of converting to an accrual basis, may exceed assets owned by pension funds. They are the so-called underfunded pension obligations. Since these underfunded obligations will become liabilities of pension managers (companies) which are ultimately responsible for the pension system, they are recorded as assets of pension funds and liabilities of companies in the transaction item "claims of pension funds on pension managers."

[Employee stock options]

Employee stock options are rights given by companies to their executives and employees to purchase existing shares. For employee stock options, the exercise price is determined at the grant date, and option holders are entitled to purchase the shares of their company at a strike price after a certain "vesting period" between the vesting date and expiration date. While there was no reference in the 1993 SNA to their treatment in particular, the 2008 SNA recommends that employee stock options are recorded as income and financial transactions.

There is no movement of cash until employee stock options are exercised. However, in an accrual based recording, employee stock options are regarded as compensation paid to executives and employees during the vesting period, and that amount is recorded as financial assets. In the FFA, such treatment will contribute to describing the actual situation accurately, while also being consistent with the understanding of both employees and companies. Accordingly, they are recorded on an accrual basis.

[Treatment of retained earnings]

Retained earnings are earnings¹⁴ made by companies that are not distributed. Usually these retained earnings are recorded for the companies which made them¹⁵.

The 2008 SNA and the IMF Manual recommend that retained earnings of directly investing companies (companies and branches established overseas by residents) and investment trusts are recorded as belonging to investors (parent companies). Namely, retained earnings are recorded as distributed to investors first, and then recorded as if they were reinvested by investors¹⁶.

Since directly investing companies are mostly controlled by the investors, i.e., parent companies, earnings made can be regarded as belonging to investors. Accordingly, reinvestment retained earnings are recorded as an increase in the direct investment flows of parent companies. While such thinking was already adopted by the 1993 SNA, the FFA has adopted it since it is now based on the 2008 SNA.

Since Investment Trusts are just a conduit which gathers money from many investors and manages assets efficiently, their earnings should be naturally regarded as belongings to investors. Reinvestment of retained earnings is recorded as acquisition by investors of investment trust beneficiary certificates. For the first time, the 2008 SNA has introduced such thinking, which is also adopted by the FFA.

¹⁴ Since income is limited to income gains under the System of National Accounts, only earnings and retained earnings derived from income gains are covered.

¹⁵ In other words, while flow of assets increase on a cash basis with companies investing retained earnings in some forms of assets, flow of liabilities does not increase on a cash basis because the companies do not make additional contributions in shares etc. Accordingly, retained earnings are recorded as financial surplus of the retaining companies.

¹⁶ As a result, investors have financial surplus because flow of assets increases with the additional investment in shares.

Table 1. List of Sectors and Major Institutions

Names of sectors	Major financial institutions	Code*
Financial institutions		1
Central bank	Bank of Japan	1-1
Depository corporations		1-2
Banks		1-2-1
Domestically licensed banks	Domestically licensed banks	1-2-1-1
Foreign banks in Japan		1-2-1-2
Financial institutions for agriculture, forestry, and fisheries	Norinchukin Bank, Agricultural Cooperatives, Prefectural Credit Federations of Agricultural Cooperatives, Fishery Cooperatives, and Prefectural Credit Federations of Fishery Cooperatives	1-2-1-3
Financial institutions for small businesses**	<i>Shinkin</i> banks, Shinkin Central bank, Shoko Chukin Bank, <i>Shinkumi</i> banks, The Shinkumi Federation Bank, Labor Banks, The Rokinren Bank, and Japan Post Bank	1-2-1-4
Postal savings (until 3 rd Quarter 2007)		1-2-2
Collectively managed trusts		1-2-3
Securities investment trusts	Investment trust management companies	1-3
Bond investment trusts		1-3-1
Of which: MMF and MRF		1-3-1-1
Stock investment trusts		1-3-2
Insurance and pension funds		1-4
Insurance		1-4-1
Life insurance	<Other than the following> Japan Post Insurance (former Japan Post Postal Life Insurance Services)	1-4-1-1
Of which: private life insurance companies (until 3 rd Quarter 2007)	Private life insurance companies	1-4-1-1-1
Nonlife insurance	<Other than the following> a part of the National Special Accounts, incorporated administrative agencies, and credit insurance institutions, etc.	1-4-1-2
Of which: private nonlife insurance companies	Private nonlife insurance companies	1-4-1-2-1
Of which: standardized guarantee institutions	Japan Federation of Credit Guarantee Corporations, Japan Educational Exchanges and Services, a part of Agriculture, Forestry and Fisheries credit Foundations, and housing loan guarantee companies, Japan Fisheries Credit Guarantee Fund Associations	1-4-1-2-2
Mutual aid insurance	National Mutual Insurance Federation of Agricultural Cooperatives, National Mutual Insurance Federations of Fisheries Cooperatives, National Federation of Workers and Consumers Insurance Cooperatives, and Prefectural Federations of Workers and Consumers Insurance Cooperatives	1-4-1-3
Pension funds		1-4-2
Corporate pensions		1-4-2-1
Defined benefit schemes	Employees' pension funds, defined-benefit corporate pension, and former qualified retirement pension plans	1-4-2-1-1
Defined contribution schemes	Defined-contribution pension plans (corporate-type)	1-4-2-1-2
Other pensions	Individual-type Defined Contribution pension plan and National Pension Fund, etc.	1-4-2-2
Other financial intermediaries		1-5
Nonbanks		1-5-1
Finance companies	Finance companies (excluding construction, real estate), securities finance company, and The Resolution and Collection Corporation, etc.	1-5-1-1
Structured-financing special purpose companies and trusts		1-5-1-2
Public financial institutions		1-5-2
Fiscal Loan Fund		1-5-2-1
Government financial institutions	Special Account for Public Investment and Loans other than the Fiscal Loan Fund, government financial institutions, other special corporations and incorporated administrative agencies whose main business is financial intermediation, and former Industrial Revitalization Corporation of Japan	1-5-2-2

	Financial dealers and brokers	<Other than the following> "Tanshi" companies (money market dealers) and Banks' Shareholdings Purchase Corporation (special account)	1-5-3
	Of which: securities companies	Securities companies	1-5-3-1
	Financial auxiliaries	<Other than the following> Stock exchanges, financial exchange, Banks' Shareholdings Purchase Corporation (general account), foreign exchange brokers, and foreign exchange margin trading firms	1-6
	Of which: financial holding companies	Financial holding companies	1-6-1
	Public captive financial institutions	Japan Expressway Holding and Debt Repayment Agency and Japan Finance Organization for Municipalities	1-7

Nonfinancial corporations			2
	Private nonfinancial corporations	Profit-making corporations and medical corporations, etc.	2-1
	Public nonfinancial corporations	Certain special corporations such as public corporations, government financial corporations and incorporated administrative agencies, Special Accounts of the Central Government, local public corporations, and local public enterprises	2-2
General government			3
	Central government	General Account of the Central Government, National Special Accounts that are not included into other sectors, and certain special corporations such as public corporations, authorized corporations, and other incorporated administrative agencies	3-1
	Local governments	Urban and rural prefectures, towns, villages, special wards, and a part of authorized corporations and local incorporated administrative agencies	3-2
	Social security funds	<Other than the following> Part of the National Special Accounts, corporate health insurance societies, and funds, etc.	3-3
	Of which: public pensions	Part of the National Special Accounts, Government Pension Investment Fund, employees' welfare insurance accounts and transitional long-term accounts of mutual aid associations, and Farmers' Pension Funds (former pension plan account)	3-3-1
Households			4
Private nonprofit institutions serving households			5
Overseas			6
Total			-

Totals of the above

Domestic nonfinancial sector	Total of Nonfinancial corporations, General government, Households, and Private nonprofit institutions serving households	7
Pension total	Total of Pension funds of financial institutions and "of which: public pensions" portion of Social security funds	8

* The codes used in this table correspond to the sector codes used in Chapter 3 and in statistical tables.

** "Financial institutions for small businesses" include the Japan Post Bank from the fourth quarter of 2007.

Table 2. List of Transaction Items and Principal Financial Instruments

Names of transaction items	Principal financial instruments	Code*
Currency and deposits		A
Currency	Bank of Japan notes and coin	A-a
Deposits with the Bank of Japan		A-b
Government deposits	Current deposits, special deposits, designated deposits, and reserve deposits for government fractional notes issued	A-c
Transferable deposits	Current deposits, ordinary deposits, savings deposits, deposits at notice, special deposits, reserves for tax payments, and ordinary postal savings	A-d
Time and savings deposits	Time deposits, installment savings, fixed savings, and postal savings (excluding ordinary postal savings)	A-e
Certificates of deposits		A-f
Foreign currency deposits	Foreign currency-denominated current deposits, foreign currency-denominated ordinary deposits, foreign currency-denominated notice deposits, foreign currency-denominated special deposits, foreign currency-denominated time deposits, and foreign currency-denominated deposits included in foreign exchange reserves	A-g
Deposits with the Fiscal Loan Fund		B
Loans		C
Bank of Japan loans		C-a
Call loans and bills	Unsecured call loans, secured call loans, yen-denominated call loans, and foreign currency-denominated call loans	C-b
Loans by private financial institutions		C-c
Housing loans		C-c-a
Consumer credit	Consumer finance, sales credit to consumers, and loans for education	C-c-b
Loans to companies and governments		C-c-c
Loans by public financial institutions		C-d
Of which: housing loans		C-d-a
Loans by the nonfinancial sector		C-e
Installment credit (not included in consumer credit)	Deferred credit and finance leases	C-f
Repurchase agreements and securities lending transactions	Bond gensaki (sale and repurchase) transactions and bond lending transactions with cash collateral	C-g
Debt securities		D
Treasury discount bills		D-a
Central government securities and FILP bonds	Super-long-term government bonds, long-term interest-bearing government bonds, medium-term discounted government bonds, interest-bearing medium-term government bonds, short-term discounted government bonds, Fiscal Loan Fund bonds, and inherited government bonds	D-b
Local government securities	Publicly issued municipal bonds and non-subscribed municipal bonds	D-c
Public corporation securities	Public corporation bonds, public finance corporation bonds, and agency bonds	D-d
Bank debentures	Interest-bearing bank debentures and discount bank debentures	D-e
Industrial securities	Domestic straight bonds and domestic bonds with warrants	D-f
External securities issued by residents		D-g
Commercial paper		D-h
Trust beneficiary rights	Collectively managed designated money trusts and loan trusts	D-i
Structured-financing instruments	Asset-backed (AB) domestic corporate bonds, asset-backed commercial paper (ABCP), and monetary claims trust beneficiary rights	D-j

Equity and investment fund shares		E
Equity		E-a
Listed shares	Stocks listed on a stock exchanges	E-a-a
Unlisted shares	Stocks unlisted on a stock exchanges and stocks of listed companies which are not traded in the markets	E-a-b
Other equity	Investments in special corporations and Bank of Japan Subscription Certificates	E-a-c
Investment trust beneficiary certificates	Bond investment trusts, stock investment trusts, and real estate investment trusts	E-b
Insurance, pension and standardized guarantees		F
Non-life insurance technical reserves	Saving-type nonlife insurance and mutual aid insurance	F-a
Life insurance reserves	Savings-type life insurance	F-b
Annuity entitlements	Annuity insurance of life insurance and mutual aid insurance	F-c
Pension entitlements	Corporate pensions and personal pensions	F-d
Claims of pension funds on pension managers		F-e
Provisions for calls under standardized guarantees		F-f
Financial derivatives and employee stock options		G
Forward-type instruments	FRA, interest rate swaps, currency swaps, exchange contracts, and foreign exchange margin transactions(unsettled positions)	G-a
Option-type instruments	OTC bond options, OTC interest options, OTC currency options, government bond options, short-term yen interest futures options, TSE Stock Price Index options, and Nikkei Stock Average options	G-b
Employee stock options		G-c
Deposits money	Deposit money, tenant guarantees, deposits with golf courses, and employees' deposits, etc.	H
Trade credits and foreign trade credits	Accounts receivable, accounts payable, notes receivable, and notes payable	I
Accounts receivable/payable	Accrued income and expenses, prepaid expenses and unearned income, accounts due and accounts payable, and prepayments and advances received	J
Outward direct investment	Share capital in overseas corporations (for control purposes)	K
Outward investment in securities	Stocks issued by non-residents, bonds issued by non-residents, and foreign investment trusts	L
Other external claims and debts		M
Of which: gold and SDRs etc.	Monetary gold, Special Drawing Rights (SDRs), and IMF reserve positions	M-a
Others		N
Financial surplus and deficit	(Flow table)	Y
Difference between financial assets and liabilities	(Stock table)	
Difference in reconciliation amounts	(Reconciliation table)	
Total		Z
(Reference)Foreign exchange reserves		W

* The codes used in this table correspond to the sector code used in Chapter 4 and in statistical tables.

Chapter 3 Definitions and Scope of Sectors

Chapter 3 Definitions and Scope of Sectors

This chapter examines the classification of economic entities in the FFA and discusses the definition and scope of each sector in detail. Please refer to Table 1 in the end of Chapter 2 for a list of sectors and the major institutions involved. The title numbers used for the sectors below correspond to the codes used in Table 1 and the sector codes used in statistical tables.

The following sections also clarify the basic concepts behind the FFA based on the System of National Accounts 2008 (the 2008 SNA), and Monetary and Financial Statistics Manual (the IMF Manual) with respect to the points at issue for each sector and the notes for the use of sector data.

1. Financial institutions

"Financial institutions" are institutions whose primary activities cover:

- financial intermediation activities that correspond to the intermediation of funds and involve the holding of financial assets and liabilities; or
- financial auxiliary activities (non-intermediary type financial activities) comprising the provision of services that are closely linked with financial intermediation but do not involve the holding of financial assets and liabilities.

This sector includes the "central bank," "depository corporations" (including collectively managed trusts), "securities investment trusts," "insurance corporations and pension funds," "other financial intermediaries," "financial auxiliaries," and "public captive financial institutions."

Moreover, holding companies, whose main objective is to control and manage the subsidiaries and whose group's primary activities are financial, are included in "financial holding companies" which is a sub-sector of financial auxiliaries.

[Treatment of failed financial institutions]

In case of failed financial institution, as long as it continues operation and satisfy the definition, it will be included in respective sectors. However, if there are no available data, in principle, the figure for the prior period is used for estimation.

1-1. Central bank

"Central bank" is a financial institution that issues currency, controls interest rates and the volume of money and credit. It refers to the Bank of Japan.

[The need – or otherwise – for a monetary authority sector]

It is possible to envisage a monetary authority sector that combines the central government's Foreign Exchange Fund Special Account with the central bank. However, the FFA has not established a monetary authority sector (1) because it believes that it is appropriate to show the financial assets and liabilities of the central bank and the central government separately; and (2) because no such sector is used in the national accounts.

1-2. Depository corporations

"Depository corporations" are financial institutions that engage in financial intermediation through accepting deposits and deposit-like instruments from general investors. The sector includes "banks," "postal savings"(until the third quarter of 2007) and "collectively managed trusts."

[Scope of deposits expanded]

Recognizing that financial innovation has led to a blurring of the lines between deposits of banks and that of financial institutions other than banks, or, deposits and deposit-like instruments, the IMF Manual advocates the use of a broader concept for depository corporations that also include financial institutions other than banks. Taking into consideration both this proposal and the scope of deposits within Japan's institutions and statistical frameworks, the FFA has adopted the depository corporations, which included postal savings (until the third quarter of 2007) and collectively managed trusts (money and loan trusts) besides banks.

The FFA has adopted the concept of "segregation of accounts" (see Chapter 2) with respect to collectively managed trusts (money and loan trusts) and classifies the account as an independent entity in the "depository corporations." This approach has been adopted because many of the products sold resemble deposits in several respects, offering principal guarantee, and coverage by deposit insurance.

1-2-1. Banks

"Banks" refers to institutions that engage in financial intermediation through the process of accepting deposits and savings. This sector includes domestically licensed banks, foreign banks in Japan, financial institutions for agriculture, forestry, and fisheries and financial institutions for small businesses ("Japan Post Bank" is included from the fourth quarter of 2007). Branches and local offices overseas of domestic banks are included in the overseas sector.

[Distinguishing between public and private institutions]

The financial institutions included in "banks" are private financial institutions. *Shoko Chukin* Bank, of which the government holds more than 50% of the equity, is included in "financial institutions for small businesses" because the government does not carry voting rights of equity ownership.

1-2-1-1. Domestically licensed banks

"Domestically licensed banks" are defined as banks and long-term credit banks engaging in financial intermediation through deposit-taking which have been established under Japanese legislation. Only banking accounts of domestically licensed banks are included and trust accounts are not included.

Financial holding companies which have domestically licensed banks as its major subsidiaries are included in "financial holding companies."

[Treatment of banks with special functions]¹

Even though they are banks under the provisions of the Banking Law, banks with special functions are classified under sectors other than "domestically licensed banks." Specifically, the Resolution and Collection Corporation (RCC), which collects claims, is classified under "other financial intermediaries – nonbanks."

In light of the fact that the RCC's main business activities were on the acquisition and recovery of claims even before its establishment through merging of the Resolution and Collection Bank (RCB) and Housing Loan Administration Corporation (HLAC), it is included in "other financial intermediaries – nonbanks" (in the "finance company" as its sub-sector.) However, considering that the Tokyo Kyodo Bank, the former RCB, was established following transfers of business from liquidated *shinkumi* banks, deposits it owes and the corresponding loans, are included in the "financial institutions for small businesses."

In other financial statistics, the RCC is regarded as domestically licensed banks. It should be noted that the above segregation of accounts are particular to the FFA.

1-2-1-2. Foreign banks in Japan

"Foreign banks in Japan" refers to branches engaging in financial intermediation through deposit-taking that are established in Japan by foreign banks.

1-2-1-3. Financial institutions for agriculture, forestry, and fisheries

"Financial institutions for agriculture, forestry, and fisheries" are defined as institutions that engage in financial intermediation through the acceptance of deposits and savings, and whose primary business is lending to persons involved in agriculture, forestry and fisheries. This sector includes the following institutions:

The Norinchukin Bank, Prefectural Credit Federations of Agricultural Cooperatives, agricultural cooperatives, Prefectural Credit Federations of Fishery Cooperatives, fisheries cooperatives

[Treatment of affiliated financial institutions]

Financial institutions for agriculture, forestry, and fisheries constitute an organization of affiliated institutions with the Norinchukin Bank at its head. The Norinchukin Bank absorbs funds as members make deposits with affiliated financial institutions higher up the organization. It therefore appears appropriate to apply the concept of "consolidation," whereby higher-ranking institutions serve as investing entities while deposits with affiliated financial institutions are offset between higher- and lower-ranking institutions. However, the FFA does not apply this concept, showing deposits with affiliated financial institutions on a gross basis. This is because (1) the Norinchukin Bank and the various associations and federations that make up

¹ The Cooperative Credit Purchasing Company (CCPC, liquidated in March 2004) was treated as being "consolidated" with domestically licensed banks. This was due to the fact that although the CCPC had taken over loan assets from banks, it had also borrowed its fund resources from the same banks.

the organization are all independent entities with corporate status, and (2) in reality, the upper-ranking institutions serve not as a trustee for investments, but as investing entities with discretionary control over investments.

1-2-1-4. Financial institutions for small businesses

"Financial institutions for small businesses" are defined as institutions that engage in financial intermediation through the acceptance of deposits and whose primary business is lending to small businesses. This sector includes the following institutions:

- (1) Shinkin Central Bank, *shinkin* banks
- (2) The Shinkumi Federation Bank, *shinkumi* banks
- (3) The Rokinren Bank, Labor Banks
- (4) The Shoko Chukin Bank
- (5) Japan Post Bank (after the fourth quarter of 2007)²

This sector also includes (6) deposits the RCC owes and the corresponding loans, considering that the Tokyo Kyodo Bank, the RCC, was established following the transfer of business from liquidated *shinkumi* banks.

1-2-2. Postal savings

"Postal savings" refers to the Japan Post Postal Savings Services (the former Postal Savings Special Account) that takes in postal savings and manages them as postal savings fund.

Due to establishment of Japan Post Bank in October 2007, the data of the "postal savings" sector are not available from the fourth quarter of 2007³.

[Treatment of the trust beneficiary rights]

The investment assets of trust beneficiary rights—held by the Postal Savings Services of Japan Post—have been consolidated since fiscal year 2003.

When the Postal Life Insurance Welfare Corporation was dissolved, Japan Post inherited the assets. The investment of assets through the Corporation had been shown as Postal Savings Special Account investment assets following a two-stage consolidation process before fiscal year 2002, when the corporation was disbanded. More specifically, part of the assets of the Postal Savings fund had been invested in financial products such as stocks and bonds via the Postal Life Insurance Welfare Corporation into separately managed money trusts, so that both the Corporation and the separately managed money trusts could be viewed as trustees. In the first stage, therefore, the appropriate financial assets of the separately managed money trust had been consolidated with those of the Postal Life Insurance Welfare Corporation. In the second stage, the appropriate financial assets of the

² The "Japan Post Bank" started its operation in October 2007. It is posted in the "financial institutions for small businesses" from the fourth quarter of 2007.

³ The Japan Post Postal Savings Services was inherited to Japan Post Bank in October 2007. Japan Post Bank has been included in "financial institutions for small businesses."

Corporation had been consolidated with those of the special account for the Postal Savings.⁴

1-2-3. Collectively managed trusts

"Collectively managed trusts" refers to trust accounts that collectively manage funds taken in through sales of financial instruments to general investors. The sector includes collectively managed money trusts and loan trusts.

[Segregation of collectively managed trusts]

In principle, the IMF Manual does not treat trusts as independent entities, but as an exception proposes that trusts established for the purposes of financial intermediation be treated as such entities in view of its nature.

In Japan, financial instruments offered by this sector resemble deposits, and the trust accounts themselves perform a financial intermediary function by collectively managing funds they receive. Therefore, trust accounts of jointly managed money and loan trusts are separated from other trust accounts, and treated as financial intermediaries⁵.

1-3. Securities investment trusts

"Securities investment trusts" are investment trust management companies that raise funds by issuing investment trust beneficiary certificates, and invest them in various types of financial instruments⁶. Bond investment trusts and stock investment trusts are included in the subsectors. Although the sector includes investment trust management companies that also engage in the investment advisory business, assets entrusted in connection with this business are "consolidated" to the primary investing entities, that financial assets and liabilities are not shown in the sector (please refer to Chapter 2).

[The financial intermediation function of investment trust management companies]

Since the FFA emphasizes the role of the original investing entity, it treats investment trust management companies that make investment decisions as financial intermediaries, and consolidates the managed assets with trust accounts.

Even though investment trust management companies do not take risks for the loss-replacement since they pay performance dividends through management gains, they transform the nature of the financial flow by pooling

⁴ The assets and liabilities of the former special account for financial deregulation of the Postal Savings Special Account had been totaled with the former general account of the Postal Savings Special Account until fiscal year 2000. Since Postal Savings Funds started managing investments on its own account, the special account for financial deregulation and the general account of the postal savings special account have been totaled. The phrase "totaled with" was preferred to "consolidated with" to indicate the totaling of all financial assets and liabilities without offsetting the claim and credit relationships from the former General Account through the former Trust Fund Bureau to the former Special Account, respecting each accounts as an independent entity.

⁵ Banks that have trust accounts clearly distinguish between (1) profits and losses associated with collectively managed money trusts (loss-replacement type) and loan trusts, and (2) profits and losses arising from trustee businesses (such as specified money trusts, pecuniary trusts other than money trusts, pension trusts) that are close in nature to commissions income.

⁶ This sector does not include foreign investment trusts (investment trusts established overseas). When residents acquire or dispose of foreign trusts, they are treated as "other external claims and debts."

funds and by diversified investment to various financial institutions. Therefore they are regarded as financial intermediaries.

Beneficiary certificates are treated as liabilities of the securities investment trust sector even if securities companies, banks and other institutions sell investment trust instruments.

[Real Estate Investment Trust (REIT)]

Real Estate Investment Trust (REIT) was listed and traded in September 2001 as one form of investment trust. Investment corporations (investment trust management companies), which are the investment entities, raise funds by issuing investment securities (investment trust beneficiary certificates) to buy and hold real estates.

This is similar to securities investment trust sector as an entity to issue investment trust beneficiary certificates to raise funds for investment. However, the point where raised funds are managed through acquisition of real estates is closer to real estate agents.

The IMF defines that financial intermediary institutions are institutions that raise funds to acquire financial assets by issuing financial liabilities. Therefore, REIT that manages funds through acquisition of real assets (real estates) does not qualify as financial intermediaries. As such, the FFA classifies the REIT as private nonfinancial corporations along with real estate agents.

1-3-1. Bond investment trusts

"Bond investment trusts" are investment trusts whose principal investment targets are bonds and short-term money market instruments, and do not include stocks.

1-3-1-1. Money management funds and money reserve funds

This sub-sector of "bond investment trusts" shows MMF (money management funds) and MRF (money reserve funds), which are the principal targets for investments in short-term money market instruments.

[Subdivision of securities investment trusts based on investment instruments]

In its subdivisions for the "finance" sector, the IMF Manual focuses on instruments offered by financial institutions (deposits, insurance and pension products, and others). With regard to subdivisions for so-called "investment funds," it advocates a focus on investment instruments (short-term money market products, bonds, stocks and real estate). The reasoning behind this is that, since all investment funds pool funds through the issue of securities, there are no noticeable differences between the instruments issued. On the other hand, there are differences between the degree of risk and return depending on the investment instruments.

1-3-2. Stock investment trusts

"Stock investment trusts" are investment trusts that can include stocks as investment targets. Even those investment trusts whose primary investment targets are bonds and short-term money market instruments are assigned in this category if they can include stocks to some extent.

1-4. Insurance and pension funds

"Insurance and pension funds" are defined as institutions that engage in financial intermediation through managing funds received from the policy holders of insurance and beneficiaries of private pension funds. This sector includes insurance and pension funds.

1-4-1. Insurance

"Insurance" refers to institutions that offer life insurance products and nonlife insurance products (reinsurance and credit insurance, as well as property and liability insurance and personal accident insurance), and manage the funds they receive. This sector includes institutions that offer life insurance, nonlife insurance, and mutual aid insurance.

1-4-1-1. Life insurance

"Life insurance" refers to institutions that offer life insurance products and invest the funds they receive. This sector includes life insurance companies (the Japan Post Insurance—which was the Japan Post Postal Life Insurance Services until the third quarter of 2007 [the former Postal Life Insurance Special Account]—is included).

[Treatment of Japan Post trust beneficiary rights]

The investment assets of trust beneficiary rights of the postal life insurance and the postal savings have been consolidated as their own assets since fiscal year 2003.

Sectors were classified and consolidated by accounts before fiscal year 2002, when the Postal Life Insurance Welfare Corporation was liquidated and the assets were inherited by Japan Post. The Postal Life Insurance Welfare Corporation was engaged in different activities; among them were; (1) the management and operation of policyholders' welfare facilities and post office facilities, and (2) investment of the Postal Life Insurance fund and the postal savings fund (the former special fund for financial deregulation of the Postal Savings Special Account). Since the Corporation was a public institution established with 100-percent government investment, and in light of the fact that it functioned as a business entity in the case of (1) above, and as trustee for financial investments of (2), the FFA classified it as follows: The general accounts and the "special account for advanced land-use projects" involved in (1) were classified as "public nonfinancial corporations." Regarding (2), the Special Account for Fund-Management Operations, which managed Postal Life Insurance funds, was consolidated with "life insurance" (offsetting long-term borrowings and entrusted funds from the said Special Account). The postal savings fund (the former Special

Account for Postal Savings Fund Management Operations), which managed the special fund for financial deregulation, was consolidated with "postal savings" (offsetting entrusted funds from the said Special Account). At that time, consolidating the trust beneficiary rights (separately managed money trusts of trust accounts) held by each account in (2) made it possible to identify what sorts of financial assets (stocks, bonds, etc.) were being managed in the life insurance and postal savings sectors.

1-4-1-1-1. Private life insurance companies

The "private life insurance companies," subdivision of the "life insurance" sector, consists of companies that provide life insurance products and invest the funds they receive. The pension accounts (entrusted funds associated with pensions) of such companies are excluded, in order to be "consolidated" under such items as "pension funds." Holding companies that have private life insurance companies as their main subsidiaries are included in "financial holding companies."

Data of the "private life insurance companies" sector are not available from the fourth quarter of 2007.

[Treatment of pension accounts]

The trust "consolidation" method is applied to the pension accounts of private life insurance companies (entrusted funds associated with group pension insurance). By consolidating assets and liabilities associated with the group pension insurance, the portfolio is recorded as the assets of primary investing entities. More specifically, the entrusted funds associated with employees' pension funds and other pension funds are consolidated with "pension funds," and the funds entrusted by the Government Pension Investment Fund (the former Pension Welfare Service Public Corporation) are consolidated with "social security funds" (see Chapter 2).

The entrusted funds managed by the "general accounts" of private life insurance companies therefore differ from the entrusted funds of trust accounts in that: (1) an assumed rate of interest is set⁷; (2) the insurance companies have discretionary rights concerning investments; and (3) at present, separate accounts are not shown for the management of pension fund assets. However, "consolidation" is also used in connection with the portion of assets entrusted to life insurance companies for the following reasons: (4) they are moving in the direction of performance distributions because the weight of the "special account" is high and the special accounts are similar to trust accounts⁸; (5) equal treatment of pension trusts and the pension accounts of life insurance companies is considered appropriate for analytical purposes; and (6) if pension accounts are disclosed, it would eliminate

⁷ If the actual investment yield exceeds the assumed rate of interest, a portion of the interest gain is returned in the form of dividends. However, if the actual investment yield falls below the expected rate of interest, the life insurance company carries the interest loss until the expected rate of interest is altered.

⁸ Funds entrusted to life insurance companies under type 1 special agreements (collective investment of pension funds through an account separate from general accounts within the existing investment regulation framework) and type 2 special agreements (noncollective investment of each pension fund) resemble pension trusts in that the accounts are segregated from other accounts, and investment returns are based on actual returns.

obstacles to making estimates. Due to limitation as noted in (3), it should be noted that estimates are not as accurate as those of pension trusts.

1-4-1-2. Nonlife insurance

"Nonlife insurance" refers to institutions that offer nonlife insurance products such as property and liability insurance, disability insurance, reinsurance, credit insurance and standardized guarantee, and invest the funds they receive. This sector includes "private nonlife insurance companies," "standardized guarantee institutions" and the following institutions:

- (1) Some of the national insurance special accounts, incorporated administrative agencies:

Forestry Insurance Account of the Forest Research and Management Organization, Nippon Export and Investment Insurance, Agricultural Reinsurance Account, Fishing Boat Reinsurance Account and Fishermen's Mutual Aid Account of Special Accounts for Stable Food Supply, Compensation Account and Account for Measures Against Motor Vehicle Accidents of the Special Accounts for Motor Vehicle Safety, and the Special Account for Earthquake Reinsurance, Injury and Accident Mutual Aid Benefits Account of Japan Sport Council, and Special Exemption Clause Account of Japan Sport Council, Housing Loan Insurance Account of Japan Housing Finance Agency.

- (2) Credit insurance institutions:

Credit insurance business account of Japan Finance Corporation, agricultural credit insurance business account of the Agriculture, Forestry and Fisheries Credit Fund, and fisheries credit insurance business account of the Agriculture, Forestry and Fisheries Credit Fund⁹.

[Treatment of reinsurance companies]

In its sectoral classifications, the 2008SNA and the IMF Manual classifies "reinsurance" (institutions that engage in sub-underwriting of insurance policies concluded by insurance companies) as "nonlife insurance," but proposes a more detailed classification of the "insurance" sector. While private and public institutions that specialize in reinsurance do exist in Japan, the FFA classifies "reinsurance" under "nonlife insurance," primarily because the financial assets of private reinsurance companies are very small.

1-4-1-2-1. Private nonlife insurance companies

The "private nonlife insurance companies," subdivision of the "nonlife insurance," are privately managed nonlife insurance companies that provide nonlife insurance instruments such as property and liability insurance, disability insurance and invest the fund they receive. Holding companies that have private nonlife insurance companies as their main subsidiaries are included in "financial holding companies." In addition, since entrusted funds pertaining to pensions are

⁹ Of the Agriculture, Forestry and Fisheries Credit Foundations, accounts associated with forestry credit guarantees are classified in "standardized guarantee institutions" because they engage in the credit guarantee business.

"consolidated" into the defined contribution schemes sector, the said funds are excluded from this sector.

1-4-1-2-2. Standardized guarantee institutions

The "standardized guarantee institutions," subdivision of the "nonlife insurance," are institutions whose major business is providing credit guarantees issued in large numbers for fairly small amounts along identical lines. "standardized guarantee institutions" include: (1) entities providing public credit guarantees; and (2) entities providing guarantees for housing loans. Japan Federation of Credit Guarantee Corporations, Japan Educational Exchanges and Services, Forestry Credit Insurance Business Account of the Agriculture, Forestry and Fisheries Credit Foundations, and Japan Fisheries Credit Guarantee Fund Associations are included in (1). Guarantee companies affiliated with banks and group financial institutions, and independent guarantee companies for housing loans are included in (2).

1-4-1-3. Mutual aid insurance

"Mutual aid insurance" refers to cooperatives that offer mutual aid insurance products (uniform-rate installment life and nonlife insurance products), and invest the funds they receive. They are unusual in that, unlike private life and nonlife insurance companies, a single institution offers both life and nonlife insurance products. Entrusted funds associated with pensions of the National Mutual Insurance Federation of Agricultural Cooperatives (national pension fund plans, former qualified retirement pension plans, and defined benefits pension plans) and those of the National Mutual Insurance Federation of Fishery Cooperatives (national pension fund plans) are excluded from this sector because, as in the case of private life insurance companies, they are consolidated into the "pension funds" sector.

This sector includes the following institutions¹⁰:

- (1) Institutions established under the Agricultural Cooperatives Law:
The National Mutual Insurance Federation of Agricultural Cooperatives.
- (2) Institutions established under the Fisheries Cooperatives Law:
National Mutual Insurance Federation of Fishery Cooperatives.
- (3) Institutions established under the Consumers' Livelihood Cooperative Association Law:
National Federation of Workers and Consumers Insurance Cooperatives.

[Differentiating "mutual aid associations" from "private nonprofit institutions serving households"]

In the case of mutual aid associations, there are numerous cases where they are managed by associations other than those engaged in finance. This has given rise to a classification problem of whether to focus on their insurance functions and include them in the "financial institutions" sector, or

¹⁰ Mutual aid insurance schemes based on the Small Business Cooperatives Law and other legislation also exist. But the FFA does not cover them because their financial assets are very small.

focus on their nature as associations and classify them as "private nonprofit institutions serving households." Because of the sheer size of the investment assets and limitations of source data, the FFA treats associations that engage exclusively in the mutual aid insurance business as "finance," and those that also engage in activities such as the distribution of goods (consumers' cooperative societies and the like) as "private nonprofit institutions serving households."

1-4-2. Pension funds

"Pension funds" are entities that invest funds established for pensions and lump-sum retirement benefits. This sector includes "corporate pensions" and "other pensions."

1-4-2-1. Corporate pensions

"Corporate pensions" are entities that manage private pension funds established at the corporation or corporate group unit level for employees through joint contributions by employers and employees. In "corporate pensions," there are "defined benefit schemes" in which employers promise employees that they will provide the amount of future payment in advance, and "defined contribution schemes" in which the amount payment depends on the contributions and the performance of managed assets.

[Treatment of reserve funds for "contract out"]

The Employees' Pension Fund manages the public pension portion of the Employees' Welfare Insurance called "contract out" as well as the private pension portion. The Employee's Pension Fund acts as agent for the Special Account for Public Pension in levying and investing contributions and in paying premiums. Bearing in mind the fact that Employees' Welfare Insurance, in itself, serves income redistribution function, it is undesirable to record the public pension portion on corporation pensions assets which accumulate and manage funds as private pensions.

However, out of the assets of the Employee's Pension Fund, the source data for the amount assets of the public pension portion are not available, and the public pension portion is not managed in a segregated account, "corporate pensions" include the public pension portion in accordance with a basic unit of classification.

1-4-2-1-1. Defined benefit schemes

Among "corporate pensions," "defined benefit schemes" are pension fund trusts for which the amounts of future payment are decided in advance. This sector includes the Employees' Pension Fund, defined benefit corporate pensions (fund-type and contract-type pension), former qualified retirement pension plans (abolished at the end of March 2012), and retirement benefit trusts.

[Pension entitlements under defined benefit schemes]

Pension entitlements under defined benefit schemes recommended by the 2008 SNA are equivalent to retirement benefit obligations in the corporate

accounting which are actuarially calculated on an accrual basis. Retirement benefit obligations show the total amount of pension liabilities to be paid by companies, regardless of payment methods as lump-sum retirement benefits or pension payments.

1-4-2-1-2. Defined contribution schemes

Among "corporate pensions," "defined contribution schemes" are pension fund trusts for which the amounts of payment are decided by the contributions paid and their investment performance. This sector includes defined contribution pension schemes (corporate type).

1-4-2-2. Other pensions

"Other pensions" refers to public entities that engage in the management of pension funds for the self-employed and employees of smaller businesses etc.¹¹, and includes the following institutions.

- (1) The National Pension Fund.
- (2) The Organization for Workers Retirement Allowance Mutual Aid (manages the Retirement Allowance Mutual Aid System of Medium and Small Enterprises, and the Construction, the Sake Brewing Industry and Forestry Retirement Allowance Mutual Aid Association, etc).
- (3) The small-sized enterprise mutual aid account of Organization for Small & Medium Enterprises and Regional Innovation.
- (4) Farmers' Pension Fund (Account for Payment of Pension).
- (5) Individual-type Defined Contribution pension plan.
- (6) Retirement pension benefit accounts of the Federation of National Public Service Personnel Mutual Aid Associations.
- (7) Retirement pension benefit accounts of the Mutual Aid Associations of Local Public Service Personnel, etc.
- (8) Retirement pension benefit account of the Promotion and Mutual Aid Corporation for Private Schools of Japan.

1-5. Other financial intermediaries

"Other financial intermediaries" are institutions that procure funds by methods other than deposits and deposit-like instruments, and invest those funds. This sector includes nonbanks, public financial institutions, and financial dealers and brokers.

1-5-1. Nonbanks

"Nonbanks" are private institutions that raise funds by methods other than

¹¹ The "retirement and pension benefits" of mutual aid pension funds established in October 2015, corresponding to (6), (7), and (8) above, are classified as "other pensions" not "corporate pensions" since (i) "retirement and pension benefits" are not private pension funds while (ii) they have contributions from the state, local governments, or private schools recognized as employers, and (iii) the funds are managed by the relevant unit of the state, local governments, or private schools.

deposits and deposit-like instruments, and invest funds through lending and similar activities (including the holding of underlying loan claims and the purchase of liquidated claims). This sector includes finance companies and structured-financing special purpose companies (SPCs) and trusts.

1-5-1-1. Finance companies

"Finance companies" are institutions that procure funds by methods other than deposits and deposit-like instruments, make investments through lending or similar activities, and hold the underlying loan claims. They include the following institutions.

- (1) Moneylending companies subject to the provisions of the Money Lending Business Act (including leasing and credit companies that are registered as moneylending companies, but excluding moneylending companies whose primary business is construction and real estate).
- (2) Securities finance companies.
- (3) The Resolution and Collection Corp. (RCC)
- (4) Venture capitals.

1-5-1-2. Structured-financing special purpose companies (SPCs) and trusts

"Structured-financing special purpose companies (SPCs) and trusts" are institutions that acquire monetary claims, raising the necessary funds by issuing securities backed by the claims in question. The sector covers SPCs, including those established under the Special Purpose Company Law. Certain monetary claims trusts are also included.

[The need for an independent sector for SPCs, etc.]

At a time when financial institutions and business corporations that hold monetary claims, such as banks and leasing and credit companies, are becoming increasingly active in liquidating claims, the coverage of SPCs and trusts that can be used in liquidation is of great significance. Even if the FFA identified instruments associated with structured finance, unless SPCs were made into a separate sector, it appears that the assets of the creditors for the underlying claims are suddenly transformed into assets of the holders of the structured-financing instruments. The correspondence with the liabilities (the debtors for the underlying claims) would become indeterminate, making it impossible to identify the flow of funds clearly. In statistical terms, therefore it is necessary to treat institutions that pool assets (a kind of paper company) as economic entities.

In light of the fact that these institutions are financial intermediaries that procure funds by methods other than deposits, and manage them by investing them in loan assets and the like, the FFA classifies them as a sort of nonbank, like the above-mentioned finance companies.

In liquidation through transfers of loan assets and loan participation, on the other hand, institutions for pooling claims are not established, and the loan claims are directly transferred from the assets of the transferring

financial institution to those of the recipient financial institution¹². For this reason, neither form of liquidated claims is included in SPCs.

[Special purpose companies and trusts associated with the liquidation of real estate]

With regard to structured-financing special purpose companies and trusts associated with the liquidation of real estate, holding financial claims secured by real estate is regarded as financial intermediation, and the institutions in question are included in this sector. In contrast, if the assets held by an SPC are real estate only, it is regarded not as a financial intermediary but as an institution that has the same functions as a real estate company (private nonfinancial corporations).

1-5-2. Public financial institutions¹³

"Public financial institutions" are the special accounts of central government and those institutions owned or controlled by the central government whose principal business is financial intermediation. This sector includes the Fiscal Loan Fund and government financial institutions. The Japan Post bank and the Japan Post Insurance (Japan Post Postal savings services and postal life insurance services until the third quarter of 2007) that are generally regarded as "public financial institutions," are classified as "depository corporations" and "life insurance" respectively in the FFA, and are not included in this sector. On the other hand, some corporations with special status are included, as will be noted later.

1-5-2-1. Fiscal Loan Fund

The Fiscal Loan Fund raises funds by issuing Fiscal Investment and Loan Program bonds (FILP bonds) and by accepting deposits from special accounts of the central government and others, and supplies such funds to institutions covered by the Fiscal Investment and Loans Program. Specifically, this sector implies the Special Account of Fiscal Investment and Loan Program Fund (Fiscal Loan Program Fund Account).

1-5-2-2. Government financial institutions

"Government financial institutions" are public financial institutions other than the Fiscal Loan Fund. This sector includes the following institutions.

- (1) Special Account for Public Investment and Loans other than the Fiscal Loan Fund:
Fiscal Investment Account for Fiscal Investment and Loan Program.
- (2) Government financial institutions¹⁴:

¹² Transfers of loan assets include the resale to other banks of loan claims in the form of nominated claim transfers under the Civil Code, and the loan participation method, whereby the economic benefits and risk associated with general loan claims held by banks are transferred to other banks.

¹³ For classification criteria of public financial institutions, please refer to Chapter 2.

¹⁴ Since the primary business of the Credit Insurance Business Accounts in the Small and Medium Enterprise Unit of Japan Finance Corporation, the former Credit Insurance Accounts of Japan Finance Corporation for Small and Medium Enterprise (which was the former Japan Small and Medium Enterprise Corporation, which

Development Bank of Japan, Japan Finance Corporation, Japan Bank for International Cooperation, and The Okinawa Development Finance Corporation.

- (3) Other special corporations, authorized companies, and incorporated administrative agencies that engage in financial intermediation as their primary business¹⁵:

Japan Housing Finance Agency (excluding Account for Housing Loan Insurance), Welfare and Medical Service Agency, Business for ODA Loans of Japan International Cooperation Agency, Japan Student Services Organization, Subsidy Accounts of the Promotion and Mutual Aid Corporation for Private Schools of Japan, Nuclear Damage Compensation and Decommissioning Facilitation Corporation, Japan Investment Corporation, Regional Economy Vitalization Corporation of Japan, Agriculture, forestry and fisheries Fund corporation for Innovation, Value-chain and Expansion Japan, the Corporation for Revitalizing Earthquake-Affected Business, Private Finance Initiative Promotion Corporation of Japan, Cool Japan Fund Inc., Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development, and Fund Corporation for the Overseas Development of Japan's ICT and Postal Services.

* This sector included a part of the Government Pension Investment Fund¹⁶ (Former General Account <corresponding to General Account of the former Pension Welfare Service Public Corporation>) until the end of March 2006.

This sector also included Former Industrial Revitalization Corporation of Japan until the end of March 2007.

1-5-3. Financial dealers and brokers

"Financial dealers and brokers" are institutions that mainly engage in the dealing and broking of financial instruments¹⁷. The sector includes securities companies, *tanshi* companies (money market dealers) and Banks' Shareholdings Purchase Corporation (Special Account)¹⁸.

was former Small Business Credit Insurance Corporation) is credit insurance, it is included in the "nonlife insurance" sub-sector of "insurance and pension funds," not in this sector.

¹⁵ The general accounts of the former Japan National Oil Corporation were classified as Government financial institutions until the liquidation in fiscal 2004.

¹⁶ Pension Welfare Service Public Corporation was dissolved in April 2001, and the Government Pension Investment Fund was newly established. The account involved in loan services had been included in Government financial institutions before April 2001. For its sectoral classification, please refer to 3-3-1 "public pensions."

¹⁷ Dealing business could be regarded as financial intermediation since it shoulders various types of risks, including market risk and credit risk. On the other hand, broking business does not shoulder such risks and cannot be considered as financial intermediation. Therefore, foreign exchange brokers that only engage in broking business are classified as "financial auxiliaries." Originally, *tanshi* companies (money market dealers) focused on broking type business associated with short-term money-market instruments such as call loans and bills. In recent years, however, they have acquired individual approval under the Former Securities and Exchange Law to engage in dealing activities like *gensaki* repurchase agreements and securities lending transactions. Since the weight of such activities is growing, they are classified under "other financial intermediaries."

¹⁸ Special Account of Banks' Shareholdings Purchase Corporation is classified into Financial dealers and brokers due to their business of, among others, buying and selling interest in banks on its own account. The General Account of the Corporation, in contrast, is just for the medium of buying bank interest by other companies; it is thus included in Financial auxiliaries.

1-5-3-1. Securities companies

"Securities companies," which is a sub-sector of "financial dealers and brokers," comprises companies that engage in sales, solicitation, and underwriting businesses in the Type I Financial Instruments Business under the Financial Instruments and Exchange Act (equivalent to securities companies in the former Securities and Exchange Law). This includes Japanese branches of foreign securities companies. Moreover, holding companies whose major subsidiaries are the above securities companies are included in "financial holding companies."

1-6. Financial auxiliaries

"Financial auxiliaries" are institutions that engage in business associated with financial intermediation, but do not engage in financial intermediation on their own account. They include "financial holding companies" and the following institutions.

- (1) Institutions that guarantee financial instruments (other than institutions included in "standardized guarantee institutions"):
Deposit Insurance Corporation of Japan, Agricultural and Fishery Co-operative Savings Insurance Corporation, Agriculture Credit Guarantee Fund Associations, Life Insurance Policyholders Protection Corporation of Japan, Non-life Insurance Policyholders Protection Corporation of Japan
- (2) Stock exchanges, financial exchanges:
Tokyo Stock Exchange, Osaka Exchange, Nagoya Stock Exchange, and Tokyo Financial Exchange (TFX)
- (3) Banks' Shareholdings Purchase Corporation (General Account)
- (4) Foreign exchange brokers, foreign exchange margin trading firms

Many other institutions that engage in business associated with financial intermediation exist, but their outstanding financial assets and liabilities are so small that the FFA limits its coverage to the above.

1-6-1. Financial holding companies

Among holding companies with headquarter functions (to be involved in management of subsidiaries), those subsidiaries' primary activities are finance are included in "financial holding companies." Specifically, it includes holding companies which have subsidiaries, such as domestically licensed banks, securities companies, and insurance companies, as well as the Japan Exchange Group.

1-7. Public captive financial institutions

Public captive financial institutions¹⁹ are entities which raise funds only from specific ones such as government and does not plan to raise funds from markets²⁰,

¹⁹ The 2008 SNA defines "captive financial institutions" as "entities providing financial services, where most of either their assets or liabilities are not transacted on open financial markets," while also envisaging private ones such as holding companies without headquarter functions and special purpose companies (SPCs) other than securitization vehicles. However, since we cannot confirm their existence by available data in Japan, we have not included private sector entities.

²⁰ Those which are envisaged to raise funds on open financial markets institutionally are not included in Public

as well as those organizations which raise funds from markets but only invest in a limited group of destinations or operations.

This sector includes Japan Expressway Holding and Debt Repayment Agency, Japan Finance Organization for Municipalities (former Japan Finance Corporation for Municipal Enterprises), Subsidy Account and Regional Public Transport Account of the Japan Railway Construction, Transport and Technology Agency, Small and Medium Enterprise Bankruptcy Prevention Mutual Aid Account, Industrial infrastructure Improvement Account and Succession of Investment Account of the Organization for Small & Medium Enterprises and Regional Innovation, the Special Accounts for Urban Development Loan (until the end of March 2008), Fund for the Promotion and Development of the Amami Islands, and Agricultural Insurance Associated Account and Fisheries Disaster Compensation Account of Agriculture, Forestry and Fisheries Credit Foundations.

2. Nonfinancial corporations

"Nonfinancial corporations" are institutions that engage in ordinary production of goods and services (excluding financial services by financial institutions, government services by the general government and non-profit services to households by private nonprofit institutions serving households). This sector includes private nonfinancial corporations and public nonfinancial corporations.

[Treatment of medical institutions]

The 2008 SNA argues that if an entity sets prices that correspond to production costs, and this has an impact on demand, they should be treated as market producers even if they are called "nonprofit corporations." It gives medical institutions as an example of entities that should be treated this way. In line with the 2008 SNA's proposal, the FFA classifies medical institutions as producers of normal goods and services. It classifies institutions that are controlled or owned by the government, such as hospitals managed by public institutions and national and public hospitals, as "public nonfinancial corporations," and medical corporations other than these as "private nonfinancial corporations." Private medical practitioners are included in the "household" sector as sole proprietorships.

2-1. Private nonfinancial corporations

"Private nonfinancial corporations" are nonfinancial corporations that are owned and controlled by entities other than government. This sector includes profit-making corporations (joint-stock corporations, limited partnerships, unlimited partnerships, and limited liability companies) and medical corporations.

2-2. Public nonfinancial corporations²¹

"Public nonfinancial corporations" are nonfinancial corporations that are

captive financial institutions even if the actual funds raised on the open markets are minimal, in order to avoid the lower usability for users due to frequent reclassifications.

²¹ Please refer to Chapter 2 for classification criterion of public institutions.

owned or controlled by the central government or local governments, and a part of special accounts of the central government.

More specifically, this sector includes the following institutions.

(1) Special corporations and incorporated administrative agencies²²:

Japan Tobacco Inc., Nippon Telegraph and Telephone Corporation, Nippon Telegraph and Telephone East Corporation, Nippon Telegraph and Telephone West Corporation, Hokkaido Railway Company, Shikoku Railway Company, Japan Freight Railway Company, Tokyo Metro Co., Ltd., New Kansai International Airport Company, Ltd., Kansai International Airport Land Company, Ltd., Narita International Airport Corporation, East Nippon Expressway Company Limited, Central Nippon Expressway Company Limited, West Nippon Expressway Company Limited, Metropolitan Expressway Company Limited, Hanshin Expressway Company Limited, Honshu-Shikoku Bridge Expressway Company Limited, Japan Environmental Storage & Safety Corporation, Japan Post Holdings Co., Ltd., Japan Post Co., Ltd., Nippon Automated Cargo And Port Consolidated System, Inc., Japan Broadcasting Corporation, Japan Sewage Works Agency, National Association of Racing, Organization for Cross-regional Coordination of Transmission Operators, JAPAN, Japan Organization of Occupational Health and Safety, National Hospital Organization, Pharmaceuticals and Medical Devices Agency, Japan Community Health care Organization, National Cancer Center, National Cerebral and Cardiovascular Center, National Center of Neurology and Psychiatry, National Center for Global Health and Medicine, National Center for Child Health and Development, National Center for Geriatrics and Gerontology, Japan Organization for Metals and Energy Security, National Agency for Automobile and Land Transport Technology, The Japan Railway Construction, Transport and Technology Agency (excluding subsidy account and Regional Public Transport Account), Japan Racing Association, Japan Mint, National Printing Bureau, National Center for University Entrance Examinations, Organization for Improvement Around Airport, Urban Renaissance Agency, Facility Improvement Account of the Organization for Small & Medium Enterprises and Regional Innovation, Japan Sport Council (excluding Mutual Aid Benefit Account and Special Exemption Clause Account) , Welfare Service Account of the Promotion and Mutual Aid Corporation for Private Schools of Japan, Japan Legal Support Center, and Local Incorporated Administrative Agencies (Hospitals).

(2) Enterprise special accounts of the central government:

the Special Account for Safety of Motor Vehicle (Airport Improvement Accounts and Accounts for Motor Vehicle Inspection and Registration) and the Special Account for Patent Registration.

(3) Local public corporations:

²² The general account and the special accounts for advanced land-use projects of the Postal Life Insurance Welfare Corporation were classified into Public nonfinancial corporations until fiscal 2002, when the corporation was disbanded.

This mainly covers local housing supply corporation and municipal road corporation established under special laws²³.

(4) Local public enterprises:

These include local public enterprises to which the Local Public Enterprise Law applies and do not (excluding sewage enterprises service, slaughter house development project, and local night soil treatment facilities).

3. General government

"General government" refers to institutions that provide government services based on tax revenues. "government services" include the provision of public goods and services and income redistribution.

3-1. Central government

"Central government" refers to the central government accounting units and public institutions that provide government services, and includes the following institutions.

(1) Central government general accounts and special accounts not elsewhere classified:

General accounts, the Special Account for Administration of National Forestry Management Debt, the Special Account for Foreign Exchange Fund, the Special Account for Stable Supply of Food (Accounts for Stabilizing Agricultural Management, Stable Food Control Accounts, Business Accounts and Accounts for National Land Improvement), the Special Account for Local Allocation and Local Transfer Tax, the Special Account for Government Bonds Consolidation Fund, the Special Account for Measures for Energy, Designated National Properties Consolidation Accounts of the Special Account for Fiscal Investment and Loan Program Funds, and the Special Account for Reconstruction from the Great East Japan Earthquake.

(2) Special public corporations²⁴ and incorporated administrative agencies²⁵ not elsewhere classified:

Japan International Cooperation Agency (excluding Business for ODA Loans), Forest Research and Management Organization (excluding Forestry Insurance Account), Account for Farm Sales Loan of Farmers' Pension Fund, General Account of Organization for Small & Medium Enterprises and Regional Innovation, and National Universities, etc.

²³ Local public corporations are corporations in which local governments have a holding of 25% or more. Although those corporations in which local governments have invested between more than 25% and less than 50% of equity do not meet the quality as public institutions, segregation is difficult, so all local public corporations have been included in this sector. Out of these local public corporations, however, there are limits to the extent to which statistics can be identified for corporate juridical persons and foundations under the Civil Code, and joint-stock corporations under the Commercial Code. For this reason, the sector tends to focus on local housing supply corporations and local road development corporations.

²⁴ The former Petroleum stock accounts of Japan National Oil Corporation had been classified to the central government until the dissolution in February 2004.

²⁵ Incorporated administrative agencies are classified according to respective business, but most are included in the "general government" or "public nonfinancial institutions."

3-2. Local governments

"Local governments" are defined as institutions such as prefectures, cities, towns and villages that assume local self-government responsibilities and perform local administrative services and administration work entrusted by the central government. This sector includes the ordinary accounts, public enterprises accounts of local governments (Local public enterprises providing sewage enterprises service, slaughter house development project, and local night soil treatment facilities), a part of Local Incorporated Administrative Agencies (Institutes of Industrial Technology and Local Public University Corporations, etc.), Japan Agency for Local Authority Information Systems, Local Tax Agency, Property wards account, Local development corporation, and Harbor bureau improvement account.

The business accounts of local governments are, in principle, classified in the "public nonfinancial corporations" sector, as is the case with the enterprises special accounts of the central government. However, the business accounts are not strictly separated from ordinary accounts because of source data limitations.

3-3. Social security funds

"Social security funds" are defined as institutions that manage social insurance such as pension insurance (public pensions), medical care insurance, employment insurance and Workmen's Accident Compensation Insurance, collecting social insurance premiums, investing funds, and paying insurance claims. In addition to public pensions, they include the following institutions.

- (1) Corporate Health Insurance Societies (including their federation), National Health Insurance Societies (including their federation, but excluding Medical Service and Facility Management Accounts), Japan Health Insurance Association, the Special Account for Public Pension (excluding the accounts included in the public pensions sector), and Japan Pension Service.
- (2) The Special Account for Labor Insurance.
- (3) The Mutual Aid Fund of Compensation for Accidents on Duty of Firemen and Others, the Fund for Local Government Employees' Accident Compensation, the Local Assembly Members Mutual Aid Association.
- (4) Social Insurance Medical Fee Payment Fund.
- (5) Mutual Aid Association (excluding the accounts included in other pensions sector or public pensions sector and Accommodation and Medical Service Accounts).

3-3-1. Public pensions

"Public pensions" that manage pension insurance are posted as a sub-classification of "social security funds" and include the following institutions.

- (1) Certain special accounts of the government etc.:
The Special Account for Public Pension (Employees' Pension Accounts, National Pension Accounts, and Basic Pension Accounts) and Government

Pension Investment Fund (general accounts <corresponding to Pension-Source Strengthen Account of the former Pension Welfare Service Public Corporation and Fund-securing Operations Account>, Investment Account for Succeeded Funds).

- (2) Mutual pensions (employees' welfare insurance account and transitional long-term account of mutual aids):

The Federation of Government Officials' Mutual Aid Associations, the Pension Fund Association for Local Government Officials (the Federation of Mutual Aid Associations of Local Public Service Personnel, the National Federation of Mutual Aid Associations for Municipal Personnel, the Mutual Aid Association of Prefectural Government Personnel, the Public School Mutual Aid Association, the Police Personnel Mutual Aid Association, the Mutual Benefit Association For Tokyo Metropolitan Employees, and designated city employees' mutual aid associations), the Mutual Aid Association of Agricultural, Forestry and Fishery Corporation Personnel, and the employees' welfare insurance account and the transitional long-term account of the Promotion and Mutual Aid Corporation for Private Schools in Japan.

- (3) Farmers' Pension Fund (Account for Payment of Pension (Former Plan))

- (4) Coal-Mining Pension Fund

[Government Pension Investment Fund]

In the FFA, the concept of "segregation of accounts according to their individual function" is adopted, and hence, the general accounts of Government Pension Investment Fund, with the aim of effectively and securely managing the fund of National Pension and Employee's Pension Insurance, is posted separately under "social security fund (public pensions)" sector. Therefore, the account is totaled with the public pensions sector of the "social security funds."

In April 2001, when the Pension Welfare Service Public Corporation was dissolved and the Government Pension Investment Fund was newly established to continue many of its operations, both the Fund-Securing Operations Account (classified under public financial institutions) and the Pension-Source Strengthen Account (classified under public pensions) of the former Pension Welfare Service Public Corporation were united in general accounts (classified under public pensions). Thus, there are breaks between the first and second quarters of 2001 for both sectors.

4. Households

"Households" consists of small groups that engage in consumption and production activities and includes employers, employees, and sole proprietorships (proprietor of self-employed personal enterprises that are unincorporated including persons engaged in agriculture, forestry and fisheries) and recipients of property income and transfer income. For the limitation of the source data it is difficult to segregate assets and liabilities of sole proprietorships with some exceptions, such as "loans to companies and governments" included in "loans by private financial

institutions" and "trade credits and foreign trade credits (assets)."

5. Private nonprofit institutions serving households

"Private nonprofit institutions serving households" are institutions that provide services to households without seeking profits. They include the following institutions.

- (1) Corporations established under special laws:
Legally incorporated educational institutions, social welfare corporations, and religious corporations²⁶.
- (2) Those corporations and foundations established under the Civil Code that provide non-profit services to households.

[Classification of "nonprofit organizations"]

Under the 2008 SNA, nonprofit organizations are categorized according to which entity they provide services (household, corporation or government) and according to whether the founding entity is from the private or the public sector. Only privately-based organizations that provide services to households are classified in "private nonprofit institutions serving households." On the other hand, privately-based organizations that provide services to corporations, such as industry associations, are classified either as "private nonfinancial corporations" or "financial institutions" because their primary objective is to contribute to the acquisition of corporate profits. Moreover, organizations that are established by, and receive funds from, the government are classified as "general government" because their primary purpose is to provide services on behalf of government. The FFA does not include finance-related industry associations in the "financial institutions" sector. For this reason, almost all the non-profit organizations not included in the "private nonprofit institutions serving households" sector are classified as "private nonfinancial corporations."

6. Overseas

The "overseas" sector covers nonresidents, including international organizations, foreign governments, and foreign corporations. The scope of nonresidents is the same as that used in the *balance of payments statistics*.

²⁶ "Medical corporations" are classified under "private nonfinancial corporations" as institutions that provide normal services.

(Totals of the above-mentioned sectors)

7. Domestic nonfinancial sector

The "domestic nonfinancial sector" covers all "nonfinancial corporations," "general government," "households," and "private nonprofit institutions serving households."

8. Pension total

"Pension total" covers all "pension funds" of "financial institutions" and the "public pensions" subdivision of "social security funds."

Chapter 4 Definitions and Scope of Transaction Items

Chapter 4 Definitions and Scope of Transaction Items

This chapter examines the classification used for financial instruments (transactions, contents of assets and liabilities) in the FFA, and discusses the definition and scope of each transaction item, as well as the scope of mark-to-market accounting. Please refer to Table 2 on the end of Chapter 2 for a list of transaction items and principal financial instruments. The title codes used for the transaction items below correspond to the codes used in Table 2 and the transaction codes used in statistical tables.

The following sections also provide the basic concepts behind the FFA based on the System of National Accounts 2008 (the 2008 SNA), and Monetary and Financial Statistics Manual (the IMF Manual) with respect to the points at issue for each transaction item and the notes for the use of transaction data.

A. Currency and deposits

"Currency and deposits" consists of currency, deposits with the Bank of Japan, government deposits, transferable deposits, time and savings deposits, certificates of deposits, and foreign currency deposits. In addition to Japanese yen currency and deposits with domestic depository corporations (including "branches of foreign banks in Japan"), deposits of residents with overseas financial institutions are also included.

[Evaluation of deposits]

In the FFA, the stock of deposits is evaluated on a face value basis, and financial transaction flow is recorded principally using the term-on-term difference in that face value. In this respect, it may be argued that if mark-to-market accounting is thoroughly implemented, outstanding deposits should be posted on a market value (fair value) basis. However, due to source data limitation, it is difficult to estimate the market value and therefore, posting on a market value basis is not adopted.

A-a. Currency

"Currency" consists of Bank of Japan notes (paper currency) and coins. This item includes Japanese currency held by economic entities, irrespective of whether they are residents or nonresidents, and the total is the sum of Bank of Japan notes issued and coins in circulation¹.

[The currency-issuing entity]

Under the current system, the entity issuing bank notes is the Bank of Japan and the entity issuing coin is the government. However, the FFA treats bank notes and coins equally because the two are mutually interchangeable². Both are deemed to have been issued by the central bank, and are posted as liabilities

¹ "Currency" does not include foreign currencies held by residents. These foreign currencies are treated as "other external claims and debts" (assets of the domestic sector/liabilities of the overseas sector), but statistical measurements are not adequately conducted at present except foreign currency held by financial institutions.

² On the asset side of the Central Bank, it is treated fictitiously as holding claims against the central government (posted as "other assets").

of the central bank sector.

A-b. Deposits with the Bank of Japan

"Deposits with the Bank of Japan" refers to current deposits that are made with the Bank of Japan by its client financial institutions.

A-c. Government deposits

"Government deposits" refers to deposits made with the Bank of Japan for Treasury fund settlements. They consist of government deposit accounts set up at the Bank of Japan, and comprise current deposits, special deposits, designated deposits and others.

[Special characteristics of government deposits]

All the movement of government funds (revenue and expenditure of general and special accounts such as tax revenue and social insurance premium or claim-debt relationships between general and special accounts) are handled centrally at an account called the "treasury," and the totaled balance of those funds reflect in the increase and decrease of government deposits. In light of such accounting procedure and fund management of the government, in the FFA, the Treasury (central government) is regarded to hold the "government deposits" unilaterally, while movement of funds between each general and special accounts are treated fictitiously as change in financial claim-debt relationships between those accounts as "others"³.

A-d. Transferable deposits

"Transferable deposits" are deposits with indefinite deposit term and which are used primarily for settlements. They include current deposits, ordinary deposits, savings deposits, deposits at notice, special deposits and deposits for tax payments with depository corporations.

Postal transfers are posted under this item.

A-e. Time and savings deposits

"Time and savings deposits" are deposits from which withdrawals can be made with certain restrictions, and which are used primarily for savings. Specifically they include time deposits, installment savings with depository corporations, as well as residents' yen deposits with overseas financial institutions.

A-f. Certificates of deposits

"Certificates of deposits" are deposits that the depositor can transfer to a third party (transfers of claims payable to specific persons), including those issued by domestic financial institutions ("depository corporations" in the sectoral classification). They do not include CDs issued by overseas financial institutions (except foreign banks in Japan).

³ While government finance statistics shows the individual special accounts holding government deposits generally, the FFA treats fictitiously the government deposits of the government finance statistics as assets and liabilities of the central government under "others."

A-g. Foreign currency deposits

"Foreign currency deposits" are foreign-currency-denominated deposits. Specifically, it includes foreign-currency-denominated current deposits, foreign-currency-denominated ordinary deposits, foreign-currency-denominated notice deposits, foreign-currency-denominated special deposits, foreign-currency-denominated time deposits with depository corporations, as well as foreign currency deposits made with overseas financial institutions by residents.

[Evaluation of foreign currency deposits]

Exchange gains and losses arising from conversions of foreign currency accounts to yen should be recorded as reconciliation amounts. However, limitations of source data made it difficult to identify all the exchange gains and losses, so basically, term-on-term differences in outstandings after converting to yen, are estimated as financial transaction flows.

B. Deposits with the Fiscal Loan Fund

"Deposits with the Fiscal Loan Fund" are deposits made with the Fiscal Loan Program Account of the Fiscal Investment and Loan Program Special Account by other special accounts and public institutions. They provide fund resources for fiscal investment and loans, such as loans by public financial institutions. Deposits with the Fiscal Loan Fund is, like deposits, evaluated on a face-value basis.

C. Loans

"Loans" are monetary claims arising from cash loan agreements for consumption and installment sales contracts. The term is deemed to apply to cash loans for consumption held by domestic financial institutions, installment claim-type monetary claims, and those repurchase agreements and securities lending transactions whereby bond-backed credit is extended. They also include loan assets held by sectors other than financial institutions (such as nonfinancial corporations and the general government). Claims and debts that accompany issuance of securities are not included.

[Evaluation of loans]

There are cases where the real value of a loan diverges sharply from the face value because of a decline in the borrower's ability to fulfill its obligations. Taking this into account, the FFA evaluates and records loan stock data on a real value basis to the maximum extent possible, then calculates transaction flow data (the difference between the executed amounts and the collected amounts of the loan) in such a way as to avoid including changes in the real value.

The FFA estimates fair loan values by deducting the amounts posted as allowances for individual uncollectibles⁴ (until fiscal 1997, the amounts

⁴ General loan-loss provisions are not subjected to exclusion, because reserves for loan-losses whose payment ability is sufficient or not deteriorating so badly, and are calculated by using past irrecoverable ratio to a certain pool of credits.

posted as "specific loan-loss provisions" and known as "write-downs") from the nominal outstanding. There are several reasons for this. 1) Individual uncollectibles are estimated value of irrecoverables based on conditions of debtor such as bankruptcy, and value of collaterals for each loan. 2) It is possible to derive an approximation of the fair value by deducting the amount of loan assets that is irrecoverable. Due to limitation of the source data, figures are not posted on a discount present value basis.

The *balance of payments statistics* and *international investment position statistics* account for loans on a face-value basis, and do not identify or record reductions in fair value⁵.

[Evaluations of foreign currency-denominated lending]

With regard to foreign currency-denominated lending, it is necessary for the FFA to record exchange gains and losses arising from conversions of foreign currency accounts to yen as reconciliation amounts. However, limitations of source data made it difficult to identify these exchange gains and losses, so term-on-term differences in outstandings are all estimated as financial transaction flows.

With regard to lending by the "overseas" sector (included in "loans by the nonfinancial sector" in the FFA), and part of the borrowing by the "overseas" sector (included in "loans by private financial institutions," "loans by public financial institutions" and "loans by the nonfinancial sector" in the FFA), discrepancies (the divergence between the flow data and the term-on-term difference in the outstanding balance) between data sources — the *balance of payments statistics* and the *international investment position statistics* — give rise to a reconciliation amount. It can be assumed that this reconciliation amount includes components arising from exchange fluctuations.

C-a. Bank of Japan loans

"Bank of Japan loans" are loans made by the Bank of Japan, and include overseas loans as well as loans to financial institutions.

C-b. Call loans and bills

"Call loans and bills" are the sum of "call loans and money" and "bills purchased and sold."

"Call loans and money" refers to short-term fund loans (one year or less) of financial institutions (in the domestic financial markets), and comprises unsecured call loans and secured call loans. This item includes foreign-currency-denominated (US dollar-denominated) transactions as well as yen-denominated transactions.

"Bills purchased and sold" refers to short-term credit facilities among financial institutions that involve buying and selling bills. This item includes bills purchased and sold by private financial institutions, and bills purchased and sold by the Bank of Japan for the purposes of monetary control⁶.

⁵ While the *balance of payments statistics* treat write-offs as capital transfers, the FFA does not, except in certain cases involving public institutions.

⁶ Bills purchased and sold rapidly decreased from the second half of the 2000s with the balance of almost zero

C-c. Loans by private financial institutions

"Loans by private financial institutions" refers to loans by private financial institutions (financial institutions excluding 1) Japan Post Bank included in the "financial institutions for small businesses" sector, 2) Japan Post Insurance included in the "life insurance" sector, 3) public institutions included in the "nonlife insurance" sector, 4) public institutions included in the "other pensions" sector, 5) public institutions included in the "financial auxiliaries" sector, 6) "public financial institutions" sector, and 7) "public captive financial institutions" sector). Specifically, installment credit and rights of indemnity as well as cash loans for consumption are included. Housing loans, consumer credit, loans to companies and governments comprise loans by private financial institutions.

Among transactions through inter-office accounts between branches in and out of Japan of financial institutions, those posted as assets of domestic branches (liabilities of overseas branches) are included.

[Treatment of inter-office accounts]

Although inter-office transaction is an internal transaction within an enterprise, since the FFA regards overseas branches as nonresidents, inter-office transactions between the domestic and overseas branches are treated as financial transactions between domestic and overseas sectors.

Inter-office account is recorded as "loans" between domestic financial institutions and overseas sector, since 1) nature of inter-office accounts could be basically regarded as loans between branches, and 2) the *Balance of Payments Statistics* record them as loans and borrowings.

Inter-office accounts that are posted in the asset side of domestic offices (liabilities of overseas branches) are treated as "loans by private financial institutions," as are loans provided by the financial institutions. On the other hand, those posted in the asset side of overseas branches (liabilities of domestic branches) are treated as "loans by the nonfinancial sector" as they are loans provided by the overseas sector.

(Inter-office transaction between domestic office and overseas branches)

	Financial Institutions	Overseas
Domestic office → Overseas branches	Loans by private financial institutions (assets)	Loans by private financial institutions (liabilities)
Overseas branches → Domestic office	Loans by the nonfinancial sector (liabilities)	Loans by the nonfinancial sector (assets)

[Treatment of rights of indemnity]

Like loan guarantee contracts, contingent claims and debts (those with conditions attached) are not recorded in the FFA. Rights of indemnity arising from subrogation (execution of a guarantee contract) are claims against entities that have defaulted, that their fair value can be expected to be lower

since June 2009 because: 1) transactions on the interbank markets changed from trading of bills to other methods such as call loan and money transactions; and 2) outstanding bills purchased decreased substantially in trading of bills by the Bank of Japan, due to the abolition of bill purchasing operations after the introduction of funds-supplying operations against pooled collateral in June 2006.

than those of normal loan assets. However, since at least some parts of the claims are highly likely to be collected by disposing collaterals, right of indemnity could be regarded as assets and therefore treated as loans in the FFA.

Rights of indemnity acquired by financial institutions are converted to a fair-value basis by deducting allowances for individual uncollectibles or taking into account performance in collecting on rights of indemnity. Because of source data limitations, 1) rights of indemnity acquired by entities other than financial institutions (included in the loans of nonfinancial sector) are not converted to a fair-value basis, 2) while those acquired by individuals are not identified or posted in the FFA.

C-c-a. Housing loans

"Housing loans" provided by private financial institutions are loans from private financial institutions to households for the purpose of housing investments (purchases of residential land and building, and large-scale repairs). They include housing loans made by banks and nonbanks. Bridge loans (short-term bridge finance) associated with housing investment are also included in this item. Apartment loans, that are loans provided to construct houses for rent, are not included in this item but are included in the loans to companies and governments.

C-c-b. Consumer credit

Consumer credit extended by private sector institutions consists of consumer finance and sales credit to consumers from private sector institutions (excluding credit for housing investment but including loans for education). It includes consumer loans from banks and nonbanks, as well as sales credit extended to consumers by nonbanks (installment and noninstallment receivables). Affiliated loans from nonbanks are not included in this item⁷.

C-c-c. Loans to companies and governments

"Loans to companies and governments" extended by private-sector institutions consist of loans from private-sector institutions to entities other than consumers. This item includes loans to companies (corporate business and sole proprietorships), loans to governments (the central government and local governments), loans to private nonprofit institutions serving households, and external lending.

C-d. Loans by public financial institutions

"Loans by public financial institutions" comprise loans made by the Japan Post Bank included in the "financial institutions for small businesses" sector (the "postal savings" sector until the third quarter of 2007), the Japan Post Insurance included in the "life insurance" sector (the "postal life insurance" sector until the third quarter of 2007), public institutions included in the "nonlife insurance" sector, "other pensions" sector, and "financial auxiliaries" sector, "public financial

⁷ Affiliated loans are credit guarantees for sales credit extended by banks and life insurance companies provided by sales credit companies. Such credit is regarded as contingent assets of the sales credit companies and not included in consumer credit.

institutions" sector, and "public captive financial institutions" sector. The loan recipients include local governments, public institutions (institutions covered by the FILP), private corporations and nonprofit organizations, and households.

C-d-a. Housing loans

The "housing loans" sub-category of loans by public financial institutions covers loans to households from public financial institutions for housing investment purpose (purchases of residential land and so on). It comprises housing loans extended by the Japan Housing Finance Agency (excluding Account for Housing Loan Insurance) and the Welfare and Medical Service Agency (Former Claim Management and Collection Account).

C-e. Loans by the nonfinancial sector

"Loans by the nonfinancial sector" refers to loans (cash loans for consumption) from economic entities other than financial institutions. It includes loans to the customers, subsidiaries and affiliates of corporate businesses, policy loans by local governments, and loans by overseas⁸ (including foreign financial institutions and overseas branches of domestic financial institutions). Sales credits and payables arising from transactions in goods and services are not included in this item, but in "trade credits and foreign trade credits."

C-f. Installment credit (not included in consumer credit)

"Installment credit" refers to claims pertaining to actual sales of goods that are repaid in installments combining principal and interest. It comprises installment credit not included in consumer credit, and includes deferred payment credit and finance leases that are treated as lease receivables in corporate accounts⁹ and installment credit of Urban Renaissance Agency and private nonfinancial corporations.

C-g. Repurchase agreements and securities lending transactions

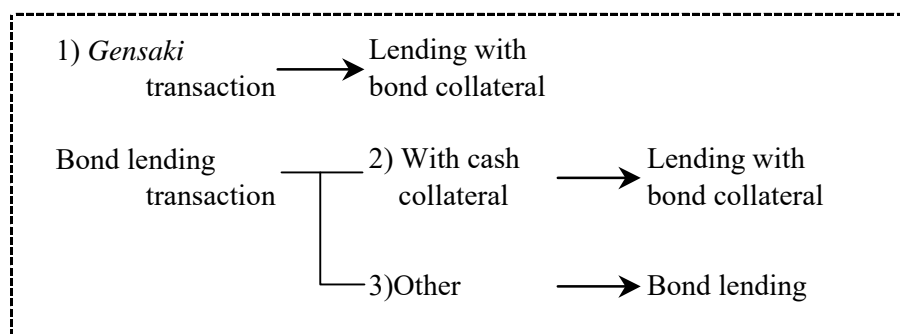
"Repurchase agreements and securities lending transactions" refers to those repurchase agreements and securities lending transactions that can be regarded as credit facilities backed by bonds and other instruments. Bonds and other instruments are sold or lent in real transactions. More specifically, they include bond *gensaki* (sale and repurchase) transactions in central government securities and treasury discount bills, and bond lending transactions with cash collateral.

⁸ Euro Yen impact loans are included in this item. If Euro Yen impact loans are extended to the private nonfinancial corporation by overseas branch of domestic financial institution (and the fund was financed from its domestic office) the transactions are posted in the following procedure. Financial institution<loans by private financial institution (assets)> to Overseas<loans by private financial institution (liabilities)> to Overseas<loans by nonfinancial sector (assets)> to Private nonfinancial corporation<loans by nonfinancial sector (liabilities)>.

⁹ For finance leases, "installment credit (not included in consumer credit)" included only finance lease transactions that transfer ownership because of source data limitations. However, in accordance with the new accounting standard ("Accounting Standard for Lease Transactions") which was applied in April 2008, "installment credit (not included in consumer credit)" has started to include lease transactions that do not transfer ownership from the second quarter of 2008.

[Treatment of repurchase agreements and securities lending transactions according to classification by form and purpose]

In line with the principle of emphasis on economic substance, repurchase agreements and securities lending transactions are handled according to their form and purpose as follows.



Since the economic function of both 1) the *gensaki* transaction and 2) the bond lending with cash collateral transaction are financing through loans with securities collateral, they are both treated as loans. The bonds subject to delivery serve as collateral.

The bond lending transactions that are not backed by cash collateral are treated as rentals that do not involve transfers of ownership. Consequently, the bonds in question are treated as assets held by the lending entity.

D. Debt securities

"Debt securities" are monetary claims in the form of securities and these issuers are responsible for repaying. They include securities under the Financial Instruments and Exchange Act and securities in private laws that are not subject to that law. More specifically, the FFA includes various kinds of bonds, as well as CP, trust beneficiary rights, structured-financing instruments, and mortgage securities.

[Evaluation of debt securities]

In the FFA, bonds are evaluated at the current price (equal to the market price) and transaction flow is calculated according to term-on-term differences in face value (or book value). Due to the limitation of source data, and as estimated figures are expected to be approximate value of current transaction amount, flows are calculated in above mentioned method but not on transaction amount. Discrepancies between the term-on-term differences in stocks and transaction flows are posted as a reconciliation amount in the reconciliation table separately.

This reconciliation amount may arise as a result of 1) a decline in the issuing entity's ability to fulfill obligations, or 2) a divergence between the interest on the bonds and market interest rates.

From this viewpoint, certain problems arise in the evaluation of privately placed bonds, which are rarely traded in the markets. However, even though they may be privately placed bonds, they may serve as substitutes for loans. To

maintain consistency with loans, therefore, it is appropriate to convert them to a fair-value basis. Also, limitations of source data make it impossible to differentiate publicly subscribed bonds from privately placed bonds, so the latter are subject to market price evaluation, too.

D-a. Treasury discount bills

"Treasury discount bills" refers to those bonds issued domestically by the government that are short-term bonds issued for the purpose of procuring funds for the Treasury, and includes financing bills issued by Special Account for the Fiscal Loan Fund and petroleum securities issued by Special Account for the Energy Measures.

Treasury bills issued before January 2009 are included in "central government securities and FILP bonds," while those issued from February 2009 onward are included in "treasury discount bills."¹⁰

D-b. Central government securities and FILP bonds

"Central government securities and FILP bonds" refers to bonds issued domestically by the government, excluding treasury discount bills. It includes 1) revenue bonds¹¹ (super-long-term interest-bearing government bonds, long-term interest-bearing government bonds, medium-term discounted government bonds, medium-term interest-bearing government bonds, and treasury bills issued before January 2009); 2) inherited government bonds (bonds inherited by the JNR Settlement Corporation, petroleum inherited bonds, bonds inherited by the Honshu-Shikoku Bridge Authority, and bonds inherited by the Japan Expressway Holding and Debt Repayment Agency); and 3) FILP bonds¹² issued by the Fiscal Loan Fund Special Accounts. In the FFA, 1) Revenue bonds and 2) inherited government bonds are liabilities of the central government sector and 3) FILP bonds are liabilities of the public financial institutions (Fiscal Loan Fund) sector.

[Treatment of deferred payment bonds]

Deferred payment bonds (subsidy bonds, demand bonds¹³ and subscription / contribution bonds that are allocated to international institutions) represent government payment obligation, however, since there are no cash transfer at time of their issue, they differ from revenue bonds. Reflecting the actual economic situation, the FFA treats each deferred payment bonds differently from revenue bonds as follows:

¹⁰ "Financing bills" was renamed "treasury discount bills" in the FFA, reflecting the integration of "financing bills" and "treasury bills" to form "treasury discount bills" from the first auction in February 2009. Since Financing bills were included in "treasury discount bills" prior to the integration (before the fourth quarter of 2008), classifications of Treasury discount bills in FFA differ before and after the integration (after the first quarter of 2009).

¹¹ Government bonds for individuals are included from March 2003, and Inflation-Indexed Bonds are included from March 2004.

¹² FILP bonds were issued in April 2001. Owning FILP bonds as a financial asset is equivalent to owning other government bonds.

¹³ The demand bonds to the Deposit Insurance Corporation are included. Corporate bonds were voted in Special Operations Accounts in fiscal year 1997 and 2000, and in Abolition of Financial Crisis Management Account in fiscal year 2000. These bonds no longer exist: all of them were returned by the end of fiscal year 2002.

Types of bonds		Treatment in the FFA
1) Subsidy bonds, demand bonds		Not to be treated as financial assets
Government subscription / contribution bonds	2) to the IMF	Not to be treated as financial assets
	3) to other international institutions	Treated as external claims and debts

Specifically, 1) with regard to subsidy bonds, government bonds issued to Deposit Insurance Corporation, current transfers are recorded at time of redemption in the national accounts, and therefore, it is appropriate to record the transfer of cash at the same time in the financial accounts to maintain consistency. And 2) for government subscription bonds to IMF, considering that transactions at time of issue are not recorded in the *Balance of Payments Statistics* and the national accounts, the FFA does not post these bonds as financial assets at time of issuance.

3) For subscription / contribution bonds to international institutions other than IMF, it is natural to regard them as financial assets or liabilities, but in light of its nature of non-interest bearing, payable on demand and non-transferable, there leaves some room for doubt as to classify them under central government securities and so, they are posted under "other external claims and debts."

D-c. Local government securities

"Local government securities" refers to bonds issued domestically by local governments. It includes 1) publicly issued municipal bonds¹⁴, and 2) privately-placed municipal bonds (issued by rural prefectures, towns and villages, special wards, and local government associations <clerical unions>).

Local government securities issued by local public enterprises accounts of local government are treated as local government securities issued by public nonfinancial corporation sector.

Some local government securities are recorded as loans by lender. These securities are recorded under "C-c. Loans by private financial institutions" or "C-d. Loans by public financial institutions" in the FFA.

D-d. Public corporation securities

"Public corporation securities" refers to those securities issued domestically by corporations such as public institutions that are backed by government credit (Government Guaranteed Bonds are also included). Of the "bonds issued by corporations in accordance with special laws" as stipulated in the Financial Instruments and Exchange Act, they exclude bonds included in bank debentures.

The following bonds are included as of the end of March 2023.

¹⁴ In addition to publicly issued municipal bonds issued by prefectures and ordinance-designated cities, "Residential Local Government Bonds" and "Joint Local Government Bonds" have been included since 2002 and 2003, respectively.

- 1) Bonds whose issuing entities are classified as public nonfinancial corporations:
East Nippon Expressway bonds, Central Nippon Expressway bonds, West Nippon Expressway bonds, New Kansai International Airport bonds, Kansai International Airport bonds succeeded by New Kansai International Airport Co., Ltd., Kansai International Airport bonds succeeded by Kansai International Airport Land Co., Ltd., Tokyo Transport bonds succeeded by Tokyo Metro Co., Ltd., Urban Renaissance bonds, Japan Railway Construction, Transport and Technology bonds (excluding subsidy accounts and Regional Public Transport Account), and Special bonds issued by regional public corporations.
- 2) Bonds whose issuing entity is classified as the central government:
Water Resources bonds, National Institution for Academic Degrees and Quality Enhancement of Higher Education bonds, national university corporation bonds, and Japan Science and Technology Agency bonds.
- 3) Bonds whose issuing entities are classified as public financial institutions:
Agriculture, Forestry and Fishery Finance Corporation bonds succeeded by Japan Finance Corporation, Japan Finance Corporation bonds, Okinawa Development Finance Corporation bonds, Development Bank of Japan bonds, Government Housing Loan Corporation bonds succeeded by Japan Housing Finance Agency, Japan Housing Finance Agency bonds, Property accumulation saving scheme-tied housing bonds of Japan Housing Finance Agency, Welfare and Medical Service Agency bonds, Japan Bank for International Cooperation bonds, Japan Student Services Organization bonds, Japan International Cooperation Agency bonds, Nuclear Damage Compensation and Decommissioning Facilitation Corporation bonds, Private Finance Initiative Promotion Corporation of Japan bonds, Fund Corporation for the Overseas Development of Japan's ICT and Postal Services bonds, and Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development bonds.
- 4) Bonds whose issuing entities are classified as private nonfinancial corporations:
Private Urban Development bonds and Central Japan International Airport bonds.
- 5) Bonds whose issuing entities are classified as financial auxiliaries:
Deposit Insurance Corporation bonds.
- 6) Bonds whose issuing entities are classified as public captive financial institutions:
Hanshin Expressway bonds succeeded by Japan Expressway Holding and Debt Repayment Agency, Honshu-Shikoku Bridge bonds succeeded by the agency, Road bonds succeeded by the agency, East Nippon Expressway bonds succeeded by the agency, Japan Expressway Holding and Debt Repayment Agency bonds, Municipal Enterprise bonds succeeded by Japan Finance Organization for Municipalities, Japan Finance Organization for Municipal Enterprises bonds, Japan Finance Organization for Municipalities

bonds.

- 7) Bonds whose issuing entities are classified as other pensions:
Property accumulation saving scheme-tied housing bonds of Organization for Workers Retirement Allowance Mutual Aid (Property Accumulation Account).

D-e. Bank debentures

"Bank debentures" refers to bonds that are issued by financial institutions through subscriptions or offerings. Of the "bonds issued by corporations in accordance with special laws" as stipulated in the Financial Instruments and Exchange Act, they are bonds issued under the Long-term Credit Bank Law, the Shoko Chukin Bank Limited Law, the Norinchukin Bank Law, and the Shinkin Bank Law. As of the end of March 2023, they include Shoko Chukin Bank bonds, Norinchukin Bank bonds, and Shinkin Central Bank bonds. Bank debentures include discount bonds as well as interest-bearing bonds. Corporate bonds other than bank debentures issued by the financial institutions are included in industrial securities or external securities issued by residents.

D-f. Industrial securities

"Industrial securities" are bonds issued domestically by joint-stock corporations. They correspond to secured or unsecured bonds under the Financial Instruments and Exchange Act and include 1) straight bonds¹⁵ (Electric Power bonds, JR Bonds, NTT bonds, and ordinary bonds), and 2) bonds with warrants.

D-g. External securities issued by residents

"External securities issued by residents" refers to bonds issued in overseas markets by Japanese residents. It does not include external bonds issued by nonresidents. The issuing entities belong to a wide range of sectors, including local governments, public nonfinancial corporations, public financial institutions, and private nonfinancial corporations.

D-h. Commercial paper

"Commercial paper (CP)" is issued by financial and nonfinancial corporations to raise short-term funds. This item covers "promissory notes issued by enterprises in order to procure necessary business funds" as stipulated by the Ordinance of the Cabinet Office under the Financial Instruments and Exchange Act, and also includes short-term bonds based on the law for bonds transfer, so-called electronic CP.

Only CP issued in Japan by residents are included in this item. On the other hand, domestically-issued Asset Backed CP and CP issued overseas are not included in this item. Instead, the former are included in "structured-financing instruments," and the latter in "other external claims and debts."

¹⁵ Straight bonds issued by Expressway Companies that are not issued under special acts, and those succeeded to by Japan Expressway Holding and Debt Repayment Agency from Expressway Companies are included.

D-i. Trust beneficiary rights

"Trust beneficiary rights" refers to beneficiary rights associated with pecuniary trusts. They are namely, "collectively managed designated money trusts" and "loan trusts."

D-j. Structured-financing instruments

"Structured-financing instruments" refers to financial instruments issued by structured-financing SPCs and trusts. They differ from bonds backed by the creditworthiness of the issuing institution in the sense that their value is based on the value of cash flow generated by liquidation of assets that are transferred to SPCs or trust accounts.

"Structured-financing instruments" includes the following instruments (please refer to the section on "structured-financing SPCs and trusts" in the sectoral classifications for information on the claims covered).

- 1) Asset-backed securities (ABS)¹⁶:
Asset-backed domestic corporate bonds and domestically-issued asset-backed commercial paper (ABCP).
- 2) Monetary claim trust beneficiary rights.
- 3) Mortgage securities¹⁷.

[Treatment of multiple-stage securitization]

Structured-financing instruments may be issued through multiple-stage securitization where 1) ABS or 2) Monetary claim trust beneficiary rights are issued backed by 2) Monetary claim trust beneficiary rights. The FFA not only records such issues on the liability side of the Structured-financing SPCs and trust sector but also posts the amount of monetary claim trust beneficiary certificates underlying such multiple-stage securitization on the asset side of the sector.

E. Equity and investment fund shares

"Equity and investment fund shares" refers to financial products of which holders have residual claims to issuers.

E-a. Equity

"Equity" refers to holdings in various kinds of corporations established in

¹⁶ Asset-Backed Securities (ABS) are classified according to the type of securities issued, as in AB bonds and ABCP. Many of them are further classified according to the issuing entity and the region of issue, as in AB domestic bonds (issued domestically by residents), AB *samurai* bonds (yen denominated foreign bonds that issued domestically by nonresidents), and AB Eurobonds (issued in the Euromarket by residents and nonresidents).

¹⁷ Mortgage securities refer to financial instruments which companies issuing mortgage securities used to raise funds by integrating mortgage loans on real estate and mortgages, securitizing them, and selling them for fairly small amounts. The FFA based on the 1993 SNA treated Mortgage securities as an independent transaction item and recorded their sales amounts under the liability of the "finance companies" sector. However, their amounts continued to decrease after the collapse of the bubble until the amounts outstanding became zero, with no possibility of future issues. The FFA based on the 2008 SNA reclassifies and records mortgage securities as a part of Structured-financing instruments.

Japan. This item covers shares issued by joint-stock corporations established under the Commercial Code and holdings in corporations established under special laws (special corporations, etc.). "Equity" consists of "listed shares," "unlisted shares," and "other equity."

E-a-a. Listed shares

"Listed shares" subdivision of "equity" covers shares that are listed on stock exchanges in Japan.

[Treatment of Bank of Japan Subscription Certificates]

Bank of Japan Subscription Certificates are posted under "other equity," not "listed shares," as it is considered appropriate to focus more on their nature as equity in authorized corporations than on their transferability.

[Treatment of preferred shares subscribed under capital injection operation]

Preferred stocks subscribed to banks under capital injection operation, underwritten by Resolution and Collection Corporation, are posted as "unlisted shares" in the FFA. This is because those preferred shares are not listed.

The capital injection operated by subscription of subordinated bonds is treated as "industrial securities." Those operated in the form of subordinated loans are treated as either "loans by private financial institutions" or "bank of Japan loans."

E-a-b. Unlisted shares

"Unlisted shares" subdivision of "equity" covers shares that are not listed on stock exchanges in Japan. Shares issued by listed companies which the government has a duty to hold by laws are included in this item.

E-a-c. Other equity

"Other equity" refers to holdings in corporations other than joint-stock corporations and special corporations, etc.

E-b. Investment trust beneficiary certificates

"Investment trust beneficiary certificates" refers to beneficiary certificates issued by Investment trust management companies against entities that purchase the investment trusts by splitting their beneficiary rights into the beneficiary certificates, and investment securities issued by investment companies. It corresponds to the beneficiary rights of securities investment trusts or the "beneficiary rights of securities investment trusts or loan trusts" referred to in the law on investment trust and investment companies under the Financial Instruments and Exchange Act.

[Treatment of retained earnings and distributions from investment trust beneficiary certificates]

Since investment trusts are just a conduit which gathers money from investors and manages the assets efficiently, their retained earnings, which are the remaining undistributed interest and dividends arising from the

performance of investment trusts, should naturally be regarded as belonging to investors, not to investment trusts. Paying attention to such characteristics of investment trusts, the 2008 SNA proposes that retained earnings be recorded as distributed to investors at first, then recorded as if they were reinvested by investors.

Furthermore, investment trusts in Japan can make distributions not only from interest and dividend income but also from capital gains and the principal as funds. Some investment funds have the policy of distributing a certain amount every month regardless of their investment performance, sometimes giving investors distributions more than interest and dividend income at the time of deteriorating investment performance. Given the investment trusts' characteristics as a conduit, such distributions (the so-called "refunds of principal") should be recorded as withdrawal by investors of investment trust beneficiary certificates.

From these viewpoints, in addition to transactions in the markets (amounts purchased by investors less the amounts of cancellation and redemption), the FFA records retained earnings from interest and dividend income as funds in the transaction amounts (flows) of investment trusts' investment trust beneficiary certificates as if they were reinvested by investors. On the other hand, the FFA estimates the distributions from capital gains and principal as funds to deduct them from flows.

F. Insurance, pension and standardized guarantees

"Insurance, pension and standardized guarantees" are the policyholders' claims on insurance and pension contracts. They include pension entitlements, claims of pension funds on pension managers, and provisions for calls under standardized guarantees in addition to the equivalent of the policyholders' holdings of insurance reserves.

F-a. Nonlife insurance technical reserves

"Nonlife insurance technical reserves" are the equivalent of policyholders' holdings of reserves for savings-type non-life insurance. They include liability reserves of savings-type non-life insurance of non-life insurance companies and mutual aid insurance (all excluding insurance other than saving type).

F-b. Life insurance reserves

"Life insurance reserves" are the equivalent of policyholders' holdings of reserves for savings-type life insurance. They include liability reserves of savings-type life insurance of life insurance companies (excluding insurance other than saving type).

[The scope for recording of non-life insurance technical reserves and life insurance reserves]

Policy reserves are broken down into 1) reserves for outstanding claims (unpaid insurance claims), 2) liability reserves and 3) reserves for dividend to policyholder, and liability reserves are broken down into 2-1) unearned

premium reserves, 2-2) reserves for maturity returns (insurance premium reserves), and 2-3) catastrophe loss reserves (reserves for risks). The FFA treats each item as follows.

Under the FFA, the scope for recording of non-life insurance technical reserves and life insurance reserves is decided paying attention to the following characteristics of each item:

First, 1) reserves for outstanding claims are included in the scope of recording since they are due but unpaid liabilities because of their status of pre-application or in litigation. Moreover, 2-1) unearned premium reserves are recorded because they are premiums already paid while their insured period has not yet arrived. Next, 2-2) reserves for maturity returns are posted as non-life technical reserves and life insurance reserves because they can be regarded as obligations (present value thereof) payable to policyholders in the future. In contrast, 2-3) catastrophe loss reserves are not recorded in the FFA in light of the fact that they are set aside in preparation for huge insurance claims payments arising from the occurrence of major insurable risks in connection with term insurance¹⁸. 3) Reserves for dividend to policyholder are funds that saved for dividend payments to the insured according to the statutes and insurance clauses. Therefore, the reserves related to insurance contracts should be recorded on this item.

More specifically, reserves for maturity returns (insurance premium reserves) for life insurance and private nonlife insurance companies are calculated by deducting insurance other than saving type in standard liability reserves, catastrophe loss reserves (reserves for risks), and group annuities from liability reserves (except individual annuities for life insurance), and are recorded in "life insurance reserves" and "non-life insurance technical reserves," respectively.

F-c. Annuity entitlements

"Annuity entitlements" are the equivalent of the policyholders' holdings on reserves for life insurance and mutual aid insurance. They include policy reserves of savings-type annuity insurance of life insurance companies and mutual aid insurance (all excluding insurance other than saving type).

F-d. Pension entitlements

"Pension entitlements" are the rights of pension beneficiaries to receive pensions and lump-sum benefits in the future. Pension entitlements under defined benefit schemes are calculated as retirement benefit obligations accrued up to the present based on the actuarial calculation. Pension entitlements under defined contribution schemes are the total amount of managed assets.

[Methodology of recording pension entitlements]

The methodology of recording pension entitlements has been substantially revised under the 2008 SNA. Namely, it distinguishes two types of pensions,

¹⁸ "Catastrophe loss reserves" are not treated as payment obligations to policyholders, but as retained earnings of insurance companies. In social accounting, they thus become savings of insurance companies (recorded in the national accounts).

defined benefit schemes and defined contribution schemes¹⁹, and records both outstanding and flows of pension entitlements under defined benefit schemes on an accrual basis.

In accordance with the recommendation of the 2008 SNA, the FFA has also changed recording pension entitlements (pension reserves) under defined benefit schemes from an cash basis (increase or decrease of reserves) in principle under the 1993 SNA to on an accrual basis. Specifically, in addition to recording as outstanding retirement benefit liabilities based on the actuarial calculation, it records as annual flows the amount calculated by adding 1) increase in entitlements acquired by one year of work by employees (service costs) and 2) increase in investment gains since the period of retirement becomes closer by one year (interest costs), and deducting 3) pensions paid in the said fiscal year (amounts of pensions paid).

F-e. Claims of pension funds on pension managers

"Claims of pension funds on pension managers" are the difference between the total amount of managed assets and the total amount of liabilities for pension entitlements etc. promised by pension managers such as companies to employees under defined benefit schemes. If the total liabilities for pension entitlements etc. exceed pension assets, the item shows the "underfunded pension obligations," for which positive assets are recorded in defined benefit schemes as claims for pension managers. On the other hand, if they fall below, the item shows the "overfunded pension obligations," for which negative assets are recorded in defined benefit schemes to be returned to pension managers.

F-f. Provisions for calls under standardized guarantees

"Provisions for calls under standardized guarantees" are the expected value of calls under guarantees issued in large numbers for fairly small amounts along identical lines provided by standardized guarantee institutions.

G. Financial derivatives and employee stock options

"Financial derivative" refers to a financial instrument that derives from a specific financial instrument (the "underlying asset") but does not involve transfers of funds in connection with the principal (notional principal) of the underlying assets. In the FFA, the figures posted in respect of financial derivatives are 1) the market prices (unrealized gains and losses) of forward-type financial derivatives, 2) the market prices (current prices of option premiums) of option-type financial derivatives, and 3) employee stock options (book value).

[Scope of financial derivatives traded on exchanges]

Statistical coverage of the figures for financial derivatives traded on Japan's stock and financial futures exchanges extends to the options, but not to futures. The reason is since financial futures involve daily transfers of futures margins, it can be argued that the market price is extinguished

¹⁹ Please refer to chapter 2.

(unrealized gains and losses are realized) as a result. After the amount of margins (unrealized gains and losses) is fixed, receivables and payables will generate until the time when transfers of margins take place. Nevertheless, since such period only extends from a day to several days, and due to source data limitations, receivables and payables are not posted.

Margins deposited with exchanges and securities companies in connection with financial derivatives transactions are posted as "money deposited" irrespective of whether they pertain to options or futures.

[Treatment of synthetic financial products]

There has been an increase in the number of synthetic financial products traded. Because synthetic financial products combine different types of financial instruments, including swaps and bonds with call options, they raise problems in terms of handling under the FFA. The IMF Manual goes no further than to propose that in cases where three or more economic entities are involved in the formation of synthetic financial products, the transactions be divided between two entities. It does not advocate resolving all synthetic financial products into their individual elements. It can be assumed that this is because of practical constraints affecting the compilation of statistics as scope of synthetic financial products is vague²⁰.

The IMF Manual's proposal does not necessitate independent evaluations of call options of bonds. At the very least, however, it requires certain measures in the case of bonds with swaps attached, the evaluation of the bond and the calculation of the swap's market value should be carried out separately. Because of the source limitations, the FFA does not introduce this sort of segregated treatment.

G-a. Forward-type instruments

Forward-type financial derivatives are financial derivatives other than options (put and call transactions in financial instruments). They only include OTC transactions such as forward rate agreements (FRAs), interest rate swaps, currency swaps, exchange forward contracts and foreign exchange margin transactions.

[Evaluation and statistical treatment of forward-type instruments]

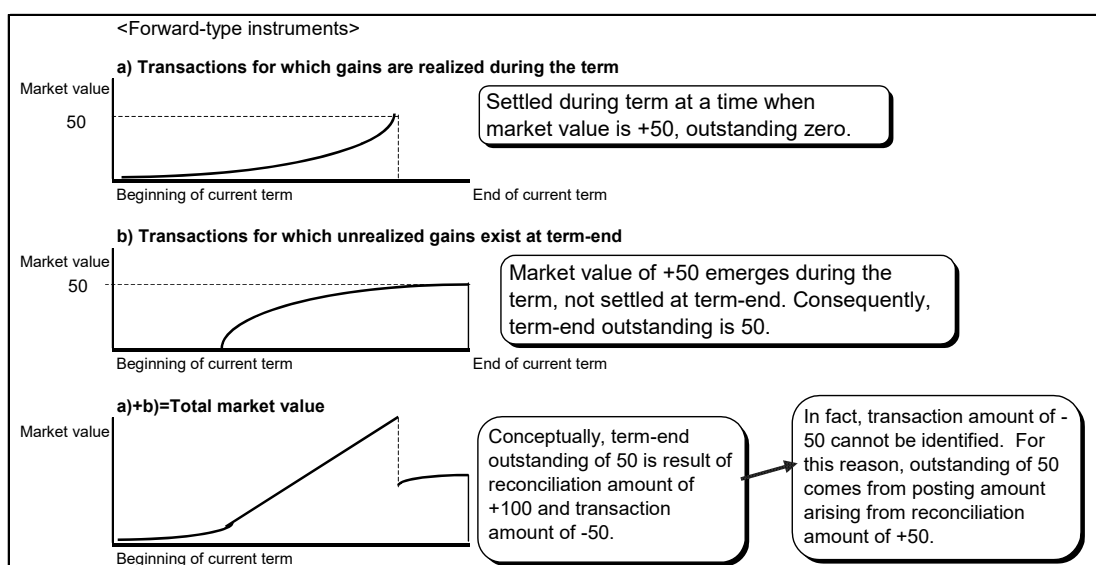
In the case of financial derivatives transactions, the economic entity simultaneously acquires the obligation to deliver, and the right to receive, the underlying assets, after which the market values of both the right and the obligation change. Consequently, the market value of the instrument in question is calculated by marking to market both the right and obligation to market on an accrual basis and netting-out the market values of both.

In the case of forward-type instruments, the market value at the time the contract is concluded is zero because both the obligation to deliver and the right to receive have the same value. As time passes, however, market value

²⁰ For example, even the most general deposits could be regarded as a synthetic financial product of deposits and deposit insurance (a type of option). Long-term fixed interest rate loans could also be regarded as a synthetic financial product, which consists of long-term floating rate loans and interest rate swaps.

emerges and is posted as the outstandings for the financial derivative in question.

Changes in this outstandings are affected both by changes in market value (generation of unrealized gains and losses) and settlements (realization of unrealized gains and losses). Since the latter cause changes in cash for the economic entity, it would normally be more appropriate to record them as financial transactions rather than reconciliation amounts. When the FFA was announced however, it was not possible to obtain source data on the amounts of unrealized gains and losses to be realized, so the total changes in the balance are recorded as reconciliation amounts (see the following chart).



G-b. Option-type instruments

Option-type financial derivatives are financial derivatives, including options (put and call transactions in financial instruments). Instruments that synthesize forward-type instruments and option-type instruments are classified as "option-type instruments." Currently, the following instruments are included:

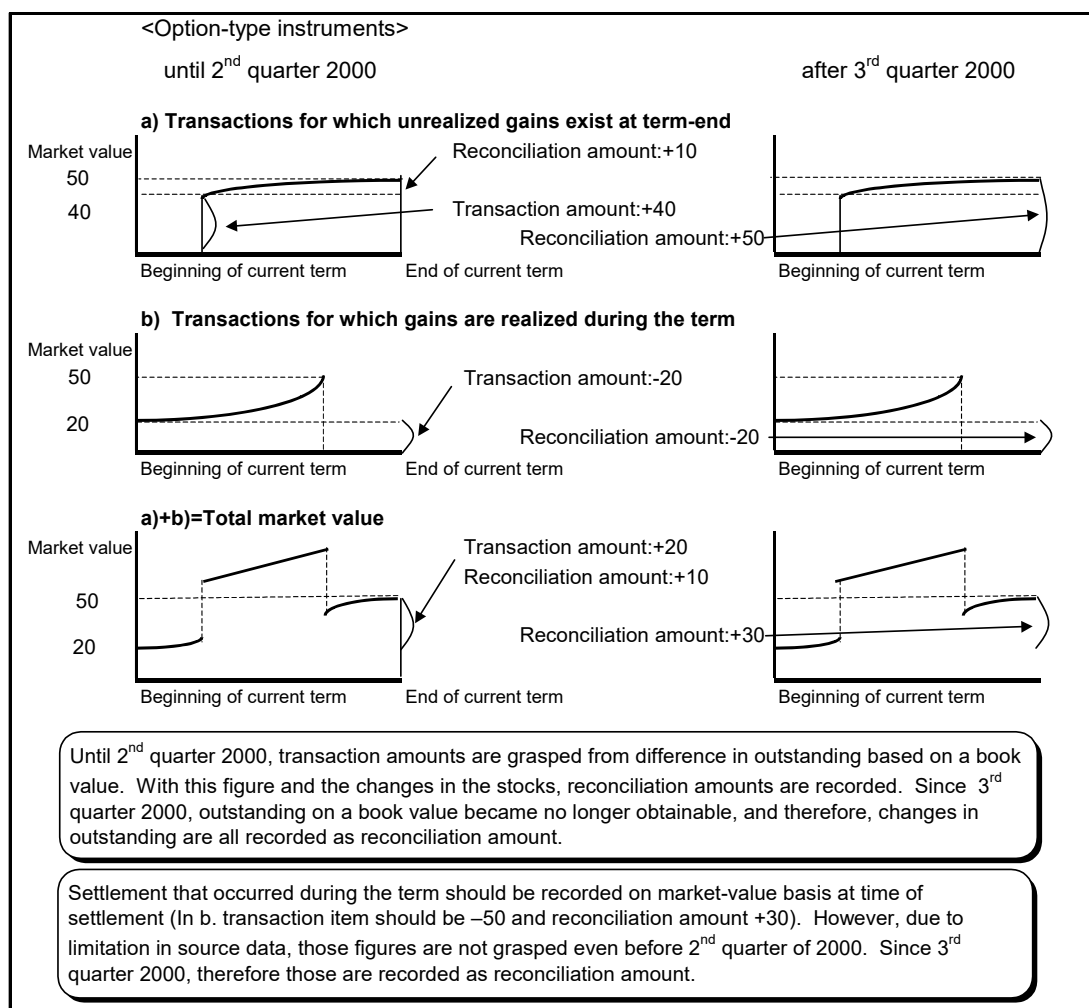
- 1) Exchange transactions
 - Bond-related: Government bond options (Tokyo Stock Exchange).
 - Interest-related: Short-term yen interest futures options (Tokyo Financial Exchange).
 - Stock-related: TSE Stock Price Index options (Tokyo Stock Exchange), Nikkei Stock Average options, the Nikkei 300 Stock Price Index options (Osaka Stock Exchange).
- 2) OTC transactions: Bond options, interest rate options, currency options.

[Evaluation and statistical treatment of option-type instruments]

In the case of option-type instruments, the values of the obligation to deliver and right to receive differ from the moment of the transaction, and an option premium corresponding to the difference (the initial value of the option) is transferred. Thereafter, changes in this outstandings are affected

both by changes in market value (generation of unrealized gains and losses) and settlements (realization of unrealized gains and losses).

The transfer of the option premium and settlement of market value (realization of unrealized gains and losses) take place in the form of cash transfer, and should be treated in the FFA as financial transactions. However, since source data is not available for option premiums²¹ and the realized amount of unrealized gains and losses, change in outstandings are all included in the reconciliation amount (see the following chart).



G-c. Employee stock options

Among rights given by companies to their executives and employees as a success bonus to purchase existing shares, employee stock options are those after the vesting but not yet exercised (during the exercise period). After the vesting date for employee stock options, option holders are entitled to purchase the shares of their employer company at the exercise price determined at the grant date within

²¹ Until 2nd quarter of 2000, term-on-term difference of amount outstanding of option premiums (acquisition cost) were posted as transaction amount. With the change in contents of disclosure of derivative transactions for listed companies, the data became no longer available.

a certain period of time. Rights to purchase existing shares, which are granted but prior to the vesting date (during the vesting period), are recorded fictitiously as part of the transaction item "others."

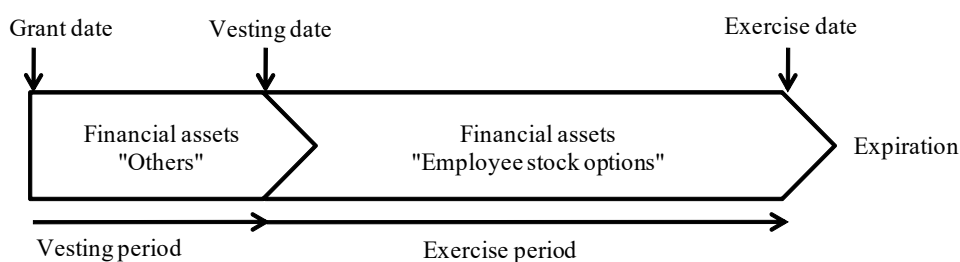
[Scope of employee stock options included in financial instruments]

Given that employee stock options in the vesting period are subject to various requirements before the vesting date (including those for work and performance) they should be recorded separately from financial derivatives under which ordinary stock options are classified. Accordingly, while rights to purchase shares in the exercise period are recorded as "employee stock options," those in the vesting period are recorded as "others" in the financial assets.

[Identification method of employee stock options in the exercise period]

Since employee stock options are recorded as share options in the corporate accounting, the FFA regards outstanding "share options" covered by the Ministry of Finance's *Financial Statements Statistics of Corporations by Industry* as the sum of rights to purchase shares in the vesting and exercise periods, of which those in the "exercise period" are regarded as employee stock options.

The amount of employee stock options in the "exercise period" is estimated proportionally using the information on the number of the outstanding unvested stock options and the outstanding vested but unexercised stock options which can be obtained separately from financial statements²².



H. Deposits money

"Deposits money" refers to monetary or temporarily deposited monetary claims and debts deposited from specific entity for a specific purpose. "Deposits money" takes various forms and has various purposes, but the FFA includes the following, which are considered to have relatively large outstanding balances, and whose source data are available.

²² Since individual rights to purchase shares differ in their design such as the grant date and vesting date, it is difficult to expect an average model representative of the economy as a whole. Accordingly, an appropriation method is adopted using the number of shares data actually observed in the financial statements.

- 1) Margins lodged with securities companies, foreign exchange margin trading firms, stock exchanges and financial exchange (excluding those in form of securities).
- 2) Building tenancy guarantees.
- 3) Deposits with golf courses (funds received by golf courses when issuing golf club memberships).
- 4) Employees' deposits with companies (so called intra-company deposit).
- 5) Withholding income tax, as well as social security insurance premium levied from wages, which were pooled inside the company temporarily until designated payment due date.
- 6) Electronic money and prepaid cards.
- 7) Outstanding amount of monetary donations related to the Great East Japan Earthquake which has yet to be distributed to sufferers.
- 8) Unallocated gold accounts
- 9) Other deposits received and money deposited that are recorded in the financial statements of financial institutions.

I. Trade credits and foreign trade credits

"Trade credits and foreign trade credits" are claims and debts arising from current transactions in goods and services (the entity's intrinsic operation). This item includes trade accounts receivable and trade accounts payable and bills payable and receivable. However, in cases where accounts receivable are liquidated, they are treated as holdings of "structured-financing SPCs and trusts" in the "financial corporations" sector. In the FFA statistics, credits/debts, etc. associated with transactions between the sectors listed below are included in "trade credits and foreign trade credits."

- 1) Accounts payable, accounts receivable of sole proprietorships
- 2) Deferred payment of public utility charges
- 3) Medical and nursing care expenses covered by public insurance²³
- 4) Deferred payment for public works
- 5) Deferred payment at the time of purchase/sale of unfinished housing
- 6) Credit pertaining to credit card transactions, lease transactions
- 7) Other trade accounts receivable and payable, and bills payable and receivable recorded in financial statements

²³ Since expenditure covered by public insurance is paid two months after the provision of the medical and nursing care service, this is comparable to credit extended to social security funds by service providers.

J. Accounts receivable/payable

"Accounts receivable/payable" refers to (1) claims and debts arising from noncurrent transactions (transactions that are not the entity's intrinsic operation) and (2) receipts and payments associated with goods and services transactions and interest and dividends, claims and debts (deferred and accrued account items) arising as differences because of time lags in the actual payment and receipt of cash. The FFA includes accrued income and expenses, prepaid expenses and unearned income, accounts due and accounts payable, prepayments and advances received, corporation tax payable, and allowance for customer loyalty award credits, as recorded in corporate financial statements.

K. Outward direct investment

"Outward direct investment" refers to acquisitions of equity in nonresident corporations by residents that are made for the purpose of controlling the nonresident corporations in question.

In the *balance of payments statistics*, equity other than reinvestment of earnings, reinvestment of earnings, debt instruments (lending, fund borrowing and securities trading between companies within direct investment relationship) are all included in direct investment. The FFA, on the other hand, includes equity other than reinvestment of earnings and reinvestment of earnings.

Furthermore, since acquisitions by nonresidents of equity other than reinvestment of earnings and reinvestment of earnings in Japanese corporations (inward direct investment) correspond to acquisitions of equity by the overseas sector, they are not treated in the FFA as a separate item. As a result, only (outward) acquisitions of equity other than reinvestment of earnings and reinvestment of earnings in overseas corporations by residents are posted separately as outward direct investment²⁴.

L. Outward investments in securities

"Outward investments in securities" refers to investments by residents in shares and securities and foreign investment trusts²⁵ issued by nonresidents. Unlike outward direct investment, whose objective is to control, "outward investments in securities" are portfolio investments or holding of foreign currency denominated assets.

Inward investments of securities are treated as "debt securities" and "equity and investment fund shares" held by the overseas sector.

M. Other external claims and debts

"Other external claims and debts" covers claims and debts between residents and nonresidents that are not included in the above items. Prior to the second

²⁴ The FFA includes inward and outward debt instruments in "loans."

²⁵ Samurai bonds (yen denominated bonds issued in the Japanese market by nonresidents) are included in this item.

quarter of 2000, all assets included in the foreign exchange reserves²⁶ were posted in this item. However, since the second quarter of 2000, assets other than "gold and SDRs etc." are each posted in relevant asset items such as foreign currency deposits and outward investment in securities.

M-a. Gold, SDRs etc.

The "gold, SDRs etc." component of "other claims and debts" refers to liquid external assets held by the monetary authorities (in Japan's case, the Foreign Exchange Fund Special Account and the Bank of Japan) that can be used for intervention in the foreign exchange markets and similar purposes. Of which, monetary gold, SDRs (IMF Special Drawing Rights), and IMF reserve positions (international reserve asset that represent a member's unconditional drawing right by other countries currency in the IMF) are included in this item.

Among these assets, gold is an asset of monetary authorities but since a corresponding liability does not exist, it is posted only on the asset side of the BOJ and the Central government in the stock table without posting financial liabilities to other sectors. It is the basic principle of the FFA that balance is maintained between assets and liabilities on a matrix, and in this regard, monetary gold is the only exception. In the flow table, changes in IMF reserve positions and SDR allocations after the third quarter of 2009 are posted as transactions of "gold, SDRs etc."

N. Others

"Others" covers claims and debts not included in the above (monetary claims and debts whose nature cannot be determined), as well as claims and debts that are treated fictitiously in the FFA, such as:

- 1) Claims of the central bank against the central government (posting of an amount equivalent to the coin circulation) that arise from the posting coin as liabilities of the central bank.
- 2) Claims and debts existing between the Treasury and special accounts (equivalent to those posted as government deposits held by each special accounts in the budgetary statistics) that arise from the posting of government deposits as holdings of the central government.
- 3) Claims of corporate pensions against corporations that arise from the posting the retirement benefit trusts as transactions through corporate pensions.
- 4) Rights that have been given by companies to their executives and employees as a success bonus to purchase the shares of the company, but not yet vested.

This item also includes statistical discrepancies arising from source data.

²⁶ Foreign exchange reserves are foreign financial assets that can be used immediately and under the control of monetary authorities for financing or regulating payments imbalances or indirectly make adjustments for foreign exchange market intervention.

Y. Financial surplus and deficit, Difference between financial assets and liabilities, Difference in reconciliation amounts

"Financial surplus and deficit, difference between financial assets and liabilities, difference in reconciliation amounts" refers to differences between the aggregate accounts for the asset and liabilities sides that arise when totaling the figures of transaction items on a unit sector basis. More specifically, it refers to financial surplus and deficit in the flow table (see Chapter 1), differences between financial assets and liabilities in the stock table, and reconciliation amounts in the reconciliation table. These differences are always posted on the liabilities side, either as positive figures in the case where the total on the assets side exceeds the total on the liabilities side, or as negative figures when the total on the assets side is less than the total on the liabilities side.

Z. Total

"Total" refers to the figures totaled for all transaction items on the asset side and the liability side. The figures are posted in such a way as to make the totals for the liability side equal to the totals for the asset side, and the balance between assets and liabilities is secured by items to account for the differences ("financial surplus and deficit," "difference between financial assets and liabilities" and "differences in reconciliation amounts").

Chapter 5 Compilation of the FFA

Chapter 5 **Compilation of the FFA**

The FFA is a statistic compiled by collecting and processing various kinds of statistical data and information from financial statements.

As various estimation methods are adopted, an explanatory overview of the methods used for compiling the FFA will be given in this chapter. For detailed explanation and remarks on its accuracy, please refer to "Compilation Method of Japan's Flow of Funds Accounts"¹ (Research and Statistics Department of the Bank of Japan).

1. Main Features of the Compilation Method

Stock data : pillar in compiling the FFA

As explained in Chapter 1, the FFA consists of three matrices: flow table, stock table and reconciliation table.

The concept behind compiling the FFA is to establish the figures for the stock table and the flow table separately. Any divergences between the term-on-term difference in the stock data and the transaction flow data are posted in the reconciliation table to reconcile flows and stocks. In fact, however, transaction data that directly identify the flow figures are limited² and thus, flow data, in many cases, is calculated from the term-on-term difference of stock data obtained in compiling the stock table such as amount outstanding of financial assets at face value. In this sense, the first step in making the FFA is to identify stock figures and compile the stock table.

Two approaches

There are two different approaches in identifying the figures. The first approach is to identify figures for each cell by using the financial statements by sector. This is called the "vertical approach." The second approach is to identify figures by allocating aggregate transaction item data to holding assets and liabilities by individual sectors, by using statistics on financial transactions. This is called the "horizontal approach."

Theoretically, if detailed financial statements for all the sectors could be obtained, it should be possible to identify financial assets and liabilities by using a vertical approach. However, it is virtually impossible to obtain financial statements of all the economic entities. This makes it essential to employ the horizontal approach, which uses statistics for individual financial instruments. Combining both approaches makes it possible to establish figures that would not be possible to identify with a single approach, and furthermore, leads to an enhanced

¹ "Compilation Method of Japan's Flow of Funds Accounts" (Research and Statistics Department of the Bank of Japan) gives detailed explanation for each sector and transaction item on estimation method, valuation method of assets and liabilities, remarks in the use of the FFA such as accuracy.

² Specifically, shares (listed shares) and for certain cross border transactions.

accuracy of the statistics³.

Identifying figures through estimation

There are some restrictions in compiling the FFA.

Due to source data limitation and delay in obtaining them, even if the data is built up from both the vertical and the horizontal approach, the FFA contains some cells (specific transaction items in specific sectors) where figures cannot be identified. When this happens, further estimations are made until identifying all figures and thus, completing the matrix.

It is ideal to grasp all the components of each transaction item for each sector, but there are sometimes difficulties in identifying all the transactions, such as in the case of "deposits money" and "accounts receivables/payables." Therefore, only those that can be grasped are covered in such items. In other words, there are cases where the coverage has to be limited to the extent that can be grasped.

[Making estimates when source data does not exist or there is a delay in obtaining the source data]

Methods such as the following are used in cases when it is not possible to prepare data for specific cells because of source data limitations.

1) Using other data

If there exist some figures that have certain correlation with the data in question, estimated data are calculated by multiplying certain ratios to the figures. Alternatively, when the figure is similar in character to data in question, it is used as a substitute.

2) Using historical data

In cases where trends in the source data or the data appear to follow a certain pattern, estimations are made on the basis of historical data. Alternatively, data from the previous term is used when it appears that the data tends not to fluctuate to any significant extent.

3) Estimating stock data by accumulating flow data

When sources of quarterly stock data are not available, but the sources of quarterly flow data are, the stock data for the end of current term is estimated by accumulating flow data for the current term to the stock data of the previous term.

Estimation method for a certain figure is, generally, not limited to one, but there exist multiple methods. In that case, an estimation method is chosen under the following three principles: 1) data and logic used in estimating figures are rational and could be explained in conceptual terms (focus on concept); 2) the estimation method should exclude arbitrariness to the maximum extent possible

³ In some cases, however, this results in two different figures for a specific cell. When this happens, the approach that offers higher quality is adopted, while taking into consideration the character of the source data.

(focus on objectivity); 3) complex estimation methods should be avoided as much as possible unless they result in a marked improvement in the precision of the estimates (focus on conciseness).

2. Specific Methods Used for Compiling the FFA

Identifying figures using the vertical approach

With the vertical approach, figures are compiled for each cell using the financial statements of individual economic entities as source data. For the most part, figures for sectors such as financial institutions and their sub-sectors, public nonfinancial corporations and social security funds (including public pensions) are established using this approach⁴.

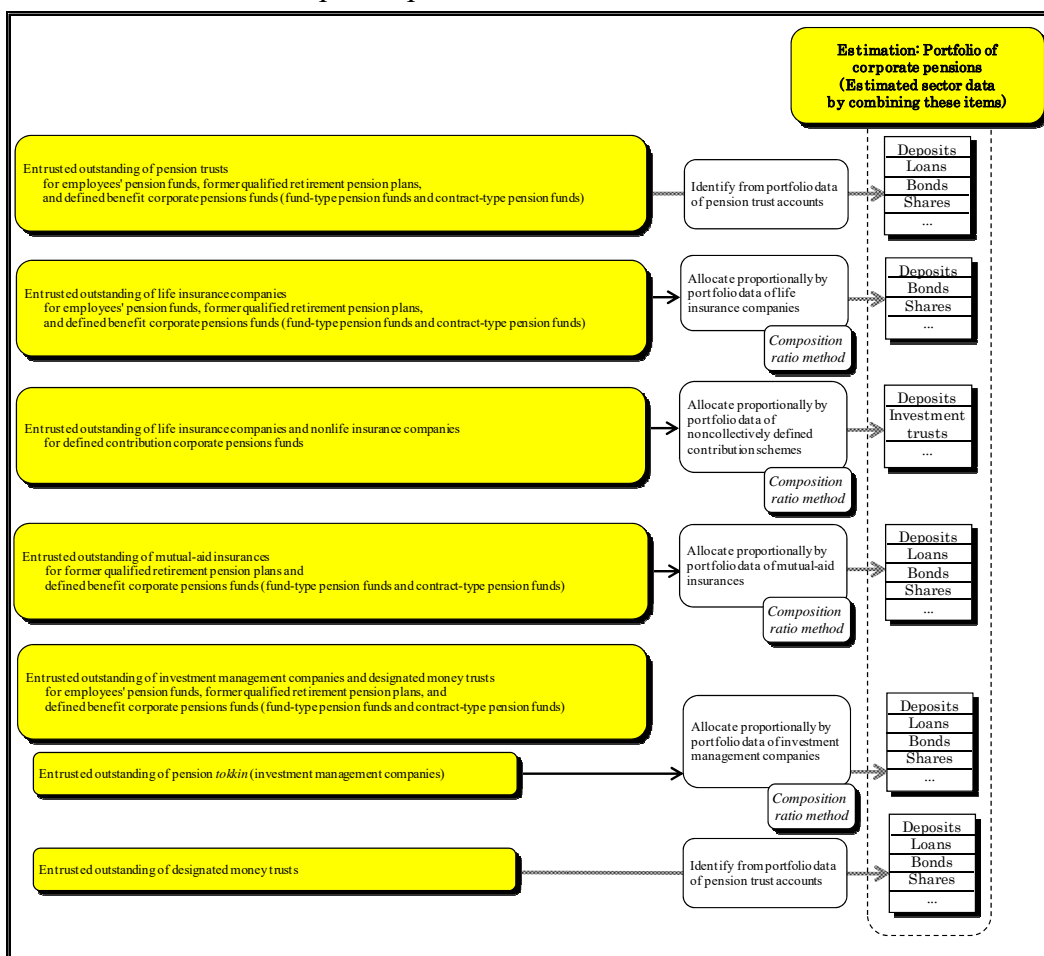
With regard to financial statements that are used as source data, there are several cases. 1) Aggregated financial statement by sector, such as balance sheets of domestically licensed banks and assets of securities investment trusts, can be used directly for the most part. 2) Financial statements of individual entities, for example, public institutions, are totaled to derive aggregated assets and liabilities for each sector. 3) Some data are obtained through "consolidation." As in the case of pension funds, the asset management entrusted to trust banks and insurance companies are "consolidated" to the pension funds. In this case, first, the amount of total assets entrusted are identified, and then allocated to each holding assets by using the trustees' asset allocation (please refer to chapter 2 on "consolidation of accounts").

[Examples for the sector derived by consolidation]

- Corporate pensions (see following chart), other pensions.
- Postal savings, life insurance (except private life insurance companies), and public pensions.

⁴ Not all items could be drawn directly from financial statements. It should be noted that there is a need to supplement by, for example, adjusting differences in the classification items between the financial statements and the FFA, and estimating quarterly data due to a delay in obtaining it, or since the data are not compiled frequently.

<Breakdown of corporate pensions sector>



Identifying figures using the horizontal approach

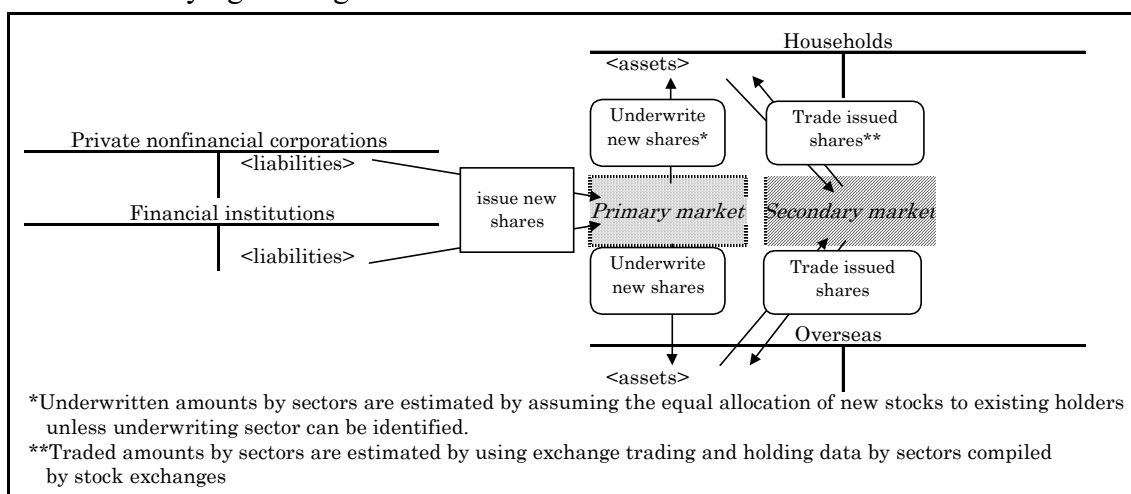
With the horizontal approach, figures are compiled for each cell by distributing totaled data identified for each transaction item to the individual sector's holding assets or liabilities. For example, 1) in the case of deposits, loans and other financial instruments that are intermediated by financial institutions, data for counterparty breakdowns are available in addition to the total data. In this case, the statistic is used as a source data to identify asset or liability figures for each sector. Concerning securities, if available, 2) outstanding data for each transaction by each holding entity, 3) purchaser data of brokerage firms, and 4) data of financial instruments for specific entity can be used to estimate holding assets for each sector upon grasping total data from market statistics.

[Examples]

- 1) Establish figure for each holding sector by deriving statistics for counterparty breakdowns from financial institutions sectoral data. Those transactions are intermediated by financial institutions, such as deposits and loans.
 - Transferable deposits, time deposits, certificates of deposit, and foreign currency deposits.

- Private financial institution loans to businesses and governments, and installment credit (from finance companies)
- 2) Estimate figures for each holding sector using outstanding data for each transaction or each holding entity involved (applied in the case of instruments with high liquidity or when it is not possible to identify sufficient data from financial statements):
 - Listed shares (see following chart).
 - Financial derivatives.
 - 3) Estimate figures for each holding sector using purchaser data from brokerage firms (applied in the case of instruments with low liquidity):
 - Investment trust beneficiary certificates, and structured-financing instruments.
 - 4) Estimate figures for each holding sector using data of financial instruments for specific entity:
 - A part of central government securities (government bonds for individuals), local government securities, industrial securities (corporate bonds for individuals), and bank debentures.

<Identifying holding sector of listed shares>



Transaction data in sectors that cannot be identified by the vertical approach are built up using the horizontal approach. Those sectors are for example, private nonfinancial corporations, central government, local governments, households, and private nonprofit institutions serving households. In cases where data cannot be obtained by this process, the matrix is completed by making further estimation taking "vertical approach" into consideration⁵.

⁵ For overseas sector, while data that show comprehensive assets and liabilities of the overall sector are used, many figures are identified in terms of transaction items. Both approaches are considered to be used.

3. Mark-to-market accounting and Creating the Reconciliation Table

The FFA, in order to adequately reflect the economic situation, records the following items on a market value basis (or fair value basis); listed shares, unlisted shares, bonds (central government securities and FILP bonds, local government securities, public corporation securities, industrial securities, and bank debentures), investment trust beneficiary certificates and loans (private financial institution loans to businesses and governments). In calculating figures based on market values, the number of shares listed and the stock price of individual companies and statistics for shares in market value from the stock exchange are used to estimate shares. For bonds, current price is estimated by multiplying the outstandings on a face-value basis by the market price index. For loans, the real value is calculated by deducting the amounts of allowances for individual uncollectibles from outstandings on a book value basis.

On the other hand, flow data concerning shares (listed shares) and certain cross-border transactions can be identified from primary data. However, such cases are not frequent, but rather, in many cases, term-on-term difference of outstandings at face value for each financial asset is used for calculation⁶.

The reconciliation table is then prepared from the divergences between the term-on-term differences in the current price stocks derived as described above and the transaction flow data⁷.

[Examples]

1) Listed shares:

For the outstanding amount of shares, the FFA seeks market value-based methods directly using the number of shares listed and the stock price of individual companies etc. Regarding the holding amount of each sector, where market value-based stock are not available (public nonfinancial corporations, local governments, and a part of social security funds), the unidentified portion of the total outstanding market share value is allocated proportionally according to the book-value weight of each shareholding sector. Likewise, with regard to sub-sectors of financial institutions, shareholdings of all financial institutions on a market-value basis are allocated proportionally using the book-value weight of the shareholdings of each individual sub-sector.

Since transaction flow can be identified from stock exchange materials, the divergence between the term-on-term difference in market value-based stock and transaction flow is treated as a reconciliation amount.

⁶ For transaction flow data, transaction value at current price should be posted. Therefore, it is desirable to estimate transaction value at current price using any available figures, for example market price index and amount outstanding based on face value. However, since focus is placed on conciseness when choosing estimation method and on considering that term-on-term difference at face value is near enough to the transaction value at current price, transaction value is estimated as difference of face value.

⁷ Reconciliation amounts arise not only from changes in market price (or fair value), but also from changes in the samples used for compiling source data. More specifically, reconciliation amounts are posted as a result of sampling changes in the *Financial Statements Statistics of Corporations by Industry*, which is source data pertaining to the financial assets and liabilities of corporate businesses under "loans by the nonfinancial sector" and "trade credits and foreign trade credits" in private nonfinancial corporations.

2) Unlisted shares

Current price does not exist for unlisted shares, since they are not traded in markets and are not traded frequently. In the FFA, market value-based stock for the unlisted shares is estimated by comparing profit, net assets, and dividends with those of listed companies in similar business type⁸ and by using market price index.

On the other hand, for transaction flow, term-on-term difference of paid-in capital (capital and capital reserve) obtained from statistics on corporations is posted. The divergence between the term-on-term difference in stock and transaction flow is treated as a reconciliation amount.

3) Central government securities and FILP bonds, local government securities, public corporation securities, industrial securities, and bank debentures:

In the case of bonds, market value-based issue and holding amounts are calculated by multiplying face value-based stock by the market price index, which is the weighted average price and represents face value/market value ratio.

There are no materials available for identifying bond transaction flow. Accordingly, the term-on-term difference in face value-based stock is treated as transaction flow⁹, and the divergence between the term-on-term difference in the stock on a market-value basis and the transaction flow is calculated as a reconciliation amount.

4) Loans by private financial institutions

Loan amounts are calculated on a real value basis by deducting the outstandings of allowances for individual uncollectibles from the outstanding loans (after direct write-offs) shown in financial statements. At this time, the borrowings of sectors engaged in borrowing are shown on a real value basis in order to balance assets and liabilities.

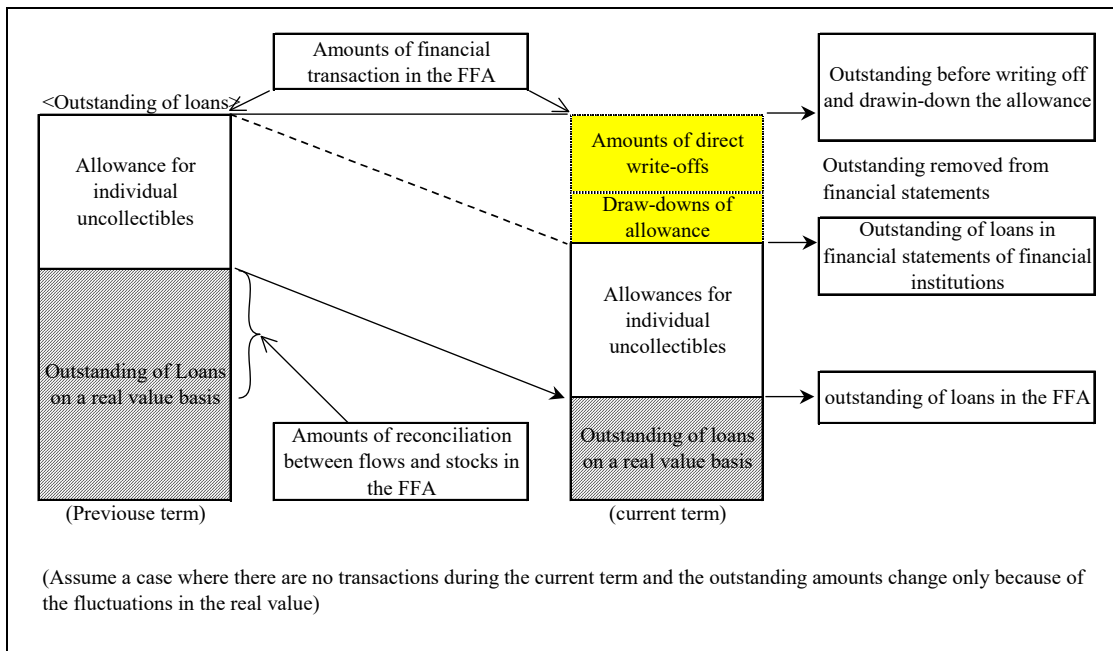
Transaction flow data, on the other hand, is calculated by comparing the outstandings before off-balancing nonperforming loans, by direct write-offs and draw-downs on the allowances for individual uncollectibles, with the previous term's balance on a face value. The divergence between the transaction flow data and the term-on-term difference in the balance on a real value basis (equivalent to direct write-off amounts <exclude draw-downs on the allowance> + addition to allowances for individual uncollectibles) is then treated as the reconciliation amount¹⁰ (see following chart).

⁸ This method is adopted by National Tax Agency, in order to evaluate fair value of shares without market price quotations for the purpose of the valuation of inheritance tax and property.

⁹ Please refer to footnote 6 in page 5-6.

¹⁰ In the FFA, the above-mentioned treatment has been applied to "loans to companies and governments" under "loans by private financial institutions." With regard to "loans by public financial institutions," on the other hand, outstanding loans in the financial statements are treated as outstanding loans in the FFA and only direct write-off amounts are posted as reconciliation amounts. With regard to other loan items (housing loans and consumer credit extended by private financial institutions, installment credit, and loans extended by the nonfinancial sector, etc.), stock is evaluated according to face value, and flow is calculated according to the term-on-term difference in the face value outstanding, and the impact of write-offs is not adjusted. However, among housing loans which is a sub-sector of loans by private financial institutions, those for standardized

<Estimating loans on a real value basis>



4. Maintaining the Balance between Assets and Liabilities

In compiling the stock table, therefore, the FFA uses a combination of the vertical and the horizontal approaches, then follows mark-to-market accounting procedures. However, in order to make the matrix consistent, it is necessary to maintain a balance between assets and liabilities of each sector and transaction item. This necessity arises because the FFA must, as a component of social accounting, be presented as accounts with credits and debits.

Since it is impossible for the FFA to identify assets and liabilities for all sectors, it seeks the figures for certain sectors as a residual. The residual is calculated by deducting the figures for other sectors from the overall total for each transaction item. On the other hand, the national account, which also is a social accounting, employs an item called "statistical discrepancies" to maintain a balance between production and outlays, but, with the above mentioned method, the FFA maintains a final balance between assets and liabilities without using balancing items. However, it is necessary to bear in mind that as a result of adopting this method, the discrepancies that arise from errors in source data and statistical discrepancies are posted in those sectors whose figures were calculated as residuals¹¹.

guarantee institutions (rights of indemnity) are recorded with their outstanding amounts on a real value basis by deducting the allowances for individual uncollectibles. The transaction amounts are the difference with their outstanding at the end of the previous period. For the foreign-currency-denominated loans part, the change in amounts outstanding arising from exchange fluctuations is included in the reconciliation amount.

¹¹ Since "residual sectors" include "statistical discrepancies," they must be sectors with large outstandings that will not be readily affected by such factors. Although the situation differs according to the transaction items involved, private nonfinancial corporations sector is generally treated as "residual sector."

Chapter 6 The FFA and Related Statistics

Chapter 6 The FFA and Related Statistics¹

The FFA focuses on the country's financial activities, covering wide range of financial transactions. Therefore, it has a common coverage with other economic and financial statistics, and could be used for one another's compilation and usage analysis. As such, the scope of relevant statistics is also wide.

For example, as a means to record a country's economic activities, the FFA contributes to part of the SNA, and in respect to the external transaction within the SNA framework, the FFA is closely related to the *Balance of Payments Statistics*. On the other hand, as a statistic on financial activities, it has a common coverage with various monetary statistics released by the Bank of Japan (*Money Stock Statistics* <M3, broadly-defined liquidity>, *Amounts Outstanding of Deposits by Depositor*, *Loans and Bills Discounted by Sector*), so that the data of these statistics are incorporated into corresponding sectors and transaction items.

This chapter explains how the FFA is related to these relevant statistics.

1. The FFA and the SNA

The FFA within the SNA framework

SNA divides a country's economic activities into: 1) process of generating value added, 2) process of distributing to, and consuming value added by, the economic entities, 3) process of accumulating capitals that are not consumed as savings. These flows are respectively recorded in the Production account, Income and outlay account, and Capital finance account. Also 4) stock data for non-financial and financial assets at the end-of term are recorded in the Closing Balance Sheet, and 5) reconciliation account is established to record reevaluation of stocks such as price change of market value, and other changes in volume of assets.

As above, the method to record economic activities is the same with the FFA in that it is based on the concept of flow, stock and reconciliation. Sections related to financial activities correspond to the FFA's flow table, stock table, and reconciliation table.

¹ For details of the FFA and related statistics please refer to "Guide to Japan's Money Stock Statistics" (Research and Statistics Department).

Accounting system of the national accounts

(Current account)	Productions account	Production Account	← Input-Output table
	Income and Outlay account	Allocation of primary income account	
		Secondary distribution of income account	
		Redistribution of income in kind account	
		Use of income account	
(Accumulation account)	Capital Finance account	Non-financial transactions (Capital account)	
		Financial transactions (Financial account)	← Financial transaction table
	Reconciliation account	Revaluation account	← Reconciliation table
		Other changes in volume of assets account	
(Balance Sheet)	Closing Balance Sheet account	Closing Balance Sheet account	← Financial assets and liabilities table

The FFA and SNA in Japan

As explained in Chapter 2, the FFA bases its classification of sectors and transaction items on the 2008 SNA, and its concept on statistics is consistent with that of the national accounts in Japan. As a matter of fact, the FFA is a major source data in compiling the national accounts and as such, these statistics are closely related.

Among the major indices of the two statistics, "net lending/net borrowing" posted in the Capital account of the Capital finance account in the national accounts is conceptually equivalent² to the "financial surplus or deficit" of the FFA's transaction table (or Financial account of the national accounts).

While the national accounts is compiled on an annual basis (both calendar year and fiscal year) excluding some provisional figures such as QE, the FFA is compiled on a quarterly basis, which causes difference³ in part of the accounts framework. Also, in compiling the national accounts, there are sections where figures for the FFA are used as basis while making further estimation and calculations. On the other hand some figures for the national accounts are used to compile the FFA.

2. The FFA and the Balance of Payments Statistics

The *Balance of Payments Statistics* (hereafter the BOP) records economic

² However, the actual figures are not necessarily the same. While the Capital finance account is based on statistical data of the non-financial transactions, the FFA is compiled from data on financial transactions and therefore difference occurs in the respective data and compilation process.

³ For example, in line with the proposal by the 2008 SNA, the national accounts in Japan has "revaluation account" and "other changes in volume of assets account" as breakdown of "reconciliation account." However, as for the FFA, since it is difficult to make such strict differentiation on a quarterly basis, there is no breakdown under "reconciliation table."

transactions, including goods, services, and income and financial transaction, between Japan and the rest of the world. It is largely classified into "current account" that records transactions in goods and services, "financial account" for transactions of external financial assets and liabilities, "capital account" that records capital transfers. Of which, overseas transactions in the FFA (that is, financial transactions between Japan and overseas) correspond to "financial account."

The BOP and the FFA are both used as source data of Japan's national accounts as they are statistics that record Japan's economic activities. And in compiling the FFA, the BOP⁴ is used as source data⁵. For example, overseas sector in the FFA is defined as "non-residents" in the BOP, and the financial surplus or deficit of the "overseas" sector is made to equal the sum of the "current account" and "capital account" in the BOP.⁶

However, it should be noted that while the BOP post assets and liabilities from the domestic side (that is, 1) loans from residents to nonresidents are "assets," and 2) securities issued by residents are "liabilities"), the FFA records from the view point of "overseas" sector (1) would be "liabilities," and 2) "assets" of the Overseas sector).

In addition, it should also be noted that for the scope of direct investment, the FFA includes equity other than reinvestment of earnings, and reinvestment of earnings, while the BOP covers widely equity other than reinvestment of earnings, reinvestment of earnings, and debt instruments.

3. The FFA and various financial statistics

The Bank of Japan releases various financial statistics, many of which concern financial assets and liabilities or financial transactions of a specific economic entity, or, market size and transaction volume by sector on specific financial assets.

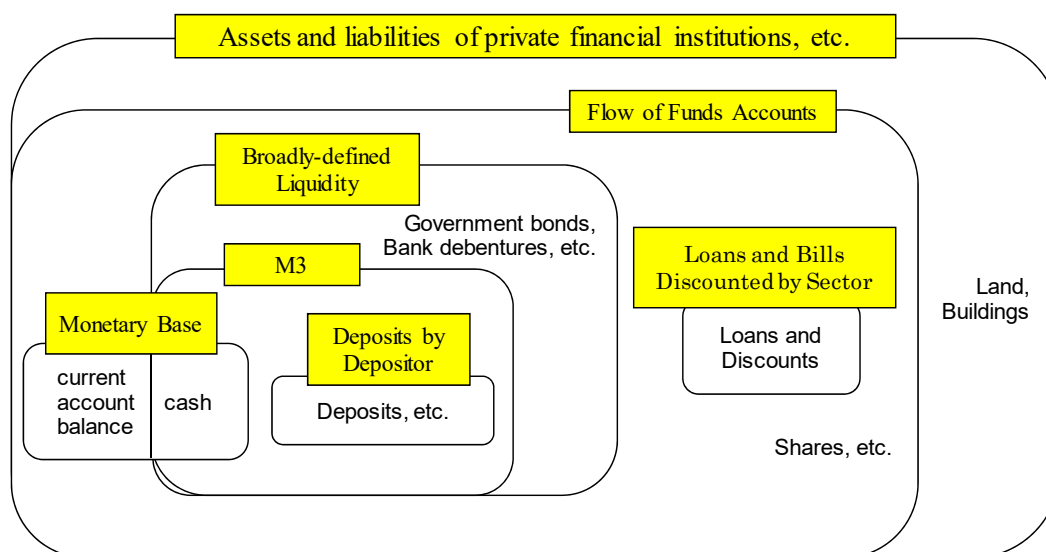
The FFA records financial activities of a country as a whole, and with respect to its scope, most financial statistics constitute part of the FFA. The relation between the FFA and these financial statistics are that the former utilizes many of the latter as source data.

⁴ The BOP only records flow data and therefore, "*International Investment Position of Japan*" is used as source data for stock table of the FFA.

⁵ The total figures are consistent, but there are not many cases where the *balance of payments statistics* are used for concrete estimates of detailed figures for sub-classifications and the like. There are various reasons for this, including, in the FFA, it is necessary to identify in detail the domestic sectors that carried out transactions with the "overseas" sector.

⁶ Financial surplus or deficit should equal "financial account." However, considering that errors and omissions arise mainly from the "financial account," the actual figures are made to equal the sum of "current account" and "capital account."

<Scope of financial instruments (transaction items) covered by various financial statistics> (Rough sketch)



However, since each of financial statistics is based on own purpose, criteria and idea, classification of economic entities and transaction items differ from those of the FFA in many cases. Also, figures on financial assets are often recorded on a different basis.

The relations between some of the financial statistics compiled by the Bank of Japan and the FFA are clarified in the following:

Relations to the Monetary Base Statistics

Monetary Base is the currency that are provided by the central bank (specifically, that is the total of "banknotes in circulation," "coins in circulation," "current account balances").

In the FFA, the sum of "currency" and "deposits with the Bank of Japan" of central bank liabilities is the equivalent amount.

Relations to the Money Stock Statistics

The *Money Stock Statistics* is "the statistics that appraises money such as cash currency in circulation and deposit money, held by money holders such as general corporations, individuals, and local governments" (In Japan, there are four indexes, such as M3, broadly-defined liquidity, according to the scope of money). Therefore, all these correspond to the total of specific financial instruments (financial assets that are defined as "money," such as cash and deposits) held by specific sectors (money holders such as corporations, individuals and local government).

As such, it is conceptually possible to compile *Money Stock Statistics* by rearranging sectors and transaction items of the FFA. Such correlation enables to analyze the underlying factor of the money stock movement by matching trends of investment and financing, that is a change in balance sheet, in the households and corporations⁷.

However, the two statistics differ in the evaluation method of stocks⁸ and also, classification of the sectors and transaction items are slightly different⁹. Therefore, the figures for the corresponding sections in each statistic are not exactly identical. And when making analysis, it should be noted that source data and timing of the data release differ between the two statistics¹⁰.

[Coverage of financial institutions]

The term "financial institutions" is often used in financial statistics but its coverage differs among them.

In the *Money Stock Statistics*, financial institutions are regarded as entities other than the money holders excluding the "central government" and "overseas." It is defined as institutions that are involved in loan business including banks, *shinkin* banks, insurance companies, and government financial institutions. In this case, entities such as security finance companies, investment trust management companies, whose main business is not credit, are included in "general corporations." Definition of financial institutions of *Money Stock Statistics* is almost identical with that of "financial institutions' deposits" of *Amounts Outstanding of Deposits by Depositor* (to be noted later)¹¹.

On the other hand, the FFA has substantially broad coverage, regarding financial institutions as those whose main business is financial intermediary operations or providing closely related services. This definition is closer to the

⁷ The method to analyze movements of money stock ex post facto from the change in money holders' balance sheet compiled from the FFA is called "Balance sheet approach for money holders." (For details, please refer to *Money supply to Keizai Katsudou* (Japanese only) Kazuhiko Ishida, Hiromichi Shirakawa <*Toyo-keizai-shimpo-sha*, 1996>, *Nyuumon Shikinjunkan* (Japanese only) Economic Statistics Division, Research and Statistics Department, Bank of Japan, <*Toyo-keizai-shimpo-sha*, 2001>.

⁸ In principle, the FFA is basically evaluated on market value basis while the *Money Stock Statistics* on a face value.

⁹ For example, in the *Money Stock Statistics*, Government Pension Investment Fund is classified as money holders, but in the FFA, it is classified to such sectors as social security fund (or partially government financial institutions), according to the Fund's functions.

¹⁰ For example, 1) Figures based on average outstanding are often used in the *Money Stock Statistics*, while figures for the FFA are based on outstandings at end of period, 2) *Money Stock Statistics* are compiled monthly whereas the FFA is a quarterly statistic, 3) provisional figures of the *Money Stock Statistics* (M3) are released on the seventh business day (the ninth business day for March and September figures) of the following month, while the FFA is released three months after the surveyed quarter.

¹¹ Specifically, Banks (including foreign banks in Japan and the Japan Post Bank), *shinkin* banks, Shinkin Central Bank, Labor Banks, The *Rokinren* Bank, Agricultural Cooperatives and Prefectural Credit Federations of Agricultural Cooperatives, Fisheries Cooperatives and Prefectural Credit Federations of Fishery Cooperatives, Norinchukin Bank, *shinkumi* banks, Shinkumi Federation Bank, *Shoko Chukin* Bank, The Resolution and Collection Corporation, insurance companies (including the Japan Post Insurance and Nippon Export and Investment Insurance), government financial institutions (Bank of Japan <i.e. deposits with agents of the Bank of Japan, etc.>, Development Bank of Japan, Japan Finance Corporation, Japan Bank for International Cooperation, The Okinawa Development Finance Corporation, Japan Finance Organization for Municipalities, Japan Housing Finance Agency, Organization for Postal Savings, Postal Life Insurance and Post Office Network, Organization for Small & Medium Enterprises and Regional Innovation, Welfare And Medical Service Agency, and the Corporation for Revitalizing Earthquake-Affected Business), and holding companies of the above-mentioned financial institutions (including Japan Post Holdings).

concept in the "finance and insurance" of *Loans and Bills Discounted by Sector* (to be noted later). Further, in order to reflect economic function and substance, the FFA also includes part of special accounts of the government (for example, classifying Special Account of Fiscal Investment and Loan under "public financial institutions") and welfare service corporations (for example classifying Employees' Pension Funds and National Pension Fund under "insurance and pension funds").

<Scope of financial institutions covered by various financial statistics>

Financial institutions of the FFA						
Central government	Depository corporations	Insurance and pension funds	Other financial intermediaries Public captive financial institutions	Securities investment trusts	Financial auxiliaries	
Bank of Japan	Banks, Shinkin banks, etc. (including the Japan Post Bank)	Insurance companies, etc. (including the Japan Post Insurance)	Government financial institutions, etc.	Nonbanks, etc.	Investment trust management companies	Stock exchanges, etc.
		Employees' pension funds, etc.	Special Account of Fiscal Investment and Loan, etc.			

- : "Financial institutions" of Money Stock Statistics and "financial institutions" (excluding securities companies, etc) of Amounts Outstanding of Deposits by Depositor
- : "Finance and insurance" of Loans and Bills Discounted by Sector

[Deposits by financial institutions and call loans]

The 2008 SNA recommends the "interbank positions" is newly established as a sub-sector of transferable deposits to record transactions of deposits and loans between financial institutions separately from financial intermediary activities with other sectors. However, it is difficult to extract only those of banks and depository corporations from call loans transactions and yen deposit transactions, which correspond to interbank transactions. Furthermore, whereas assets and liabilities need to match in order to be listed in the main table of the FFA, sufficient basic data do not exist for figures on the assets side.

Accordingly, the amount of "deposits by financial institutions" reported on the liability side of banks' balance sheets plus the amount of "call loans" are recorded as reference figures "deposits by financial institutions and call loans" corresponding to interbank positions. It should be noted that while the definition of "deposits by financial institutions" here is identical with the scope of financial institutions of *Money Stock Statistics*, it is different from the concept of deposits in the FFA.

Relations to "Amounts Outstanding of Deposits by Depositor"

Amounts Outstanding of Deposits by Depositor shows the deposits accepted by domestically licensed banks and *shinkin* banks etc. by depositor and by type of deposits. These correspond to transaction items "transferable deposits," "time and savings deposits," "certificates of deposits" and "foreign currency deposits" of the FFA¹².

However, compared with the FFA, it differs in that 1) it covers only limited financial institutions such as domestically licensed banks and *shinkin* banks, 2) offshore accounts are not included in the financial instruments surveyed. Also depositors are largely classified into general corporations, individuals, public deposits-government deposits, financial institutions, nonresidents, and are slightly different from the sectoral classification in the FFA. "General corporation" of *Amounts Outstanding of Deposits by Depositor*, includes nondepository corporations such as "nondeposit-taking institutions including money lenders and credit card companies (but excluding government financial institutions)" (included in "Financial institutions" in the FFA) and "institutions providing medical, health care, welfare, and educational services, and other organizations" (many of these are included in "private nonprofit institutions serving households"), and breakdowns by depositor and by type are compiled)¹³.

[Classification of depositors in *Amounts Outstanding of Deposits by Depositor* and sectors in the FFA]

Classification of depositors in *Amounts Outstanding of Deposits by Depositor* and sectors in the FFA are compared as follows:

Amounts Outstanding of Deposits by Depositor		Flow of Funds Accounts	
Corporations	1		
Of which: nondeposit-taking institutions including money lenders and credit card companies (but excluding government financial institutions)	2	Nonfinancial corporations	part of 1,3,5
Of which: institutions providing medical, health care, welfare, and educational services, and other organizations	3	Private nonprofit institutions serving households	part of 3
Households	4	Households	4
Central government, local governments, and local public enterprises	5	General government	part of 5
Financial institutions	6	Financial institutions	2&6

In the FFA, *Amounts Outstanding of Deposits by Depositor* is used as source data for estimating outstandings of deposits by depositor and by type.

¹² Certificates of Deposits are shown separately from the total deposits in the *Amounts Outstanding of Deposits by Depositor*.

¹³ Detailed figures for *Amounts Outstanding of Deposits by Depositor* (by Rank of Amounts) are also released.

Relations to "Loans and Bills Discounted by Sector"

Loans and Bills Discounted by Sector shows loans outstanding by type of institutions, and by borrower for domestically licensed banks, *shinkin* banks and other financial institutions¹⁴. This corresponds to transaction items "loans by private financial institutions" and "loans by public financial institutions" in the FFA.

When compared with the FFA, it differs in that 1) financial institutions covered are limited such as domestically licensed banks and *shinkin* banks, 2) offshore accounts and loans to central government are excluded¹⁵, 3) inter-office accounts for overseas branches, which are regarded as loans to overseas branches in the FFA, are not covered, 4) valuation method is on a book value¹⁶. In addition, sectors are largely classified into corporations, local governments, individuals, overseas yen loans/domestic loans transferred overseas and are slightly different from sectoral classification of the FFA.

"Corporations" include wide range of institutions such as finance and insurance as well as organizations other than individuals and local governments¹⁷.

[Classification of institutions in *Loans and Bills Discounted by Sector* and sectors in the FFA]

Comparison of classification of institutions in *Loans and Bills Discounted by Sector* and the FFA is as follows:

Loans and Bills Discounted by Sector		Flow of Funds Accounts	
Corporations (includes finance and insurance)	1	Nonfinancial corporations	part of 1
Of which: finance and insurance	2	Financial institutions	2
Of which: medical, health care, and welfare services	3	Private nonprofit institutions serving households	part of 3 and 4
Of which: education and learning support, other organizations	4	General government	5&8
Local governments	5	Households	part of 1 and 6
Households	6	Overseas	7
Overseas yen loans and domestic loans transferred overseas	7		
Central government	8		

In the FFA, *Loans and Bills Discounted by Sector* are used as source data in estimating outstanding of "Loans by Private Financial Institutions" by sector.

¹⁴ Total of Shoko Chukin Bank, Norinchukin Bank, Development Bank of Japan, Japan Financial Corporation, Japan Bank for International Cooperation, and the Okinawa Development Finance Corporation.

¹⁵ Loans to central government are shown separately from the total of loans and discount outstanding in the survey.

¹⁶ On the other hand, "loans by private financial institutions" of the FFA is evaluated on real value basis, by deducting the amounts of allowances for individual uncollectibles from outstandings on a book value basis.

¹⁷ Detailed breakdowns within the sector are released at the end of every quarter. For loans to finance and insurance, monthly figures are released in "Deposits, Vault Cash, and Loans and Bills Discounted."

Relations to "Assets and Liabilities of Financial Institutions"

"Assets and Liabilities of Financial Institutions" is the aggregates of balance sheets by type of financial institutions, showing the major assets and liabilities monthly. In this statistic, assets and liabilities of domestically licensed banks, foreign banks in Japan are compiled.

All those institutions are a part of "financial institutions" in the FFA. Those assets and liabilities are recorded under corporate accounting rules, and there are cases where categories of items differ from one another and from the FFA as well. Nonfinancial assets and liabilities, such as properties, and figures accrued under accounting system, such as reserves and deferred accounts, are also recorded here.

However, "Assets and liabilities of financial institutions" is a major source data for the FFA to estimate breakdowns of financial institutions.

(Reference) Related materials of the FFA

		Author / Publisher	Web site
Explanation			
Guide to Japan's Flow of Funds Accounts	Updated periodically	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/statistics/outline/exp/xxsj01.htm/
Compilations Method of Japan's Flow of Funds Accounts	Updated periodically	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/statistics/outline/exp/xxsj02.htm/
Working paper etc.			
Points on International Comparison of the Flow of Funds Accounts	December 2000	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/brp/ron_2000/ron0012b.htm/
Japan's Financial Structure since the 1980s - in View of the Flow of Funds Accounts	July 2005	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/brp/ron_2005/ron0503a.htm/
Japan's Flow of Funds Accounts: Main Characteristics and Measures for Enhancement	April 2012	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/wps_rev/rev_2012/rev12e04.htm/
Highlights of Enhanced Japan's Flow of Funds Accounts Based on 2008SNA	May 2016	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/wps_rev/rev_2016/rev16e03.htm/
Revision			
Revision of Japan's Flow of Funds Accounts Statistics	June 1999	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/statistics/outline/notice_1999/ntsj01.htm/ <Bank of Japan Monthly, July 1999>
The Implementation of 2008SNA Recommendations in Japan's Flow of Funds Accounts	July 2014	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/brp/ron_2014/ron140718a.htm/
Results of Revision to the Flow of Funds Accounts Based on 2008SNA	March 2016	Research and Statistics Department Bank of Japan	https://www.boj.or.jp/en/research/brp/ron_2016/ron160331a.htm/
Other materials			
System of National Accounts 2008	2009	United Nations	https://unstats.un.org/unsd/nationalaccount/sna2008.asp
Monetary and Financial Statistics Manual	September 2000	International Monetary Fund	https://www.imf.org/en/home