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## Other financial corporations survey in Japan -- compilation measures and recent features<sup>1</sup>

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<sup>1</sup> This paper was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

# Other Financial Corporations Survey in Japan

## - Compilation measures and recent features -

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### Abstract

As a part of post-crisis international statistical initiatives, the Bank of Japan worked on the Other Financial Corporations Survey (OFCS) and started releasing the data in January 2018. The OFCS classifies assets and liabilities of other financial corporations (OFCs) -- financial corporations other than the central bank and depository corporations -- broken down by counterparty sector. The OFCS is an important step forward to understanding the trends of OFCs. In compilation, we used various measures for example by utilizing other statistics including the breakdown data of the Flow of Funds Accounts (J-FFA).

In this paper, we first provide an overview of the compilation measures including new estimation methods, and evaluate the accuracy of the estimates for each item by sector. We then examine the OFCS data that shows a growing trend in the outstanding amounts of assets and liabilities of OFCs. We focus on several breakdowns of the data of the OFCS and confirm that OFCs play a significant role while depository corporations extend their business overseas.

Keywords: other financial corporations, financial assets and liabilities, Flow of Funds Accounts

JEL classification: C13, E59, G11, G20, G22, G23

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## Introduction

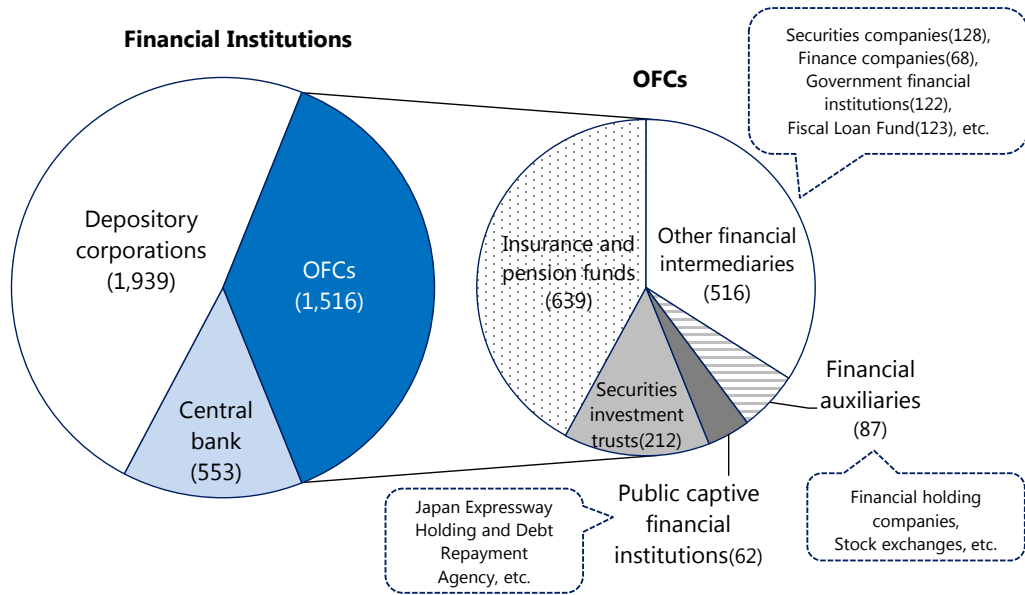
In response to the global financial crisis and the resulting perception that there is room for improvement to understand the risks inherent in financial activities, there is a growing movement to enhance statistics. In particular, a series of initiatives referred to as the G-20 Data Gaps Initiative (DGI) followed by the Second Phase of the G-20 Data Gaps Initiative (DGI-2) were carried out in response to the report "The Financial Crisis and Information Gaps." This report included a set of recommendations adopted at the meeting of the G-20 Finance Ministers and Central Bank Governors in November 2009. IMF's Special Data Dissemination Standard Plus (SDDS Plus) was established in concert with the DGI to reinforce and supplement the existing data standards initiatives<sup>2</sup>.

As one of those statistical initiatives, the Bank of Japan worked on the Other Financial Corporations Survey (OFCS) and started releasing the data in January 2018<sup>3</sup>. Other financial corporations (OFCs) cover financial corporations other than the central bank and depository corporations<sup>4</sup>. OFCs include various financial entities such as insurance and pension funds, broker dealers, securities investment trusts, government financial institutions, and finance companies. The asset size of OFCs as a whole is nearly three quarters of that of depository corporations as of FY2017 (Chart 1). In the Japanese financial system, financial corporations other than depository corporations also play a significant role and it is important to understand their financial activities. OFCs cover a considerably broad range of entities compared to other financial intermediaries (OFIs) that are often regarded as shadow banking entities. The OFCS provides a framework that seeks to capture the wide range of financial activities of financial entities other than depository corporations.

<sup>2</sup> The IMF's Special Data Dissemination Standard (SDDS) was established in 1996 to guide countries that have access to international capital markets in the dissemination of economic and financial data to the public. The SDDS applies to 18 categories of economic and financial statistics and covers four sectors of the economy. Although subscription to the SDDS is free to each country, once a country has decided to subscribe, it commits to providing data according to specified standards. The SDDS Plus was established in 2012 as the highest tier of data standards Initiatives and applies to 9 additional categories. A transition period is available for the SDDS Plus. The transition period allows countries to be considered adherents to the SDDS Plus when 1) they meet the requirements for five of the nine additional categories and 2) have plans in place to meet all of the requirements within five years of the date of adherence.

<sup>3</sup> The release of OFCS is one of the SDDS Plus requirements (see note 2).

<sup>4</sup> Throughout this paper, we include the central bank in "other sectors" and distinguish it from depository corporations, whereas in the released OFCS data the central bank is included in "depository corporations."



Note: The data are as of March 2018.

The Bank of Japan compiles and releases the Flow of Funds Accounts (J-FFA), which shows an overview of financial transactions in Japan. The J-FFA records both financial transactions and the corresponding outstanding balances of financial assets and liabilities of each financial instrument (transaction item) by economic entity (sector) (Chart 2). In response to the global financial crisis, the Bank of Japan worked to enhance and expand the J-FFA as the importance of enhancing statistics has been discussed globally. The Bank of Japan started to release the new data series; from-whom-to-whom data of debt securities and loans in September 2011 and in December 2013, respectively<sup>5</sup>. Those data clarify from whom funds move to whom and how potential vulnerabilities are transferred through financial transactions (Chart 3). Yet, those data do not reveal the creditor-debtor relationships between depository corporations and OFCs as there is no sector breakdown of financial institutions on the debtor side.

Financial Assets and Liabilities Table, Flow of Funds

Chart 2

	Financial institutions							
			Central bank		Depository corporations		OFCs	
	Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability
Currency and deposits								
Loans								
Debt securities								
...								
...								
Total								

Counterparties are not specified.

<sup>5</sup> For details, see Konno (2015).

Borrower sector		to Financial institutions	to Nonfinancial corporations	to General government	...	Total
<b>Lender sector</b>						
Financial institutions						
	Central bank					
	Depository corporations					
	Insurance and pension funds					
	Other financial intermediaries	Transactions within Financial institutions are not specified.				
	Financial auxiliaries					
Nonfinancial sector						
	Nonfinancial corporations					
	General government					
	Overseas					
	...					
Total						

The OFCS records the outstanding balances of OFCs' financial assets and liabilities by counterparty sector, shedding light on financial entities other than depository corporations (Chart 4). The creditor-debtor relationship in the from-whom-to-whom format captures the credit accommodation and works as an early indicator of the build-up of risk via transactions through OFCs. The OFCS is based on the ongoing J-FFA (2008SNA basis). The data period is from March 2005 onward; the data frequency is quarterly, and the timeliness of the release is 4 months.

Items Recorded in OFCS

<b>Asset of OFCs (Credit to ~)</b>
Overseas
Central government
Depository corporations
Other sectors
<b>Liability of OFCs (Credit from ~)</b>
Overseas
Central government
Depository corporations
Other sectors
<b>Capital (Shares and other equity)<sup>1</sup></b>
<b>Other items (net)<sup>2</sup></b>

Notes: 1. Shares issued by OFCs are not included in Liability, but in Capital.

2. "Other items" records not only shares issued by OFCs that OFCs hold, but also items not included in any other categories.

In this paper, we first introduce the compilation measures including new estimation methods. Then, we evaluate accuracy of the estimates for each item

based on those estimation methods. In compilation, we used various measures by utilizing other statistics. We also used some micro data such as the breakdown data of the J-FFA, if necessary. In the latter part of the paper, we examine the recent features of the financial system and financial intermediation activities in Japan by examining estimates and breakdown data of the OFCS.

## Compilation methods

In the OFCS compilation, the J-FFA is mainly used as source data. When the counterparty sector is obvious for a certain transaction item, the J-FFA figures are then reconfigured for the OFCS. However, while the J-FFA records the assets and liabilities balance of each sector by detailed transaction items, it is hard to identify the counterparty sector for the majority of the items. Therefore, in the OFCS compilation, we make estimations in order to identify the counterparty sector based on certain assumptions while utilizing the source data of the J-FFA or other statistics.

For example, for transaction items such as "treasury discount bills" and "outward investment in securities" held by the OFCs, it is obvious that the counterparty sector is the "central government" and "overseas," respectively. In those cases, we allocate the amount outstanding of each transaction item as credit to the corresponding sector.

On the other hand, for transaction items such as "repurchase agreements and securities lending transactions," "industrial securities," "commercial paper," "listed shares," and "deposits money," it is hard to identify the counterparty sector for both OFCs' assets and liabilities. In the case of "loans by private financial institutions," although the from-whom-to-whom data are recorded in the J-FFA framework, the transaction between OFCs and depository corporations are not specified. With respect to such transaction items, depending on the nature of the transaction items or the availability of relevant statistics, we make estimates by utilizing other existing statistics or their source data based on certain assumptions. We show some examples of the estimation methods in the following sections.

### (1) Lending between OFCs and depository corporations

Although the Bank of Japan releases the from-whom-to-whom data of loans as a part of the J-FFA, those data do not reveal creditor-debtor relationship between depository corporations and OFCs since there is no breakdown of financial institutions for debtor sector. In the OFCS compilation, we use the source data of the J-FFA and first estimate the lending from OFCs to depository corporations, whose components seem relatively easy to be identified. In concrete terms, we estimate the lending from OFCs to depository corporations as an aggregation of the following three items: 1) lending from bank holding companies (classified as "financial auxiliaries") to their subsidiary banks, 2) borrowing from trust accounts in pension trusts, and 3) lending from Fiscal Loan Funds to the Japan Post Bank. Other creditor-debtor relationships between OFCs and depository corporations are calculated by filling out the matrix below (Chart 5).

Matrix of Loans between OFCs and Depository Corporations

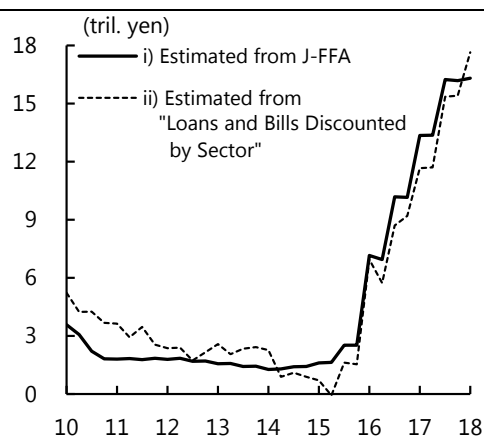
Chart 5

Lender sector \ Borrower sector	Depository corporations	OFCs	Financial institutions (Depository corporations + OFCs)
	Depository corporations	Obtained by subtraction	Obtained by subtraction
OFCs	Estimated by adding up the breakdown items.	Obtained by subtraction	
Financial institutions (Depository corporations + OFCs)	Specified in J-FFA		

As a cross check of the results obtained here, we use the data of loans to "Finance and Insurance" and "Banking, and Financial Institutions for Cooperative Organizations" in the "Loans and Bills Discounted by Sector" statistics released by the Bank of Japan. In particular, loans to "Banking, and Financial Institutions for Cooperative Organizations" is regarded as lending to depository corporations and then the ratio to the loans to "Finance and Insurance" is calculated<sup>6</sup>. Using this ratio, we decompose "loans from depository corporations to financial institutions" in the J-FFA into "loans from depository corporations to depository corporations" and "loans from depository corporations to OFCs." Comparing the figures with those obtained by the aggregation of the three items in the J-FFA source data, the two move in almost the same way suggesting that the estimation accuracy is considerably high (Chart 6).

Loans from OFCs to Depository Corporations (cross check)

Chart 6



Note: The latest data are as of March 2018.

In this estimation method, however, if the items that are included in aggregation of the lending from OFCs to depository corporations are not appropriate, it can lead to a larger estimation error. In order to avoid this estimation error, it is necessary to check from time to time if the items included are adequate.

<sup>6</sup> In the actual calculation, we use the ratio for each business category (banks, credit unions, and other financial institutions) in the decomposition. Also, we use additional data of borrowed money from trust accounts in collectively managed trusts, which are not covered in "Loans and Bills Discounted by Sector."



## (2) Repurchase agreements and securities lending transactions

While the J-FFA records the amount of outstanding repurchase agreements and securities lending transactions by each sector, it does not identify the counterparty. Here again, we use a matrix by sector and specify the balance outstanding of the creditor-debtor relationships between OFCs and each sector by filling in the matrix (Chart 7). Specifically, the creditor-debtor relationship between each sector and overseas is identified by using the Balance of Payment Statistics. Then, given that repurchase agreements and securities lending transactions by depository corporations are basically through broker dealers, it is assumed that there is no transaction between depository corporations. Regarding the transactions between depository corporations and other sectors, only those between depository corporations and the central bank are included. Regarding the transactions between other sectors, only transactions between the central government and the central bank (sales under repurchase agreements by the Bank of Japan) are included. With these transactions, the remaining cells of the matrix can be filled in and the creditor-debtor relationship between OFCs and each sector can be calculated.

Matrix of Repurchase Agreements and Securities Lending Transactions

Chart 7

Asset \ Liability	Depository corporations	OFCs	Overseas	Other sectors	Total
Depository corporations	Assumed to be zero	(2)	Balance of Payments	Depository corp. ↔Central Bank	Specified in J-FFA
OFCs	(2)	(4)	(1)	(3)	
Overseas	Balance of Payments	(1)		Balance of Payments	
Other sectors	Depository corp. ↔Central Bank	(3)	Balance of Payments	Central Government ↔Central Bank	
Total	Specified in J-FFA				

<Estimation steps>

- Use Balance of Payments for transactions with Overseas
- Calculate (1)
- Assumption of  and
- Calculate (2) and (3)
- Calculate (4) as a residual

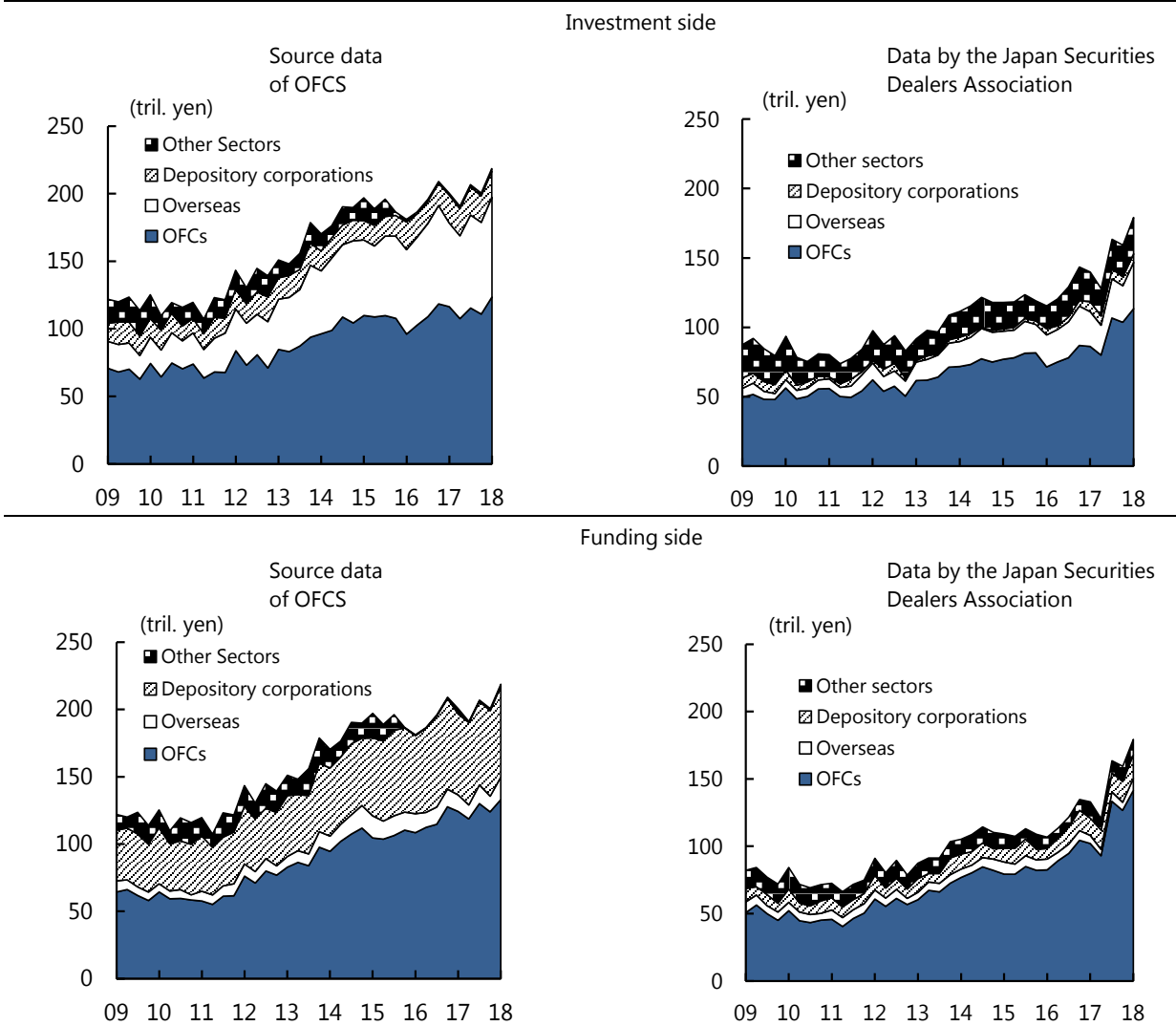
In order to maintain the accuracy of this estimation, it is necessary to keep eyes on if the assumptions of the zero or limited transactions between certain sectors are plausible.

For the results obtained here, it is difficult to cross check the from-whom-to-whom data with other statistics due to data constraints. However, the amount of outstanding assets or liabilities by sector can be compared with the data released by the Japan Securities Dealers Association. When the amount of outstanding repurchase agreements and securities lending transactions used in the OFCS compilation is compared to the sum of "Balance of Bond Transactions with Repurchase Agreements (by investor type)" and "Bond Margin Loans" released by

the Japan Securities Dealers Association<sup>7</sup>, there is a significant difference for the overseas sector and OFCs on the asset side, and for depository corporations and OFCs on the liability side (Chart 8). This is mainly because of the difference in coverage. While the data used in the OFCS compilation include repurchase agreements in foreign securities, the data released by the Japan Securities Dealers Association do not.

Repurchase Agreements and Securities Lending Transactions (comparison with other statistics)

Chart 8



Notes: 1. The latest data are as of March 2018.

2. "Data by the Japan Securities Dealers Association" are the sum of "Bond Margin Loans" and "Balance of Bond Transactions with Repurchase Agreements."
3. "Data by the Japan Securities Dealers Association" include the Japan Post Bank and Japan Post Insurance in "Other sectors", while data in the J-FFA include those in "depository corporations" and "OFCs," respectively.

<sup>7</sup> The trust account that is not counted in the J-FFA is excluded from the data.

### (3) Deposits money (margin and collateral for financial transactions, and deposits from customers)

Deposits money on the asset side of OFCs in the J-FFA is mainly composed of margin and collateral for financial transactions. In addition to these, deposits from customers are the main components on the liability side of OFCs.

With regard to deposits money, although the balance outstanding of assets and liabilities of each sector is reported in the J-FFA, the counterparty is not identified. Again, we use a matrix by sector and fill in the cells in order to calculate the creditor-debtor relationship between OFCs and each sector (Chart 9). We used the Balance of Payments Statistics to obtain the data on margin and collateral for financial transactions for the overseas sector<sup>8</sup>.

Matrix of Deposits Money

Chart 9

Asset \ Liability	Depository corporations	OFCs	Overseas	Other sectors	Total
Depository corporations	Assumed to be zero	Assumed to be zero	(1)	Assumed to be zero	Specified in J-FFA
OFCs	Assumed to be zero	(3)	(2)	Assumed to be zero	
Overseas	(1)	(2)		Assumed to be zero	
Other sectors	Assumed to be zero	(4)	Assumed to be zero		
Total	Specified in J-FFA				

<Estimation steps>

- Assumption of ,  and
- Calculate (1)
- Calculate (2)
- Calculate (3) and (4)

In the J-FFA, when comparing the margin and collateral for financial transactions of the depository corporations and overseas sector, the assets of depository corporations and the liabilities of the overseas have similar trends. In the same way, the liabilities of depository corporations and the assets of overseas move similarly to each other<sup>9</sup> (Chart 10).

Based on these figures, we assume here that the counterparty sector for depository corporations in deposits money transactions is overseas only. Furthermore, given that most part of the deposits money of overseas is collateral for derivatives, we assume that the counterparty sector is financial institutions only.

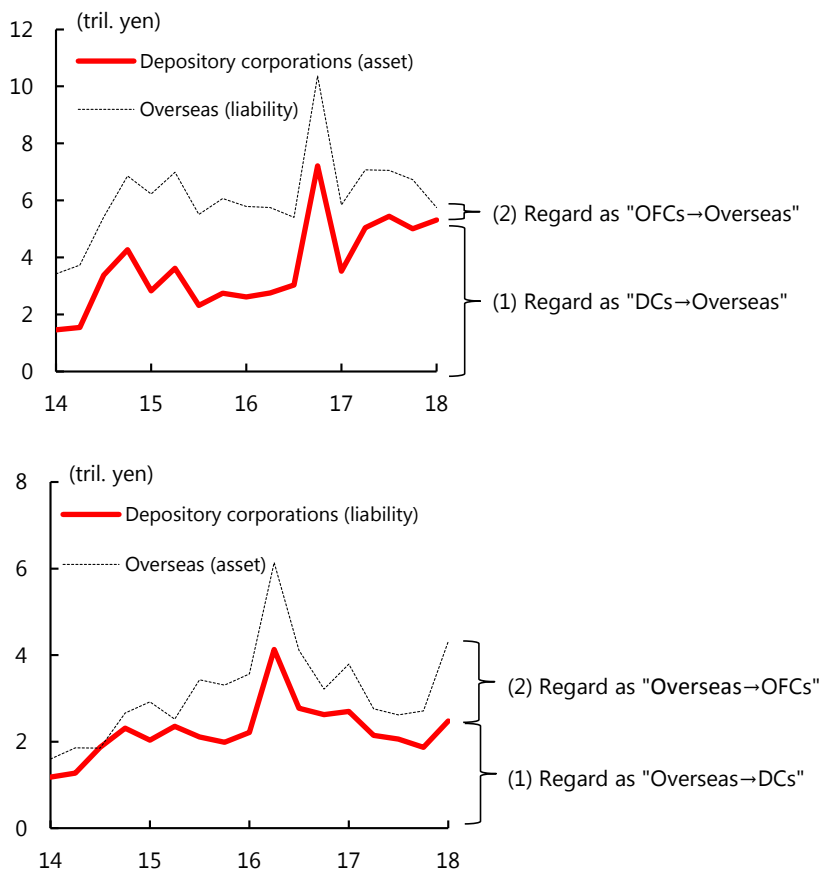
<sup>8</sup> The data became available from 2014 onwards due to the revision of the balance of payments with the aim of achieving conformity with the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) published by the IMF. Before 2014, the transactions between OFCs and overseas were not recorded due to data constraints.

<sup>9</sup> The transaction would basically be the exchange of margin for currency or foreign exchange swap. From the time series data, it is inferred that when the yen depreciated in the first half of 2016, additional margin was paid from the overseas sector to depository corporations. Similarly, when the yen appreciated in the latter half of 2016, additional margin was paid from depository corporations to the overseas sector.

With this, the creditor-debtor relationships between overseas and OFCs can be calculated. Regarding the counterparty sector of OFCs other than overseas, given that the asset side of OFCs is mostly margin and collateral for financial transactions, we assume that the balance from OFCs to other sectors is zero, and calculate the balance from OFCs to OFCs as a residual. Finally, we calculate the balance from other sectors to OFCs as a residual to complete the matrix.

## Margin and Collateral for Financial Transactions of Depository Corporations and Overseas

Chart 10



Notes: 1. The latest data are as of March 2018.

2. The number (1) and (2) correspond to those of Chart 9.

In this section, we presented three examples of the estimation methods applied in the OFCS compilation. Other than those discussed above, the creditor-debtor relationships regarding listed shares are estimated by "Shareholding at Market Value by Sector by Investor Category" released by the Tokyo Stock Exchange to calculate the ratio of each invested sector by holding sector<sup>10</sup>. Regarding industrial securities, commercial paper, and public corporation securities, it is difficult to

<sup>10</sup> Since issuance by "banks" includes that by "bank holding companies" in "Shareholding at Market Value by Sector by Investor Category," we adjust the data using the liability side data (share issuance) of the J-FFA.

identify the holding sector due to data constraints. For those securities, estimates are made assuming that each sector holds each type of securities according to the ratio of each issuance sector's issuance amount to the total issued amount.

## Accuracy of the estimates of the OFCS

As explained in the earlier section, the estimation methods vary among transaction items depending on the nature of transaction or on the availability of related statistics. Therefore, we need to keep in mind that the accuracies of estimates differ from item to item. For reference, a rough sketch of the accuracies for transaction items is illustrated in the following chart (Chart 11).

Estimation Accuracy of the Estimates that comprise OFCS (rough sketch)

Chart 11

: High    
  : Middle    
  : Low

	Asset of OFC (Credit to ~)					Liability of OFC (Credit from ~)				
	Overseas	Central government	Depository corporations	Other sectors (Households, Nonfinancial corporations, Local governments, NPISH, Central bank)	OFCs	Overseas	Central government	Depository corporations	Other sectors (Households, Nonfinancial corporations, Local governments, NPISH, Central bank)	OFCs
Currency and deposits										
Deposits with the Fiscal Loan Fund										
Loans										
Loans by private and public financial institutions										
Repurchase agreements and securities lending transactions										
Debt securities										
Equity										
Investment fund shares										
Insurance, pension and standardized guarantees										
Financial derivatives, etc.										
Deposits money										
Trade credits and foreign trade credits										
External claims, etc.										

Notes: 1. "High" indicates that the figures are compiled directly by using the original source data. "Middle" indicates that the figures are estimated by using original source data where the information on estimations is generally available. "Low" indicates that the figures are estimated where the information on estimations is not available, or where the figures are estimated as residuals. Empty cells indicate that there is no figure compiled.

2. "Financial derivatives, etc." indicates "Financial derivatives and employee stock options." "External claims, etc." indicates the total of "Outward direct investment," "Outward investment in securities," and "Other external claims and debts."

Looking by sector, in the overseas sector in which the Balance of Payments Statistics are directly used, or in the government sector for which a transaction item basis data are available as source data of the J-FFA, the estimation accuracy is relatively high. According to the estimation methods presented earlier, the items are with reasonable accuracy in depository corporations. On the other hand, the

accuracy is relatively low for other sectors as many of the items are calculated as residuals.

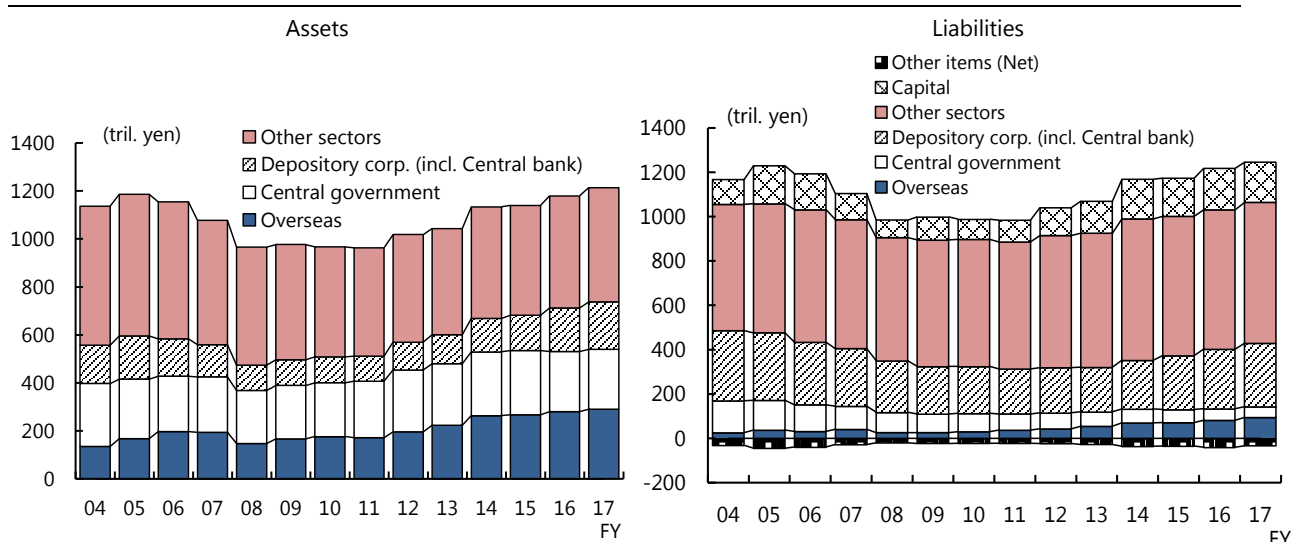
## Recent development in the OFCS

With the above mentioned from-whom-to-whom data regarding OFCs, a more complete picture of the creditor-debtor relationship between different sectors is available, especially of the relationship between OFCs and depository corporations.

In the time series data, from around 2010, both the asset and the liability side of the OFCs are on increasing trends especially vis-à-vis overseas and depository corporations (Chart 12). In the following part, we present some distinctive features of the trend.

Assets and Liabilities of OFCs by Counterparty

Chart 12



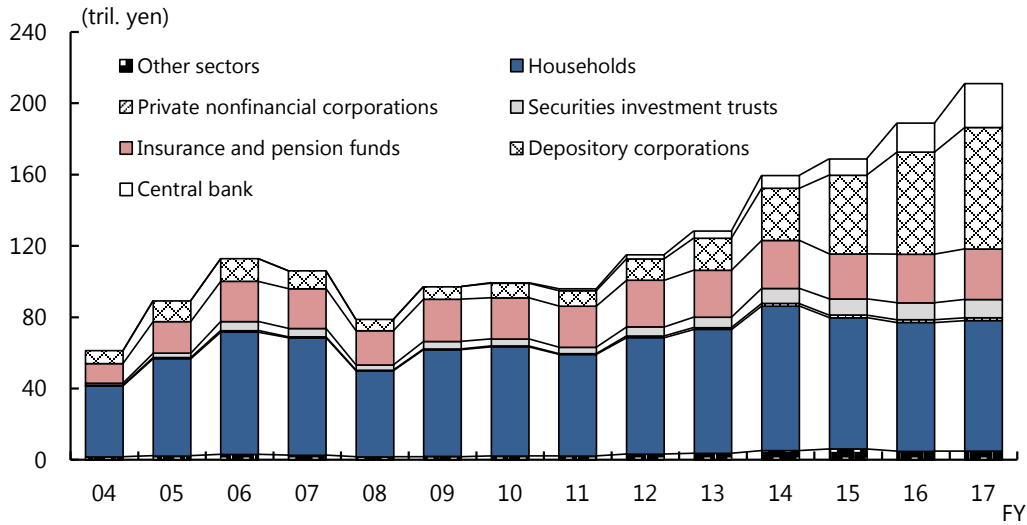
### (1) Increase in investment trusts

Securities investment trusts are classified as OFCs. The amount of outstanding investment trusts is expanding rapidly in recent years and is mainly attributable to the increase in holdings by depository corporations (Chart 13). As has often been pointed out, lending margins, which constitute the core profits of Japanese depository corporations, have been on a declining trend<sup>11</sup>. In such circumstances, depository corporations are taking a more proactive stance toward investing in investment trusts and foreign bonds as part of their portfolio allocation strategy. The breakdown data by investment assets show that foreign securities investment accounts for a significant portion and is on an increasing trend. Equities are also increasing (Chart 14).

<sup>11</sup> For details, refer to Financial System Report (<http://www.boj.or.jp/en/research/brp/fsr/index.htm/>) by the Bank of Japan, for example.

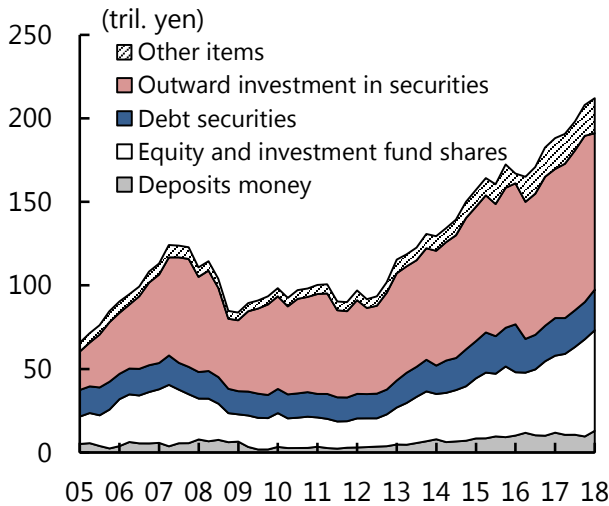
Amount Outstanding of Investment Trust by Holders

Chart 13



Amount Outstanding of Investment Trust (excl. REIT) by Item

Chart 14



Note: The latest data are as of March 2018.

## (2) Increase in repurchase agreements and securities lending transactions

The amount of outstanding repurchase agreements and securities lending transactions are calculated using the method described earlier. The time series data show that the OFCs' funding through the overseas sector as well as OFCs' investment to depository corporations is increasing (Chart 15).

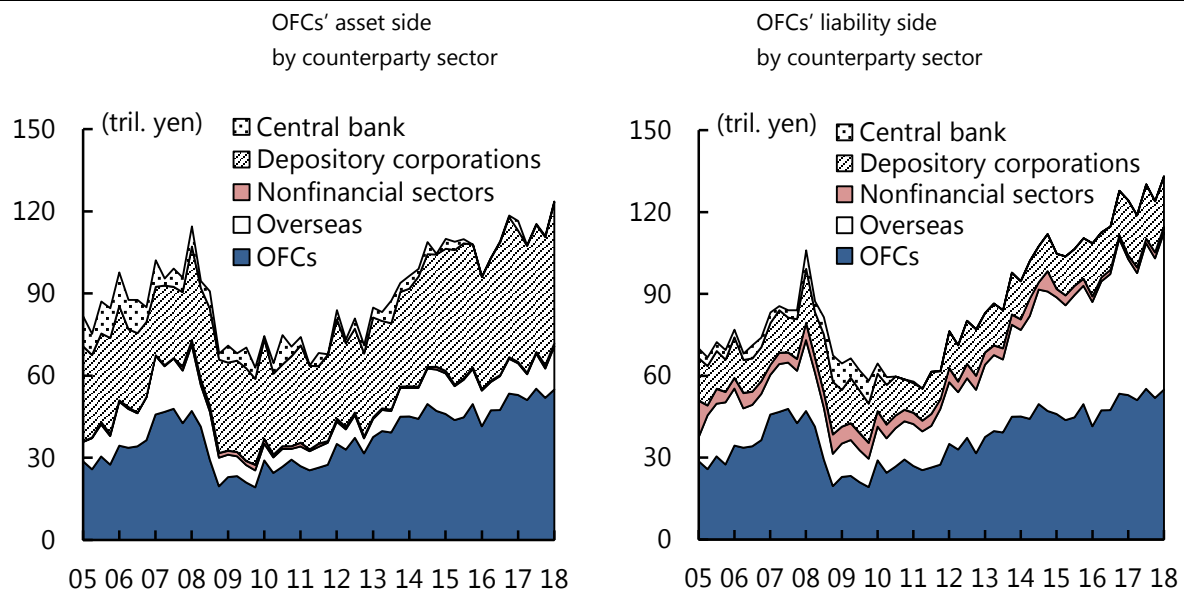
This presumably reflects the trend of the expanding needs of foreign currency funding by depository corporations and insurance companies due to the increase in their foreign credit exposure including overseas loans and foreign bond holdings. OFCs, typically broker dealers, are working as intermediaries and overseas are responding to these demands.

Foreign financial institutions that have ample funds in dollars convert their money into yen and invest in safe assets such as Japanese government bond through repurchase agreements. In the background of the increase in repurchase agreements were these sorts of transactions, which expanded as the dollar funding premium widened in the FX swap and cross-currency basis swap market from around 2014.

These figures confirm that OFCs in particular broker dealers play a significant role in repurchase agreements between depository corporations and the overseas sector.

Repurchase Agreements and Securities Lending Transactions of OFCs by Counterparty

Chart 15



Note: The latest data are as of March 2018.

### (3) Debt securities issues and intra-group lending by bank holding companies

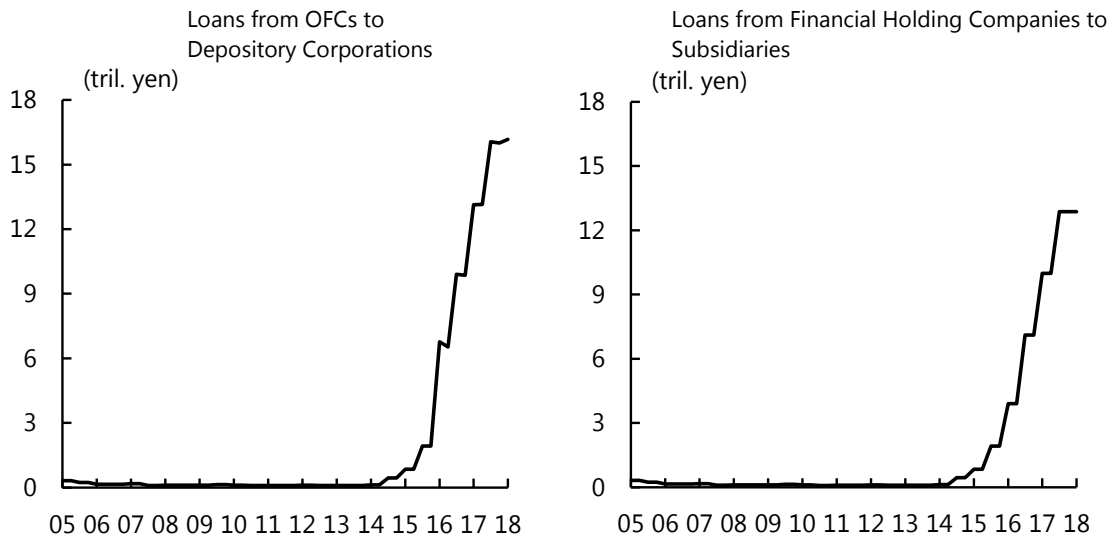
Lending between OFCs and depository corporations is calculated using the method described earlier. In the time series data of OFCs' lending to depository corporations, the amount outstanding has been on a declining trend due to the contraction of Fiscal Loan Funds. However, in recent years, the outstanding amount is picking up mainly because of the internal TLAC<sup>12</sup> from bank holding companies to their subsidiary banks (Chart 16, 17).

<sup>12</sup> The Internal Total Loss-Absorbing Capacity of G-SIBs (Internal TLAC) is designed to shore up the host authorities of cross-border subsidiary banks without harming the host country's financial system, by transferring losses from the subsidiary banks to the holding companies.



Loans from OFCs to Depository Corporations, Loans from Financial Holding Companies to Subsidiaries

Chart 16, 17

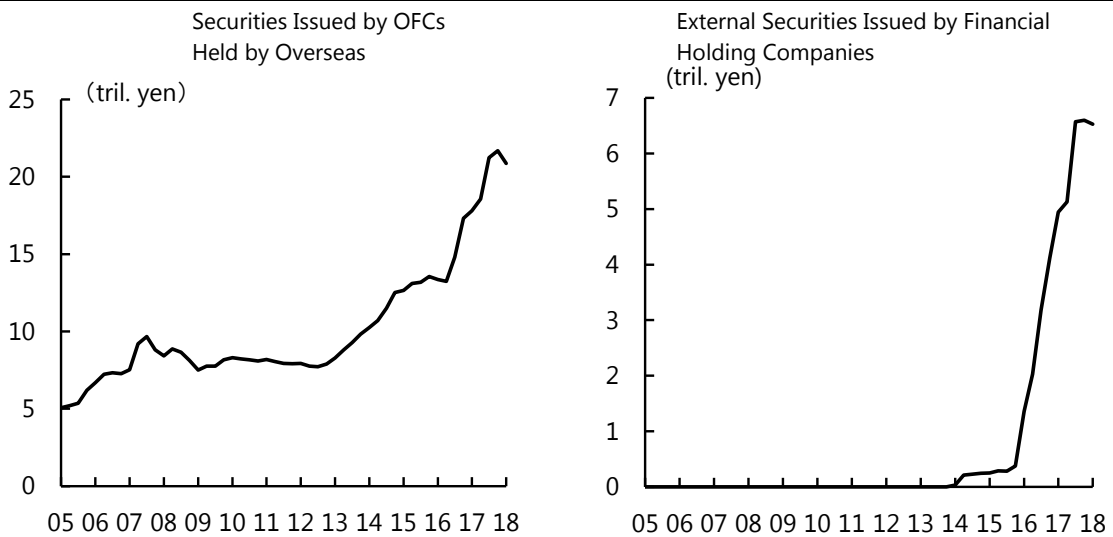


Note: The latest data are as of March 2018.

At the same time, although the estimation accuracy is relatively low, the holder breakdown of the bond issued by OFCs indicates that holding in the overseas sector is on an increasing trend in recent years (Chart 18). One of the main related factors is the bond issuance by bank holding companies. Global systemically important banks (G-SIBs) have been working to come into line with TLAC regulations by issuing debt securities from holding companies in foreign currency (Chart 19). The capital raised in that manner is used as aforementioned loans from the holding companies to their subsidiary banks, which is one of foreign currency funding measures of depository corporations.

Securities Issued by OFCs Held by Overseas, External Securities Issued by Financial Holding Companies

Chart 18, 19



Note: The latest data are as of March 2018.

The features raised in this section came about by focusing on certain OFCS breakdown data. These figures confirm that OFCs, typically broker dealers and investment trusts, play a significant role in terms of intermediation while both funding and investing transactions grow between financial institutions and overseas.

## Conclusions

In this paper, we introduced some of the estimation methods that were applied in the OFCS compilation. We considered some measures to maintain the estimation accuracy even though there are difficulties in obtaining granular data. In efforts to enhance statistics, how to compile and verify data especially in areas with data constraints is a common problem globally. We hope that the measures described in this paper are of some help in compiling other statistics.

In the latter part of the paper, we examined the breakdown data of the OFCS and confirmed that OFCs play a significant role especially when depository corporations extend their business overseas. Transactions by financial institutions through OFCs are important means of obtaining funding from and investing in overseas. They also contribute to the promotion of financial intermediation activities.

At the same time, given that international financial transactions are becoming more complex, it is increasingly important to understand capital flows through the financial system including institutions other than depository corporations in order to understand the risks inherent in financial transactions. The G20 and the FSB have pursued discussions with the aim of addressing the risks as part of an initiative to mitigate financial stability risks caused by non-bank financial intermediation. The Bank of Japan participates in FSB's global non-bank financial intermediation monitoring exercise. In addition, the Bank of Japan and the Financial Service Agency are taking part in the FSB Data Experts Group (DEG) and are working on the details of the data collection framework of repurchase agreements and securities lending transactions<sup>13</sup>.

The OFCS classifies the balance of OFCs' assets and liabilities by counterparty sector. As shown in this paper, it is important to grasp the trends in the OFCs' assets and liabilities with the OFCS data, and then to seek more detailed data together with other statistics in order to understand OFCs' role in the financial system or in financial intermediary activities. The OFCS is an important step forward for the development of the data regarding OFCs to understand capital flows and potential vulnerabilities involved in financial transactions. Since the global financial crisis, the Bank of Japan has been working to enhance statistics in line with international initiatives and intends to continue to make further efforts in order to narrow the data gaps thereby helping to understand the risks inherent in financial activities.

<sup>13</sup> See Ono et al. (2015).

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Irving Fisher Committee on  
Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

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Ninth IFC Conference on "Are post-crisis statistical initiatives completed?"

Basel, 30-31 August 2018

## Other financial corporations survey in Japan -- compilation measures and recent features<sup>1</sup>

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<sup>1</sup> This presentation was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

# **Other Financial Corporations Survey in Japan**

**- Compilation measures and recent features -**

9th IFC Biennial Conference  
“Are post-crisis statistical initiatives completed?”

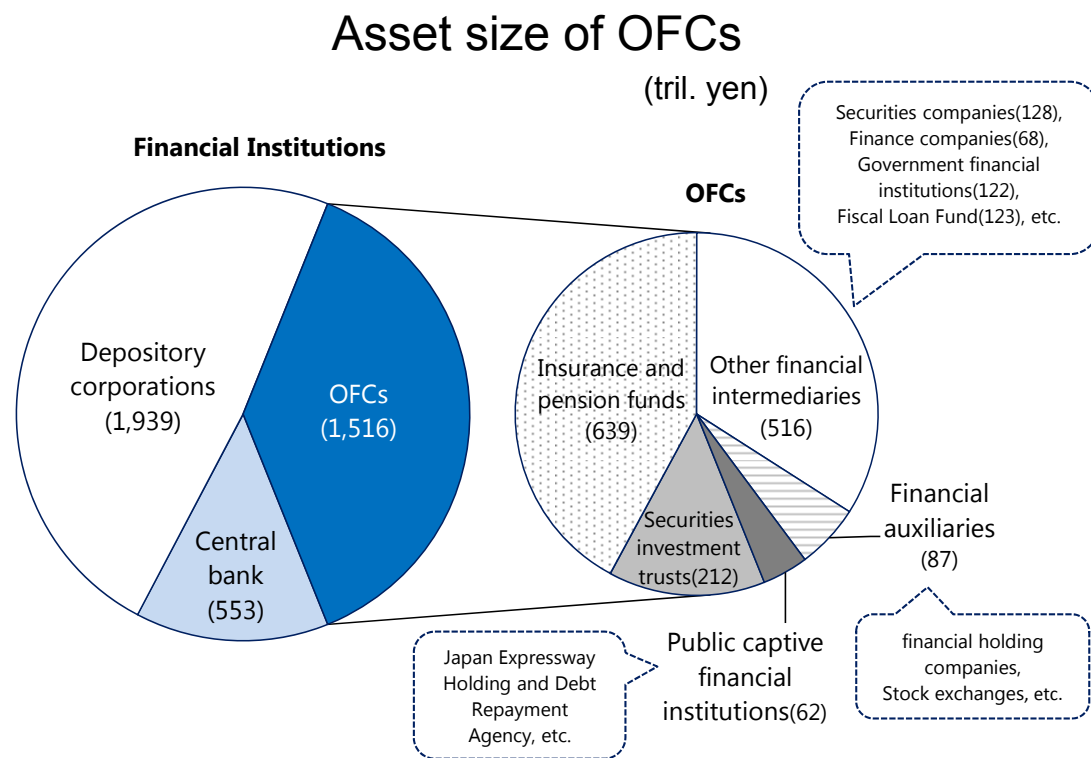
Haruko Kato  
Bank of Japan

30-31 August 2018  
BIS, Basel

# • Other Financial Corporations Survey (OFCS)

A framework that seeks to capture a wide range of financial activities and risks inherent in these activities of Other Financial Corporations (OFCs) - financial entities other than the central bank and depository corporations -.

- ✓ One of the nine data categories of the SDDS Plus



## Items recorded in OFCS

<b>Asset of OFCs (Credit to ~)</b>	
Overseas	
Central government	
Depository corporations	
Other sectors	
<b>Liability of OFCs (Credit from ~)</b>	
Overseas	
Central government	
Depository corporations	
Other sectors	
<b>Capital (Shares and other equity)<sup>1</sup></b>	
<b>Other items (net)<sup>2</sup></b>	

- Notes: 1. Shares issued by OFCs are not included in Liability, but in Capital.  
2. "Other items" records not only shares issued by OFCs that OFCs hold, but also items not included in any other categories.

Note: The data are as of March 2018.

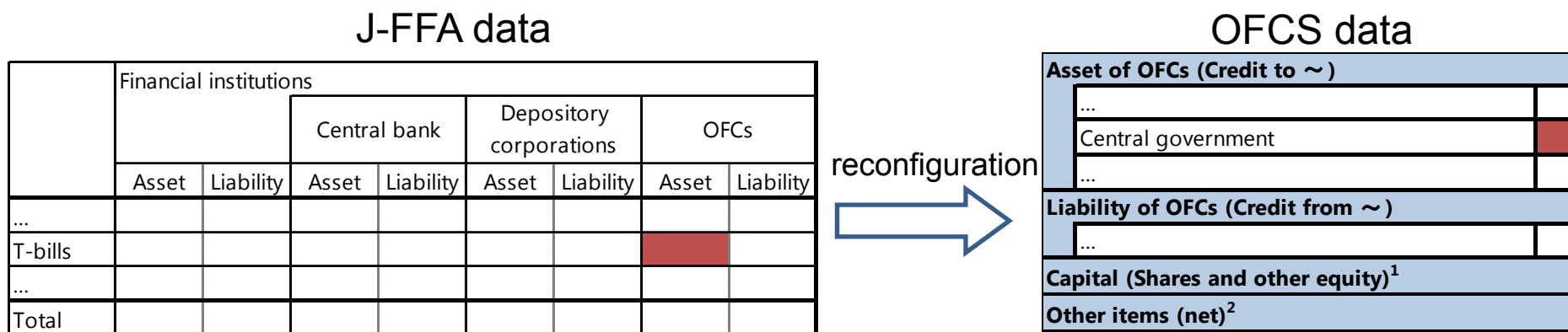
# • OFCS Compilation

## Basic policy in compilation:

- ✓ **Make full use of existing statistics**
  - The Flow of Funds Accounts (J-FFA)
  - The Balance of Payment statistics
  - External statistics
- ✓ **Use micro data depending on the needs**
  - Source data of J-FFA

### ◆ Example 1 (treasury discount bills)

➤ Reconfiguration of J-FFA figures



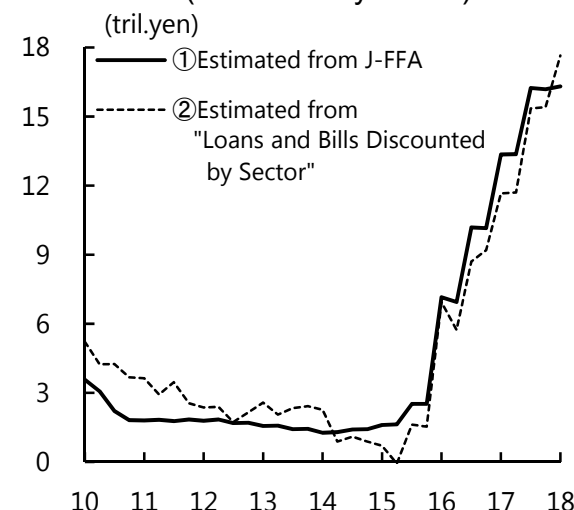
# • OFCS Compilation

## ◆ Example 2 (lending between OFCs and depository corp.)

➤ Use J-FFA + its source data

Borrower sector \ Lender sector	Depository corporations	OFCs	Financial institutions (Depository corporations + OFCs)
Depository corporations	Obtained by subtraction	Obtained by subtraction	Specified in J-FFA
OFCs	Estimated by adding up the breakdown items.	Obtained by subtraction	
Financial institutions (Depository corporations + OFCs)	Specified in J-FFA		

Lending from OFCs to Depository Corp. (Consistency check)



## ◆ Example 3 (repurchase agreements & securities lending transactions)

➤ Use J-FFA + Balance of Payments + certain assumptions

Liability \ Asset	Depository corporations	OFCs	Overseas	Other sectors	Total
Depository corporations	Assumed to be zero	②	Balance of Payments	Depository corp. ↔ Central Bank	Specified in J-FFA
OFCs	②	④	①	③	
Overseas	Balance of Payments	①	/	Balance of Payments	
Other sectors	Depository corp. ↔ Central Bank	③	Balance of Payments	Central Gov. ↔ Central Bank	
Total	Specified in J-FFA				

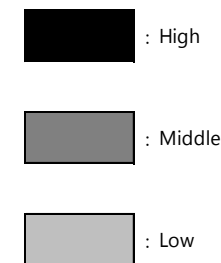
- Use BoP for transactions with Overseas
- Calculate ①
- Assumption of   and
- Calculate ③
- Calculate ④ as a residual



# • Estimation accuracy

- ✓ The estimation accuracy is relatively high in the overseas sector (direct use of Balance of Payment statistics) and government sector (transaction item basis data are available as source data of the J-FFA).
- ✓ According to the estimation methods presented earlier, the items are with reasonable accuracy in depository corporations.

	Asset of OFC (Credit to ~)					Liability of OFC (Credit from ~)				
	Overseas	Central government	Depository corporations	Other sectors (Households, Nonfinancial corporations, Local governments, NPISH, Central bank)	OFCs	Overseas	Central government	Depository corporations	Other sectors (Households, Nonfinancial corporations, Local governments, NPISH, Central bank)	OFCs
Currency and deposits			High							
Deposits with the Fiscal Loan Fund					High	High	High	High	High	High
Loans	High	Middle	Middle	Middle	Middle	High	Middle	Middle	Middle	Middle
Loans by private and public financial	High	High	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Repurchase agreements and securities lending	High	Middle	Middle	Middle	Middle	High	Middle	Middle	Middle	Middle
Debt securities		Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Equity			Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Investment fund shares			Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Insurance, pension and standardized guarantees					Middle			Middle	Middle	Middle
Financial derivatives, etc.	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Deposits money	Middle	High	Middle	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Trade credits and foreign trade credits	High	High	Middle	Middle	Middle	High	Middle	Middle	Middle	Middle
External claims, etc.	Middle					Middle				

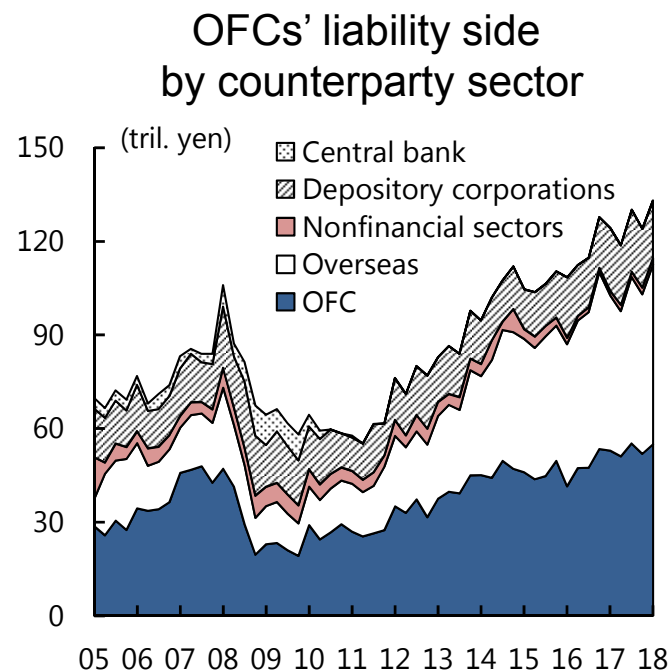
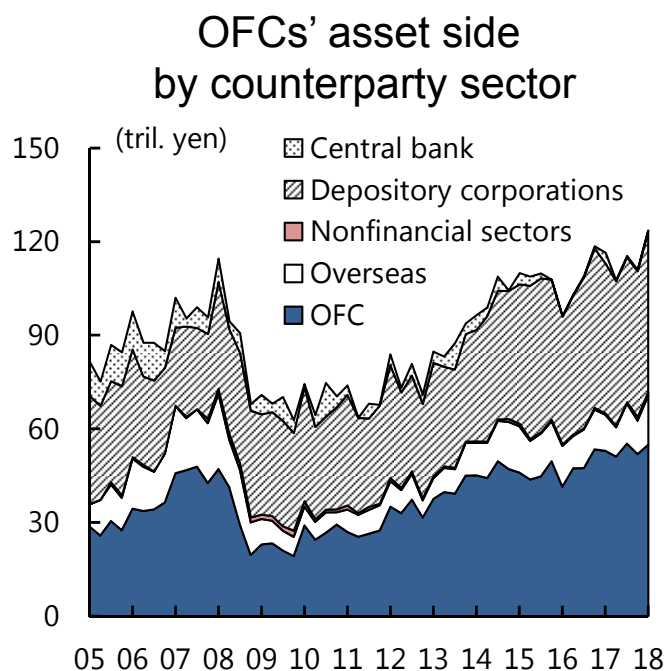


Note: Empty cells indicate that there is no figure compiled.

# • Recent features in the OFCS

## ◆ Repurchase agreements & securities lending transactions

- ✓ Expanding needs of foreign currency funding by depository corporations and insurance companies due to the increase in their foreign bond holdings as part of their portfolio allocation strategy.
- ✓ OFCs, in particular broker dealers, are working as intermediaries and overseas are responding to these demands.

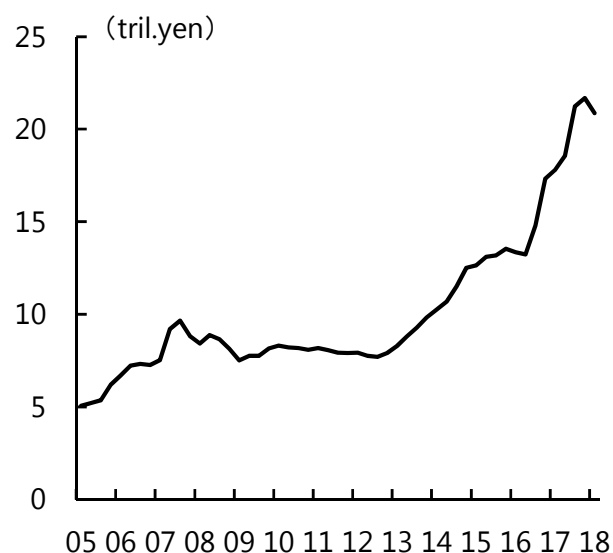


Note: The latest data are as of March 2018.

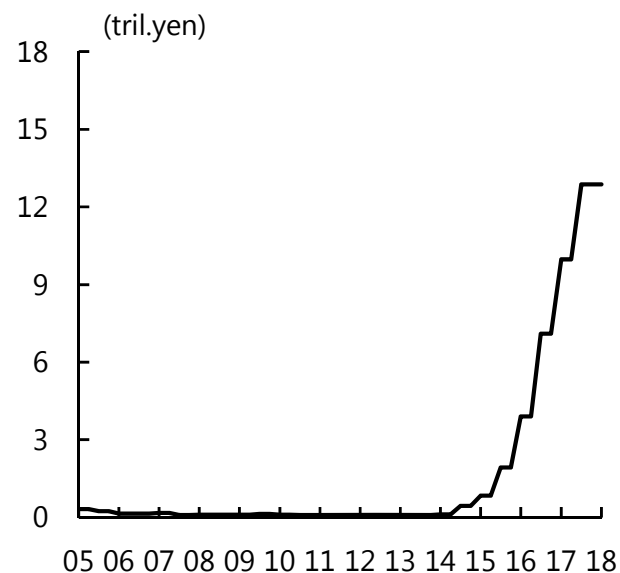
# • Recent features in the OFCS

- ◆ Debt securities issues and intra-group lending by bank holding companies
  - ✓ G-SIBs have been working to come into line with TLAC regulations by issuing debt securities from holding companies (OFCs) in foreign currency.
  - ✓ The capital raised in that manner is used as holding companies' lending to their subsidiary depository corporations (internal TLAC)

Securities Issued by OFCs  
Held by Overseas



Loans from Holding Companies  
to Subsidiaries



Note: The latest data are as of March 2018.

- **Summary**

- **The OFCS is an important step forward to understanding the trend of OFCs.**
- **In the OFCS compilation, we use various measures by utilizing other statistics and some micro data depending on the needs.**
- **The breakdowns of the OFCS data confirm that OFCs play a significant role while Japanese depository corporations extend their business overseas.**

**Thank you!**