



# CONFERENCE ON STRENGTHENING SECTORAL POSITION AND FLOW DATA IN THE MACROECONOMIC ACCOUNTS

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# Korea's Experiences in Compilation of Flow of Funds

To be presented in Session 2, Item 2 by Seunghwan Ko

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# Korea's Experiences in Compilation of Flow of Funds

#### 1. Outline

The flow of funds (FOF) accounts present a composite picture not only of the way in which economic entities' financial surpluses or deficits resulting from nonfinancial activities are funded or used, but also of the flow of funds in the financial market and financial transactions with the overseas sector.

The Korean FOF accounts are composed of a 'Financial Transactions Table', which records the increase and decrease in assets and liabilities of all economic entity as a result of financial transactions during the designated period (quarter or year), a 'Financial Assets and Liabilities Outstanding Table', which details the balance at a certain time (end of quarter or year), and a 'Reconciliation Table', which explains changes in financial assets and liabilities due to asset revaluation without in- or outflows of money.

The Bank of Korea (BOK) compiles and disseminates preliminary FOF accounts every quarter, including its 'Financial Transactions Table' and 'Financial Assets and Liabilities Outstanding Table'. The BOK then revises this data and in the spring two years later publishes the final data for the whole year concerned including the quarterly data. The final accounts contain additional Savings, Investment and Difference rows from the National Income Statistics, which enable us to compare the industrial and the financial flows of funds.

The BOK is preparing to compile a National Balance Sheet covering the whole economy in the future, through which we can see the nation's Financial and Real Economy Balance Sheets, too.

The Korean Flow of Funds accounts have been compiled since 1965, covering data back to 1963. However, since the current major revision was made in 2006, to adopt the 1993 SNA, data is only retroacted to 2002.

Table 1.

# **Time Series of Korean FOF**

	Financial Transactions	Financial A/L Outstanding	Frequency
1993 SNA	2003. 1Q -	2002. 4Q -	Quarterly & Annually
1968 SNA	1975. 1Q - 2005.4Q	1975. 1Q - 2005.4Q	Quarterly
	1970 - 1974	1969 - 1974	Annually
1953 SNA	1963 - 1970	1962 - 1970	Annually

#### 2. Structure of Korean Flow of Funds Accounts

The Korean FOF accounts adopt the system of integrating national accounts with financial accounts using a matrix system. Specifically, the matrix rows consist of the financial instrument categories (transactions, assets and liabilities) and matrix columns consist of the institutional sectors and their uses and sources of funds. In Financial Transactions, the type of fund inflows (e.g., bank borrowings, issuance of securities, and overseas borrowings) are recorded in the 'Sources' column, which corresponds to 'Liabilities' in A/L Outstanding Table. The type of funds usage (e.g., deposits and securities investment) are recorded in the 'Uses' column, corresponding to 'Assets' in A/L Outstanding Table.

In the Korean FOF accounts, the economic entities (institutional sectors) are broadly divided into five categories – Financial Corporations, the General Government, Nonfinancial Corporations, Individuals and the-Rest-of-the-world (Overseas). These five sectors are further broken down into sub-sectors, especially in the Financial Corporations sector.

While the Financial Corporations sector is further broken down into five sub-sectors, the Nonfinancial Corporation sector is broken down into two – Public Nonfinancial Corporations and Private Nonfinancial Enterprises. While the General Government and Individuals sectors are composed of sub-sectors, the data of these sectors are published by themselves. The Overseas sector is a consolidated entity including all foreign economic units of Korea's trading and investing partners. All transactions with the Overseas sector are recorded from the viewpoint of the rest-of-the-world.

Table 2 shows the sectoral composition of the Korean FOF in more detail. These detailed sectoral data can be found on the BOK's Economic Statistics System website (ECOS, http://ecos.bok.or.kr/).

Table 2

<u>List of Institution Sectors in ECOS</u>

Sectors (5)	Sub-sectors (10)	Detailed sectors (14/18)		
	Central Bank	Central Bank		
	Depository Corporations	Banks	Domestically-Licensed Banks	
			Specialized Banks	
		Non-Banks	Collectively Managed Trusts	
			Small Loan Financial Companies	
			Investment Institutions	
Financial Corporations	Insurance Companies and Pension Funds	Insurance Companies	Life Insurance	
Corporations			Non-Life Insurance	
		Pension Funds		
	Other Financial Intermediaries	Securities Institutions		
		Credit-specialized Financial Institutions		
		Public Financial Institutions		
	Financial Auxiliaries			
General Government	(Central Government, Local Government, Social security funds)			
Non-financial	Public Nonfinancial Corporations			
Corporations	Private Nonfinancial Enterprises			
Individuals	(Households, NPISH)	ds, NPISH)		
Rest of the World				

Meanwhile, financial instruments are broadly divided by 14 categories. Especially Deposits, Securities, Loans and Shares has more sub-sectors. Table 2 shows list of financial instrument of Korean FOF.

## Table 3. List of Financial Instruments

#### 1. Gold & SDRs

# 2. Currency & Deposits

- (1) Deposits with the BOK
- (2) Currency
- (3) Transferable & Short-term Deposits
- (4) Government Deposits with the BOK
- (5) Long-term Savings Deposits
- (6) Cover Bills
- (7) Negotiable Certificates of Deposits (CDs)
- (8) Repurchase Agreements (RPs)
- (9) Money in Trust
- (10) Others

#### 3. Insurance & Pension Reserves

#### 4. Securities other than Shares

- (1) Government Bonds
- (2) Financial Debentures
- (3) Commercial Paper
- (4) Public Bonds
- (5) Corporate Bonds
- (6) Structured-Financing Instruments
- (7) External Securities/Securities owned by nonresidents
- (8) Beneficiary Certificates

# 5. Loans

- (1) BOK Loans
- (2) Depository Corporation Loans
- (3) Insurance Company Loans
- (4) Loans by Credit-specialized Financial Institutions
- (5) Loans by Public Financial Institutions
- (6) Other Loans

#### 6. Government Loans

# 7. Shares & Other Equities

- (1) Shares
- (2) Other Equities

#### 8. Financial Derivatives

- 9. Trade Credits
- 10. Foreign Exchange Holdings
- 11. Foreign/Overseas Direct Investment
- 12. Call Loans and Call Money
- 13. Other Foreign Claims and Debts
- 14. Miscellaneous assets & Liabilities

## 3. Compilation

As mentioned earlier, the Korean FOF accounts are composed of 'Financial Assets and Liabilities Outstanding Table', 'Financial Transaction Table' and "Reconciliation Table'. Financial A/L Outstanding is compiled by collecting data from the individual institutions' financial statements. The volume of financial transactions is estimated by subtracting the beginning-of-period financial asset and liability balances from the end-of-period balances. The Financial Transaction table of each sector are estimated by using the financial transactions survey results and institutions' balance sheets and auxiliary financial statements. The bond and stock issuance balances are also used to compile the Financial Transactions table.

Discrepancies between the transactions and the balance are classified in the reconciliation table. Especially, most of these discrepancies occur in asset revaluation and translation of foreign currencies to Korean won.

For the matrix, the matrix columns (institutional sectors – Financial Corporations, General Government and Public Nonfinancial Corporations) are input first and the matrix rows (financial instruments) are then filled out by checking and allocating the remaining sectors – Individuals and Private Nonfinancial Enterprises.

Among the five sectors, Financial Corporations, the General Government and Public Corporations among Nonfinancial Corporations are investigated directly. Most quarterly data of these sectors can be obtained from the individual institutions and the monthly Monetary & Financial Statistics compiled by the BOK. Also, the Overseas sector is compiled by using the BOP and IIP statistics of the BOK. However, Individuals and Private Enterprises among Nonfinancial Corporations are estimated indirectly using financial transactions, holding securities and other survey from financial institutions. In the case of Private Nonfinancial Enterprises, a sample survey is conducted to estimate the balances and volumes of financial transactions and securities traded annually of this sector, which is used for the final data.

Overseas claims and liabilities are translated into Korean won at the basic exchange rates against the corresponding foreign currencies. End-of-period foreign exchange rates are applied to the asset and liability balances, while period-average exchange rates are applied to the Financial Transactions Table.

# [ Process of Compiling FOF ]



#### **Survey Reports**

(2009)

Sectors	Institutions	Reports
Financial Corporations	804	5,460
Depository Corporations	361	2,037
Insurance Companies and Pension Funds	66	520
Other Financial Intermediaries	235	1,909
Financial Auxiliaries	142	994
General Government	184	1,288
Nonfinancial Corporations	36	252
Total	1,024	7,000

# 4. Periodicity

The preliminary quarterly and annual FOF accounts statistics are released around 75 days after the ends of the concerned periods. The final quarterly and annual data are disseminated in the spring of the second year following.

Dissemination: Press releases

「Monthly Statistical Bulletin」, 「Economic Statistics Yearbook」 Website of Bank of Korea (http://ecos.bok.or.kr)

# 5. Future Plans

Our main current issues involve implementing the 2008 SNA. We plan to release data based on the 2008 SNA in the spring of 2014. Under the 2008 SNA standards, sectors and instruments are subdivided more extensively and the detailed FOF will be published from that time, too. We already have information on the issuers of securities; however, the breakdown of maturities for financial instruments will be an issue. We have compiled consolidated FOF since last year, which will assist as in compilation of the detailed FOF.