

# **Compilation and Utilisation of the Financial Account of the Nonfinancial Corporations (NFC) Sector: Experience, Challenges, and Opportunities (the case of Indonesia)**

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**1** Introduction

**2** Compilation Practices of NFC Sector's Financial Account

**3** Utilisation of NFC Sector's Financial Account

**4** Next Steps

# 1. Introduction

## Overview of Financial Account and Balance Sheet Indonesia (FABSI)

### Description

**FABSI** is a quarterly publication with a data lag of 4 months.

### Purpose

- To analyze liquidity, financial imbalances, and intersectoral systemic risks → financial system stability assessment.
- As data input for Sectoral Account and Balance Sheets (SAB) Indonesia (G20 DGI Phase 2 rec #8)

### Concept and Framework

Balance Sheet  
(opening)



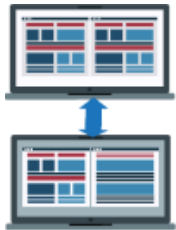
Financial Account  
(transaction)



Revaluation and Other Changes  
(others)



Balance Sheet  
(closing)



### FINANCIAL ACCOUNT (FA)

A statement that records net transactions of financial assets and liabilities between institutional sectors at a specific time.



### BALANCE SHEET (BS)

A statement of the values of the financial assets owned and the liabilities owed by an institutional unit at a specific time

### SECTORS



Non Financial Corporations



Central Bank



Other Depository Corporations



Other Financial Corporations



Central Government



Local Government



Households + NPISH



Rest of the World

### INSTRUMENTS



Monetary Golds & SDRs



Currency & Deposits



Debt Securities



Loans



Equity



Insurance & Pension Funds



Financial Derivative



Other accounts receivable/payable

### MANUAL

System of National Accounts (2008)

# 1. Introduction

## Business Process

### COLLECT

Bloomberg

CB Financial Report

GFS- MoF

BI-Scriptless Securities Settlement System

State-owned enterprises Financial Report

Banks Financial Report

Central Securities Depository

BOP, IIP, Indonesia External Debt Statistics

Survey

Tax Report - MoF

OFCs Financial Report



MoF: Ministry of Finance



BOP: Balance of Payments  
IIP: International Investment Position

GFS: Gov Finance Statistics

### COMPILATION

Sectoral Balance Sheet - ODC

Sectoral Balance Sheet - OFC

Sectoral Balance Sheet - CG & LG

Whom-to-Whom Matrix

Sectoral Balance Sheet - CB

Sectoral Balance Sheet - NFC

Sectoral Balance Sheet - ROW

### Outputs

Balance Sheets Dataset

Financial Account Dataset

Financial Account and Balance Sheet Analysis

Infographic

Supply Data for Sectoral Accounts and Balance Sheet (SAB)

### PUBLICATION

Bank Indonesia

Statistics Indonesia

Sectoral Account Balance Sheet (SAB) Indonesia – G20 DGI II.8

## 2. Compilation Practices of NFC Sector's Financial Account

### ■ Instruments and Data Availability

#### NFC's financial instruments

	F1	F2	F3	F4	F5	F6	F7	F8
Assets	x	✓	✓	✓	✓	✓	✓	✓
Liabilities	x	x	✓	✓	✓	x	✓	✓

#### NFC data availability

Data Source	Periodicity	Source	Lag Data	Issues
Public companies' financial report	Quarterly	Bloomberg	1 month	Extra effort to collect counterparty information from notes to the financial statements of each company
Unlisted state-owned enterprise' financial reports	Quarterly	Ministry of State-owned Enterprises	4 month	Extra effort to collect counterparty information from notes to the financial statements of each company, time lag
Tax reports (unlisted public-owned enterprise' financial reports)	Annual	Ministry of Finance	7 month	Time lag, no counterparty information

### ■ Issues in Data Collection

#### Challenges

Lagging data:

- State –owned enterprises Financial Report
- Tax Report

Extra effort to collect counterparty information from notes to the financial statements of each company:

- Public companies' financial report
- Unlisted state-owned enterprise' financial reports

#### Solution

Data mirroring


Estimation:

e.g. by proportion, growth rate

## 2. Compilation Practices of NFC Sector's Financial Account

### ■ NFC's assets data source by instruments


Code	Instrument	Data Source - NFC Asset On					
		CB	ODC	OFC	CG	HH	ROW
F1	Mon' Gold & SDRs						
F2	Currency & Deposit	Mirroring CB Reporting (SRF 1SR)	Mirroring Bank Reporting (SRF 2SR)				IIP, BOP
F3	Debt Securities	BI-SSSS	Mirroring Bank Reporting (SRF 2SR), Central Securities Depository	Central Securities Depository	BI-SSSS		IIP, BOP
F4	Loans		Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)			IIP, BOP
F5	Equity		Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)			IIP, BOP
F6	Insurance & Pension Fund			Mirroring OFC Reporting (SRF 4SR)			
F7	Financial Derivatives		Mirroring Bank Reporting (SRF 2SR)				
F8	Other Account Receivable	Mirroring CB Reporting (SRF 1SR)	Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)	Ministry of Finance (estimation)	N/A	IIP, BOP

 Not relevant

## 2. Compilation Practices of NFC Sector's Financial Account

### ■ NFC's liabilities data source by instruments

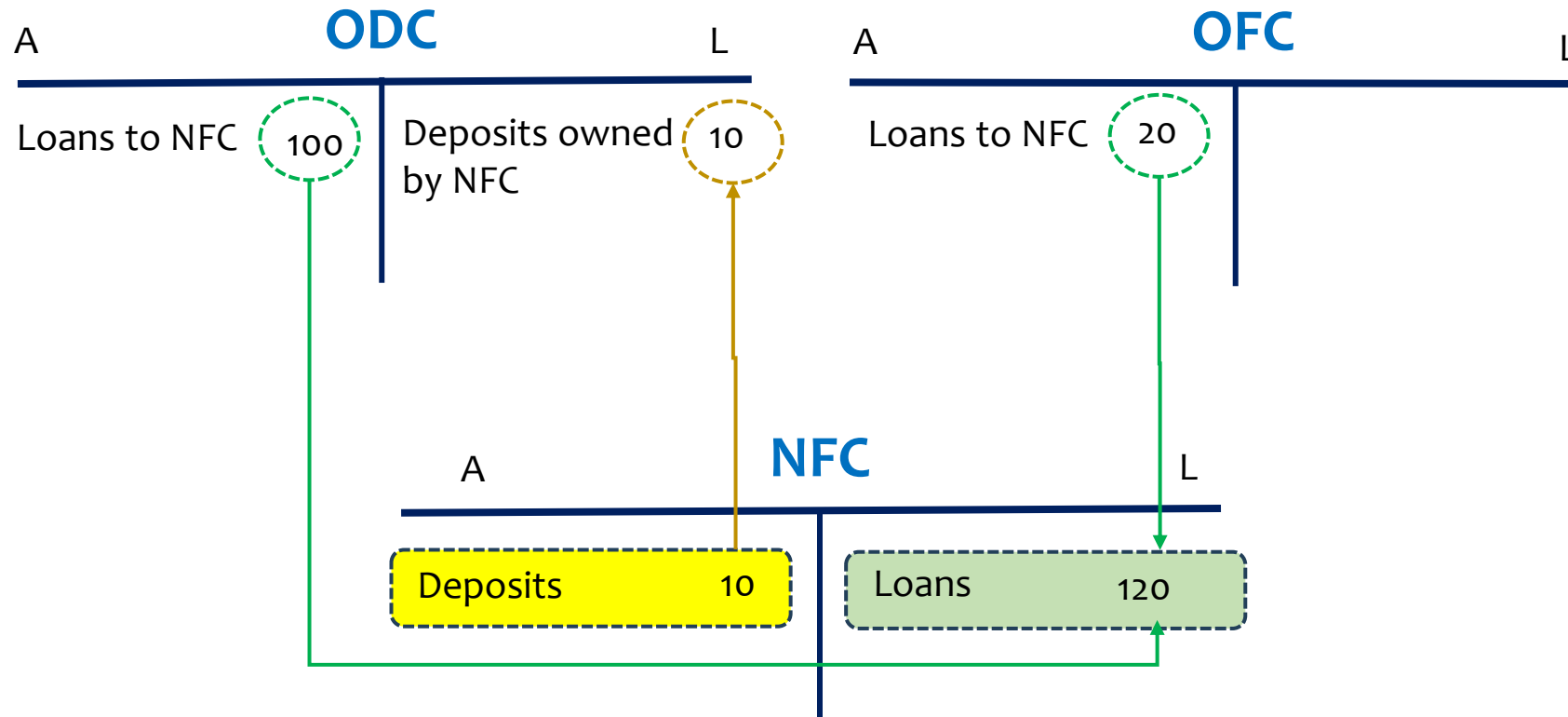
Code	Instrument	Data Source - NFC Liab On					
		CB	ODC	OFC	CG	HH	ROW
F1	Mon' Gold & SDRs						
F2	Currency & Deposit						
F3	Debt Securities	Central Securities Depository	Central Securities Depository	Central Securities Depository		Central Securities Depository	IIP, BOP
F4	Loans		Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)	Ministry of Finance (estimation)		IIP, BOP
F5	Equity		Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)	Ministry of Finance (estimation)	Bloomberg (estimation)	IIP, BOP
F6	Insurance & Pension Fund						
F7	Financial Derivatives		Mirroring Bank Reporting (SRF 2SR)				
F8	Other Account Payable	Mirroring CB BS (SRF 1SR)	Mirroring Bank Reporting (SRF 2SR)	Mirroring OFC Reporting (SRF 4SR)	Ministry of Finance (estimation)	Bloomberg (estimation)	IIP, BOP

 Not relevant



## 2. Compilation Practices of NFC Sector's Financial Account

Data mirroring: F2 and F4



### Cons:

Data is undervalued and inaccurate due to under coverage data source (e.g. SRF 4-SR)

## 2. Compilation Practices of NFC Sector's Financial Account

### Data estimation – growth rate

- Estimate with growth rate when data is not yet available.

Example:

Liabilities To HH	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021*
F8	100	97	115	120	137	136

$$F8_{Q4\ 2021} = F8_{Q3\ 2021} + \frac{(F8_{Q4\ 2020} - F8_{Q3\ 2020})}{F8_{Q3\ 2020}}$$
$$= 137 + \frac{97 - 100}{100}$$

### Cons:

Data is inaccurate as the estimates only relying on one single point historical data.

## 2. Compilation Practices of NFC Sector's Financial Account

### Data estimation - proportions

- Estimate with proportions to provide from whom-to-whom figures. The proportions itself are the average proportion obtained from notes to the financial statement of public companies.

Example:

Assets		NFC	CB	ODC	OFC	CG	LG	HH	ROW	Total
<i>Value</i>										
F5		2								1200
	F5DC*)	336		24	24					
	F5FC*)								816	
*) estimation										
<i>Proportions</i>										
F5										100%
	F5DC	28%		2%	2%					
	F5FC								68%	

Diagram annotations: A green dashed arrow points from the '2' in the 'Value' table to the '28%' in the 'Proportions' table. Another green dashed arrow points from the '1200' in the 'Value' table to the calculation  $28\% \times 1200$  in the 'Proportions' table. A green circle with the number '1' is placed near the calculation.

### Cons:

Data is inaccurate.

## 2. Compilation Practices of NFC Sector's Financial Account

### Data estimation - proportions

Example:

Notes to financial statement of a public company

### 23. MODAL SAHAM

Kepemilikan modal saham Perusahaan pada tanggal 31 Desember 2023 dan 2022 adalah sebagai berikut:




### 23. SHARE CAPITAL

Ownership of the Company's share capital as at 31 December 2023 and 2022 is as follows:

F5

	2023 dan/and 2022			
	Jumlah saham/ Number of shares	Modal ditempatkan dan disetor/ Issued and paid-up capital stock	Persentase kepemilikan/ Percentage of ownership	
Harga saham Rp 1.000 per saham, Mirae Asset Securities (HK) Limited	32,000,000	32,000	5.21	Par value of Rp 1,000 per share, Mirae Asset Securities (HK) Limited
Harga saham Rp 500 per saham, Mirae Asset Securities (HK) Limited PT Aiti Investment	45,199,000 901,000	22,600 450	3.68 0.07	Par value of Rp 500 per share, Mirae Asset Securities (HK) Limited PT Aiti Investment
Harga saham Rp 2.500 per saham, Mirae Asset Securities (HK) Limited	12,000,000	30,000	4.88	Par value of Rp 2,500 per share, Mirae Asset Securities (HK) Limited
Harga saham Rp 7.200 per saham, Mirae Asset Securities (HK) Limited, PT Snet Indonesia	17,919,000 181,000	129,017 1,303	21.00 0.21	Par value of Rp 7,200 per share, Mirae Asset Securities (HK) Limited, PT Snet Indonesia
Harga saham Rp 5.700 per saham, Mirae Asset Securities (HK) Limited, PT Snet Indonesia	69,300,000 700,000	395,010 3,990	64.30 0.65	Par value of Rp 5,700 per share, Mirae Asset Securities (HK) Limited, PT Snet Indonesia
	<u>178,200,000</u>	<u>614,370</u>	<u>100,00</u>	

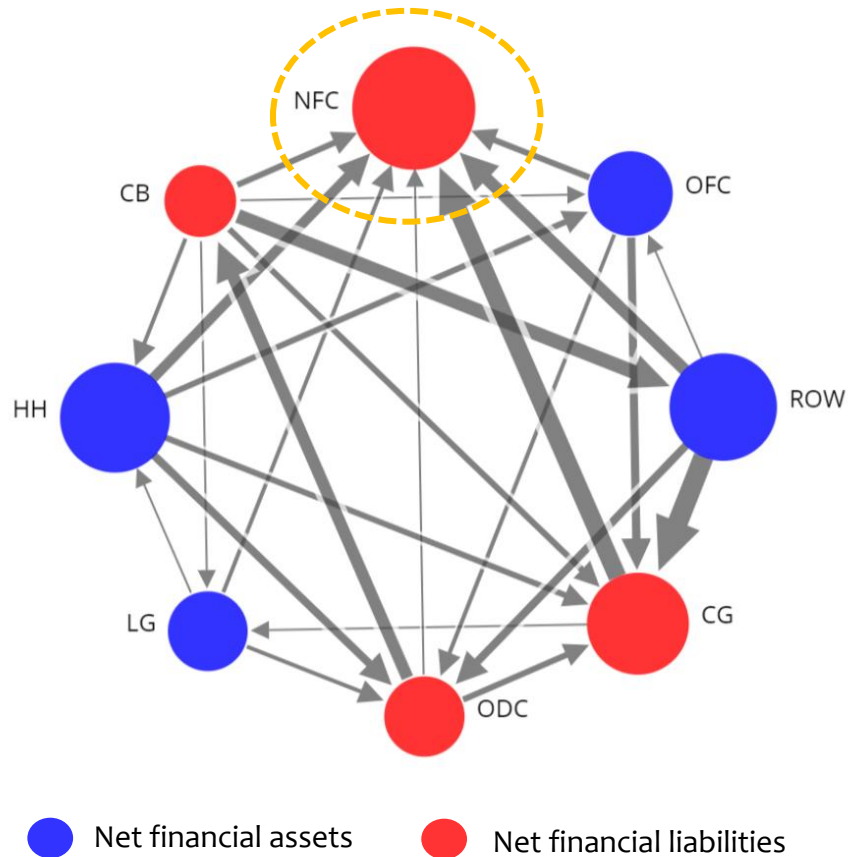
Reporting period

 ROW  
 OFC  
 NFC

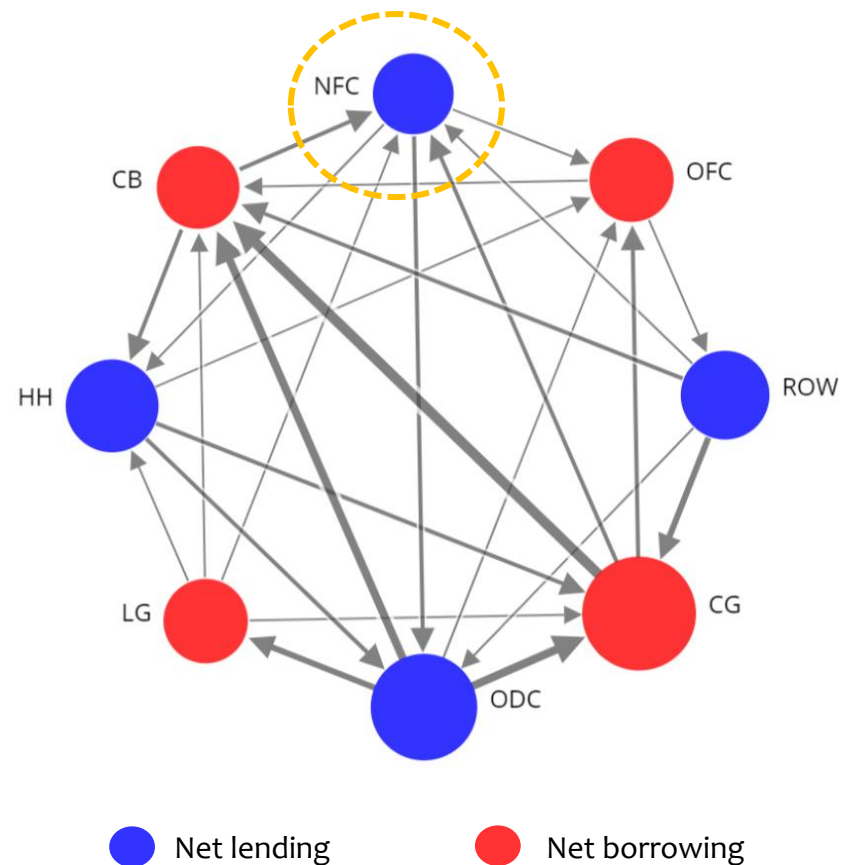
# 3. Utilisation of NFC Sector's Financial Account

## Network Analysis

FINANCIAL POSITION NETWORK Q4 2023



NET FINANCIAL TRANSACTION NETWORK Q4 2023

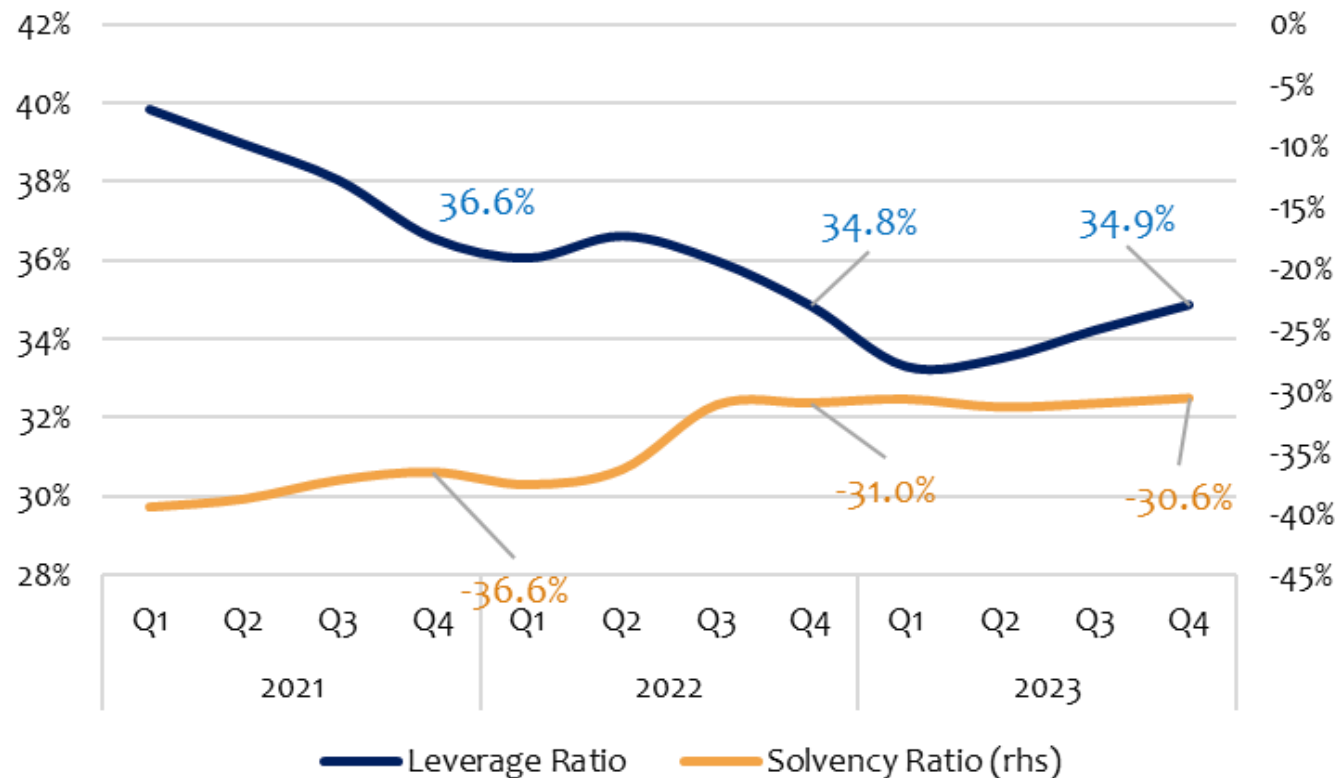


- Network shows the position of a sector, which is described as nodes, and connected by edges, which are the size of interconnected exposures.
- It is formed using the whom-to-whom matrix which contains information regarding the bilateral exposure position between institutional sectors.

# 3. Utilisation of NFC Sector's Financial Account

## ■ Risk Profile Analysis

### LEVERAGE RATIO AND SOLVENCY RATIO OF NFC SECTOR



- **Leverage ratio (Debt to GDP)** measures the capacity of a sector to repay its debts.
- **Solvency ratio (Net financial position to GDP)** measures the ability of a sector to meet its long-term obligations

**Next steps** to improve the accuracy NFC' financial accounts:

1 Review and improve the existing estimation method

2 Improve data source e.g submission of granular NFC' financial reports to the regulatory authorities

3 Strengthening institutional cooperation between BI and other institution to obtain full tax report and unlisted state-owned enterprise' financial reports timely and granular.

**Thank You**