Non-financial corporations: compilation process in the Belgian financial accounts matrix

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October 2024

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Financial accounts

- Overview of the financial investment and financing activities of the major economic sectors
    - **Non financial coorporations (NFC)**
    - Financial institutions (9 subsectors)
    - Government sector
    - Household sector
    - Rest of the World (ROW)
- Full who-to-whom matrix
- A cross table of asset sector and liabilities sector for each instrument/ time period/ type
- Broken down by financial instruments, with a matrix for each instrument

		Liabilities sectors												
		s11	s121	s122	s124	s125	s126	s127	s128	s129	s13	s14	s15	s2	**Total**
Asset sectors	s11														
	s121														
	s122														
	s124														
	s125														
	s126														
	s127														
	s128														
	s129														
	s13														
	s14														
	s15														
	s2														
	Total														

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Financial accounts

		Liabilities sectors													
		s11	s121	s122	s124	s125	s126	s127	s128	s129	s13	s14	s15	s2	**Total**
Asset sectors	s11														
	s121														
	s122														
	s124														
	s125														
	s126														
	s127														
	s128														
	s129														
	s13														
	s14														
	s15														
	s2														
	Total														

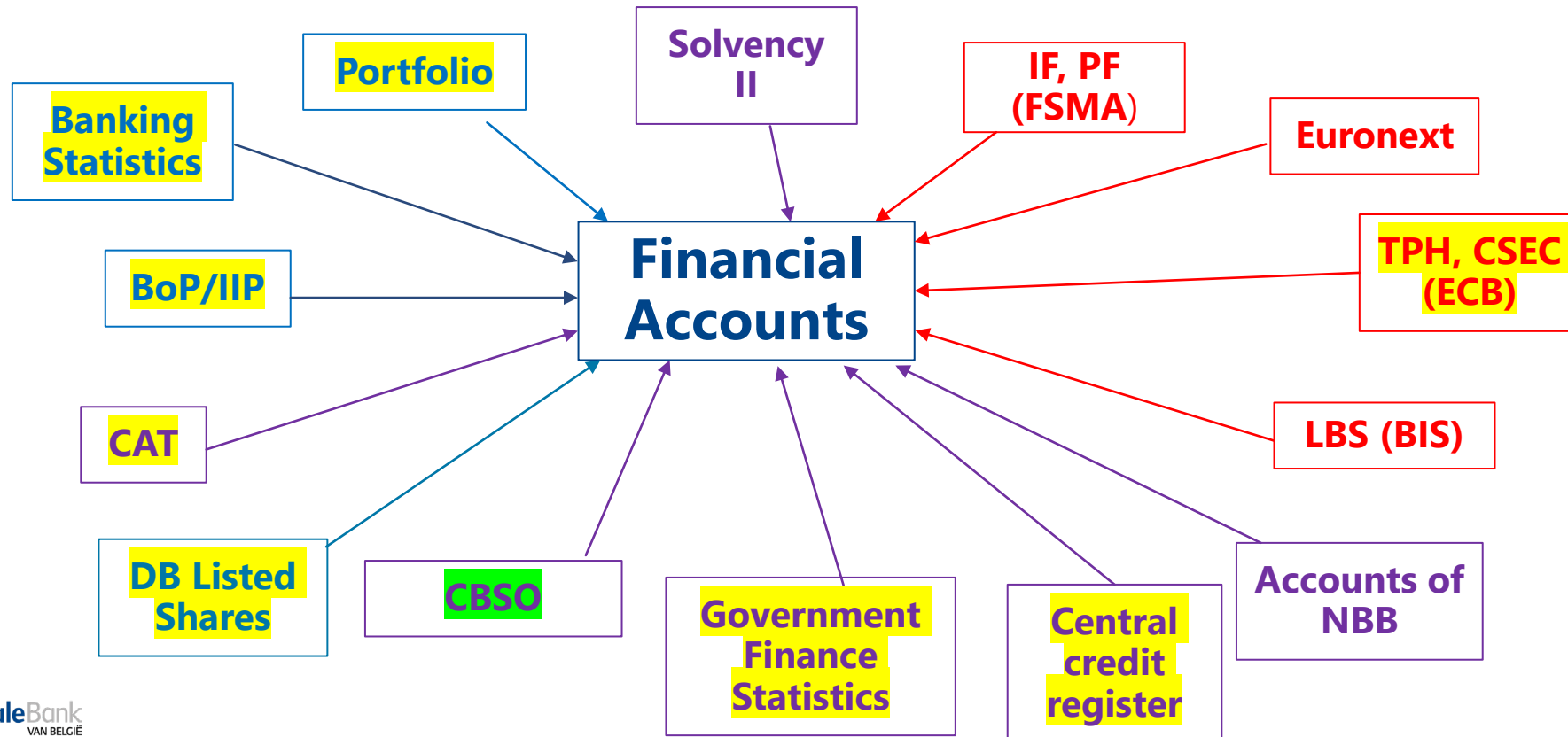- **secondary statistic using other primary sources**

- Based on different sources, ideally already structured in a whom-to-whom manner

- **Key trick: primary sources containing as much counterpart data as possible**

- Estimations for missing data needed

- Reconciliation of different sources needed

- Important advantage of such a matrix is "horizontal balancing"

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Financial Accounts= secondary statistic using other primary sources

Mix of sources from inside NBB and from other institutions

Compilation process

- Collecting data from different primary sources, convert data to ESA 2010 requirements
- Input depends on the sources
- Hierarchy of sources (not absolute)
- Processing & integrating into a specifically designed DB (FASTRA)
- Analysis, validation & quality control
- Revision policy
- Quarterly time series from 1998Q4 / Annual from 1995
- Number of series: +- 16000 (and growing)
- More detailed information available in FASTRA than needed for dissemination (for internal use)

Compilation rules: hierarchy of sources

Hierarchy of sources (not absolute):

- Sometimes more sources are available for certain fields in the matrix

- Tentative hierarchy:

Source	Sector/instrument	Counterpart information?
Government Finance Statistics	S.13	Yes - micro
Accounts from the central bank	S.121	Yes - macro
Banking Statistics (BSI)	S.122	Yes - macro
FVC-statistics	S.125-1	Partly
Solvency II	S.128	Partly
FSMA	S.124 - S.129	Partly
Euronext	F.511	No
Portfolio statistics	F.31 - F.32 - F.511 - F.52	Yes - macro
DB on shareholdership	F.511	Yes - micro
Shares issues statistics	F.512 - F.519	Yes - micro
BoP and IIP	S.2	Partly
Annual accounts data from CBSO	S.11	No

Compilation rules

- Most reliable (almost full microdata) = government statistics QFAGG

- Direct reporting of almost all governement entities on their assets and liabilities, with counterpart info (if known)

- Full who-to-whom available

⟹ All liabilities of NCF from government

⟹ All assets of NFC held by government

- From viewpoint of government entities

Assets \ Liabilities	s11 Non-financial corporations	s122 Deposit-taking corporations	s12 Other financial sectors	s13 General government	s2 Rest of the world	Total
s11 Non-financial corporations				QFAGG		
s121 The central bank				QFAGG		
s122 Deposit-taking corporations				QFAGG		
s124 Non-MMF investment funds				QFAGG		
s125 Other financial intermediaries				QFAGG		
s127 Captive financial institutions				QFAGG		
s128 Insurance corporations				QFAGG		
s129 Pension funds				QFAGG		
s13 General government	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG
s14+s15 Households& NPISH				QFAGG		
s2 Rest of the world				QFAGG		
Total				**QFAGG**		

Compilation rules

- Add data on monetary Financial Institutions (MFI)
  - ➢ Banking statistics: bank assets per aggregated counterpart
  - ➢ FVC statistics
  - ➢ Third party holding from BIS on foreign deposits & loans
- Add NCB data
  - ➢ very limited for NFC

Assets \ Liabilities	s11 Non-financial corporations	s122 Deposit-taking corporations	s12 Other financial sectors	s13 General government	s2 Rest of the world	Total
s11 Non-financial corporations		MFI	MFI	QFAGG		
s121 The central bank	NCB	NCB	NCB	QFAGG	NCB	NCB
s122 Deposit-taking corporations	MFI	MFI	MFI	QFAGG		
s124 Non-MMF investment funds		MFI	MFI	QFAGG		
s125 Other financial intermediaries	MFI	MFI	MFI	QFAGG		
s127 Captive financial institutions		MFI	MFI	QFAGG		
s128 Insurance corporations		MFI	MFI	QFAGG		
s129 Pension funds		MFI	MFI	QFAGG		
s13 General government	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG
s14+s15 Households& NPISH		MFI	MFI	QFAGG		
s2 Rest of the world		MFI	MFI	QFAGG		
Total		**MFI**	**MFI**	**QFAGG**		

Compilation rules

- Add instrument specific data

  - **Portfolio data**

    - Domestic holders and issuers of debt securities and (listed) shares

    - Third part holdings via ECB databases CSEC

    - Information for all sectors

  - **Euronext & DB on listed shares**

    - data on listed shares, issuers, transactions, stocks

  - **CAT**

    - Data on capital transactions of domestic firms (+ data on newly created entyerprises)

  => Partial balancing on instruments debt securities, listed shares and investment fund shares

Compilation rules

Add data

- from statistics on insurance companies (IC, Solvency II), Investment funds (IF), Pension funds (PF)
  - ➤ Mainly asset info
  - ➤ NFC available as counterpart
- on ROW Rest of the world
  => BoP/IIP data
- From CBSO on annual accounts: balance sheets (BS)
  - ➤ Totals on NFC assets & liabilities
- Balancing with all other data
- NFC = residual sector

Assets \ Liabilities	s11 Non-financial corporations	s122 Deposit-taking corporations	s12 Other financial sectors	s13 General government	s2 Rest of the world	Total
s11 Non-financial corporations	residual	MFI	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	BS
s121 The central bank	NCB	NCB	NCB	QFAGG	NCB	NCB
s122 Deposit-taking corporations	MFI	MFI	MFI/FVC/IF/IC/PF	QFAGG	MFI	MFI
s124 Non-MMF investment funds	IF	MFI/IF	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	IF
s125 Other financial intermediaries	MFI	MFI/FVC	MFI/FVC/IF/IC/PF	QFAGG	MFI/FVC	MFI
s127 Captive financial institutions	BS	MFI/BS	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	BS
s128 Insurance corporations	IC	MFI/IC	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	IC
s129 Pension funds	PF	MFI/PF	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	PF
s13 General government	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG	QFAGG
s14+s15 Households& NPISH	BS	MFI	MFI/FVC/IF/IC/PF	QFAGG	BoP/IIP	
s2 Rest of the world	BoP/IIP	MFI	MFI/FVC/IF/IC/PF	QFAGG		residual
Total	**BS**	**MFI**	**MFI/FVC/IF/IC/PF**	**QFAGG**	**BoP/IIP**	

Important source for NFC is CBSO = Central Balance Sheet Office

- Collects statutory accounts (per legal entity) – transposition directive 2013/34/EU (legal obligation except for specific legal form)

- Standardized schemes with balance sheet, P&L, annex tables, 'social' balance sheet, annual report, audit report

- According to Belgian GAAP >< IFRS

- Extensive data of good quality: audited (for large companies) + validation checks by CBSO

- Full coverage of NFC-sector and Captive financial institutions and some other financial institution sectors

- Annual frequency, time lag: Y+14m

    => not designed for statistical needs

CBSO

- Not designed to have counterpart info
- Granularity analysis
  - ➢ By items
  - ➢ By entity
  - ➢ Other sources consistency
  - ➢ Separate accruals analysis
- Different types of adjustments
  - ➢ Add missing balance sheets
  - ➢ Translation to ESA instruments
  - ➢ Valorisation effects
  - ➢ OCV (sectorisation – instruments)
- Goal is to get final results as conform as possible with ESA & SNA definitions

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		Assets									Liabilities								
		S11 NFCs	S12K MFIs	S124 IFs	S12O OFIs	S128 IC	S129 PF	S13 Gov	S14+S15 HH+NPISH	S2 RoW	S11 NFCs	S12K MFIs	S124 IFs	S12O OFIs	S128 IC	S129 PF	S13 Gov	S14+S15 HH+NPISHs	S2 RoW
F11	Monetary gold		MFI																
F12	SDRs		MFI																MFI
F21	Currency	NFC	MFI						*	BoP		MFI							MFI
F22	Deposits, transferable	MFI	MFI	IF	MFI/OFI/OFC	IC	PF	QFAGG	MFI	MFI		MFI							MFI/BoP
F29	Deposits, other	MFI/BoP	MFI	IF	MFI/OFI/OFC	IC	PF	QFAGG	MFI/BoP	MFI		MFI					QFAGG		MFI/BoP
F3	Debt securities	SHS	MFI	IF	SHS	IC	PF	QFAGG	SHS	SHS*	SEC	MFI/SEC		FVC/CSEC	IC		QFAGG		SHS
F4	Loans	NFC*	MFI		FVC/OFI/OFC	IC	PF	QFAGG	NPISH	BoP	MFI/BoP/NFC*	MFI	IF	MFI/OFI/OFC	IC		QFAGG	MFI/FVC/OFI /BoP/QFAG	BoP
F511	Listed shares	SHS/LDB	MFI	IF	SHS/LDB	IC	PF	QFAGG	SHS	SHS/LDB*	LDB	LDB		LDB			QFAGG		SHS
F512	Unlisted shares	NFC/SIS/*	MFI	IF	OFI/OFC/SIS	IC	PF	QFAGG	SIS/*	BoP	NFC/SIS	MFI		OFI/OFC/SIS	IC				BoP
F519	Other equity	NFC/SIS/*	MFI		OFI/OFC/SIS		PF	QFAGG	SIS/BoP/*	BoP	NFC/SIS	MFI		OFI/OFC/SIS	IC		QFAGG		BoP
F52	Investment fund shares/units	IF	MFI	IF	IF	IC	PF	QFAGG	IF*	IF		MFI	IF						SHS
F61	Non-life insurance techn. res.	IC			IC	IC			IC	IC					IC				IC
F62	Life insurance and annuities								IC	IC					IC				IC
F63-F65	Pension entitlements								IC/PF						IC	PF	QFAGG		
F66	Standardised guarantees								QFAGG								QFAGG		
F7	Financial derivatives	SHS	MFI	IF	FVC	IC			SHS	BoP	BoP	MFI	IF	FVC	IC		QFAGG		BoP
F81	Trade credits and advances	NFC*	MFI		OFI/OFC			QFAGG	ENA	BoP	NFC*	MFI		OFI/OFC	IC		QFAGG	ENA	BoP
F89	Other accounts excl. F81	NFC*	MFI	IF	FVC/OFI/OFC	IC	PF	QFAGG	QFAGG	BoP	NFC*	MFI	IF	FVC/OFI/OFC	IC		QFAGG	QFAGG	BoP

Key for data sources and calculation/estimations:

QFAGG   Quarterly financial accounts for general government

MFI   MFI balance sheet statistics (including NBB balance sheet data)

IC   Insurance corporations statistics

PF   Pension fund statistics

IF   Investment fund statistics

FVC   Financial vehicle corporations statistics

SHS   Securities holdings statistics (including TPH)

LDB   Listed shares database

BoP   Balance of payments and international investment position.

OFI   other financial institution statistics

CSEC   Centralized securities issues statistics

NFC   Non-financial corporation balance sheets (CBSO, coverage 100%, estimations until final data is integrated at t+7 quarters)

OFC   Other financial corporation balance sheets (CBSO, coverage 100%, estimations until final data is integrated at t+7 quarters)

NPISH   NPISH balance sheets (CBSO, coverage 93%, grossing up model, estimations until final data is integrated at t+7 quarters)

SIS   Share issues statistics

ENA   Estimation based on national accounts data

*   Residual sector for respective instrument - i.e. the sector (assets or liabilities) where source is available, but most likely adapted to achieve horizontal consistency.

**   Pure residual calculation as no source data for a meaningful plausibility check is available.