

# UPGRADING FINANCIAL ACCOUNTS WITH CENTRAL BALANCE SHEET DATA – WHAT’S IN IT FOR CENTRAL BANKS’ POLICY?



BANCO DE PORTUGAL  
EUROSYSTEM

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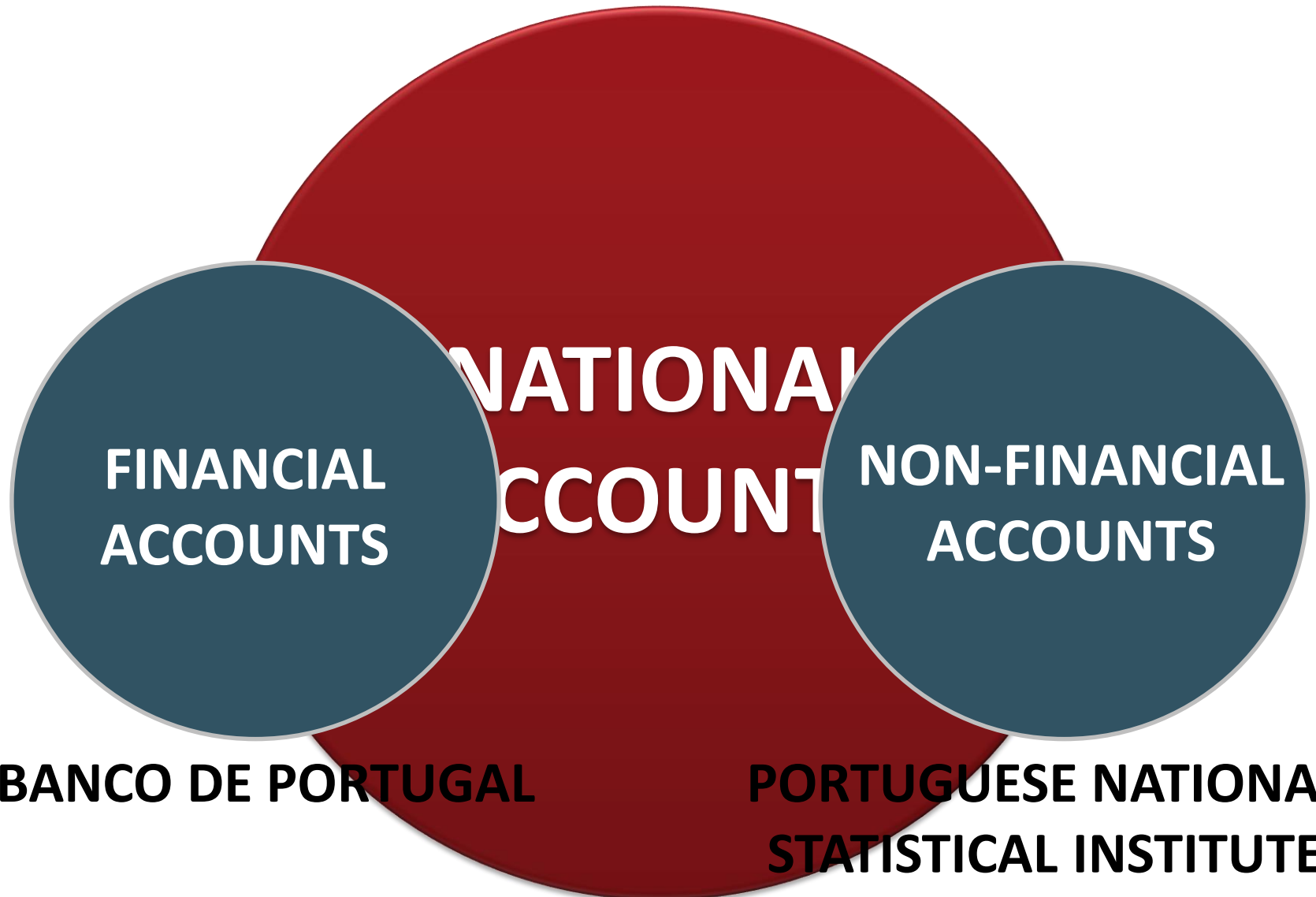
**International Statistical Institute**

**Regional Statistics Conference**

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# NATIONAL ACCOUNTS





FINANCIAL  
ACCOUNTS

Simplified statistical representation of the **FINANCING STRUCTURE** and **NET FINANCIAL ASSETS** of the **VARIOUS INSTITUTIONAL SECTORS**.

Allow an **OVERVIEW** of the **uses of financial surpluses** and the **way deficits are financed**.

QUARTERLY  
PRODUCED

Q1



**MULTIDISCIPLINARY  
TEAM**

*“Estrutura de  
Missão das Contas  
Financeiras”*



Financial accounts data include both the financial transactions and stocks  
of the **DIFFERENT INSTITUTIONAL SECTORS**

	NFC		FC		GG		HH + NPISH		RoW	
	A	L	A	L	A	L	A	L	A	L
CURRENCY AND DEPOSITS										
SECURITIES										
LOAN										
SHARES AND OTHER EQUITY										
INSURANCE TECHNICAL RESERVES										
OTHER ACCOUNTS										



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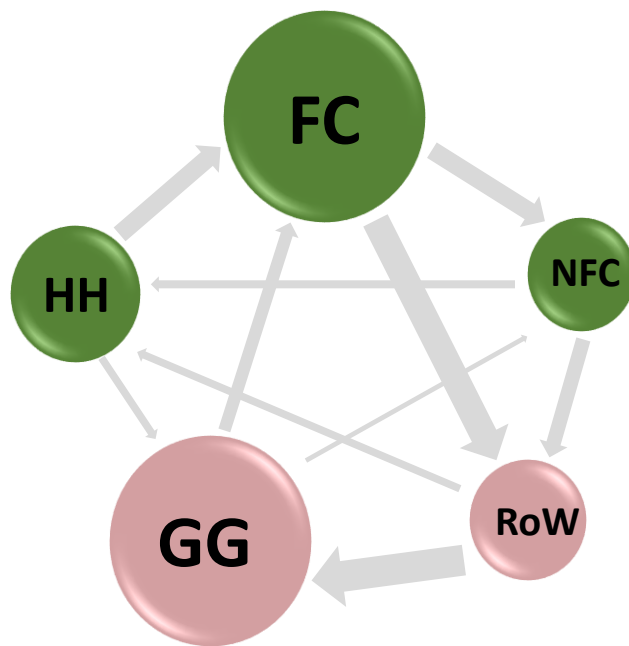
COUNTERPART INFORMATION

		NET INCURRENCE OF DEBT SECURITIES BY				
		NFC	FC	GG	HH + NPISH	RoW
NET ACQUISITION OF DEBT SECURITIES BY	DEBTOR SECTOR					
	CREDITOR SECTOR					
	NFC					
	FC					
	GG					
HH + NPISH						
RoW						

“WHOM-TO-WHOM” MATRICES



## FULL "WHOM-TO-WHOM" MATRICES FOR EACH FINANCIAL INSTRUMENT WE ARE ABLE TO BUILD FLOW OF FUNDS



Show the interlinkages between institutional sectors :

- Diameter proportional to net lending/borrowing of each sector
- Green/red if positive/negative
- Represent net flow
- Width proportional to magnitude of inter-sectoral relation

**DEMANDS FOR COMPLETE INFORMATION FOR ALL INSTITUTIONAL SECTORS,  
FINANCIAL INSTRUMENTS AND COUNTERPARTS.**



## THE BENEFITS OF COLLECTING MICRO DATA ARE BEING GLOBALLY RECOGNISED.

The information required to compile integrated sectoral accounts and flow of funds schemes can be easier derived from granular administrative datasets.



### CENTRAL CREDIT REGISTER

Contains granular information on e.g. credit exposures

### SECURITIES STATISTICS INTEGRATED SYSTEM

A security-by-security and investor-by-investor database of both securities holdings and issues.

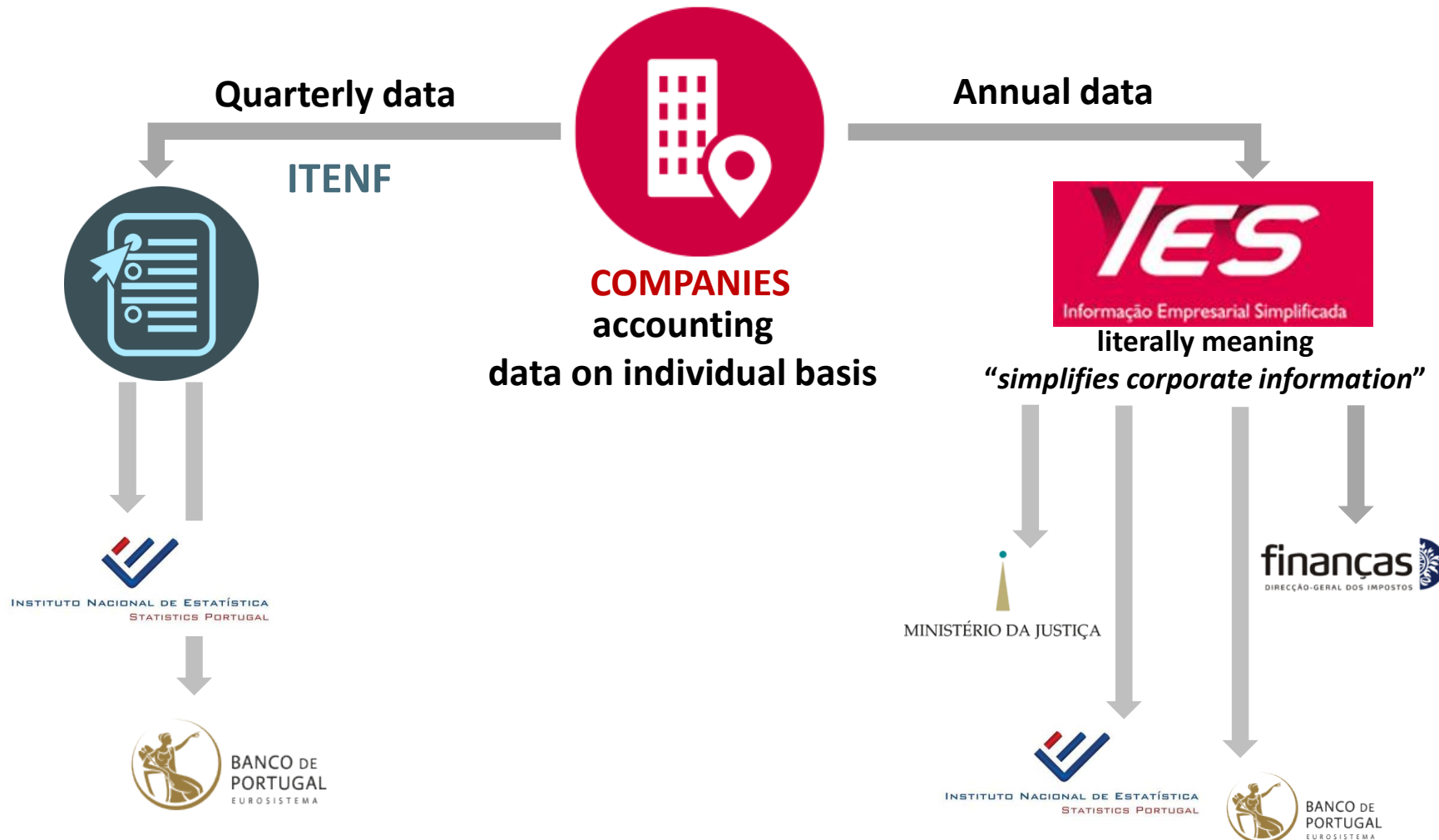
### CENTRAL BALANCE-SHEET DATABASE

An economic and financial database based on annual and quarterly accounting data on individual Portuguese Non-financial corporations.



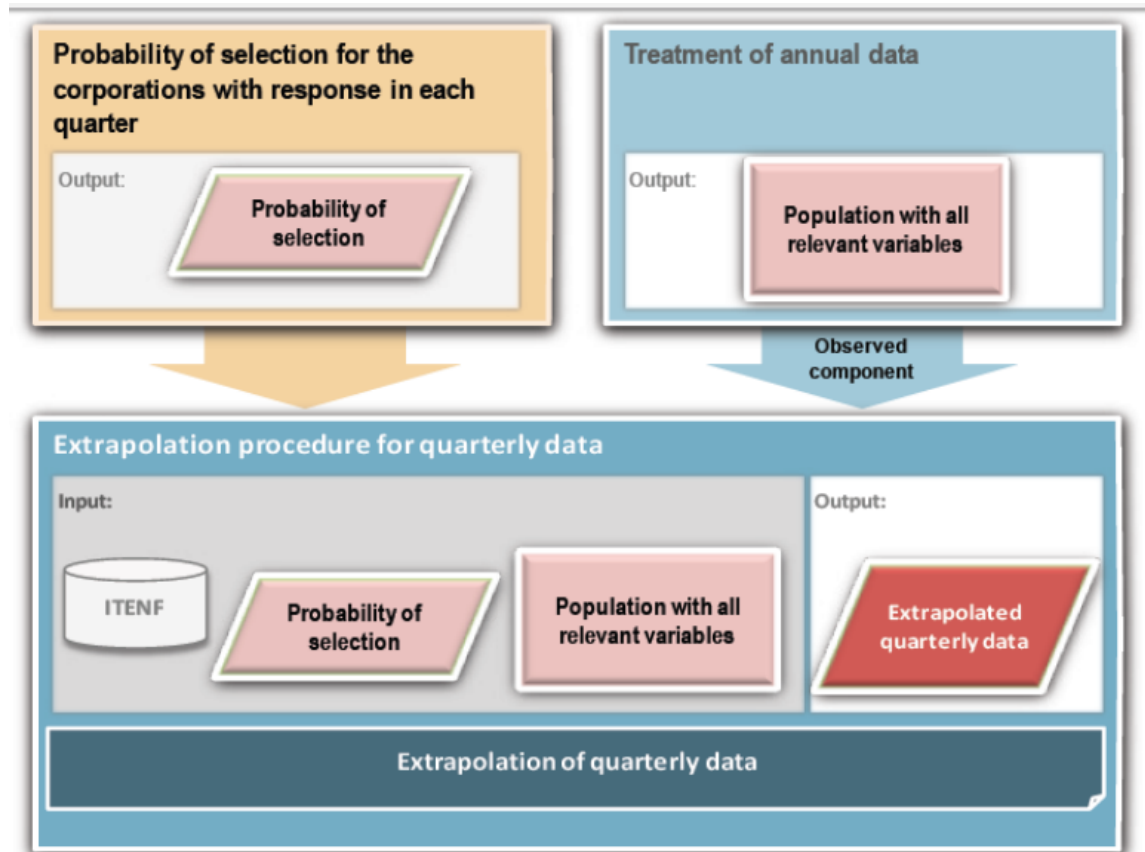


## CENTRAL BALANCE - SHEET DATABASE: sources of information





## EXTRAPOLATION PROCEDURE FOR QUARTELY DATA



Extrapolated data are used as data for total NFC, which is undoubtedly a great plus to the production of NFC statistics and also to the elaboration of different and flexible statistical products – inter alia, **quarterly national financial accounts**.



## CONCILIATION BETWEEN ANNUAL AND QUARTERLY DATA - *BENCHMARKING*

This conciliation method makes possible to adjust the quarterly time-series obtained by extrapolating ITENF to the annual time-series obtained from IES, which are considered as benchmarks.

In order to carry out this adjustment, a set of constraints to be fulfilled by final data are defined:

### AGGREGATION CONSTRAINTS

Ensure that the quarterly time-series is consistent with the annual time-series.

### CONTEMPORANEOUS CONSTRAINTS OF ACCOUNTING BALANCE

Ensures that an accounting balance condition between the balance sheet and the profit and loss account is met in each period.

The final result for each aggregate consists in a range of quarterly time series based on a balance sheet and a profit and loss account without imbalances, which combine the annual value obtained in IES with the intra-annual dynamics resulting from the extrapolated ITENF.



## NATIONAL FINANCIAL ACCOUNTS COMPILATION USING CBSD DATA

NON-FINANCIAL  
CORPORATIONS

### OWN DATA SOURCES

**IES:** annual data,  
quarterly figures  
estimated based  
primarily on the  
ITENF

**SSIS:** Securities  
Statistics Information  
System

### COUNTERPART INFORMATION

Financial sector,  
General Government  
and Rest of the World

All information  
identified by these 3  
sectors as having its  
counterpart in the  
NFC sector is **taken  
directly** for the  
compilation of the  
NFCs account





## NATIONAL FINANCIAL ACCOUNTS COMPILATION USING CBSD DATA

**NON FINANCIAL  
CORPORATIONS  
+  
HOUSEHOLDS**

### **CBSD - IES**

- Unquoted shares and other equity
- Loans between NFCs and with HHs
- Trade credits
- Insurance technical reserves
- Other accounts receivable/payable

**Counterpart sector  
data, relevant for  
HHs account  
compilation**

### **SSIS**

- Quoted shares
- Securities other than shares





## NATIONAL FINANCIAL ACCOUNTS COMPILATION USING CBSD DATA

### NFC account

ASSETS	LIABILITIES
Loans – intra-NFCs and between NFCs and HHs	Loans – intra-NFCs and between NFCs and HHs
Unquoted shares and other equity	Unquoted shares and other equity held by HHs and by NFCs
	Insurance technical reserves
Trade credits	Trade credits
Other accounts receivable/payable, exclud. trade credits and advances	Other accounts receivable/payable, exclud. trade credits and advances

### HH account

ASSETS	LIABILITIES
Loans – between NFCs and HHs	Loans – between NFCs and HHs
Unquoted shares and other equity held by HHs	



## NATIONAL FINANCIAL ACCOUNTS COMPILATION USING CBSD DATA

### NFC account

ASSETS	LIABILITIES
Loans – intra-NFCs and between NFCs and HHs	Loans – intra-NFCs and between NFCs and HHs
Unquoted shares and other equity	Unquoted shares and other equity held by HHs and by NFCs
	Insurance technical reserves
Trade credits	Trade credits
Other accounts receivable/payable, exclud. trade credits and advances	Other accounts receivable/payable, exclud. trade credits and advances

### HH account

ASSETS	LIABILITIES
Loans – between NFCs and HHs	Loans – between NFCs and HHs
Unquoted shares and other equity held by HHs	



## FINAL REMARKS

- The achievement of Portuguese **fully integrated and consistent financial accounts**, was only made possible due to **the richness of the statistical content of the CBSD** run by the Banco de Portugal.
- This huge potentiality is due to:
  - the relevant data on the population of corporations in Portugal for a relatively long period, as a result of the excellent coverage of IES;
  - the appropriate methodology for the selection of corporations within the scope of the ITENF and the respective extrapolation procedure.
- Alone or combined with other information, **CBSD data also proved to be a great value for pursuing the statistical central bank statutory obligations.** The use of this information for the compilation of the NFC and HH sectors' financial accounts is an example of the statistical possibilities of such census information.





# Thank you for your attention!



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