

## Session 2.2: Sector Accounts

**Regional Course on Integrated Economic Statistics  
to Support 2008 SNA Implementation**

**Leonidas Akritidis  
Office for National Statistics  
United Kingdom**

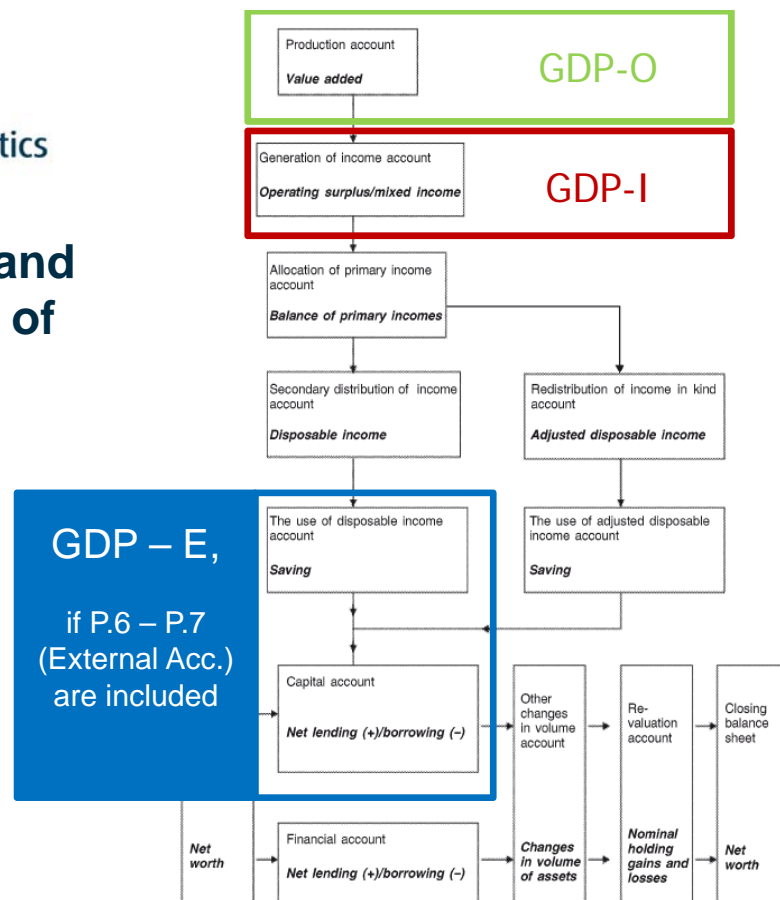
### **Content**

1. Introduction
2. Structure and sequence of the Accounts
3. Institutional Units and Sectors
4. The Non-Financial Account
5. The Financial Account
  - a) Accounting identity of the Financial Account
  - b) Financial Instruments
  - c) From-whom-to-whom (w2w) /Flow of Funds (FoF)

## Introduction

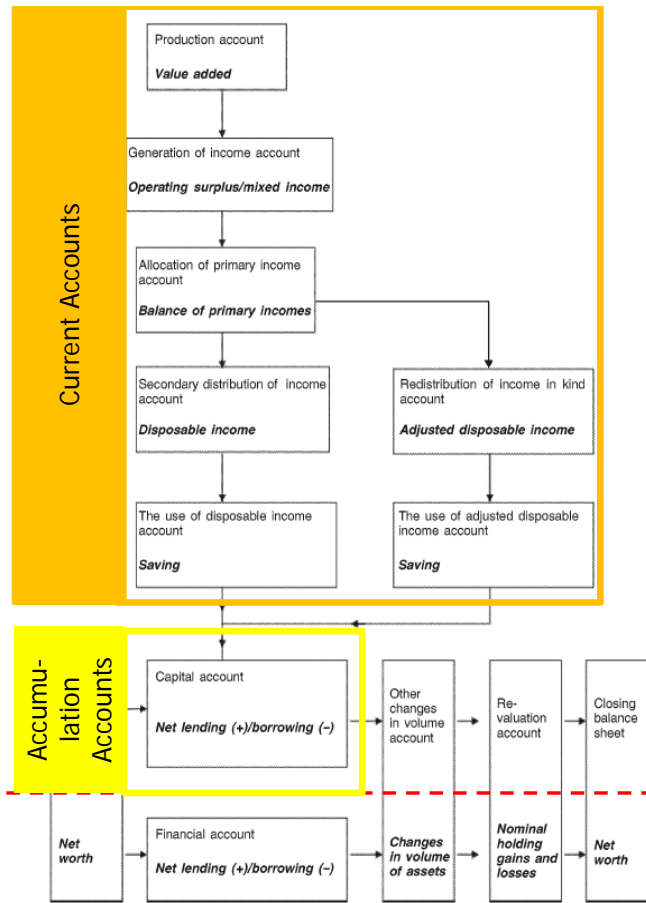
- Sector Accounts records non-financial and financial stocks , transactions, and other flows;
- Sector Accounts are ordered in a set of accounts according to a logical analysis of economic life, which provide the aggregates, e.g.: Operating Surplus, Disposable Income, Saving, financing aspects
- Sector Accounts are required to study of interactions between sectors.
- The institutional sectors are a breakdown of the economy by groups of similar producing or consuming institutional units
- There are four domestic sectors and the rest of the world

## The Structure and the Sequence of Accounts



# The Structure and the Sequence of Accounts

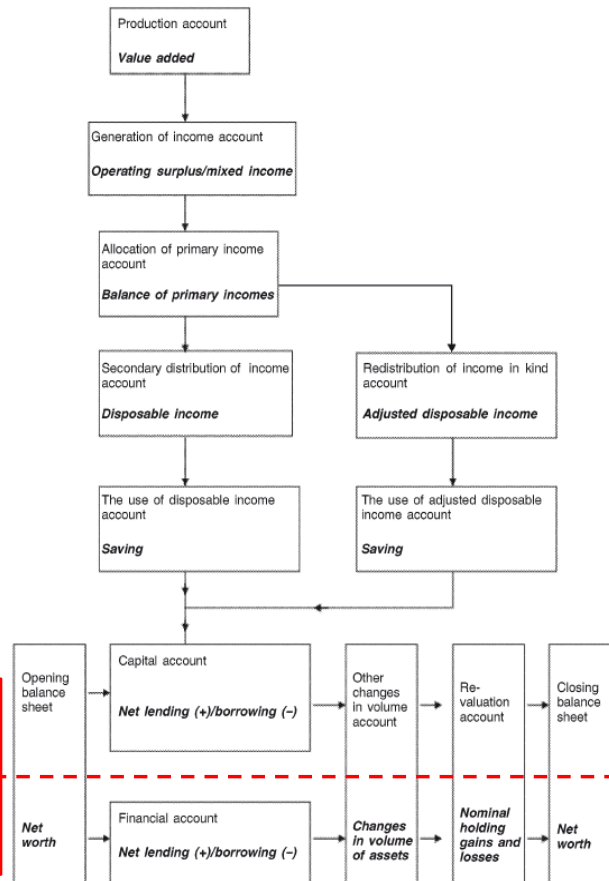
Non-Financial Account (NFA)



Financial Account (FA)

# The Structure and the Sequence of Accounts

Non-Financial Account (NFA)  
*Net lending/borrowing*  
 Equals  
 Financial Account (FA)  
*Net lending/borrowing*



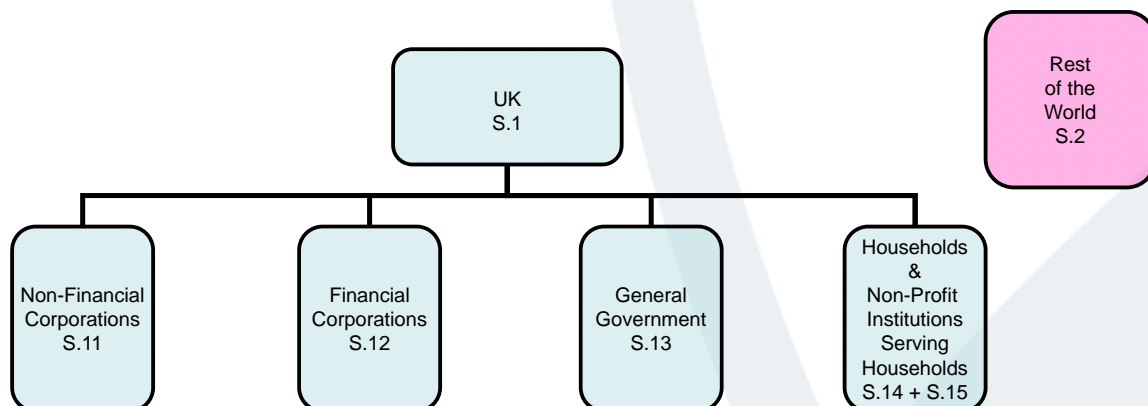
## Institutional Units

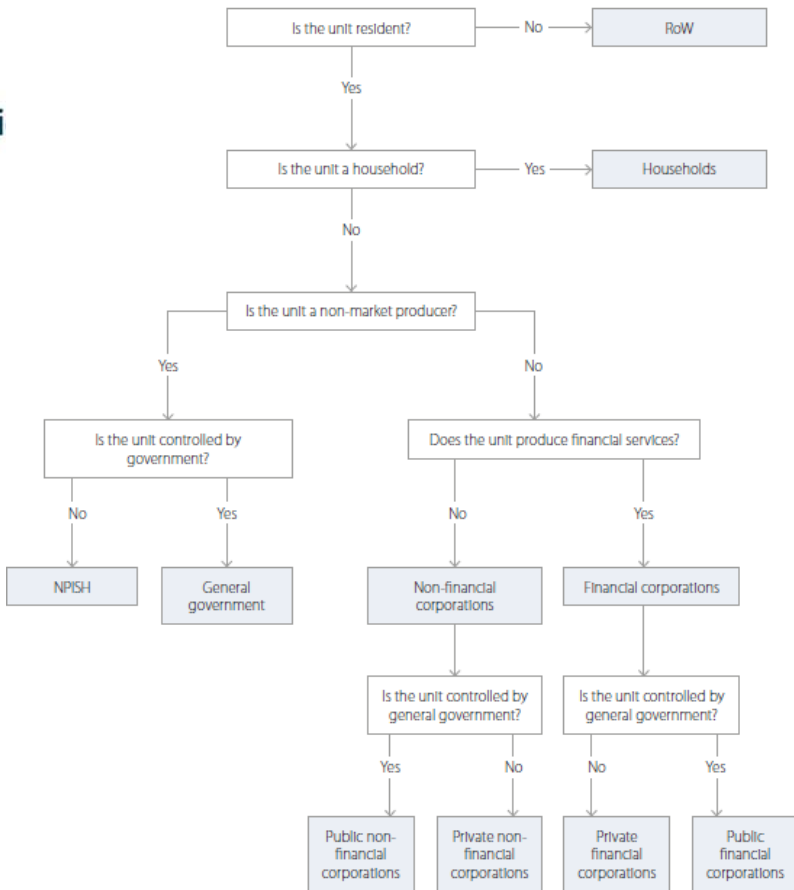
An **institutional unit** is an economic entity characterised by *decision making autonomy* in the exercise of its principle function, and it either keeps or is able to compile *a complete set of accounts*.

It is also:

- Entitled to **own goods or assets** in its own right;
- Able to take **economic decisions** and **engage in economic activities**;
- Able to **incur liabilities** on its own behalf and it is **accountable at law**.

## Institutional Sectors





## Institutional Sectors

## Institutional Sectors

### Non-Financial corporations sector (S.11)

Principally engaged in production of market goods and non-financial services

- private corporations
- co-operatives and partnerships
- public producers recognised as separate units
- non-profit institutions serving corporations
- head offices controlling a group of corporations
- SPEs
- quasi-corporations

## Institutional Sectors

### Financial corporations sector (S.12)

Consists of institutional units which are independent legal entities and market producers, and whose principal activity is the production of financial services. Such institutional units comprise all corporations and quasi-corporations which are principally engaged in:

1. **Financial intermediation** (financial intermediaries); and/or
2. **Auxiliary financial activities** (financial auxiliaries).

## Institutional Sectors

**Financial intermediation** is a process of channelling funds between parties with a surplus and those with a lack of funds.

In the financial intermediation process, assets and liabilities of financial intermediaries are transformed or repackaged, e.g. in relation to maturity, scale, risk, etc.

**Auxiliary financial activities** are activities related to financial intermediation but which do not involve financial intermediation themselves, e.g. **head offices, brokers, fund managers**

## Institutional Sectors

Sectors and subsectors		
Financial corporations		S.12
Monetary financial institutions (MFI)	Central bank	S.121
	Other monetary financial institutions (OMFI)	Deposit-taking corporations except the central bank
		MMF
Financial corporations except MFI and ICPF	Non-MMF investment funds	S.124
	Other financial intermediaries, except insurance corporations and pension funds	S.125
	Financial auxiliaries	S.126
	Captive financial institutions and money lenders	S.127
Insurance corporations and pension funds (ICPFs)	Insurance corporations (IC)	S.128
	Pension funds (PF)	S.129

## Institutional Sectors

### General Government sector (S.13)

- Produces non-market services for individual and collective consumption
- Redistributes income or wealth
- Sub-sectors
  - Central (S.1311)
  - State (S.1312)
  - Local (S.1313)
  - Social security funds (S.1314)

## Institutional Sectors

### Household sector (S.14)

- Consumers
- Person living in institutions
- Entrepreneurs (market producers)
- Producers exclusively for own final use

## Institutional Sectors

### NPISH sector (S.15)

Non-profit institutions serving households

- Separate legal entities
- Serving households
- Resources mainly voluntary contributions
- Examples are: **trade unions, political parties, churches, charities; hospitals/universities!**



## Rest of the World sector (S.2)

Not strictly sector

= non-residents transactions within our economy

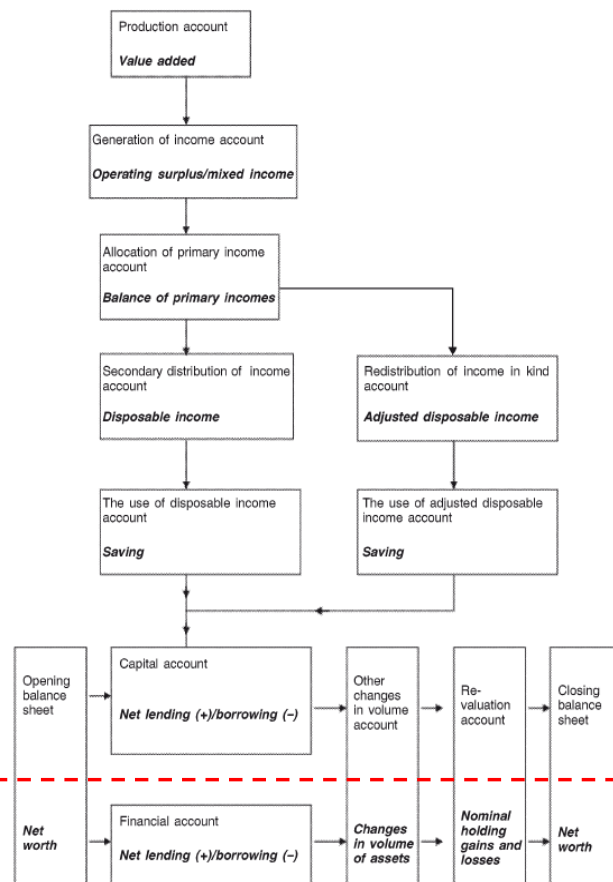
→ Only counter-part (mirror) of domestic economy

The relationship: RoW = - BOP

## Sequence of Accounts Revisited

Non-Financial Account (NFA)

Financial Account (FA)



## Sequence of Accounts Revisited

- Transactions (economic flows)
  - Products (P.'s)
    - Those which relate directly to producing, buying and selling goods and services
  - Distributive (D.'s)
    - Distribute (or redistribute) income generated by transactions in products
  - Financial (F.'s)
    - Describes how all the others transactions are funded
- Balance Sheets
  - Financial assets and liabilities (AF.'s)
  - Non-financial assets (AN.'s)

## Non-Financial Account

### I. Production Account

Uses	Resources
Intermediate consumption (P.2)	Output (P.1)
<i>Gross value added (B.1g)</i>	

### II.1.1.Generation of Income Account

Uses	Resources
Compensation of employees (D.1)	Gross value added (B.1g)
<i>Gross operating surplus (B.2g)</i> <i>Mixed income (household sector only) (B.3g)</i>	

### II.1.2.Allocation of Primary Income Account

Uses	Resources
	Gross operating surplus (B.2g) Mixed income (B.3g)
	Compensation of employees received (D.1)
Property income paid (D.4)	Property income received (D.4)
<i>Balance of primary incomes (B.5g)</i>	

## II.2. Secondary Distribution of Income Account

Uses	Resources
	Balance of primary incomes (B.5g)
Current taxes on income and wealth paid (D.5)	Current taxes on income and wealth received (government only) (D.5)
Social benefits and contributions paid (D.6)	Social benefits and contributions received (D.6)
Other current transfers paid (D.7)	Other current transfers received (D.7)
<i>Gross disposable income (B.6g)</i>	

### II.4.1. Use of Disposable Income Account

Uses	Resources
	Gross disposable income (B.6g)
Adjustment for the change pension entitlements (D.8)	Adjustment for the change pension entitlements (D.8)
Final consumption expenditure (P.3)	
<i>Gross saving (B.8g)</i>	

## II.1. Capital Account

### II.1.1 Changes in Net Worth due to Savings and Capital Transfers Account

Uses	Resources
Changes in Net Worth due to Savings and Capital Transfers Account (B.101)	Gross saving B.8g Capital transfers received (D.9r) <i>less</i> Capital transfers paid (D.9p)

## II.1. Capital Account

### II.1.2 Acquisition of Non-Financial Assets Account

Uses	Resources
Gross capital formation (P.5g) Acquisitions less disposals of non-produced (NP) <i>Net lending(+)</i> / <i>borrowing(-)</i> (B.9)	Changes in Net Worth due to Savings and Capital Transfers Account (B.101)

## Sequence of Accounts Revisited

Stocks and changes in assets										Stocks and changes in liabilities									
S11	S12	S13	S14	S15	S1	S2				S11	S12	S13	S14	S15	S1	S2			
Non-financial corporations	Financial corporations	General government	Households	MPISHs	Total economy	Rest of the world account	Total			Non-financial corporations	Financial corporations	General government	Households	MPISHs	Total economy	Rest of the world account	Total		
2 151	93	789	1 429	159	4 621		4 621	AN	Non-financial assets										
982	3 421	396	3 260	172	8 231	805	9 036	AF	Financial assets/liabilities	3 221	3 544	687	189	121	7 762	1 274	9 036		
								B90	Net worth	- 88	- 30	498	4 500	210	5 090	- 469	4 621		
300	- 2	57	116	11	482		482	AN	Non-financial assets										
93	230	- 9	205	4	523	54	577	AF	Financial assets/liabilities	157	224	102	16	6	505	72	577		
								B10	Changes in net worth, total	236	4	- 54	305	9	500	- 18	482		
								B101	Saving and capital transfers	88	- 5	- 90	210	- 1	202	- 10	192		
								B102	Other changes in volume of assets	14	- 1	- 2	- 1	0	10		10		
								B103	Nominal holding gains/losses	134	10	38	96	10	288	- 8	280		
								B1031	Neutral holding gains/losses	82	6	27	87	6	208	- 10	198		
								B1032	Real holding gains/losses	52	4	11	9	4	80	2	82		
2 451	91	846	1 545	170	5 103		5 103	AN	Non-financial assets										
1 075	3 651	387	3 465	176	8 754	859	9 613	AF	Financial assets/liabilities	3 378	3 768	789	205	127	8 267	1 346	9 613		
								B90	Net worth	148	- 26	444	4 805	219	5 590	- 487	5 103		

Opening

Closing

27

## Other Flows

### III.3. Other Changes in Assets Accounts

#### III.3.1 Other Changes in Volume Assets Account

Changes in assets	Changes in liabilities & Net Worth
- Financial Assets -> AF.1-AF.8	- Financial Liabilities -> AF.1-AF.8
- Non-Financial Assets -> AN.1-AN.2	
	<i>Changes in Net Worth due to OCVA (B.102)</i>

### III.3. Other Changes in Assets Accounts

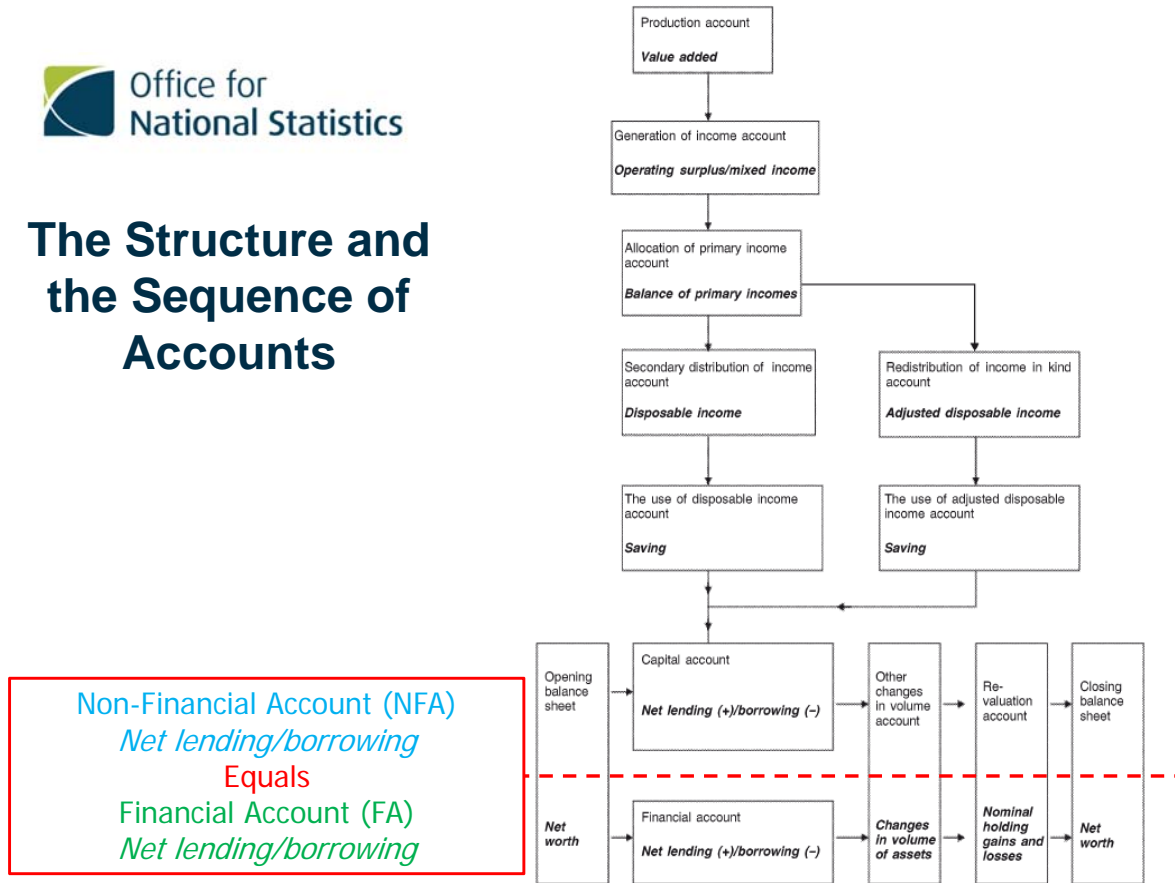
#### III.3.2. Revaluation Account

Changes in assets	Changes in liabilities & Net Worth
<ul style="list-style-type: none"> <li>- Financial Assets -&gt; AF.1-AF.8</li> <li>- Non-Financial Assets -&gt; AN.1-AN.2</li> </ul>	<ul style="list-style-type: none"> <li>- Financial Liabilities -&gt; AF.1-AF.8</li> </ul> <p><i>Changes in Net Worth due to Nominal Holding Gains/Losses (B.103)</i></p>

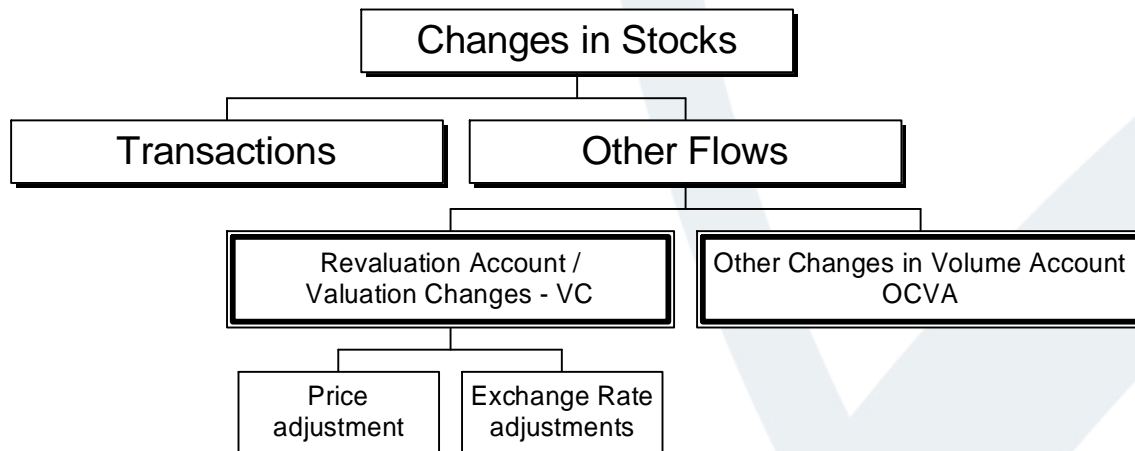
### IV. Balance Sheet

Assets	Liabilities and Net Worth
AF.1 – AF.8	AF.1 – AF.8
Produced Non-Financial (AN.1) Non-Produced Non-Financial (AN.2)	<i>Net worth (B.90)</i>

## The Structure and the Sequence of Accounts



## Financial Account Accounting Identity





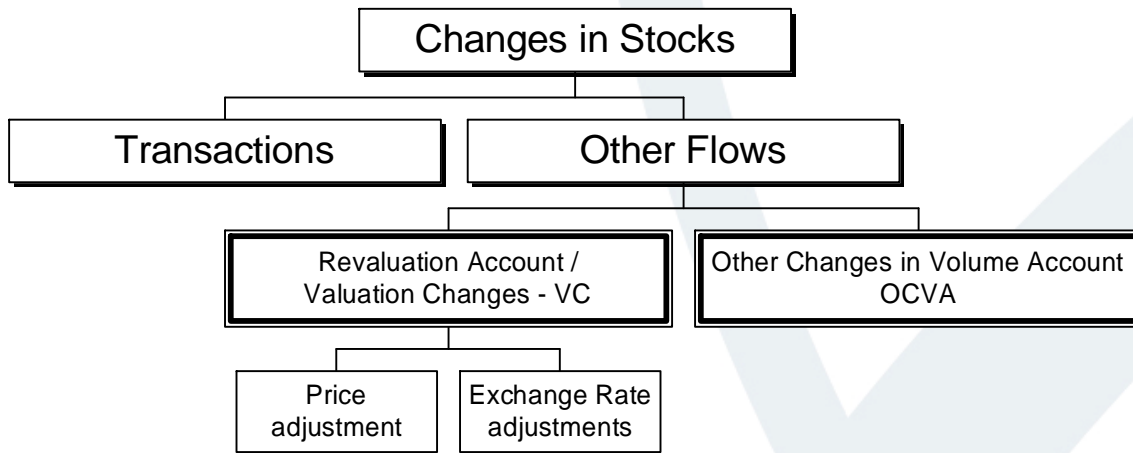
## Financial Account Accounting Identity

- **Balance Sheets:** show the value of the outstanding stocks of a category of financial assets or liabilities at a given accounting period;
- **Transactions:** are financial flows that arise, by mutual agreement between institutional units, from the creation, liquidation, or change in ownership of financial assets or liabilities. Changes in ownership occur through the sale, transfer, or other discharge of all rights, obligations, and risks associated with a financial asset or liability;

## Financial Account Accounting Identity

- **Revaluation Account:** represents financial flows arising from changes in (1) the prices of financial assets and liabilities and/or (2) the exchange rates that affect the domestic currency values of assets and liabilities denominated in foreign currency.
- **Other Changes in Volume Account:** represents financial flows that arise from asset and liability changes other than those arising from transactions and revaluations. Included are write-offs of claims, reclassification of assets, monetization or demonetization of gold, changes in demographic assumption of actuarial liabilities, and other events.

## Financial Account Accounting Identity



$$\text{Stock}_t - \text{Stock}_{t-1} = \text{Transaction}_t + \text{VC}_t + \text{OVCA}_t$$

$$\text{Stock}_t - \text{Stock}_{t-1} - \text{Transaction}_t - \text{VC}_t - \text{OVCA}_t = 0$$

## Financial Account

### Financial Instruments

	Stocks	Transactions
Monetary gold and SDRs	AF.1	F.1
Currency and deposits	AF.2	F.2
Debt Securities	AF.3	F.3
Loans	AF.4	F.4
Equities and investment fund shares/units	AF.5	F.5
Insurance, pension & standard guarantees	AF.6	F.6
Financial derivatives and ESOs	AF.7	F.7
Other accounts receivable / payable	AF.8	F.8

## Monetary gold and SDRs (F.1)

- Monetary gold (F.11): held in reserve assets by monetary authorities. There is no counterpart liability for gold bullion;
- SDRs (F.12): created by IMF and allocated to member states to supplement reserves. Counterpart liability exists under ESA 2010.

## Currency and deposits (F.2)

- Currency (F.21): notes and coins in circulation, including foreign currency held by residents.
- Transferable deposits (F.22): exchangeable for currency on demand, at par, and directly usable for making payments.
- Other deposits (F.29): time deposits etc., not withdrawable on demand without restriction or penalty.

## Debt securities (F.3)

Defined as negotiable financial instruments serving as evidence of debt.

- Short-term debt securities (F.31): its original maturity is up to one year (inclusive)
- Long-term debt securities (F.32) its original maturity is beyond one year or has no stated maturity

## Loans (F.4)

Loans comprise short-term (F.41), and long-term loans (F.42) and normally are:

- non-negotiable, unconditional debt, interest-bearing, to be repaid at maturity;
- initiated by the borrower, while the conditions are set by the lender.

## **Equity and investment fund shares or units (F.5)**

They represent a residual claim on the assets of the corporation or other institutional unit that issued them.

- Equity (F.51) is subcategorised into:
  - listed shares (F.511);
  - unlisted shares (F.512), and;
  - other equity (F.519).
- Investment fund shares/units (F.52) comprise of:
  - money market fund shares/units (F.521), and;
  - non-MMF shares/units (F.522).

## **Insurance, pension and standardised guarantee schemes (F.6)**

Includes the following :

- Non-life insurance technical reserves (F.61)
- Life insurance and annuity entitlements (F.62)
- Pension entitlements (F.63)
- Claims of pension funds on pension managers (F.64)
- Entitlements to non-pension benefits (F.65)
- Provisions for calls under standardised guarantees (F.66)

## **Financial derivatives and employee stock options (F.7)**

- Financial derivatives (F.71) are instruments linked to a specified financial asset, indicator or commodity, through which specific financial risks can be traded. No principal amount is paid.
- Employee stock options (F.72): employee has the right to buy a given number of shares of the employer's stock at a stated price and time or within a stated period.

## **Other accounts receivable/ payable (F.8)**

They are created when there is a timing difference between transactions and corresponding payments.

- Trade credits and advances (F.81): claims arising from the direct extension of credit by suppliers to customers, and prepayments
- Other accounts receivable/ payable excluding trade credits and advances (F.89)

## III.2. Financial Account

Changes in assets	Changes in liabilities
Monetary gold and SDRs (F.1)	Monetary gold and SDRs (F.1)
Currency and deposits (F.2)	Currency and deposits (F.2)
Debt Securities (F.3)	Debt Securities (F.3)
Loans (F.4)	Loans (F.4)
Equities and investment fund sh. (F.5)	Equities and investment fund sh. (F.5)
Insurance, pension & std garant. (F.6)	Insurance, pension & std garant. (F.6)
Financial derivatives and ESOs (F.7)	Financial derivatives and ESOs (F.7)
Other accounts rec / pay (F.8)	Other accounts rec / pay (F.8)
	<i>Net lending(+) / borrowing(-) (B.9)</i>

### Financial Account (Tabular Presentation)

Deposits with MFIs		Assets					Liab.	
		PR	BK	BS	HH	RW	BK	BS
Stocks	2013	285	903	22	893	425	2492	36
	2014	307	612	22	931	413	2251	34
Transactions	2014	2	-49	0	6	30	-8	-3
OCVA	2014	3	9	0	9	4	25	0
Revaluation	2014	17	-251	0	23	-46	-264	0

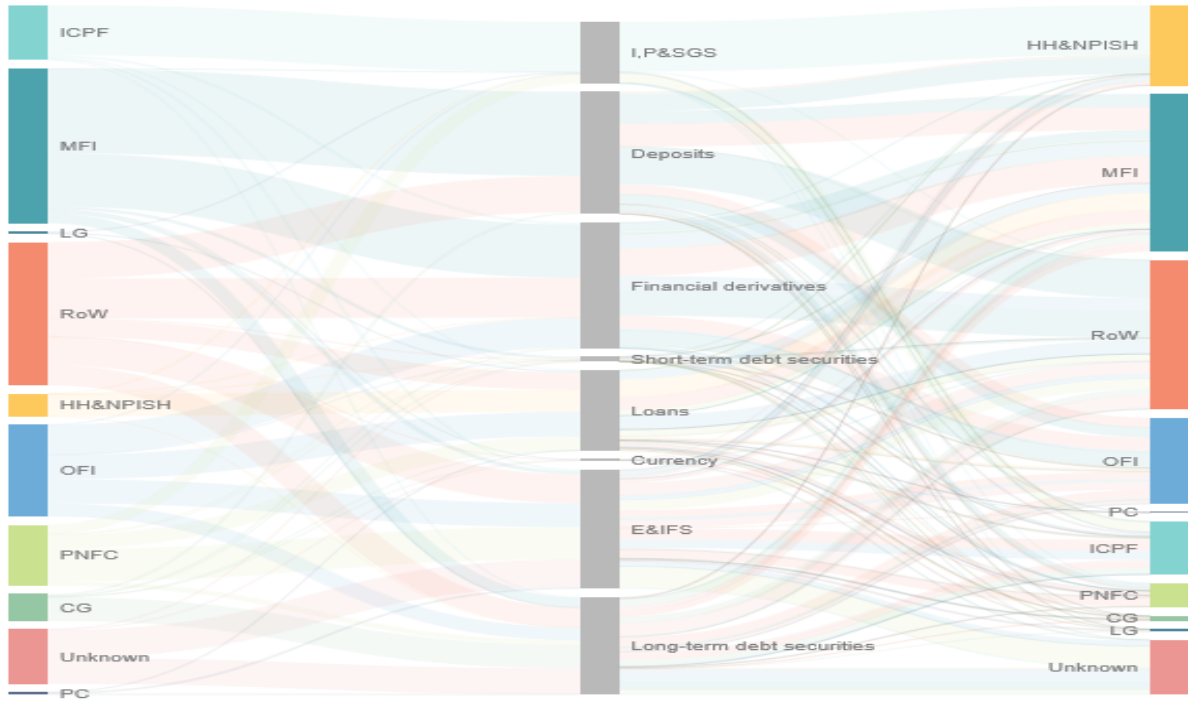
### Flow of Funds (FoF)

Stocks - 2014		Assets					Liab.	
		PR	BK	BS	HH	RW	BK	BS
Liab.	BK	300	593	19	926	413		
	BS	7	19	3	5	0		
Stocks - 2013								
Liab.	BK	275	885	18	889	425		
	BS	10	18	4	4	0		
Transactions - 2014								
Liab.	BK	4	-49	1	6	30		
	BS	-2	0	-1	0	0		
OCVA - 2014								
Liab.	BK	3	9	0	9	4		
	BS	0	0	0	0	0		
Revaluation - 2014								
Liab.	BK	17	-251	0	23	-46		
	BS	0	0	0	0	0		

Liability

Instrument

Asset



E&IFS: Equity and investment fund shares

I,P&SGS : Insurance, pension and standardised guarantee schemes

Note: the sector-to-sector counterparty statistics in this diagram have been rounded to the nearest £1 billion

Source: [UK Flow of Funds Project, ONS](#)