



Jean Monnet Chair

Small Area Methods for Monitoring of Poverty and Living conditions in EU (SAMPL-EU)

II.1. Income, Consumption and Poverty in the European Statistical System

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Outline

1. Some points from previous lectures
2. From GDP to Well-Being and Poverty
3. National Accounts
4. Basic Equations and Identities
5. Aggregates of interest
6. Sub-System of NA: Labour Account
7. Household Sector and Consumption
8. Regional Accounts

Some points from previous lectures -1-

✓ **Design of policy intervention**: we are interested in the field of poverty and living conditions

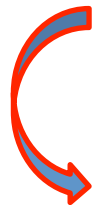
✓ Implementation of a pertinent **Statistical Information System** and set of Indicators



Indispensable for taking rational decisions, under the general and specific **context**

✓ Main analyses: for **Interpretation** and **Comparisons**

✓ Characteristics of data: in general term we speak of **Quality of data**:



Confidence in the quality of the information is **indispensable** in order to use it without suspect

Some points from previous lectures -2-

✓ statistical outputs have meet certain **quality standards**
relevance, accuracy, timeliness, accessibility , clarity (or interpretability), coherence and comparability

➤ For this reasons the international organization (UN and EUROSTAT) state that it is important that the statistical outputs meet certain **quality standards** and actually **they try to guarantee it**

➤ **Needs and Methods of producing data**

at **macro-level**

at **micro-level**

➤ **Comparisons** ➡ Never plain: need for standardization

From GDP to Well-Being and Poverty -1-

- The **effects** of the policy intervention impact at **micro level**
- But the **evaluation** of the effect are measured both considering units satisfaction and at **macro level** (global economy)
- Need to have a **coherent system of statistical information** for the evaluation that describe the economy and to compare different situations among countries (in Europe) and within countries (NA)

□ Well being and poverty

- ✓ Well-being is a state that **involve all the aspects** of a person and marks his the quality of life



Emotional, mental, physical, social, and spiritual

- ✓ **Concept in evolution** during the time

The possibility to satisfy some fundamental needs and some wishes one time difficult to reach, conducts to the **born of other needs** and wishes

From GDP to Well-Being and Poverty -2-

- **Well-being and poverty**

- ✓ **Economic well-being** concept linked to **Income resources**, at **Macro** level (territorial areas, groups of population, etc.)

- ✓ **Economic well-being** concept linked to **Income resources**, at **Micro** level (households or families and individuals)

- ✓ **Non-material well-being** concept linked to **other aspects of the life** (as living conditions); alternative measures

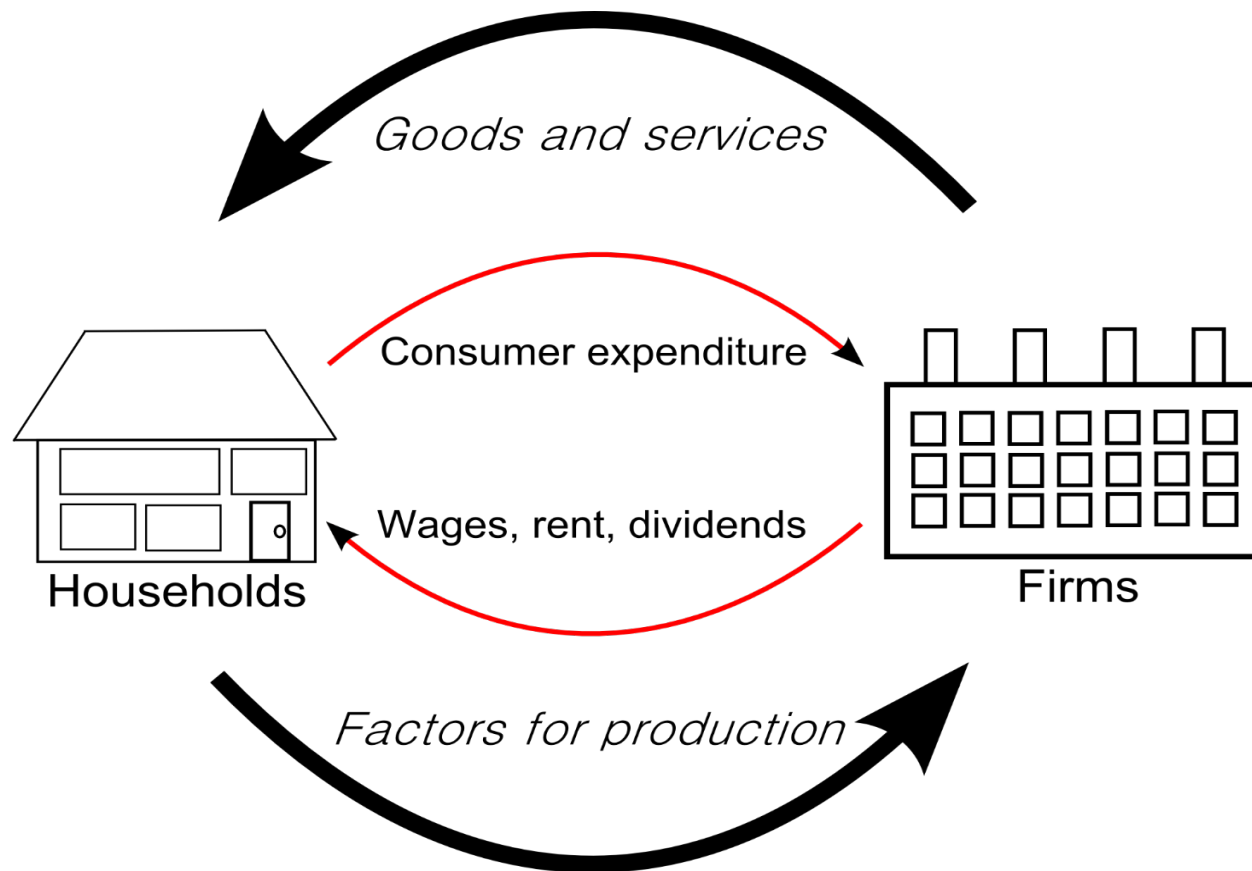


Needs to refer to **Income production** and **distribution**

in **National Accounts**

3. National Accounts: The circular flow of Income -1-

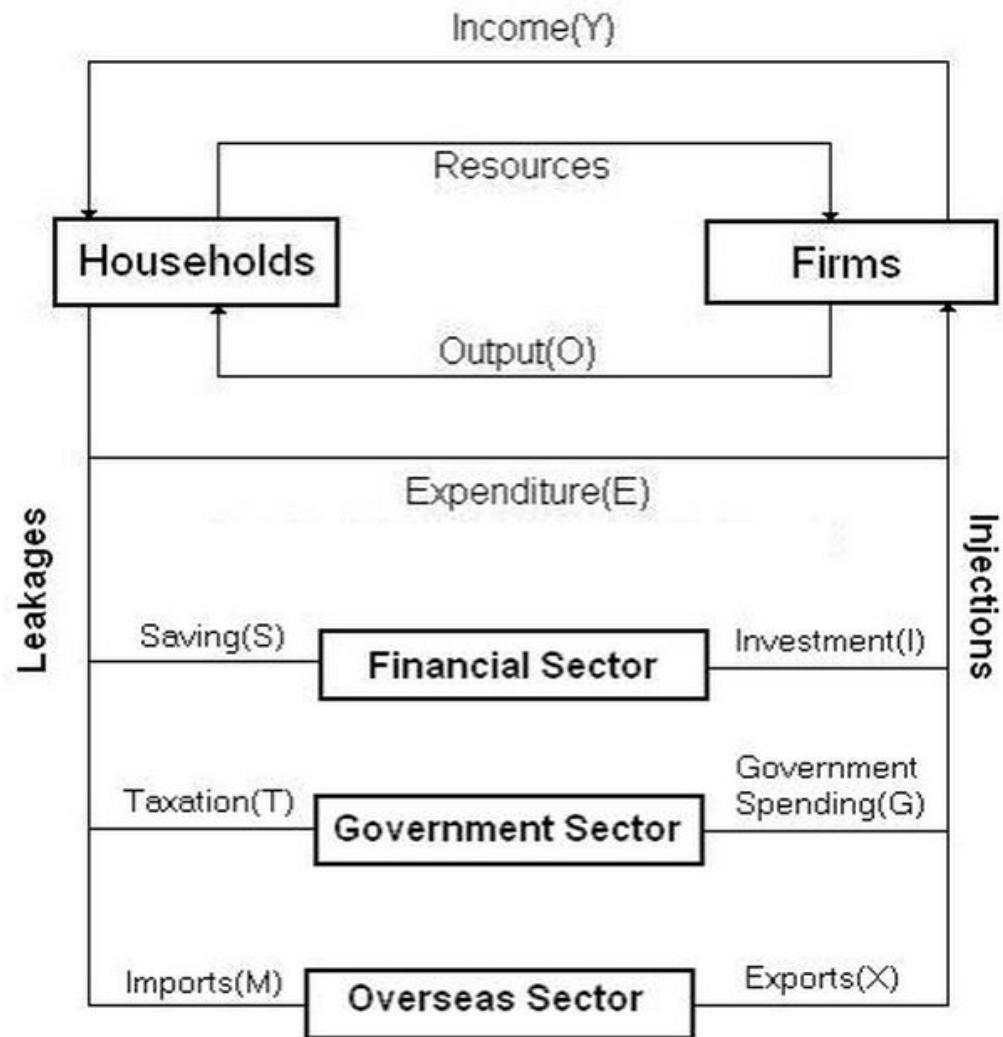
The circular flow of income or circular flow is a model of the economy in which the major exchanges are represented as flow of money, goods and services, etc. between economic agents



3. National Accounts: The circular flow of Income -2-

- The flows of money and goods exchanges is a **closed circuit** and correspond in value, but run in opposite direction
- Only two **agents (or sectors)** are considered
- The circular flow analysis is the **basis of National Accounts** and hence of **macroeconomics**
- In the next slide a **five sector model** is presented

EXAMPLE OF A FIVE SECTOR MODEL



N.B the symbols represent the corresponding sectors or flows

The system of National Accounts-1-

➤ Definition

A comprehensive and systematic, quantitative description of economic phenomena in a country, related to a certain period of time, to give an overall picture of its economy

➤ Why National Accounts?

▪ Relevance

- **Monitoring the performance** of an economy with a consistent set of indicators
- Basis for **Economic theory** and Model building
- Basis for **coherent policy formulation** (and evaluation) and for **monitoring** and **forecasting the effects** of socio-economic policies
- Gives a possibility of **comparisons between years and countries** (for international comparisons)

The system of National Accounts -2-

▪ Objective

Give a complete overview of the **various economic processes** within an economic territory

- Production, **consumption**, capital formation
- **Income distribution and redistribution**
- Flow of funds (financial processes)
- Accumulation of wealth
- Relations between sectors and with the rest of the world

▪ The core of the system of National Accounts

- National Accounts is a **closed system with identities** (definitional equation)
- Checking data with the help of identities (e.g. the budget identity and transaction identity)
- **Uniform concepts, definitions and accounting rules** (SNA 2008 and ESA 2010)

The system of National Accounts: Basic Identities

- **Two basic kinds of information in the system:**
 - **Stocks**: holdings of assets and liabilities at a point of time --> recorded in balance sheets
 - **Flows**: reflect creation, transformation, exchange, transfer or extinction of economic value --> recorded in all other accounts of the system --> **two kinds of economic flows**:
 - transactions
 - other changes in assets

- **Basic Identities (equations)**
 - The basic idea: **supply and demand are equal** $GDP + M = C + G + I + X \Leftrightarrow GDP = C + G + I + (X - M)$
 - Also: output + import = $IC + C + G + I + X$
 - Production = Income = Expenditure
 - **Definitional equations**:
 - **transaction identity** (for transactions between units): total uses = total resources
 - **budget identity** (for sectors and units): total uses = total resources

5. Aggregates of interest: Production Aggregates -1-

In the following slides **only** the aggregates and sectors of interest for the JMC are presented

Definition of Production

- “An activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital and goods and services to produce outputs of goods and services. Production does not cover purely natural processes without any human involvement or direction,...” (ESA95)
- Same definition in ESA 2010

Value added (gross)

= difference between output and intermediate consumption

= **income** generated with production

= **compensation** of employees

» **wages and salaries**

» social contributions

+ operating surplus and mixed income

+ consumption of fixed capital

5. Aggregates of interest: Production Aggregates -2-

GROSS DOMESTIC PRODUCT (GDP)

Three methods for estimation:

A. Production method -> based on value added by industry

$$Y = P - IC$$

B. Expenditure method -> based on expenses

consumption

capital formation

exports - imports

$$Y = C + I + E - M$$

C. Income method -> based on information on
income by sector

5. Aggregates of interest: Production Aggregates -3-

Gross National Income (GNI)

= gross domestic product + primary income received from the rest of the world - primary income paid to the rest of the world

- **Primary income**
 - wages and salaries, social contributions (these together equal compensation of employees)
 - interest, dividends
 - taxes on production and imports
 - subsidies
- Income of the population
- Used in the EU context

5. Aggregates of interest: Final Expenditure

Final Expenditure

Exports and imports (foreign trade)

 **Consumption of households**

Consumption of government and NPISH

Gross capital formation

Final expenditure: Consumption (C + G)

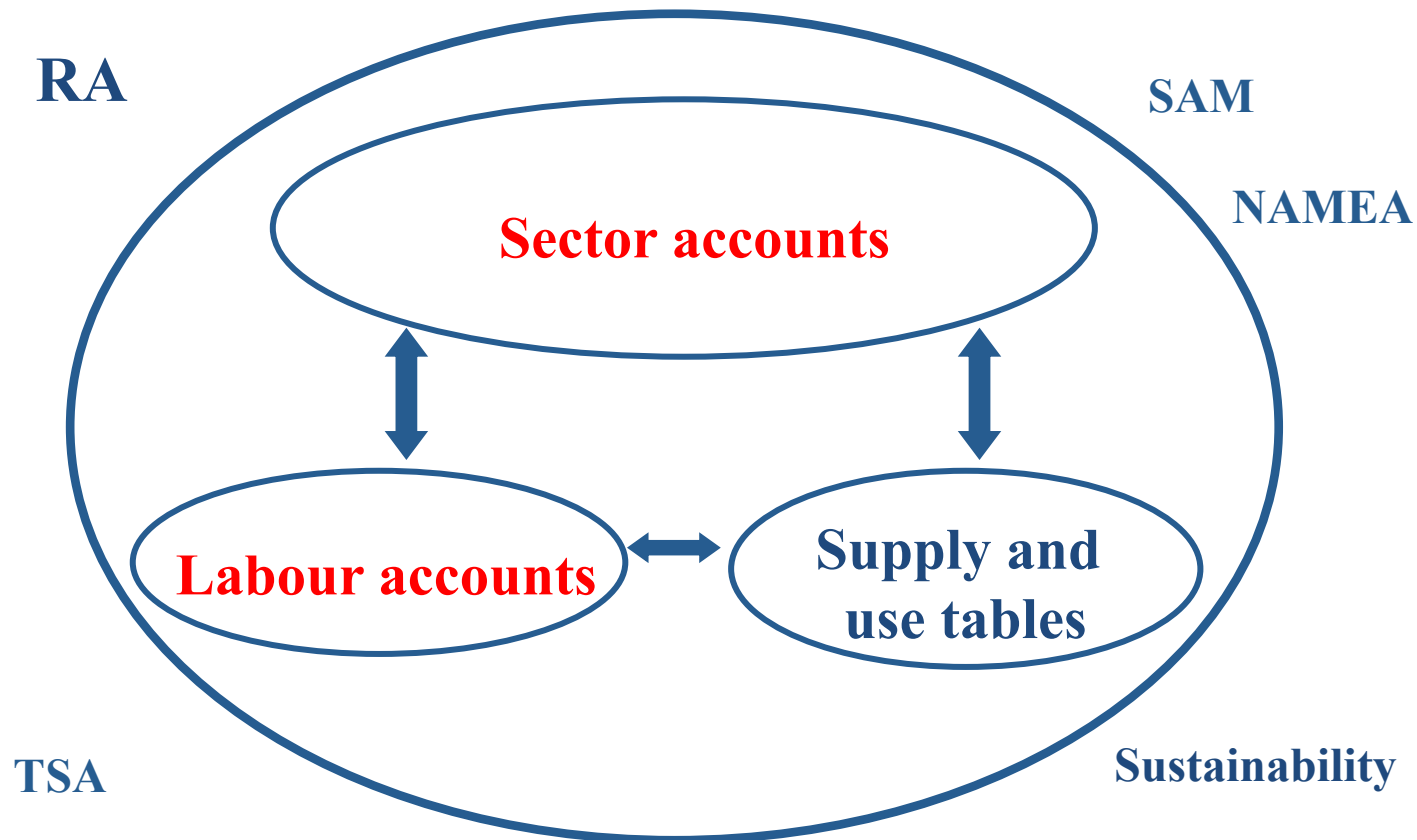
Final consumption expenditure

Actual final consumption:

- In the economy as total: final consumption expenditure = actual final consumption
- Actual individual consumption is used for international comparisons

6. The enlarged system of N A: main sub-system

The system of National Accounts has been enlarged to show other flows and included other sectors



6. Main subsystems of N A: The Labour Accounts

Labour accounts (important for the evaluation of income distribution and poverty)

- Integrated dataset on **labour** and **wages**
- Consistency with corresponding data in sector accounts and supply and use tables

Examples: data on population and labour force, employment (hours worked, number of jobs, number of employees/self employed), compensation of employees



Also the Social Account Matrix (SMA) is very important for the analysis of the income distribution, but it is not presented in this course

Content

1. Concepts

- International guidelines
- Employment
- **Compensation of employees (and mixed income)**

2. Labour Accounts Frameworks

- Data confrontation
- Labour market dynamics
- **Price and volume measurement**

3. Key data sources

- **Labour force survey**
- Employees' registers

International Guidelines

SNA 2008

- Chapter 7 – **Distribution of income**
compensation of employees, mixed income
- Chapter 19 – Population and labour inputs
labour force, labour inputs, productivity, data sources

ESA 2010

- Chapter 4 – **Distributive transactions**
compensation of employees
- Chapter 11 – Population and labour accounts *(un)employment, jobs, non-observed economy, labour input, labour input at constant prices, productivity*

Empoyment measures: Total hours worked

Includes:

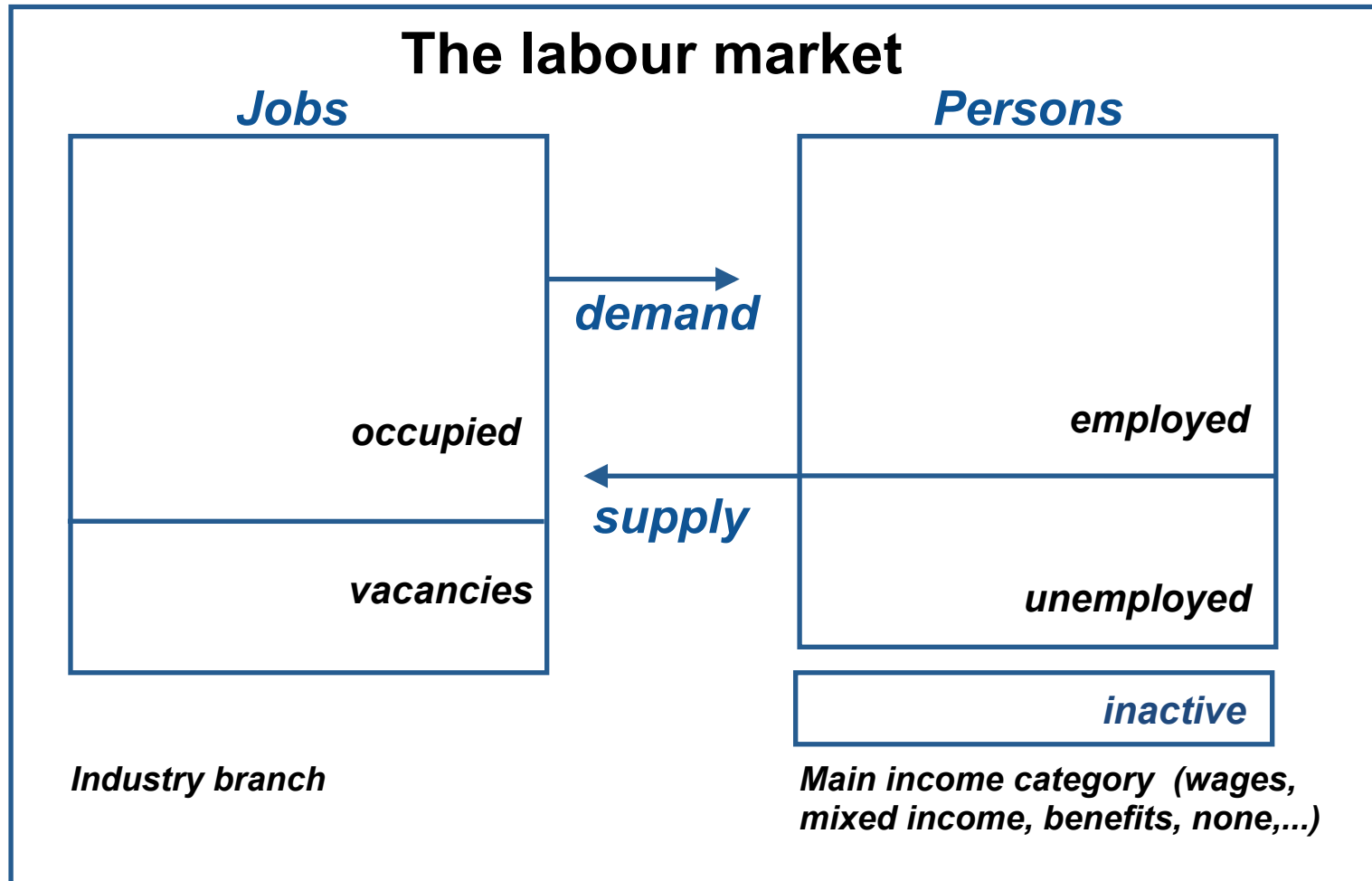
- Work of employees and self-employed;
- Contractual hours and (un)paid overtime;
- Work time spent on training;
- Coffee/tea breaks.

But excludes:

- Hours paid for but not worked such as holidays and sick leave;
- Meal breaks;
- Time spent on commuting;
- Education other than training.

Labour Account -4- Flows of demand and supply

Categories of Jobs and Persons in the labour market



7. Household Sector and Consumption in NA

Classification of institutional sectors

- S11 Non-financial corporations
- S12 Financial corporations
- S13 General government
- • S14 **Households**
- S15 Non-profit institutions serving households
- S2 Rest of the world

Household Sector -1-

Content

1. Definition of households
2. Principal roles of households
3. Institutional units
4. Institutional sector
5. Households sector
6. Households sub sectors

1. Definition of households

Small groups of persons

- who share the **same living accomodation**
- who **pool income and wealth**
- who **consume certain types of goods and services collectively**, mainly housing and food

Household Sector -2-

2. Principal roles of households

- Consumers (final consumption)
- Employees (supply of labour)
- Producers (production of market goods and services, unincorporated producers/ enterprises)

3. Households are institutional units

Institutional units are economic entities that are capable of:

- owning goods and services
- incurring liabilities
- engaging in economic activities and transactions with other units in their own right

Household Sector -3-

4. Institutional sector

Resident institutional units grouped together into mutually exclusive sectors according to their economic behaviour

The households sector consists of all **resident** households

5. Households sector includes:

- Households whose principal function is **consumption**
- Household producers for exclusively **own final use**
- Sole proprietorships and partnerships without legal status that are **market producers** (other than quasi-corporations)
- Persons living permanently in institutions (**institutional households**)

Household Sector -4-

6. The households sector is subdivided in:

- Employers and own-account workers
- Employees
- Recipients of property incomes
- Recipients of pensions
- Recipients of other transfer incomes

Criterion of inclusion in the different aggregates: the largest income category of the household as a whole

Data Sources

Direct sources

- Household surveys (for current accounts)
- Central Banks (for financial accounts)
- Fiscal data (for own account workers)

Indirect sources

- Social economic reports
 - Fiscal data
 - Business registers / production statistics
 - Social security funds
 - Institutional investment schemes
 - In general: data of other sectors

Consumption of households: definition

- Goods and services
- Consumption of own production
- Barter
- Second hand purchases

Unincorporated enterprises: intermediate versus final consumption

Tourism: domestic versus national concept

Sources of data

Retailtrade survey (RTS)

- all larger firms included
- compulsory participation
- turnovers by product group, excl. VAT
- sales specification by branch (Nace)

Household budget survey (HBS)

- small sample size, only households
- voluntary participation
- non response and underreporting
- detailed product specification, incl. VAT
- weak coverage of services
- detailed specification by type of outlet

Methods of computation

Reconciliation of RTS and HBS

- make population and valuation consistent
- turnovers from RTS
- market shares from HBS (specification by type of outlet)

Paid for by households directly or indirectly

- examples: housing, financial and medical services

Many consumption items based on mixture of sources

- examples: utilities, energy, transport, cultural & social services

8. Regional Accounts

We are interested in designing and implementing poverty policies at regional level. In this case as general framework it is possible to use the Regional Accounts that are derived by the National Accounts

Background: Why Do Regional Accounts Exist?

- Data on national accounts is not enough
- An input for decision-making
- Regional policy and development
- Analysis, monitoring and forecasting
- Research

Basic Concepts

- Regional accounts are a regional specification of the corresponding accounts of the national economy
- Same basic concepts than in National Accounts
- Regional Accounts make regional economic structures, disparities and development visible

References

Most of the slides are taken by the documentation used in the European Statistical Training Programmes held during the last four years

- Measuring the Economy: A Primer on GDP and the National Income and Product Accounts, (http://bea.gov/NATIONAL/PDF/NIPA_PRIMER.PDF), by Bureau of Economic Analysis (BEA), US
- Richard Stone: "Definition and measurement of the National Income and related tools", 1947
- United Nations, System of National Accounts: SNA 1953, 1968, 1993 and now 2008
- Eurostat, European System of Accounts: ESA 1970, 1979, 1995 and now 2010 (to read only the chapters and paragraphs regarding the topics treated in the slides)