Jean Monnet Chair 2018-2021
1st October 2018
Entry test

links to Code of Practice and to ESS e SDMX
Definition of data and metadata
Data, metadata and statistics
OECD equivalence scale
Gerscheckron effect

A- European Statistical System

A1 - According to statistical principles, European statistics must be developed (*Multiple answers are possible)*:

a. An independent manner, particularly as regards the selection of techniques, definitions, methodologies and sources to be used, and the timing and content of all forms of dissemination;
b. Taking into account the opinion of political groups from Community or national authorities, or budgetary provisions or definitions of statistical needs;
c. In a neutral manner, and that all users must be given equal treatment;
d. Without any obligation that the policies and practices followed are transparent to users and survey respondents.

A2 - The European Statistical System is:

e. A network in which Eurostat leads the harmonization of statistics in close cooperation with the national authorities;
f. An agreement between European Member States and other developed countries on the data collection;
g. A standard procedure at European levels (European Commission and European agencies) in collaboration with the international organisations such as OECD, the UN, International Monetary Fund and World Bank.

A3 - How data collection at national level can be improved:

h. Linking different administrative datasets but no unified system should be established;
i. Linking different administrative datasets, ensuring collaboration efforts between data holding authorities;
j. Linking different administrative datasets, creating a data linkage to share individual information in order to establish an integrated platform, combining survey and administrative data.

A4 - Eurostat is :

k. The statistical office of the European Union and its main task is to provide the European Union with statistics that enable comparisons between countries and regions;
l. A national statistical office located in Luxembourg and its main task is to collect data from all European countries;

m. A statistical division of the European Commission and its main task is the production of statistical indicators.

A5 – SDMX Metadata definition:

n. Statistical concepts to support the interpretation of numerical observations;
o. Statistical concepts common to a large number of statistical institutes.
p. Statistical concepts to understand the meaning of numerical observations;

B- Role of Statistics and the design of policy intervention

B1 – The design of political intervention is a strategic field because (*Multiple answers are possible)*

a. It is based on the simulation of the actions on which intervention is based with macro or micro models. (Also this can be acceptable, but it is not the main issue)
b. It gives scientific support for decisional processes
c. It avoids the dissemination of the evaluation results also as a means of social control by general public and by interested bodies.
d. It allows for the control and monitoring of the implementation of the programmed targets and on their impact
e. It guarantees the transparency of the intervention with reference to users and safeguards the society interests

B2 - Why there is a need for a Statistical Information System?

a. It is the consequence of the design, implementation and evaluation of the policy actions
b. To evaluate the consequences of possible actions
c. It is the basis for the definition of the intervention, the management of the intervention and the evaluation of the intervention

B3 - Which of the statements is true (*Multiple answers are possible*):

a. The design of policy intervention cannot be based on the analysis of the context and of a real situation.
b. The design of policy intervention allows for the control of the effective implementation of the programmed targets.
c. The design of policy intervention offers scientific support for the decisional process.

B4 - Which of the statements is true:

a. To design a policy intervention it is necessary to simulate the actions on which intervention is based with macro or micro models, to evaluate their possible consequences, and to choose among the various alternative actions.

b. In the design of policy interventions, it is not necessary to plan the dissemination of the evaluation results also as a means of social control by general public and by interested bodies.

B5 - Which of the statements is true:

a. The statistical data are not a key condition for the design, implementation and evaluation of an intervention policy. (this is false)
b. The effects of the programme must be measured using *response variables* strictly connected to the objectives of the programme.

C- National Accounts, GDP and beyond GDP

C1 –The System of National Account is relevant because (*Multiple answers are possible)*

a. It allows for monitoring the performance of an economy with a consistent set of indicators
b. It is the basis for coherent policy formulation (and evaluation) and for monitoring and forecasting the effects of the socio-economic policies
c. It does not give a possibility of comparisons between years and countries (for international and intra-national comparisons)

C2 - Which of the statements is true (*Multiple answers are possible)*:

d. Income is the flow of money (cash or cash-equivalent) received from work (wage or salary)
e. Economic well-being is a concept not linked to Income resources
f. Non-material well-being concept is linked to other aspects of the life, as living conditions
g. Economic poverty, is the condition of having little (or no) money, goods, or means of support and limited (or no) access to essential social services;

C3- Which of the statements is true:

a. The flows of money and goods exchanges are a not a closed circuit in National Accounts
b. Households, Firms, Financial Sector, Government Sector, Overseas Sector are the five sectors of a model for National Accounts

C4 - What is the Gross Domestic Product?

a. gross national income + primary income received from the rest of the world - primary income paid to the rest of the world
b. GDP = C + G + I + (X - M) where
   M = Imports;
   C = Consumption of Households
   G = Government Expenditures
   I = Investments

X = Exports

C5 - Which of the statements is true:

a. The Households are small groups of persons who share the same living accommodation, who pool income and wealth, who consume certain types of goods and services collectively, mainly housing and food
b. The Households are not institutional units which are economic entities that are capable of owing goods and services, incurring liabilities, engaging in economic activities and transactions with other units in their own right

C6 - Which of the statements is true:

a. The indirect sources for the aggregates of National Accounts are Household surveys (for current accounts), Central Banks (for financial accounts), Fiscal data (for own account workers)
b. Retail trade survey (RTS) and the Household budget survey (HBS) are the direct sources of data on the Consumption of households

C7 - Which of the statements is true:

a. To measure poverty and quality of life at micro level we do not need to go beyond the economic dimension
b. Perceptions, opinions, attitudes, satisfaction of citizens **in** occupation, health conditions, use of health services, leisure activities, safety, family and friends relations, travels, holidays, time use, environment, etc. are relevant to not material well being

C8 - Which of the statements is true:

a. Indicators on poverty, quality of live and living conditions are not computed by using data collected with some sample surveys on households and individuals
b. At the European level (conducted in all European countries): Survey on income and living conditions (Eu-Silc), Household budget surveys, Labor force Survey are sources of data to compute poverty and well being indicators

C9 - Which of the statements is true:

a. The main purpose of EU-Silc is to provide the weights for the Consumer Price Index (CPI) and data to estimate the National Accounts aggregates of Households Consumption
b. The EU-SILC instrument provides two types of data**:** Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions of households, Longitudinal data pertaining to individual-level changes over time, observed periodically over a four-year period.

C10 - Which of the statements is true:

a. The main result of the Stiglitz Commission is that National Income is the measure of well-being

b. One of the key message of the Stiglitz Commission is that it is important to focus on Living standard, Poverty, Health, Education, Political choice, Social connections, environment, security

C11 - Which of the statements is true:

a. Measuring all aspects of well-being doe not requires a set of indicators for each topic
b. Embedding poverty and quality of life indicators indicators in accounting frameworks has some advantages:
   - Consistency and comparability
   - Clear points of reference: GDP, Consumption, investment etc.,
   - Opportunities of analysing underlying relationships

D- Measuring Prices: Comparisons of Economic Aggregates and Indicators over Time and Space

D1 - Which are the conditions to do adequate comparisons over time and space of economic aggregates and indicators?

a. The comparisons should be made in "nominal" terms
b. The comparisons should be made with current value data
c. The comparisons should be made eliminating the effect due to the changes and/or the level of the prices

D2 - Which of the statements is true:

a. PPPs are used to convert values (e.g. GDP, Household Income) into a common currency that neutralises prices differences
b. PPPs are equal to the values of exchange rates

D3 - Which of the statements is true:

a. The computation of PPPs is done before at Basic Heading Level (BH) and then from the PPPs of each BH to Aggregate level (Basic heading = finest level for which an expenditure weight is available)
b. The computation of PPPs is done directly at Aggregate level and then the values are disaggregated at Basic heading level (Basic heading = finest level for which an expenditure weight is available)

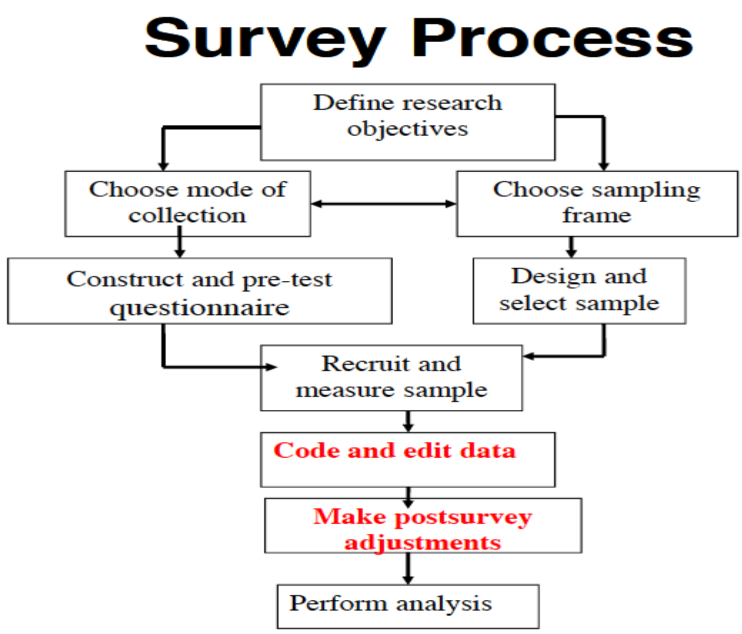
D4 - Which of the statements is true:

a. **Gerscheckron effect:** with reference price structure, the more a country is far from the base (country) structure of price, the higher its GDP will appear.
b. **Gerscheckron effect:** with reference price structure, the more a country is close to the base (country) structure of price, the higher its GDP will appear.

E- Total Survey Error, Handling Missing Data, Statistical Data Editing and Imputation

E1 – With reference to the following description of the Survey Process chose the true statements:

a. The sampling error refers to the mode of data collection;
b. The design and selection of the sample are the causes of the sampling error;
c. Post-survey adjustments doe not include weighting for non response
d. Processing errors are individuated when coding and editing data



E2 – Which of the statements is true:

1. Non-response is not likely to occur in all surveys. (here Non-response is intended as "heavy" non-response, not physiological, but pathological non-response)

2. Item non-response means that you have no measurements on unit

3. Unit non-response means that measurement for some items is missing for unit

E3. - Which of the statements is true:

1. Under-coverage arises when there are units in target population but not in the (sampled) study population.

2. Under-coverage and non-response are the same phenomenon
3. Both under-coverage and non-response can result in biased estimates.

E4 – Which of the following are sources of item non-response (*Multiple answers are possible*):

a) failure to locate/identify the sample unit or to contact the sample unit
b) non co-operation
c) refusal of sample unit to participate
d) interviewer does not ask the question
e) inability of sample unit to respond to the question (e.g. due to ill, health, language barriers)
f) other, e.g. accidental loss of data/questionnaire
g) interviewer does not record the response to the question

E5 – About the Total Survey Error you can say (*Choose the true answer*):

1. The TSE is a component of the Mean Squared Error
   a. True
   b. False

2. The representation of TSE is complete when we consider the errors due to Coverage, Sampling, Measurement, Nonresponse and Adjustment
   a. True
   b. False

3. The control of the TSE doe not aim at minimising the components of it
   a. True
   b. False

4. The processing error involve the removal of outliers impact, the coding and the imputation of missing data
   a. True
   b. False

F- Definition and Measure of Poverty

F1 - Poverty is

a. A lack of command over commodities in general
b. A pronounced deprivation in well-being
c. Lack of capability to function in society
d. All of the above

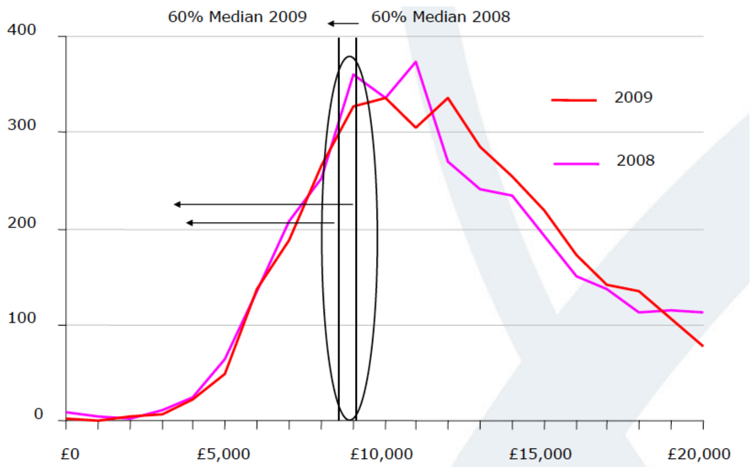
F2 - Which of the following is a reason to go to the trouble and expense of measuring poverty?

a. To evaluate the impact of policy interventions geared toward the poor
b. To keep poor people on the agenda of public policy
c. To measure the distributional effects of economic growth
d. To target interventions designed to reduce poverty

F3 - The OECD scale measures adult equivalents as follows:
AE = 1 + 0.7 (N adults − 1) + 0.5 N children.
Based on this scale, a household consisting of two parents, a grandmother, two teenagers, and an infant would:

a. Have a lower Adult Equivalent expenditure than it would have expenditure per capita.
b. Have an Adult Equivalent of 3.4.
c. Have a higher Adult Equivalent than a household with five adults.
d. Become better off when the eldest teenager becomes an adult.

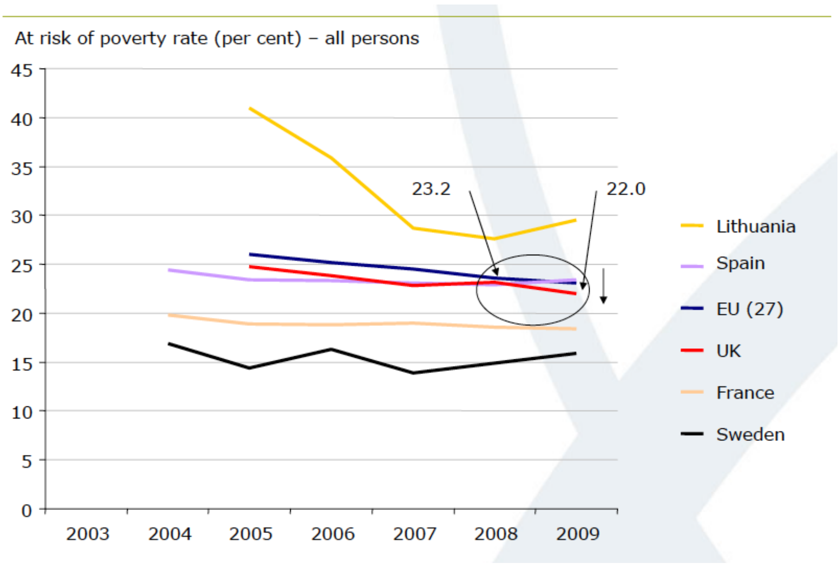
F4 - The graph shows the income distribution of the 65+ age group in UK in 2009 and 2008 (Office for National Statistics)



a. the percentage of persons below the poverty line increased in 2009
b. the percentage of persons below the poverty line decreased in 2009
c. the percentage of persons below the poverty line did not change in 2009

d. we cannot say anything about the change of the percentage.

F5 - The graph shows the evolution of the "at risk of poverty rate" in some EU countries (Eurostat).



a. From 2008 to 2009, in UK, Spain and Lithuania the percentage of poor persons decreased
b. From 2008 to 2009, in UK, Spain and Lithuania the percentage of poor persons increased
c. In the period 2008-2009 three countries are always below the EU(27) values
d. In the period 2008-2009 four countries are always below the EU(27) values

F6 - A poverty line is
e. The minimum expenditure required to fulfill basic needs.
f. The threshold consumption needed for a household to escape poverty.
g. Somewhat arbitrary because the line between poor and nonpoor can be hard to define.
h. All of the above.

F7 - In a sample of 5,000 households, 800 households have expenditure levels below the poverty line.
This means that the headcount poverty rate (at risk of poverty rate – head count ratio)
i. Was 16 percent.
j. Was 0.0625.
k. Cannot be computed from these numbers.
l. Is too small to be computed accurately

F8 – Choose the right statements (*Multiple answers are possible*)

m. the headcount index indicate how poor the poor are
n. the poverty gap changes if people below the poverty line become poorer.
o. the easiest way to reduce the headcount index is to target benefits to people just below the poverty line