



**Training Course on:  
The Analysis of the Egyptian Economic Census  
Survey 2012/2013**

**CAPMAS, Cairo – Egypt**

**17-19 October, 2015**

**Introduction**

The training course presents a schematized set of lectures for quantitative and statistical analysis of economic censuses with particular emphasis on Egypt's recent Economic Census Survey 2012/2013 (ECS 2012/13). Besides the lectures, an important component of the training course will involve practical pragmatic applications using a sub-sample of the ECS 2012/13 (ECSS 2012/2013), which includes detailed disaggregate information on three production sectors as well as on governorate and economy-wide statistical indicators and survey design variables. Applied exercises—using statistical software—employing ECSS 2012/2013 are designed to strengthen the trainees' analytical and computational skills by offering hands-on experience that should be helpful in production of reliable statistics and indicators for private and public agents to inform and aid their decision making process. The lectures and applications will be presented in Arabic, though English may be used now and then especially in the applied sessions.



**Lecturers/Trainers (in alphabetic order)**

Mr. Ali Rashed	Population Council.
Miss Awatef Hussein	CAPMAS.
Mr. Khaled Maher	CAPMAS.
Mrs. Mai El Mossallamy	Department of Economics, Faculty of Economics and Political Science, Cairo University.
Dr. Mohamed Ismail	Department of Statistics, Faculty of Economics and Political Science, Cairo University.
Miss Nany Elfar	CAPMAS.
Mrs. Nevine El Zayat	Department of Statistics, Faculty of Economics and Political Science, Cairo University.
Mrs. Noha Samy	Department of Economics, Faculty of Economics and Political Science, Cairo University.
Dr. Sherine Alshawarby	Department of Economics, Faculty of Economics and Political Science, Cairo University.
Dr. Tarek Moursi	Department of Economics, Faculty of Economics and Political Science, Cairo University. (Course coordinator)



## Training Program

### DAY 1: Saturday 17/10/2015

- 08:30 – 09:00      **Registration**
- 09:00 – 09:30      **Opening Remarks. (Moursi)**  
**Economic Censuses in the World. (Elfar)**
- 09:30 – 09:45      **Coffee break**
- 09:45 – 11:15      **General Review of Stata (Lecture/Application)**  
Including Stata interface, syntax and commands, data management, basic descriptive and exploratory statistics, graphs, loops and do/ado files. (Rashed)
- 11:15 – 11:30      **Coffee break**
- 11:30 – 13:30      **Using Stata in Survey Analysis: Part I (Lecture/Application)**  
Survey design, multistage survey data, sampling weights, cluster sampling, stratification, PSU, SSU, FPC, svy prefix, svyset, svydescribe, means, proportions and ratios, oneway and twoway tabulation, graphics, subpopulation. (El Zayat)
- 13:30 – 15:00      **Lunch**
- 15:00 – 17:00      **Using Stata in Survey Analysis: Part II (Lecture/Application)**  
Survey design, multistage survey data, sampling weights, cluster sampling, stratification, PSU, SSU, FPC, svy prefix, svyset, svydescribe, means, proportions and ratios, oneway and twoway tabulation, subpopulation. (El Zayat)



**DAY 2: Sunday 18/10/2015**

- 09:00 – 10:00 ***Economic Census Survey 2012/2013: Survey Methodology (Lecture)***  
Objective of ECS 2012/2013, sample design, properties and representation, coverage, definitions used in the survey, data collection, fieldwork problems and fixes, database preparation and management (coding, entry, etc.). (Hussein)
- 10:00 – 10:15 **Coffee break**
- 10:15 – 13:30 ***Exploratory and Descriptive Analysis for the Economic Census using ECS 2012/2013 sub-population (Lecture/Application)***  
The session introduces and explains the philosophy, objectives and (graphical/quantitative) techniques of Exploratory Data Analysis (EDA). Graphical techniques of EDA include histogram, dot, Run-Sequence, box, normal probability, scatter, quantile-quantile (q-q), autocorrelation function plots among others. Common EDA quantitative techniques are measures of location, dispersion, skewness, kurtosis, randomness, distributions, outliers detection, and correlation. ECSS 2012/2013 is used to demonstrate the mentioned EDA graphical and quantitative techniques. (Ismail with Rashed)
- 13:30 – 15:00 **Lunch**
- 15:00 – 15:30 ***Exploring ECS 2012/13: Overview (Demonstration)***  
Overall structure and organization of the ECS 2012/13, coding, variables description, sample design variables, basic descriptive statistics (maximum and minimum values, mean, standard deviation, coefficient of variation, etc.), validating sample representation. (Maher)
- 15:30 – 17:00 ***A Closer Look at the data: Part I (Lecture/Application)***  
ECSS 2012/13 structure for selected sectors, survey descriptive statistics (sectoral and governorate and economy-wide) for selected variables including value added, sales, profits, worker productivity, etc. (Samy)



**DAY 3: Monday 19/10/2015**

- 09:00 – 09:30 ***A Closer Look at the data: Part II (Application)***  
Practicing with ECSS 2012/13. (Samy)
- 09:30 – 09:45 **Coffee break**
- 09:45 – 10:45 ***Economic Rationalization and Validation of Data (Lecture/Application)***  
Exploring the integrity of the data through examining the economic validity and rationality of sectoral and national statistics computed with ECSS 2012/13 including value added, output, sales and profits. (El Mossallamy with Moursi)
- 10:45 – 11:00 **Coffee break**
- 11:00 – 14:00 ***Using ECS 2012/13 to Support Private and Government Decision Making (Lecture/Application)***  
Uses of economic censuses. Demonstration with ECSS 2012/13: guiding current and prospective businesses decisions (e.g., investment, sales, employment, competitiveness) based on comparisons with sectoral, regional and national industry norms; recommending guidelines for government policymaking (tax and subsidies policies, assessment of industry contributions to value added, etc.). Graphical presentation of statistical results. Constructing a simple (3-sector) input-output table for Egypt with ECS 2012/13. (Moursi with El Mossallamy and Samy)
- 14:00 – 15:30 **Lunch**
- 15:30 – 17:00 ***Integrating ECS 2012/13 with Official Statistics (Lecture)***  
Utilizing ECS 2012/13 to evaluate reliability of official statistics and to help government agencies adjust their statistics and indexes (such as GDP, index of industrial production and employment and taxes, subsidies and other fiscal flows). Integrating ECS 2012/13 with other official statistics (e.g., IO and SAM accounts). Using the census survey to provide frames for sample surveys. (Alshawarby)