

**Online Training Workshop on Applied Micro-econometrics and Public Policy Evaluation**

March 30-31<sup>st</sup> and April 6-7<sup>th</sup>, 2021

**I. Introduction:**

The aim of this online training workshop is to provide participants with a deeper understanding of micro-econometric estimation techniques that are widely used in public policy evaluation. Several methods will be illustrated and discussed such as selection correction models, instrumental variables, difference-in-difference, panel data models (fixed and random effects), and matching estimators.

The workshop will be held via Zoom and will be conducted mainly in English, with the possibility of using Arabic and French if needed. It will be split into theoretical and practical sessions where the instructors will present the theory behind each econometric technique. Furthermore, Q&A session from the audience will follow (questions can be asked live or via Zoom Chat) and participants will have several hands-on exercises (either individual or collective using the Breakout room facility in Zoom where the participants can work in smaller groups).

By the end of this online workshop, participants will have acquired detailed knowledge of and hands-on experience in public policy evaluation techniques.

The training will be conducted by Racha Ramadan and Chahir Zaki. A short biography is included at the end of this announcement.

**II. Eligibility:**

Applicants should be:

- Researchers from the ERF region with MAs or PhDs or in the process of completing these degrees.
- Less than 40 years of age.
- Trained in statistics or econometrics and able to use statistical programs. Priority will be given for those who are knowledgeable about STATA.
- Familiar with the management and analysis of microeconomic datasets such as labor force surveys and household surveys
- Priority will be given to those who have not attended previous ERF workshops.

### **III. Application procedure:**

Applications must include a curriculum vitae (CV) with a minimum of one reference name and a motivation letter indicating why the candidate is interested in the topic of the workshop and how it relates to his/her research. A writing sample (any research paper that uses quantitative techniques) is a plus.

**Deadline for submissions: March 15<sup>th</sup>, 2021.**

### **IV. Program:**

#### **Day 1 (March 30<sup>th</sup>): 15.00-18.00**

- Introduction and Objectives of the Workshop
- The fundamental problem of causal inference in program evaluation:
  - o Identifying appropriate counterfactuals
  - o Endogeneity: simultaneity, sample selection and omitted variable bias
- Potential Solutions:
  - o Randomization
  - o Non-experimental methods

#### **Day 2 (March 31<sup>st</sup>): 15.00-18.00**

Solutions (1): Matching estimators

- Propensity score matching
- Propensity score weighted regressions
- Applications in STATA (1)

#### **Day 3 (April 6<sup>th</sup>): 15.00-18.00**

Solutions (2): Difference in Difference

- Theory and principles
- Applications in STATA (2)

#### **Day 4 (April 7<sup>th</sup>): 15.00-18.00**

Solutions (2): Panel Data Models:

- Fixed and Random Effects
- Applications in STATA (3)
- General Remarks on identification
- Conclusion

### **V. Readings**

1. Angrist, J.D. and J.-S. Pischke (2009). Chapter 4 “Instrumental variables in action: Sometimes you get what you need” Mostly Harmless Econometrics Princeton, NJ: Princeton University Press.

2. Sections 1-4.2 in Ravallion, M. (2008). "Evaluating Anti-Poverty Programs" in Handbook of Development Economics 4, Ch. 59
3. Section 5 in Ravallion, M. (2008). "Evaluating Anti-Poverty Programs" in Handbook of Development Economics 4, Ch. 59
4. Skoufias, E. (2005). "PROGRESA and Its Impacts on the Welfare of Rural Households in Mexico." IFPRI Research Report 139. Washington, DC: IFPRI.
5. Wooldrich, Jeffrey. 2009. Introductory Econometrics: A Modern Approach. Chapters 13 and 14.
6. Wahba, J. and Assaad, R. "Flexible Labor Regulations and Informality in Egypt" ERF Working Paper Series No. 915. Cairo, Egypt.

## **VI. Biographies:**

**Racha Ramadan** is a citizen of Egypt. Racha is an associate professor at the Economics Department, Faculty of Economics and Political Science, Cairo University and Economic Research Forum (ERF) Research Fellow. She got her Ph.D. in Economics, in 2010, from Toulouse School of Economics. Since 2010, she worked as an economic consultant for different international organizations such as the UNDP, World Bank, UN-ESCWA, UN-FAO, IFAD and UNESCO. She is a fellow of the Summer Program in Social Science (SPSS) at the Institute for Advanced Study in Princeton and a member of the Associate Editorial Board of New Medit- A Mediterranean Journal of Economics, Agriculture and Environment. She has several papers published in peer reviewed journals as Review of Income and Wealth and the Journal of Development Studies. Her research interests include applied micro-econometrics on poverty, food security, gender and human development in Egypt and other developing countries.

**Chahir Zaki.** Chahir Zaki is a citizen of Egypt. At present, Chahir is an Associate Professor of Economics at the Faculty of Economics and Political Science, Cairo University. In this position, Chahir teaches and conducts research on trade policy and macroeconomics. He is also the Director of the French section at the faculty. Chahir works also for the Economic Research Forum (Cairo, Egypt) as a part-time Lead Economist and as a consultant for several international organizations (the World Bank, the International Labor Office and the International Trade Center). He holds a B.A. in Economics from the Faculty of Economics and Political Science, Cairo University, an M.A. in Economics from Université Paris 1 Panthéon Sorbonne, and a Ph.D. in Economics from Université Paris 1 Panthéon Sorbonne. He has written numerous studies published in refereed journals on international trade, trade policy, trade in services, applied economics and macroeconomic modeling.