

The impact of micro-econometrics training

Summary

One of the key activities outlined by IFPRI/ESSP is strengthening the capacity and knowledge dissemination within the academia and research community in the country. As part of this mission, ESSP organized short-term training in cooperation with national universities, research institutes and other organizations. Over the last three years in association with EDRI, ESSP has provided training workshops on micro-econometric techniques and applications to young researchers and academics in economics. An emphasis was placed on practical assignments to analyze economic data as well as to apply a variety of methodologies.

A follow-up survey, conducted more than 6 months after the ESSP training, reports that 90% of carefully selected participants increased skill levels and knowledge of micro-econometrics from the training. In particular, the hands-on teaching techniques to apply micro-econometric tools and techniques have been instrumental in transferring skills to the workplace. The direct and indirect impact reported by the on-going use of training materials, and their distribution and adoption in other courses, affirms the quality and valued resource such training has delivered to the learning community.

Training objectives

- To use basic econometric tools in the analysis and interpretation of data
- To describe the implications of different sampling methods and analysis of dependent variables
- To apply methodologies in analyzing complex econometric models and data

Participants

There were 106 participants in three groups during the period November 2011 to June 2013. Approximately two thirds were from public universities and one third from research organizations comprising:

- Lecturers of micro-econometrics at universities
- Post-graduate research students who are incorporating micro-econometrics in their theses
- Researchers in government policy think tanks

The training was conducted in half-day sessions for 2 weeks.

Sampling

In total, 30 questionnaires were collected from target respondents as shown in Table 1.

Table 1: Sample size and constitution

Organizations	Male respondents	Female respondents	Total respondents
Universities	17	2	19
Research institutes	7	3	10
Others	1	0	1
TOTAL	25	5	30

The questionnaire focused on 3 areas:

1. Relevance and quality of training delivery
2. Individual and organizational impact
3. Ongoing application and knowledge sharing

Survey results

1. Relevance and quality of training

The participants unanimously agreed that the topics covered in the training materials were relevant.

Table 2 describes the questions and responses to the questionnaire. For each question, participants were asked to rank (**Strongly disagree** to **Strongly agree**) each aspect of the training delivery and computer skills needed for the course.

Table 2: Relevance and quality of training (%)

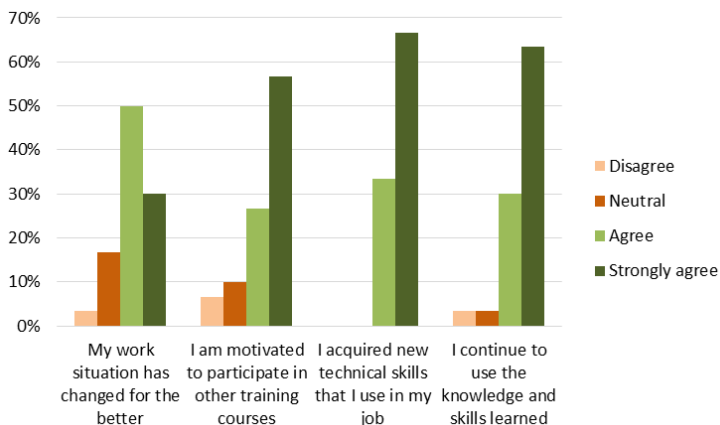
Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Relevance of the topic covered	0	0	0	23	77
Adequacy of the material provided	0	0	0	30	70
Knowledge of the trainers	0	0	0	17	83
I received the necessary assistance	0	0	7	43	50
Easiness of the manual to follow	0	0	13	50	37
Ability to use computer skills	0	0	7	27	67
Need for additional computer training before the course	0	0	20	33	30

In general, the training was rated very highly in all aspects of relevance, quality of trainers, materials and assistance provided. The survey considered prerequisite computer and software skills for this training and found 85% of participants had the necessary skills to embark on training. Nevertheless, 53% agreed that prerequisite refresher courses in computer skills would have been useful.

2. Individual and organizational impact

From a personal perspective, participants responded positively to the impact of the training (Figure 1), reporting that their technical skills had developed and their work situation had changed for the better.

Figure 1: Individual impact of the training



Furthermore, more than 90% of participants applied their new learning in their work and were motivated to develop their skills in the future. This positive attitude ramified throughout the universities with participants recounting that they shared new skills and knowledge with their colleagues.

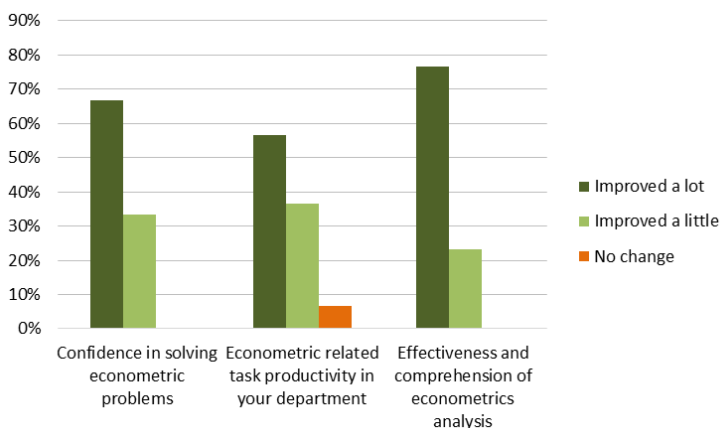
Improvements after training

The very practical and applied nature of micro-econometrics helps in assessing and measuring improvements in skill levels. The survey investigated improvements under 3 dimensions:

- Confidence in problem solving
- Econometric related task productivity
- Effectiveness and comprehension of econometric analysis

The greater share of participants perceived improvements in all 3 aspects as Figure 2 illustrates:

Figure 2: Degree of improvement after training

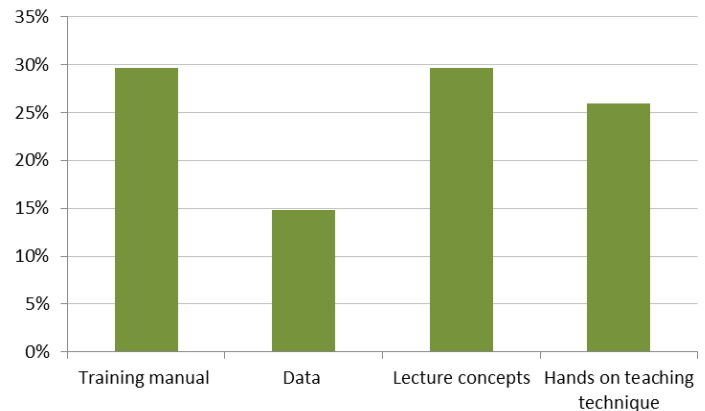


For all participants to varying degrees, the training brought greater understanding of econometric analysis and confidence to tackle econometric problems.

3. Ongoing application and knowledge sharing

The full effect of training can be seen through the on-going use of training materials and their adoption in other courses within university departments or organizations to train others (Figure 3). More than 25% of participants adopted the practical teaching techniques from the course.

Figure 3: Training materials used in other courses



From the 30 respondents, a total of 277 people were found to have benefited directly from receiving training, or indirectly through exposure to trained lecturers who used the materials after the ESSP training. This suggests that for each trained individual, approximately 9 others were impacted. Through the delivery of successive micro-econometric courses or modules, the number of ESSP's training beneficiaries will inevitably increase with time.

Conclusion

The concrete evidence contained in these results conclude that the training met the key objectives, and it was successful in identifying the most appropriate participants for the training. Furthermore, for many participants this was the first opportunity for ESSP training, and motivated many to embark on further learning.

Participants rated the training very highly by having the right balance of relevant topics, adequate training materials and good, knowledgeable lecturers. Most significantly, the participants reported that their working situation had improved. 90% continued to use the knowledge and skills gained from training, particularly in comprehension and hands-on teaching techniques. These survey results illustrate ESSP's mission of strengthening the capacity and knowledge dissemination within academia and the research community. In practical terms, micro-econometrics has been applied more effectively and improved performance as a result of training.

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