

Ninth European Workshop on Efficiency and Productivity Measurement

June 29-July 2, 2005 - Brussels

Special Session on

Basic Modelling Issues in Applied Production Analysis (working title)

BASIC MOTIVATION

The purpose is to offer a special session devoted to basic modelling issues in developing policy-oriented advice. This type of session is oriented towards a general scientific public, but it is especially informative for PhD students and young researchers.

With basic modelling issues we mean: choice of data set (e.g., level of aggregation, data screening, outlier detection, etc.); choice among modelling approaches (e.g., index numbers or econometric model); choice of variables among the ones available in databases; specification choices and tests (e.g., all specifications tested and not just the ones “worthwhile” reporting); development of policy scenarios and simulations; etc. It is important that presenters report all steps in their analysis, including the judgements made as well as the detours and dead-ends encountered. In brief, we want to see the “reality” of research: the fight with the data (more cynically: how does one force the data to confess?).

We ideally would like to shed light on the so-called “context of discovery” (what motivates your choices in executing the project) rather than on the “context of justification” (the formal procedures resulting in a streamlined presentation). Thus, we intend to reveal that which is at best implicit in standard publications or relegated to footnotes and/or replies to editors and referees in letters and reports.

The basic format of the session is to have 4 presentations by leading scholars on a common topic addressing a common question relevant to economic policy. It should be stressed that it is not a contest for the “best” model in terms of forecasting capacity, historical tracking record, etc. Rather, these presentations should focus on what constitutes a “relevant” model to answer certain “broad” questions of general economic interest and ought to dwell as explicitly as possible on the aforementioned questions and choices.

SELECTION OF RESEARCH TOPIC

The requirements on a potential research topic are various. There should be a short list of policy-oriented research questions, a series of different data sets containing a wide range of variables, etc. The selected project (data, policy questions, etc.) should be made available on the internet site, so that the public is able to play an active role (see below). Ideally, there should be a brief (a summary) and a detailed (basically the same information that is made available to the contributors) description of the entire problem. Finally, the topic should not favour any of the participating scholars. While all ideally should have a minimum of familiarity with the basic issues underlying the topic, no one should ideally have been involved in writing on the specific topic itself.

The topic is selected and prepared by the organisers of the special session. These organisers play a role both in setting up the research topic and in leading the discussion in the special session. Their role is rewarded by their involvement in the eventual publication process (e.g., by an introduction of the topic and a summary of the discussions).

The topic selected is:

“What are the policy impacts of R&D on U.S. agricultural productivity patterns?”

Motivation: There are divergent results in the literature on the impact of R&D on productivity and the case of agriculture presents an interesting case study.

The data proposed to analyse this topic is described in a separate document.

SETUP OF THE SESSION

The exact structure and organization of the session is important, since the presentation of the main contributions and the discussion of these contributions are the intermediary products of the research effort. The entire special session lasts 2 hours.

While the specifics of the session organisation and its publication potential require further reflection, the essential idea is that the discussion itself is also part of the contribution, rather than a hidden part of the review process. Several formats for this type of special session are possible. One concrete proposal is sketched below.

The organisers provide an opening/introduction to the session identifying the problem and discussing the common data series offered to each presenter. This also includes a background essay on the topic, and an introduction to each of the presenters and the approaches adopted.

There is time for 3 presentations. The presentation of the main contributions can take several forms. One can opt for preliminary results that ideally ought to be finalized subject to comments of referees and audience. Another possibility is to have a presentation of nearly finalized results that ideally could constitute a standard submission to a journal.

Among the many potential contributors, we have contacted and obtained confirmation of the following people:

- ◇ Rolf Färe & Shawna Grosskopf (Oregon State University);
- ◇ Lilyan Fulginiti (University of Nebraska);
- ◇ Quirino Paris (University of California, Davis).

These contributors have a proven scientific track record which allows them to embark on this type of venture.

For the conference session, we opt for one discussant with sufficient breadth to address all three papers. Steven Buccola (Oregon State University) has accepted this important task.

One potential schedule for the session is presented below.

Schedule for the session	Presenters	Time
Introduction: • objectives of session (K. Kerstens)	K. Kerstens&	10 minutes

• background for problem setting & data set (S. Stefanou)	S. Stefanou	
Paper #1	L. Fulginiti	20 minutes
Paper #2	Q. Paris	20 minutes
Paper #3	R. Färe, S. Grosskopf	20 minutes
Discussion & Integration	S. Buccola	15 minutes
Rejoinders	Presenters #1-3	15 minutes (5 min each)
Audience Discussion	Moderator: S. Stefanou	20 minutes
		Total =120 minutes

REFEREEING PROCESS

The entire conference session is an integral part of the traditional refereeing process. This constitutes an open peer review process (this is less traditional in economics, but it is well-known in certain other disciplines). *JPA* has accepted the principle of open refereeing: Robin Sickles acts as liaisoning editor for this special issue.

However, the organisation of the conference session is distinct from the output in terms of a publication. While there is only one discussant in the session, several other open referee reports will be solicited before the contributions can eventually be published. The names of these other referees have not yet been fixed. Normally, their open referee reports, though not presented at the session, will be available before the session (on the website). This allows the contributors, the main discussant during the session (S. Buccola), and the audience to take notice of the questions and comments raised and eventually to react to them. It should be noted that the main discussant's presentation is not conditioned by all these available referee reports (e.g., he is not forced to make only the comments that are common among the referee reports).

The entire discussion may not be finalised at the end of the session. It is up to the contributors and referees to digest the discussion later on. Eventually, they can continue it afterwards via private conversations (e.g., at the conference) and e-mail, and revise their work accordingly. R. Sickles and the session organisers will supervise the post-session process.

The revisions of the contributors after the session should probably be limited to correcting factual errors and minor interventions. We want to avoid at all cost that there is a major retrospective revision and streamlining that eliminates all traces of the context of discovery that we seek. Will be asked to revise and digest criticisms and remarks in their replies.

To raise the stakes for the referees, their contributions are to be published (within length constraints) as part of the open refereeing process. This requires a minimal control on the quality of the refereeing contributions done by the special session organisers. Revisions on the side of the referees are less of a problem, since the whole refereeing process is open.

Also the comments of the audience are part of the refereeing process in the following sense. The debate between contributor and referee, and between contributor, referee and audience can be taped (audio or video) and, with minor editorial and stylistic corrections, be summarized and published along with the corrected and finalized contributions. To raise the stakes for the audience, we will encourage session attendees to write up additional comments (as a kind of unsolicited referee report) and we reserve 2 to 4 such contributions to be published (subject to minimal quality standards and within size constraints). There are at least 3 options here:

Option 1: The audience members can submit their comments in written form and, if acceptable for the Guest Editors, these comments can be published as discussion comments and titled “Reply to Professor XXXXX”, with the commentators names attached. These discussion comments will not be refereed (as the title suggests) with a single blind review, but there will be a quality check by the Guest Editors.

Option 2: The audience members can submit their comments in written form. These comments, along with the discussion at the session, can be offered for the written record as a commentary summarized by the Guest Editors, with suitable acknowledgement to all the contributors. In this case, the Guest Editors serve as a quality check again, but under their own authorship-line.

Option 3: A combination of both is possible: publish some excellent reports and summarize a few others.

We suggest awaiting the final submissions before deciding on an option.

ROLE OF THE PUBLIC IN THE SESSION

Since the public plays an important role, a few practical rules may well need to be imposed:

- 1) Once entered one cannot leave this session in order to minimize disturbance.
- 2) To guarantee an active role of the audience a minimal set of conditions may well be imposed.
 - 2.1. All participants are welcome if they feel they can potentially play an active role in the discussion. This implies that we encourage them to download the material that has been made available on the internet some time before (see above) in order to be prepared.
 - 2.2. Furthermore, a minimum of places should probably be reserved to PhD students and young researchers (since they are among the primary target public). These people will be strongly encouraged to read the available material (this can be done in various ways, e.g., by making the minimum package of information available to the participants of the Young Researchers workshop in their conference bundle).

If deemed useful, more restrictive rules may be imposed at a later stage: prior registration for this special session, etc.

ARCHIVING DATA AND PROGRAMS

Transparency and replication of research products is important given the session’s purpose to reveal the context of discovery and showing researchers “at work”. Presenters are kindly requested to maintain all programs utilised to generate empirical results. These programs could be archived at the end of the project (this requires a brief description of the content of each program), together with the original data and the description of the session set-up for access by third parties.

It is important to distinguish between user written programs (say, in TSP, GAUSS, Matlab, etc), that can be easily stored in the formats proper to these programs, and the utilisation of Windows-driven software for which eventually no session logs are available. In the latter case, we

urge contributors to briefly make a log file (e.g., a simple ASCII text file) themselves with the exact procedures and options selected among the standard procedures in the software.

This way of handling things is in line with certain practices at a small, but increasing number of journals such as *The Economic Journal* and *Journal of Applied Econometrics* among others. This more general policy question is currently also under study at the *JPA*. This project will adhere to this principle via *JPA* or by other means (maintaining a separate website).

PROJECT TIMING (PRELIMINARY)

Just to fix a few ideas, below we set out a potential time schedule:

Preparation of the project: data & policy questions	December 2004
Availability of the basic project to the contributors	January 2005
Availability of the basic project on the WEPA website	April 2005
Availability of the preliminary contributions on the WEPA website	End May 2005
Finalisation of the contributions, refereeing reports and the public debate	December 2005

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