PRACTICAL GE MODELLING COURSE BEIJING 4-8JULY 2016

Conducted by Centre of Policy Studies (CoPS), Victoria University And hosted by School of International Trade and Economics, University of International Business and Economics (UIBE)

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Summary

The Centre of Policy Studies and Impact Project at Victoria University, Melbourne, Australia will offer an intensive five-day course introducing participants to computable general equilibrium modelling and to the GEMPACK software used to solve equilibrium models. The course will be hosted by the School of International Trade and Economics, University ofInternational Business and Economics (UIBE) during 4-8 July 2016. The course will be lectured in English with tutoring available in Chinese during computer sessions.

The course focuses on a typical single-region applied general equilibrium model of China: the ORANIG China model with 2002 input-output database. The model is a variant of the ORANI-G model of theAustralian economy (http://www.copsmodels.com/oranig.htm). Variants of the ORANI model of the Australian economy have been used extensively for policy analysis in Australia for more than two decades. ORANI-G (a generic version of ORANI) has been used as the basis of many single-country modelsincluding models of Thailand, China, Brazil, South Africa, Pakistan, the Philippines, Denmark and etc. GEMPACK software is used by research workers in over 300 different locations in about 70 countries around the world.

Rationale for the Practical GE Modelling Course

The course should appeal to

• Those needing background in order to work with, or understand results from, a typical CGE modellike ORANIG-China;

• Those wishing to use the theory of ORANI-G with GEMPACK as the basis for a model of a country other than China;

• Those wishing to get sufficient background in order to learn about multi-regional, multi-country, dynamic and/or forecasting models. Examples of such models are the Monash-Multi-Country model, CHINAGEM and Sino-TERM models of China, MONASH or MMRF models of Australia or the USAGE model of USA. This course also provides the background assumed for more advanced multi-regional or dynamic model courses run by CoPS each year.

Course Outline

The course aims to introduce participants to the ideas and techniques of CGE modelling, and to equip themto start using, adapting or constructing CGE models for their own simulations. By the end of the course, participants will have acquired thorough knowledge of:

- The theory underlying CGE models;
- The basic structure of a typical CGE model;
- The representation of applied GE models in the notation used in GEMPACK;
- The data requirements of a typical single-country CGE model;
- Checking that the equations and data of a model are implemented correctly on the computer;
- Formulating exogenous scenarios;
- Computing simulations for policy analysis;
- Interpreting and reporting results.

July 2016 Course Program at School of International Trade and Economics, University of International Business and Economics (UIBE)

The course program will consist of lectures integrated with extensive hands-on experience with modelling in GEMPACK. Participants in this course will need to bring their own notebook computer (for notebook requirements, seehttp://www.copsmodels.com/laptops.htm). The course is designed as an intensive live-in program, with fairly long work hours. The course material and program are as follows.

Monday 4July 2016: commence 9am The basic structure of a CGE model Introduction to the ORANIG-China model Overview of GEMPACK software Computing: First simulation – an overall picture; looking at the data for ORANIG-China Finish 5.30pm

Tuesday 5July 2016: commence 9am

The theoretical structure of ORANIG-China: producer, export/local mix; capital creation Computing: interrogating the data; closure and homogeneity; tariff cut with ORANI-China Finish 5.30pm

Wednesday 6 July2016: commence 9am

Theoretical structure of ORANIG-China: household demand, other final demands, market clearing Computing: Analysing how equations and data affect simulation results; wage simulation with ORANIG-China Finish 5.30pm

Thursday 7 July 2016: commence 9am

Analysing the wage simulation Theoretical structure of ORANIG-China: purchasers prices and macros; investment and labour market; explaining results, closure Computing: adding new data, variables, and equations; using subtotals Finish 5.30pm

Friday 8 July 2016: commence 9am Group simulations with ORANIG-China: simulation, analysis of results, report preparation Group presentation of reports on ORANIG-China Finish 5.30pm

Documentation and Software

Course participants receive a folder, containing

- Course notes and printed lecture slide shows;
- Exercises to be completed in classes and labs;
- Documentation of the ORANIG-China model and data;
- Instructions for installing and using GEMPACK.
- A book of "ORANI: a multisectoral model of the Australian Economy" written by Peter Dixon, B.
- R. Parmenter, John Sutton and D. P. Vincent.

At the end of the course participants receive one or more CDs, containing

• An Executable-Image version of the latest GEMPACK software which will allow them to runORANI-G simulations on any modern Windows PC, and to construct and run their own models of comparable size;

- PDF files containing the complete GEMPACK documentation;
- An individual GEMPACK licence for the above software;
- All computer files needed to run a standard 35-sector version of the ORANIG-China model;

• A CD image of the entire CoPS website, containing many example models, working papers, andutility programs.

Assumed Background

Previous hands-on experience in solving GE models is not required. We expect that course participants have:

- A bachelor or master degree in Economics, or equivalent work experience;
- Experience of using a PC or notebook running Windows;
- A desire to learn about CGE modelling.

Preparing for the course

Participants should study some material prior to the course. Download and work through the MINIMAL course material (http://www.monash.edu.au/policy/minimal.htm). The MINIMAL model and course are simplified versions of the ORANI-G model and course -- and use similar notation and software. To go further, you could:

• Download and read the ORANI-G document, which you can find at the top of ORANI-G page (http://www.copsmodels.com/oranig.htm);

• Download and experiment with the free Demonstration Version of GEMPACK (<u>http://www.copsmodels.com/gpdemo.htm</u>).

Course Fees Beijing 2016

AU\$2500

The fee covers course materials (including software), morning and afternoon teas, lunch, one course dinner. It does not cover accommodation, or other meals.

Venue and Accommodation

Course Venue:

School of International Trade and Economics, Building No.10, University of International Business and Economics (UIBE), Huixin Eastern Street, Chaoyang District, Beijing, 100029

Accommodation

For information regarding accommodation near the course venue contact:

JunYang

Professor, School of International Trade and Economics, University of International Business and Economics (UIBE) Eastern Street, Chaoyang District, Beijing, 100029 Tel: +86 18513399037 Email: yangguohua0809@163.com



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Conducted by Centre of Policy Studies, Victoria University

COURSE REGISTRATION

Attention: Xiujian Peng (Xiujian.Peng@vu.edu.au) Please copy email to: Louise Pinchen (Louise.Pinchen@vu.edu.au) Jun Yang (yjydy.ccap@igsnrr.ac.cn) Centre of Policy Studies, Victoria University, 300 Flinders St PO Box 14428 Melbourne, Victoria 8001, Australia Fax: (from overseas) +61 3 9919 1108 (within Australia) 03 9919 1108

Please note Registration and payment deadline are 30 June 2016. Course fee payment after 30June 2016 will incur AU\$200 late fee.

PLEASE PRINT CLEARLY

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Course fee	AUD				
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□ Pay via electronic funds transfer to VU's China bank at Shanghai (AUD or RMB)					

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Name: Bank Name: BSB: Account Number: SWIFT Code: IBAN: Address:	Victoria University National Australia Bank 083-004 62-191-9124 NATAAU3303M 330 Collins Street, Melbourne, Victoria, Australia 3000
IBAN:	083004621919124
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Victoria University's China Bank Details

For Training Course Registration

Name: Bank Name: Account Number: Account Type: SWIFT Code: RMB Local Clearing No.: RMB CNAPS No.:

Victoria University ANZ NRA28945400001CNY NRA RMB Basic Account ANZBCNSH 404294 761290013606

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