

Dynamic TERM Regional CGE Course

offered by

Centre of Policy Studies, Monash University

in cooperation with

Polish Academy of Sciences, IRWiR

2-7 September
2013 in Warsaw
(Poland)



THIS ONE-WEEK INTENSIVE COURSE...

will introduce participants to Dynamic TERM- a multiregional multiperiod CGE model of a single country- and provide them both with software used to solve equilibrium models and with extensive hands-on experience with modelling in GEMPACK and RunDynam.

TERM (The Enormous Regional Model) is a multiregional CGE model of a single country, which is "bottom-up" —it treats each region as a separate economy. Two key features of TERM are: (a) its ability to solve quickly with a large number of regions or sectors, and (b) its database construction methodology, which allows a multiregional database to be constructed quickly, even with quite limited regional data.

The first, Australian, version of TERM distinguished 144 sectors and 57 regions. More recently, its master database has been extended to represent 172 sectors in 206 statistical sub-divisions (SSDs): so that urban areas, water catchment areas and tourism regions may all be

distinguished accurately. The high degree of regional detail makes TERM a useful tool for examining the regional impacts of shocks (especially supply-side shocks) that may be region-specific. Dynamic TERM adds the capacity to trace interactions through time.

Versions of TERM have been prepared for Brazil, Finland, China, Indonesia, South Africa, Poland, Japan and USA.

The course material is mainly based on a recursive dynamic version of TERM using Indonesian data.

Read more about the TERM model at:

<http://www.monash.edu.au/policy/term.htm>



All sessions will take place in the Staszic Palace, the main building of the Polish Academy of Sciences, located in the centre of the city.

Staszic Palace, Nowy Świat 72 St.

TIME AND PLACE

The Staszic Palace

All sessions will take place between 2-7 September, 2013 in the Staszic Palace, the main building of the Polish Academy of Sciences. Located in the heart of Warsaw, the Staszic Palace is only 5 minutes walk from the historic Old Town, 3 minutes walk from the University of Warsaw, and 8 minutes walk from the metro station. There are many hotels, restaurants, museums, cinemas and more within easy walking distance.

Why visit Warsaw?

Like any European capital, Warsaw has many iconic tourist attractions. If you are visiting Warsaw for the first time, you will be surprised how much the city has to offer and how many places there are to see and things to do. This is a city with a wealth of history, the birthplace of Chopin, a city with fantastic palaces, the enchanting royal gardens of Łazienki Park and the famous Old Town, rebuilt from scratch after its destruction during World War II, now a thriving center of cultural significance. At the heart of many of Warsaw's tourist attractions is the "Royal Route", which runs north-south between the New and Old Towns, past the fashionable shops of Nowy Świat, the palaces that survived the war and the Łazienki Park, before reaching Wilanów Palace to the south of the city centre. The city boasts many green spaces, with leafy parks hosting free classical concerts and open air festivals attracting large crowds. The city enjoys a diverse and vibrant nightlife scene, with the city's clued-up and well dressed youth flocking to the countless bars and clubs of a city that buzzes after dark.

How to get to Warsaw?

By air. Warsaw Fryderyk Chopin Airport serves both regular and budget airlines and is about 10 km from the city centre.

Booking well in advance one can buy inexpensive tickets from many destinations in Europe, North America, Asia or Australia. The majority of international airline representatives have their offices at the international airport in Warsaw. You can easily reach the city centre from the airport by fast rail link (app. 25 minutes) http://www.lotnisko-chopina.pl/en/passenger/access-and-car-parks/train/train?cl=en&set_language=en ; bus number 175 (all week from 05:05 to 23:25) or N32 (all week from 23:15 to 04:49) or by taking a taxi. The cost of a single bus and fast rail link ticket is approx. 1 -2 EUR. The cost of a taxi from the airport to the Staszic Palace is about 10 -15 EUR.

By train. Warsaw has three large railway stations for international and intercity connections: Western Warsaw Station (Zachodnia), Central Warsaw Station (Centralna), Eastern Warsaw Station (Wschodnia). The best place to get on and off trains is the Central Station, located in the heart of the city centre (54 Jerozolimskie Av.).

Information for tourists visiting Warsaw can be found at the official Warsaw website:

<http://www.um.warszawa.pl/en>

Pictures of Warsaw:

<http://www.facesofwarsaw.com>

The course should appeal to those needing background in CGE modelling in order to work with, or understand results from a typical multi-regional CGE model, and to those wishing to learn CGE modelling using GEMPACK.



Outside of course hours, there will be many activities scheduled for participants, taking advantage of Warsaw's rich offerings of museums, theatres, exhibitions and restaurants.

Further information, including the course program, may be found at the course web page: <http://www.monash.edu.au/policy/termcourse.htm>



COURSE PROGRAM

All sessions will take place in the main building of the Polish Academy of Sciences, Palace of Staszic, Warsaw, Poland, 72 Nowy Swiat Street.

The course will consist of lectures integrated with extensive hands-on experience of modelling in GEMPACK and RunDynam. It is intensive, with fairly long work hours—it runs from Monday to Friday 9am to 6.30pm, plus on Saturday from 9am to 1.15pm. During the first 3.5 days, about equal time is spent on lectures, explaining CGE theory as applied to TERM, and on lab sessions designed to teach how to compute and explain simulation results. Then, participants form into groups, each focused on running different simulations. On the final (Saturday) morning, the groups present and explain their simulation results. You can download the course program from the course web page at:

<http://www.monash.edu.au/policy/dtermcourse.htm>.

ORGANIZERS

The Centre of Policy Studies (CoPS), part of Monash University's Faculty of Business and Economics, is a world leader in the development and application of computable general equilibrium (CGE) modeling. CoPS undertakes academic/contract research and software development, offers graduate student supervision, and conducts training courses in CGE modeling. Openness, including transparent documentation of its models and provision of training, has long been part of the CoPS philosophy. In 1978, CoPS provided the world's first training course in CGE modelling. These courses continue to the present. Since 2000, over 1000 participants have attended over 50 CoPS' training courses held in Australia, Brazil, China, Germany, Indonesia, Italy, Malaysia, Poland, the Philippines, South Africa, the U.S. and Vietnam. To promote transparent communication of model outputs, a particular emphasis in CoPS' courses is training in the clear interpretation of simulation results. CoPS modelling techniques have been applied worldwide, with researchers at CoPS completing projects in South Africa, Brazil, Taiwan, Thailand, China, Vietnam and many other countries. Perhaps the most prominent international implementation of a CoPS model is USAGE, a 500 sector dynamic computable general equilibrium model of the US economy, developed by CoPS researchers in collaboration with the US International Trade Commission. The single-country generic model, ORANI-G, has been created as a pattern on which to base models of other countries. CoPS' CGE modelling software, GEMPACK, is used in over 400 locations in around 70 countries.

The Institute of Rural and Agricultural Development is situated in the Social Sciences Department of the Polish Academy of Sciences. The Institute is a leading research center dealing with research on rural issues and agriculture and an unchallenged precursor of the theoretical studies on the multi-functional development of rural areas. Gathering specialists representing many different disciplines: economics, sociology, demography, ethnology, education, and spatial geography, the Institute provides an inter-disciplinary approach to rural and agricultural policy research. Researchers from the Institute collaborate with the Centre of Policy Studies, Monash University, and have developed a TERM-based regional CGE model of Poland implemented with the GEMPACK software.

LECTURERS



Mark Horridge

Professor Horridge is Director (GEMPACK software) at the Centre of Policy Studies, Monash University. During the last 25 years, he has played a key role in many CGE modelling projects including the creation of several multi-regional CGE models of Australia, such as the TERM model. He has helped to create large general equilibrium models of Brazil, Vietnam, Thailand, Indonesia, South Africa, Taiwan, P.R. China and several other foreign countries. These overseas projects are usually associated with training, at Monash or overseas—he has organized or taught in around 80 training courses. A long-time associate of the Global Trade Analysis Project, he is now one of 3 "members-at-large" of the GTAP Advisory Board. Recently he has specialized in writing software used by GE modellers world-wide, and in devising procedures to efficiently construct CGE databases.



Louise Roos

Louise Roos obtained Bachelors and Masters degrees from the University of Pretoria, South Africa, before graduating PhD from Monash in Economics. She is a Research Fellow at the Centre of Policy Studies, Faculty of Business and Economics Monash University. She is also the Resident Tutor and assistant dean at Mannix College, Melbourne, Australia. Prior to her current position, Louisa Roos was a lecturer at the Department of Economics, University of Pretoria, having previously worked as a tutor at the same Department. Her research interest is in labour market and health modelling. She has a strong background in lecturing Quantitative Economic Policy (ETC4430) and from 2006 has participated

in selected lecturing and tutoring responsibilities in one week intensive computable general equilibrium modelling courses organized by the Centre of Policy Studies, Monash University.



Janine Dixon

Janine Dixon is a Senior Research Fellow (Associate Professor level) at the Centre of Policy Studies, Monash University. Her professional areas of interests are in theory and application of large scale computable general equilibrium (CGE) models and labour market forecasting using CGE models, with over ten year's experience in applying such models to forecasting and policy analysis. She has developed and delivered various commercial consulting contracts for private and public sector agencies and is experienced CGE intensive modelling courses lecturer.

More information about all three lecturers is available from:

<http://www.monash.edu.au/policy/staff.htm>

DOCUMENTATION & 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 TERM model and data;
- instructions for installing and using GEMPACK and RunDynam.

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

- an Unlimited Executable-Image version of the latest GEMPACK and RunDynam software which will allow them to run TERM simulations, and to construct and run their own models;
- HTM and PDF files containing the complete GEMPACK documentation;
- licenses for GEMPACK and RunDynam (which last for 2 years);
- all computer files needed to run a standard version of the TERM model ;
- a DVD image of the entire CoPS website, containing many example models, working papers, and utility programs.

PREPARING FOR THE COURSE

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 running Windows;
- a burning desire to learn how to do CGE modelling

Preparation

You should study some material prior to the course. Download and work through the MINIMAL course material at <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 from <http://www.monash.edu.au/policy/oranig.htm>

Download and experiment with the free Demonstration Version of GEMPACK from: <http://www.monash.edu.au/policy/gpdemo.htm>

Laptop

Participants bring and use their own laptops. Software must be installed before travelling to the course. Most Windows laptops will be adequate. Special requirements are:

- the laptop must run Windows XP or later Windows operating system;
- the laptop must have at least 1GB of RAM, and be able to read CDs;
- the laptop must have a separate mouse (even if it has a touchpad or other pointing device);
- "Administrator" or "Power User" access may be needed during the install process (this might be an issue if your laptop belongs to, or was configured by, your organization's IT section).
- the laptop must be able to "open a DOS box" [Start...Run..."cmd"]. Occasionally system administrators configure PCs to prevent this.

If you are outside from Europe, please check if you have an adaptor to plug your laptop into an European standard local power socket (2 round pins, 230 volts, 50Hz).

To do the course exercises, you'll need to pre-install GEMPACK on your laptop. Please follow the instructions at:

<http://www.monash.edu.au/policy/gplapsoft.htm>.

Then download and install RunDynam from:

<http://www.monash.edu.au/policy/gprddl.htm>.

In each case the installation procedure will create for you a temporary, size-limited licence. Longer-lasting licence files, without size limitations will be distributed at the course.

COURSE FEES

Course fees cover: course materials (including software), lunches, morning and afternoon teas. They do not cover accommodation, transportation, breakfast or evening meals.

Course fee: **2300 EUR** shall be transferred to the Institute of Rural and Agricultural Development **before August, 15th, 2013** as follows:

BENEFICIARY NAME AND BANK ACCOUNT NUMBER:

Beneficiary Name: Instytut Rozwoju Wsi i Rolnictwa PAN
Beneficiary Address: Nowy Świat 72 , Warsaw 00 330
Poland
Bank Account Name: Kurs modelowania ekonomicznego CGE
Bank: **Bank BPH S.A.**
Bank Branch: Al. Pokoju 1
31 584 Kraków, Poland

Bank Account Number: **75106000760000321000223779**

SWIFT Code/ Bank Transit No: **BPHKPLPK**

IBAN Number: **PL75106000760000321000223779**



WHEN THE MONEY HAS BEEN TRANSFERRED PLEASE SEND THE REMITTANCE ADVICE (E-MAIL or FAX) TO:

Name: Institute of Rural and Agricultural Development
Address: Nowy Świat 72, 00 330 Warsaw, Poland
Fax: (+48 22) 22 657-27-72
Phone: (+48 22) 22 657-27-50
Email: katarzyna.drozdziel@irwirpan.waw.pl

PLEASE NOTE YOUR REGISTRATION WILL NOT BE FINALIZED UNTIL THE MONEY HAS BEEN RECEIVED AND IDENTIFIED.

In case of any questions or problems related to the fee payment, please contact:

Katarzyna Drozdziel, Project Officer,
katarzyna.drozdziel@irwirpan.waw.pl,
IRWiR Polish Academy of Sciences,
Nowy Swiat Str. 72,
00-330 Warsaw, Poland,
Tel.: +48 22 657-27-72
Fax: +48 22 657-27-50

ACCOMODATION

The Palace of Staszic, main building of the Polish Academy of Sciences, where the course will take place is located in the city center. It is only 5 minutes walk from the Old Town, 3 minutes walk from Warsaw University, and 8 minutes walk from the metro station. There are many accommodation options catering to all budgets within a short walk of the palace. Hotel bookings can be made directly with the hotels/residences or through popular online systems (i.e. www.booking.com) that offer discount prices for all types of hotels worldwide.

Should you need more information about accommodation, our staff can provide advice as to the most suitable options.

VISA & CONSULAR INFORMATION

It is the responsibility of visitors to the Polish Academy of Sciences to inform themselves of Polish visa requirements and make suitable arrangements.

For information concerning entry requirements and residence in Poland, please contact a local Polish embassy or consulate in your country. Check here for information about entering Poland: http://www.msz.gov.pl/en/travel_to_poland/entering_poland/entering_poland



There are a lot of accommodation options near the course venue

FOR MORE DETAILS

OR TO REGISTER, **PLEASE** CONTACT:

Katarzyna Droździel

Project Officer

katarzyna.drozdziel@irwirpan.waw.pl

Prof. Katarzyna Zawalińska

Deputy Director

kzawalinska@irwirpan.waw.pl

IRWiR Polish Academy of Sciences

Nowy Świat Str. 72

00 330 Warsaw, Poland

Tel.: +48 22 657 27 72

<http://www.irwirpan.waw.pl>