

The GTAP Advisory Board Meeting, June 2001

CPB Netherlands Bureau for Economic Policy Analysis

GTAP activities of the CPB

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In this note we describe our main activities and research projects in 2000 and the first months of 2001. The main tool for our analyses is the Applied General Equilibrium model WorldScan (CPB, 1999). We attach a list of recent papers based on GTAP data, which are published or presented.

Climate Change

The assessment of climate change policies constitute a growing part of our activities. We work intensively together with RIVM (National Institute of Public Health and Environment). Our work covers the whole range from short and medium term analysis to long-term issues. The Climate Conference last year in The Hague (COP6) and the recent development around the Kyoto Protocol determine to a large extent our agenda. We carried out analyses on restrictions on emissions permit trading (=restoration rates) and the consequences of opting-out by the USA. We also investigated what 'penalty' is needed to induce parties to early action. Regarding long-term stabilisation of the concentration of greenhouse gases, we contributed to the research co-ordinated by the Intergovernmental Panel on Climate Change (IPCC). Together with RIVM we developed one of the new emission scenarios (Nakicenovic 2000). We also contributed to the Third Assessment Report of IPCC, Working group III. We developed and analysed a number of stabilisation scenarios. We participate in the Stanford based Energy Modelling Forum. Current issues are spill-over effects from climate change policy on technological change.

EU-enlargement

We explore the economic consequences of the enlargement of the European Union (EU) with ten countries from Central and Eastern Europe (CEE). In contrast to most earlier analyses, we do not focus on formal trade barriers. The reason is that, by the end of 2002 these barriers will be removed entirely in accordance with the Europe agreements -- at least for industry products. Our paper therefore focuses on further steps in the integration process which primarily involve the accession to the internal market and the equalisation of external tariffs. The method we use is new: we combine industry level gravity equations with Worldscan. (Lejour and Nahuis, forthcoming).

China's Accession to the WTO

In the last two years, in co-operation with the Chinese Academy of Social Sciences (CASS), we have examined the effects of China's accession to the WTO on its sectoral structure and on the main trading partners (Lejour, 2000 and Li, 2000). In this period the focus has changed from trade in commodities to trade in services. Last October, CPB and the Institute of Quantitative and Technical Economics of the CASS organised a two-day workshop on China's accession to the WTO. The aim of the workshop was to get an overview of recent analyses of China's accession to the WTO, in particular from a Chinese perspective (<http://www.cpb.nl/eng/general/org/afdelingen/iea/wto/>)

This research was also presented at the international conference “Greater China and the WTO” in March of this year in Hong Kong.

Technology Transfers

We apply earlier work on the relation between research and development and growth (Lejour and Nahuis, 2000) on climate change policies. Furthermore, a project was started to compare energy-intensities between regions and sectors. This should give insight in the driving forces behind (energy-specific) technological change.

Model Development

A more flexible version of the WorldScan model was developed to facilitate changes in the sectoral and regional disaggregation of the model. Also, we developed a model version with a simplified expectational structure. A research project was started to model consumption in a theoretical more satisfying way. In the current version consumption patterns in the USA are taken as given and the distribution of consumption over sectors and regions is modelled rather ad-hoc.

Publications

A.M. Lejour (2001), “China and the WTO: the impact of China’s Accession on the world economy”, Paper presented at the international conference: Greater China and the WTO, Hong Kong, March 2001, *forthcoming in book volume*

A.M. Lejour, R.A. de Mooij and R. Nahuis, EU enlargement: Economic implications for countries and industries, *forthcoming*

A.M. Lejour, and P. Tang (2000), “The differential impact of the South on wage inequality on the North”. CPB Research Memoranda 167.
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A.M. Lejour, and R. Nahuis (2000), “Openness, Growth and R&D spillovers: Uncovering the missing link? CPB Research Memoranda 168.
<http://www.cpb.nl/eng/pub/onderzoek/168/>

Nahuis, R., 2001, One size fits all? Accession to the internal market, an industry level assessment of EU enlargement, *forthcoming*

Nakicenovic, N. et al, 2000, IPCC Special Report on Emissions Scenarios, Cambridge University Press.

IPCC, 2001, Third Assessment Report, Working Group III, Cambridge University Press.

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Bollen, J.C., A. Manders and H. Timmer (2000), The Benefits and Costs of Waiting – Early Action versus Delayed Response, *Environmental Economics and Policy Studies*, Springer.

Bollen, J.C., A Manders and P.J.G. Tang (2001), Winners and Losers of Kyoto, CPB Netherlands Bureau for Economic Policy Analysis and RIVM National Institute for Public Health and the Environment
http://www.rivm.nl/ieweb/ieweb/Reports/cpb_rivmstudy.pdf

Manders, A.J.G. and P.J.G. Tang (2001), Obstacles in the climate policy arena, *CPB Report 2001/3 forthcoming*

Leeuwen, N. van (2001), “Protection Data for China” Paper presented at the international conference: Greater China and the WTO, Hong Kong, March 2001, *forthcoming in book volume*