INSTITUTE OF FOOD AND RESOURCE ECONOMICS UNIVERSITY OF COPENHAGEN



GTAP related work at FOI, 2006/07

FOI mergers

The **Institute of Food and Resource Economics (FOI)** under went a merger with the Royal Veterinary and Agricultural University in Copenhagen a couple of years ago and has now become part of a new merger with the University of Copenhagen which took effect from the 1st of January 2007. As a consequence, the Royal Veterinary and Agricultural University has become the Faculty of Life Sciences at the University of Copenhagen, under which the **Institute of Food and Resource Economics** is located.

The **Institute of Food and Resource Economics (FOI)** has not changed its address but is now a part of the University of Copenhagen where fore our official title has changed to:

Institute of Food and Resource Economics University of Copenhagen

And our new web address is www.foi.life.ku.dk

GTAP at work within FOI

ENARPRI

FOI has been (in the period 2003 – 2006) a member of the European Network of Agricultural and Rural Policy Research Institutes (ENARPRI) network for the past four years which has been financed by the European Commission under its 5th Research Framework Programme. http://www.enarpri.org/ The central themes of this network was the impact of regional, bilateral, and multilateral trade agreements which the European Union had concluded or was negotiating, including WTO, enlargement, Everything But Arms (EBA), EuroMed, Mercosur; as well as, the multifunctional model of European agriculture and sustainable development of rural areas. Within this group of research institutes FOI has been being working together with FAL, among others, on modelling the EU agricultural policies and trade agreements using the GTAP database. This work within the ENARPRI group was concluded in 2006 with a final dissertation of the groups findings/results at a conference in Brussels in 2006, where FOI present a paper on "Reforming the EU's domestic support in the Doha round: Measurement, feasibility and consequences" which following was published in the ENAPRI book Trade Agreements, Multifunctionality and EU Agriculture, edited by Eleni Kaditi and Johan Swinnen. During the final stages of the ENARPRI group meetings, plans were made to continue the net work among European agricultural and rural research institutes in another form which is still under negotiation.

tralac

FOI has also undertaken some commissioned work for the South African ministry of agriculture in 2006, together with tralac (trade law centre for southern Africa) where the GTAP data base has

been used to highlight the possible effect of a FTA between South Africa and China. Following the successful completion of this task, cooperation between tralac and FOI has continued. This has evolved to further joint work examining the India, Brazil and South African (IBSA) triangular trading relationship and a possible WTO outcome for South African agriculture, both evaluated using the GTAP database. The IBSA paper was present at a GTAP conference in Pakistan March 2007 by Sarfraz Ahmad and the paper is being published in the conference proceedings. It is also planned to submit the paper to a journal in the near future. Work is still in progress between tralac and FOI with new papers not published yet.

Commissioned work

FOI has also undertaken commissioned work for the National Agency of Enterprise and Construction (Erhvers- og Byggestyrelsen) Denmark. This undertaking meant that FOI for a short time focused on Non Agricultural Market Access (NAMA) in the Doha round and its possible effects on Denmark. In undertaking this project FOI used the MacMaps database at the HS6 digit level in order to construct policy shocks to the GTAP version 6 database which was used to evaluate NAMA tariff reductions and its consequences for Denmark. FOI was also commissioned to undertake a GTAP-analysis of three bilateral Free Trade Agreements between the EU and respectively, USA, Russia and China, involving complete reciprocal liberalisation of tariffs and subsidies/taxes. The bilateral scenarios were compared with a multilateral Doha agreement. The study was meant as a policy analysis to provide input to the debate on regionalism vs. multilateralism and was presented at the winter meeting of the International Agricultural Trade Research Consortium (IATRC) in Florida in December.

Incorporation of land supply curves in the standard GTAP model

In collaboration with the Danish Technical University, FOI is working on a modification of the standard GTAP model to allow for flexible (but limited) supply of land. We subdivide land rent from the GTAP database into two types of land, cultivable land, which may be used by both crop and livestock sectors, and pastureland, which is only suitable for livestock production. Subsequently, we construct region-specific land supply curves for both land types, similar to those introduced by van Meijl et. al. (2006), using data supplied by Professor Navin Ramankutty of McGill University, Montreal. To test the modifications, we simulate a shift in demand (towards wheat) in different countries and analyse the consequences for supply of new land. Apart from general methodological development, results are intended for use within the field of Life Cycle Analysis.

Data work

FOI has also contributed to the GTAP version 7 database with domestic support for the European Union in the year 2004. This work involved dis-aggregating the OECD's PSE table for the EU25 by member country and GTAP commodity. This work was done utilizing the commission's financial reports on the European agricultural guidance and guarantee section together with information provided by Catherine Moreddu at the OECD.

GTAP related publications/presentations by FOI

Commissioned papers

Baltzer K. S. Frandsen and H.G. Jensen (2007), European Free Trade Areas as an alternative to the Doha – Impact of US, Russian and Chinese FTAs. A paper commissioned by the National Agency of Enterprise and Construction (Erhvers- og Byggestyrelsen) Denmark.

Jensen, H.G., K. Baltzer and R. Babula (2006), The Impact of Multilateral NAMA Tariff Reductions. A paper commissioned by the National Agency of Enterprise and Construction (Erhvers- og Byggestyrelsen) Denmark.

Jensen, H.G. and R. Sandrey, (2006), A Possible SACU/China Free Trade Agreement (FTA): Implications for Agriculture. A paper commissioned by the Ministry of Agriculture, South Africa.

Book Chapters

Jensen H.G. and W. Yu (2006). Reforming the EU's domestic support in the Doha round: Measurement, feasibility and consequences. Chapter 3 in Trade Agreements, Multifunctionality and EU Agriculture. Edited by Eleni Kaditi and Johan Swinnen, CEPS Paperback Book, 2006

Working papers

Jensen H. G. K. Baltzer, R. Babula and S. Frandsen (2007), The Economy_Wide impact of multilateral NAMA Tariff Reductions: A Global and Danish Perspective. FØI W. P. forth coming.

Baltzer K. S. Frandsen and H.G. Jensen (2007), European Free Trade Areas as an alternative to the Doha – Impact of US, Russian and Chinese FTAs. FØI W.P. no. 2/2007

Sandrey R. and H G Jensen (2007), South African agriculture: a possible WTO outcome and FTA policy space – a modelling approach. tralac working paper No 5/2007, March 2007 www.tralac.org

Sandrey R. and H G Jensen (2007), Examining the India, Brazil and South African (IBSA) Triangular Trading Relationship. tralac working paper No 1/2007, February 2007 www.tralac.org

Jensen H. G. and R. Sandrey (2006), A possible SACU/China Free Trade Agreement (FTA): Implications for the South African Manufacturing Sector. tralac working paper No 8/2006, July 2006 www.tralac.org

Policy Brief

Baltzer K. and S. E. Frandsen (2007). Free Trade Agreements as an Alternative to Doha. FOI policy brief, January 2007.

Data work

Jensen, H.G. (2007), Domestic Support: European Union 2004. – Dis-aggregating the OECD's PSE table by member country and GTAP commodity. A contribution to the GTAP version 7 database.

Presentations

Frandsen S. (2006) European Free Trade Areas as an alternative to the Doha – Impact of US, Russian and Chinese FTAs. IATRC (Internal Agricultural Trade Research Consortium) winter meeting, Florida USA, December 2006

Jensen H. G. (2006). South African agriculture: a possible WTO outcome. Workshop at tralac (trade law centre for southern Africa) Stellenbosch South Africa, November 2006.

Yu W (2006). Reforming the EU's domestic support in the Doha round: Measurement, feasibility and consequences. ENARPRI (European Network of Agricultural and Rural Policy Research Institutes) conference. Trade Agreements & EU Agriculture, Brussels, June 2006.

For further information contact

Hans G Jensen Division of International Economics and Policy Rolighedsvej 25 1958 Frederiksberg C Denmark

Hans@foi.dk

TEL. + 45 35 28 68 58