

GTAP Related Activities

Below is a short summary on GTAP related research activities by Thünen Institute in 2016/2017.

Staff

Currently six researchers are involved in CGE related activities: Martin Banse, Florian Freund, Janine Pelikan, Andrea Rothe, Viktoriya Sturm and Verena Wolf.

Publications

Banse M, Freund F (2017) Mögliche Auswirkungen eines Brexit auf den deutschen Agrarhandel. Braunschweig: Johann Heinrich von Thünen-Institut, 23 p, Thünen Working Paper 70, [DOI:10.3220/WP1490874455000](https://doi.org/10.3220/WP1490874455000)

Berkum S van, Banse M, Deppermann A, Erjavec E, Djuric I, Philippides G, Wolf V, Haß M, Salamon P, et al (2016) Exploring the potential for agriculture and trade in CIS: Synthesis of findings of the FP7 financed AGRICISTRADe project [online]. 25 p, retrieved from <http://www.agricistrade.eu>

Freund F (2016) Hilft die WTO Entwicklungsländern? Theoretische und empirische Aspekte. Regensburg, Univ, Diss

Freund F, Pelikan J, Salamon P, Offermann F, & Banse M (2017). The UK after the Referendum: Renegotiating Tariffs and Beyond. Purdue University, West Lafayette, IN: Global Trade Analysis Project (GTAP), retrieved from https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=5256

Sturm V (2016) Klimaschutzpolitik der EU: Analyse und Bewertung von Politikinstrumenten zur Minderung von agrarrelevanten THG-Emissionen - Modellierung mit dem GTAP-Modell. Göttingen: Cuvillier, 326 p, Gießen, Univ, Diss

Thraen D, Schaldach R, Millinger M, Wolf V, Arendt O, Poinitka J, Gärtner S, Rettenmaier N, Hennenberg KJ, Schüngel J (2016) The MILESTONES modeling framework: An integrated analysis of national bioenergy strategies and their global environmental impacts. *Environ Modelling Software* 86:14-29, DOI:10.1016/j.envsoft.2016.09.005

Thrän, D., Arendt, O., Banse, M., Braun, J., Fritsche, U., Gärtner, S., Hennenberg, K. J., Hünneke, K., Millinger, M., Ponitka, J., Rettenmaier, N., Schaldach, R., Schüngel, J., Wern, B. and Wolf, V. (2017), Strategy Elements for a Sustainable Bioenergy Policy Based on Scenarios and Systems Modeling: Germany as Example. *Chem. Eng. Technol.*, 40: 211–226. doi:10.1002/ceat.201600259

Wolf V, Banse M (2017) Ukrainian oilseed and grain markets till 2030. Paper prepared for presentation at the IAMO Forum 2017, Halle (Saale), Germany, 21 -23 June 2017.

Wolf V, Deppermann A, Tabeau A, Banse M, Berkum S van, Haß M, Havlik P, Philippides G, Salamon P, Verma M (2016) Linking three market models to project Russian and Ukrainian wheat markets till 2030 : Paper prepared for presentation at the 155th EAAE Seminar 'European Agriculture towards 2030 Perspectives for further East-West Integration, Kiev, Ukraine, September 19-21, 2016. EAAE, 24 p.

Projects

1. BMEL (Federal Ministry of Food and Agriculture) project to analyze the effects of already decided regional trade agreements on the German and European agricultural sector.
2. BMEL (Federal Ministry of Food and Agriculture) project to analyze the effects of CETA on the German and European agricultural sector.
3. BMEL (Federal Ministry of Food and Agriculture) project to analyze the effects of trade agreements currently under negotiation on the German and European agricultural sector. Here, tariff rate quotas as well as effects on German farm incomes are analyzed. We combine our CGE model results with AGMEMOD an econometric, dynamic, multi-product partial equilibrium model, a farm level model (FARMIS) and TIPI-CAL, a simulation model used in agri benchmark to produce results for typical farms (<http://www.agribenchmark.org>).
4. BLE (Federal Office for Food and Agriculture) funded Ph.D. project: Analyzing consumer demand for imported chicken meat in Sub-Sahara Africa.
5. MACSUR („Modeling European Agriculture with Climate Change for Food Security“). The project is a JPI (Joint Programming Initiative) by the EU but is funded at the national level. It consists of more than 60 working groups from 14 European countries with the Thünen Institute being its main coordinator. www.macsur.eu.
6. Ph.D. project: The project focuses on the development of a detailed single country CGE model for Germany based on the STAGE model. One of the main challenges is the development and disaggregation of a Social Accounting Matrix (SAM) for Germany.

The distinctive features of the model derive from the focus of the analyses being on the impact of agricultural and energy policies on all parts of the economy: in particular the agricultural, food and energy sectors will be modeled at a more disaggregated level than in the standard national accounts database.

7. AGRICISTRIDE (Agriculture and trade development in EU's Eastern Neighbors) is a FP7 project that ended in December 2016. Within the project MAGNET was linked to a partial equilibrium model and trade analysis between the EU and its Eastern Neighbors were carried out. This work has been done in cooperation with the Wageningen Economic Research (WEcR) in the Netherlands which were responsible for the MAGNET part.
8. The project "Interactions between Agricultural, Wood and Energy Markets" is a joint project of several Thünen Institutes. Within the project MAGNET is linked to other economic models of the agricultural and forestry sector to represent the linkages between markets for agricultural and forestry products as well as for energy markets.
9. BEPASO ("Bio Economy 2050: Potentials, trade-offs, solution strategies") is a joint research project of two Thünen Institutes and 4 external partners funded by Federal Ministry of Education and Research (BMBF). The project aims at developing several scenarios of the change to a bio-based economy in 2050 and at presenting acceptable transition paths. To carry out the analysis MAGNET will be coupled with three other models. Duration of the project is Jan. 2017 –Nov. 2019.

Other Activities

Cooperation with Wageningen Economic Research and DG JRC-Seville to further develop MAGNET (GTAP based model with extensions added in a modular structure).