Applied General Equilibrium Models

Semester: January – May, 2015

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Course objective:
Applied General Equilibrium (AGE) models are widely used for analysing economy-wide effects of various policies, such as, tax reforms, trade liberalisation, distribution policies, energy and environmental issues, etc. These models are useful for analysing issues where inter-sectoral and inter-agent linkages are crucial. This course is intended as an introduction to AGE models. Emphasis would be on the actual building of prototype models with applications in the areas of students’ interest.

Grading:
Term paper based on computer application (50%) + Final written exam (50%)

Course content:
- **Introduction**: General introduction to AGE models, its features & uses; A simple 2 x 2 x 2 AGE model by Shovan & Whalley; Introduction to GAMS software and demonstration of the Shovan & Whalley model;
- **Database for AGE models**: Input-Output tables; Social Accounting Matrix (SAM);
- **Formulation of an AGE model and Solution methods**: Input-Output models; Walras-Cassel model; Linear programming approach; CGE format; Excess-demand format;
- **Implementation issues**: Closure rules; Welfare comparisons of policy alternatives;
- **Some existing applications**: Armington assumption and trade focused models; trade liberalization applications; agricultural trade; price policies; distributional analysis; environmental applications;
- **Global modelling**: Data base issues; modelling issues;
- **Term paper using prototype model**: Prototype model – structure and GAMS code;

References

A) Essential readings


**B) Advanced readings**


**C) GAMS**


**D) Applications**


