



'One day in the winter of 1881-2 Alfred Marshall came down from the sunny rooftop of his hotel in Palermo 'highly delighted', for he had just invented elasticity of demand.

Keynes, 1925

Introduction

One recurring issue in CGE modeling is the choice of elasticity values. Which value should one use? How sensitive are the results to changes in the values of the elasticities? If one does a sensitivity analysis what upper and lower bounds for the elasticities should one use? Often the elasticities are taken from other CGE models, sometimes from econometric studies or, if there are no reliable estimates, one simply uses a “guesstimate”. Although there is a vast literature on econometric estimates of elasticities, most CGE modelers lack the time or the econometric and theoretical knowledge to screen this literature. Even gathering estimates used by other CGE modeling experts can be very time consuming.

Goals

The Alfred Marshall Project, the open-source elasticity database, wants to provide the CGE community a user-friendly web-database containing a variety of information on all kind of elasticities used in CGE modeling. The main features of the Alfred Marshall Project are:

- **Variety of information:** The database will not only contain values of individual or sets of elasticities, but also information on the source (author of the paper, paper reference, etc.) and, if available, on the distribution, estimation methods and related studies (empirical and theoretical).
- **All kind of elasticities:** The Alfred Marshall Project will contain information not only on the typical CGE elasticities like substitution and transformation elasticities, but also on, for example, price elasticities that can be used to calibrate the CGE model.
- **Open-source:** The Alfred Marshall Project will be open for everybody who either is looking for information on elasticities, or wants to provide information.
- **User-friendly:** Users can either search the database or provide data using an interface, export data to text, spreadsheet or other files.

Stages

The development of the Alfred Marshall Project consist of three phases:

1. α -Version: Gathering data, solving of aggregational issues, developing an α -Version of the database, testing
2. Web-Version (www.marshallproject.org): Adding web-based functionality, publishing of the Web-Version, announcement to the CGE-community with invitation to collaborate.

3. Improvement of the Web-Version: additional information on elasticities, discussion forum, mailing list, export features.

As soon as the Alfred Marshall Project will be accessible, its success will depend, as is the case with the GTAP-database, on the willingness of the CGE community to provide the database with additional data. In order to give the database a critical mass quickly enough to encourage economists to use it and contribute their own estimates, it would be great, if people could already provide the Alfred Marshall Project with data during the first phase of the project (α -Version).

In a later stage, the restriction of elasticities only for CGE modeling could be relaxed in two ways: In order to get the full support of the econometricians, the restriction of gathering data on elasticities only for CGE-work could be abandoned. Another relaxation would be to add other CGE parameters (like assumptions on interest rates, saving rates, etc.) .

What has already been done

- first draft of homepage (www.marshallproject.org)
- intensive discussion within the working group on aggregational issues, scope of the project, dissemination of the results.
- First draft of the database in Access 2000 (not yet part of the website)

Next steps

- Search for funding: until now everybody of the working group worked as a volunteer. However, as the project will become rather time and resource consuming during the next stage, funding will be necessary (hints on possible donors are welcome).
- Gathering of data, building the α -Version and putting it on the web.
- Dissemination of the project to the CGE community and invitation to collaborate.

Working group

The Alfred Marshall Project-working group consists of four persons: Melanie Bacou from GTAP and Renger van Nieuwkoop from Ecoplan (Switzerland) will develop the database and the website. Advisors are Glenn Harrison from the University of South Carolina and Randy Wigle from the Wilfrid Laurier University, Waterloo.

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