Trade in Services

Presented by
Robert McDougall
Construct initial estimates.

- Use services exports and imports data from IMF Balance of Payments statistics.
- Fill in missing values using time series and cross section comparisons (entropy method).
- Reconcile import and export estimates (simple rescaling).
Bilateralize.

• Initial estimates:
  – Allocate across partners proportionally to total trade.
  – [Path not taken: Take pattern from merchandise trade data.]

• Zero diagonal.

• Rebalance.
Adjust to GTAP categories.

- Remove royalties.
- Set international freight aside for separate treatment.
- Apportion travelers' expenditures across commodities.
- Adjust Hong Kong trade for reexports.
Develop trade margins.

• Take modal shares in U.S. trade margins from Mark Gehlhar.
• Extrapolate heroically to other countries' trade.
• Balance against main services trade data set.
• In some cases, our heroic extrapolations look better than the IMF statistics.
Defects and Difficulties

• IMF BoP statistics:
  – Much improved since GTAP 5 in coverage and internal consistency.
  – Uneven level of detail, e.g., Denmark provides no commodity breakdown within transport.
  – False zeros.
  – Some implausible transport trade profiles.

• No data for apportionment of travelers' expenditures across commodities.
OECD Bilateral Services
Trade Data

• Three commodities
• Limited set of reporter countries
• Partner detail
  – multi-level aggregation
  – not fully disaggregated
  – level of disaggregation varies across partner countries
Problems

- Inconsistency with IMF data
- Inconsistency between export and import reports
- Inconsistent levels of partner detail
- Incomplete country coverage
CPB data set

- Resolves for us most problems in OECD data
- Country coverage less complete than IMF
- Most comparable to our services trade data set before adjustment to GTAP categories
Exploitation

1. Where available, use CPB OECD-based estimates.

2. Bilateralize Purdue IMF-based estimates according to merchandise trade pattern.

3. Use (2) to fill in gaps in (1).

4. Rebalance against IMF totals.
IMF vs OECD

• Default position: Adjust IMF to OECD rather than vice versa.

• IMF has more complete country coverage.

• Review in light of data comparison.