Experiences and Challenges in Measuring National Income and Wealth in Transition Economies

Session 1c: Construction and Use of Input-Output Tables in Transition Economies

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Discussant

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Paper to be discussed

Assessment Study for the RAS Method based on China’s Input-Output Tables

by

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Assessment Study for the RAS Method based on China’s Input-Output Tables
Overview

• Objective, structure and content of the paper
• Conclusions
• Issues
• Ideas for the way forward
**Assessment Study for the RAS Method based on China’s Input-Output Tables**

**Objective, structure and content of the paper**

<table>
<thead>
<tr>
<th>Objective(s)</th>
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<tbody>
<tr>
<td>– Accuracy of rAs method applied to producing I-O Tables for China</td>
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<tr>
<td>– Where and how is the improvement in accuracy achieved?</td>
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<th>How is this achieved?</th>
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<tr>
<td>– Analysis of real accuracy and upper limit accuracy</td>
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<td>– Analysis of degree of freedom and updating error</td>
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<tr>
<td>– Concept and measure indicators</td>
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<td>– Design basis of datasets for both approaches</td>
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<td>– Results analyses</td>
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<td>– Conclusion</td>
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**Content of the paper**

**Background**

- NBS compiles I-O Tables every 5 years
- Published 2-3 years after the reference year of the table
- Need to improve timeliness of the tables
- Use of modelling techniques

**Modified rAs versus standard rAs**

- Modified more reliable than standard

**Time and data frame used**

- 1992 and 1997
- Key role of China Statistical Yearbooks (CSY)
- 17 sectors for ‘real accuracy & upper-limit accuracy’
- 18 sectors for ‘degree of freedom and updating error’
- Linking I-O totals to CSY data
- Recognising differences and deficiencies
## Conclusions

- **Real accuracy and upper limit accuracy**
  - Direct input coefficients for base year improves target year estimation compared to rAs
  - Error in the control values distributed uniformly

- **Degree of freedom and updating error**
  - Reduction of degree of freedom
    - Increase of pre-identified coefficients (with zero error)
    - Decrease overall error
  - Threshold effect of degree of freedom relationship
    - Accuracy of unknown coefficients
    - Number of pre-identified coefficients (at least 50%)

## Issues

### Adjustment coefficients
- Fixed ratio assumption between I-O Table data and CSY data
- Output & GVA estimate based on these ratio’s
- Intermediate consumption is a residual
- HHFce does not reflect changes in consumer behaviour/patterns

Does not reflect standard error and variance of survey/source data

### Use of SNA 93 terminology
- Minor issues, e.g. output, intermediate consumption
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Way forward

Develop:
- More analyses of year-on-year type
- Are the results credible?
- Economic reality test, impact on levels and growth rates
- Standard error and variance of survey/source data

Adjustment coefficients
- Fixed ratio assumption between I-O and CSY to be addressed
- Fixed structures between 1992 and 1997

Development of:
- Annual Supply and Use Tables and I-O Tables
- Both in current prices and previous years’ prices

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Any Questions?

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