

IARIW-NBS International Conference

**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

The Evolution and Issues of I-O Table Compilation
during Economy Transformation in China

by
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The Evolution and Issues of I-O Table Compilation during Economy Transformation in China

Overview

- Objective and structure of the paper
- Content of the paper
- Proposed way forward
- Few personal thoughts to help you along the way!

The Evolution and Issues of I-O Table Compilation during Economy Transformation in China

Objective and structure of the paper

Objective

- History and development of I-O Tables in China

Structure of the paper

- Evolution and implementation
- I-O Survey
- Compilation of I-O Table
- Challenges and the future

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Content of the paper

Evolution and implementation

- Experimentation
 - I-O approach from late 1950s
 - Symmetric I-O Table
 - 1st I-O Table (1973 compiled in 1974)
 - 1981 I-O Table in value and physical terms
 - 1983, update of 1981
- Implementation
 - 1987 I-O Survey (General Office of State Council)
 - Production and non-production
 - 5-yearly survey
- Regular compilation
 - Benchmark Table 5-yearly with mid-year Annual Table
 - Benchmark exercise 1987, 1992, 1997, 2002 (around 120 sectors)
 - Annual Table 1990, 1995, 2000, 2005 (around 40 sectors)

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Content of the paper

I-O Survey

- 2007 is 5th survey
- Links between local statistical office and related ministry
- State controlled activities, e.g. railways and post
- Sample survey
- Statistical unit is the enterprise
- Large enterprises fully covered, rest sampled
- 52 survey forms
- Trade flows between provinces
- Data collected includes intermediate consumption and capital formation
- Links to PPI for manufacturing

Compilation of the I-O Table

- Traditional data population but Supply and Use Tables not produced
- Gross value added based on income approach
- I-O Table at producers' prices
- Allocation exercise done to handle enterprise issues

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Content of the paper

Challenges and the future

- Align with SNA 93
- Enterprise to establishment
- Commodity classification
- Limited volume data
- Incomplete data on service industries
- In 2009, transition table for the year 2008 will use:
 - 2nd China economy census in 2008
 - 2007 I-O Survey
 - 2007 I-O Table
- Develop Supply and Use Table framework

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Proposed way forward

Developing economic statistics for China

- Vision, say for next 5-10 years
- Strategy
- Plan, reflecting resources, priorities and achievability

Review

- Reflect lessons learnt to date
- Aim for best practice
- Utilise statistical offices with developed National Accounts and integrated Supply and Use Tables and I-O Tables

Aim for the development of integrated:

- Annual and quarterly Supply and Use Tables
- I-O Tables
- Both in current prices and previous years' prices
- Within core National Accounts

Few personal thoughts to help you along the way!

Supply and Use Tables and I-O Tables (1)

Business register

- Survey data
 - Supply and Use Tables (core of National Accounts)
 - I-O Tables
 - I-O Applications including satellite accounts

Statistical units

- Enterprise group
 - Enterprise
 - Establishment → Local KAU

Classifications

- Use of internationally recognised classifications (above own national levels)
- Industries – NACE Rev. 1.1
 - Products – CPC/CPA
 - Functional – COFOG, COICOP etc.

Conventions, terminology and definitions

- Need to ensure correctness and consistency with SNA 93
- Including presentation

Few personal thoughts to help you along the way!

Supply and Use Tables and I-O Tables (2)

Structural change

- Need to collect actual survey data regularly (annually?)
- Economies are much more elastic to change
- Rapid change is now generated by technological development, globalisation, toll processing, outsourcing, etc.

Need for data representing economic activity

- Survey based data covering the whole economy
- Links with, and role of administrative data (tax and employment)

Links between SUTs and I-O Tables

- SUTs should and must be produced before I-O Tables
 - Improves quality of I-O Tables, and feedback loop to improve SUTs
 - Closer links to actual business activity
- Separate valuation matrices for each stage of production and delivery

Balancing

- Manual versus Automatic

Few personal thoughts to help you along the way!

Supply and Use Tables and I-O Tables (3)

Deflation

- Supply and Use Tables provide framework for double deflation
- Homogeneity (matching concept of current price values with price indices)
- Current basic prices not matched by producer prices

Revisions

- Levels versus growth rates
- Current prices versus PYPs (improvements can affect volume data only)

Other issues

- Data confidentiality
- Compliance burdens on business
- Transparency of methodology and processes
- Process regularity (quarterly versus annual versus 5-yearly)
- Productivity, labour accounts and social accounting matrices
- Computer processing system and analytical capability
- Need for continuity of staff, training, systems, data etc.
- Regional analyses/requirements

Few personal thoughts to help you along the way!

Supply and Use Tables and I-O Tables (4)

Ever-changing user needs'

- Timeliness versus quality
- Role of market sector
 - Indicator of demand pressures
 - Business cycle
 - Monitoring output gap
- Productivity and quality adjustments
- Understanding the quality of National Accounts

Link between survey data and National Accounts SNA 93

Survey data

- + coverage adjustments
 - + conceptual adjustments
 - + quality adjustments
 - + balancing/coherence adjustments
- = **National Accounts on SNA 93**

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Any Questions?

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