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

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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

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

### Content of the paper

#### Evolution and implementation

- **Experimentation**
  - 1-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

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

#### 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

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### 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, globalization, 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
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