

Gross Output Matrix and Intermediate Consumption Matrix of China

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Base year

- **Year 2005.**
- **Annual I-O table compilation year**
- **Available to collect relative basic data sources, such as:**
detailed output by product,
household survey data,
import/export data.

Classification

1、 Three types of classification

- Classification of National Economy**

Industry used by NBS

- CPC provided by ADB**
- ISIC provided by ADB**

Classification

2、 Compare classifications

- The most detailed I-O table 2005 in china includes 62 commodity sectors**
- Close to 2-digit CPC and ISIC**
- GO and IC matrices of China are compiled on the basis of 2-digit**

Classification

- 3、 Establish the relationship among China's IOT sector, CPC and ISIC**
 - The main differences to CPC**
 - The main differences to ISIC**

CPC	China's I-O table	Row where Data inputed in
01-04	Agriculture, hunting and related service activities	Row 104 (01Total)
15-16	Non-metal minerals and other mining	Row 242 (15 Total)
21-23	Food manufacturing	Row 367 (21 Total)
61-62	Wholesale and retail trade services	Row 2386 (61 Total)
64-67	Transport and storage	Row 2775 (64 Total)
69、73-99	Other services	Row 3654 (97 Total)

ISIC	China's I-O table	Column where Data inputed in
01、 02、 05	Agriculture, hunting and related service activities	Row 104 (01 Total)
51-52	Wholesale and retail trade services	Row 242 (15 Total)
60-63	Transport and storage	Row 367 (21 Total)
65-67	Finance and insurance	Row 2386 (61 Total)
71-99	Other services	Row 2775 (64 Total)

Classification

- 3、 Establish the relationship among China's IOT sector, CPC and ISIC**
 - after combining, GO and IC matrices include 39 commodities and 38 industrials**

Gross Output Matrix

1、 Agriculture

- Method. *Quantity multiply Price*
- Basic data source.

**Gross Output Value of Agriculture, Forestry, Animal Husbandry, Fishery and Related services (Table M301).
Department of Rural Survey, NBS**

2、 Industrial

- Method. *Output quantity multiply Price*
- Data source.

Aggregative table of industrial gross output value by product, grouped by sector in the type of industrial enterprises by region and size (Aggregate by Table B201). Department of Industrial Statistics, NBS

Gross Output Matrix

3, Construction

- Calculated by total output value of construction.
- Data source: Production status on Construction Enterprises (Table C102). Department of Investment and Construction Statistics, NBS

4, Others

- Enterprises: Calculated by operating income.
- Government agency and other units: Calculated by regular operating expenditure plus fixed capital consumption.
- Data source: accounting materials of enterprises, statistics from departments, government revenue and expenditure reports, census data and so on.

Intermediate Consumption Matrix

- **According to available data sources, we use indirect methods to obtain the IC matrix.**
 - **Adopt the principle of “same technique of product assumptions”. That is, a product has same technique no matter which sector produces it.**

Intermediate Consumption Matrix

- **Calculate the Input Coefficient Matrix by industry,
The formula is: $B=AC$
In which,**
- **A is direct input coefficient matrix of I-0 table with commodity by commodity.**
- **C is the coefficient matrix of product proportion in GO table with commodity by industry.**
- **Calculate the Intermediate Use Matrix
Calculated by Gross output by industry multiply correspond input coefficient by industry.**

Intermediate Consumption Matrix

- **Data sources**
 - **Annual input-output table 2005**
 - **GO matrix**
 - **Relative price indices**

Valuation

- Producers' price including VAT
 - It is difficult to estimate GO matrix at basic prices currently
 - Chinese national accounts are valued by producers' price, which include value added tax.
 - Lack of detailed basic taxes data by products

Issues and problems

- Valuation. Study the boundary of basic prices follow China's tax system according to 1993 SNA
- Classification.
- Techniques on balancing the differences between GDP'p and GDP'e when compiling U table

The End

Thanks !