Brief Explanation of Multi-regional Input-Output Model for China 2000

1. Regions

<u>The Region to be defined</u>

- Northeast (Heilongjiang, Jilin, Liaoning)
- North Municipalities (Beijing, Tianjin)
- North coast (Hebei Shandong)
- Central coast (Jiangsu, Shanghai, Zhejiang)
- South coast (Fujian, Guangdong, Hainan)
- Central (Shanxi, Henan, Anhui, Hubei, Hunan, Jiangxi)
- Northwest (Inner Mongolia, Shaanxi, Ningxia, Gansu, Qinghai, Xinjiang)
- Southwest (Sichuan, Chongqing, Yunnan, Guizhou, Guanxi, Tibet)

   Taiwan is excluded.

2. Model Format

$$\begin{bmatrix} \hat{C}^{11} & \hat{C}^{12} \\ \hat{C}^{21} & \hat{C}^{22} \end{bmatrix} \begin{bmatrix} A^1 & 0 \\ 0 & A^2 \end{bmatrix} \begin{bmatrix} X^1 \\ X^2 \end{bmatrix} + \begin{bmatrix} \hat{C}^{11} & \hat{C}^{12} \\ \hat{C}^{21} & \hat{C}^{22} \end{bmatrix} \begin{bmatrix} F^1 \\ F^2 \end{bmatrix} + \begin{bmatrix} E^1 \\ E^2 \end{bmatrix} - \begin{bmatrix} M^1 \\ M^2 \end{bmatrix} = \begin{bmatrix} X^1 \\ X^2 \end{bmatrix}$$

Based on the above multi-regional IO model, we developed it to Isard type by using column coefficient.

3. Estimation Methodology

We estimated the regional technical coefficient, final demand, value added and foreign trade based on the related data. And interregional commodity flow was estimated by Leontief-Strout type gravity model, and also the survey was conducted to the important and large enterprise in China. These data was linked according to the model structure.

4. Project Personnel

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5. Remarks

This study was conducted with State Information Center in China.