



China's practices and experience in the compilation of ISP and SPPI

National Bureau of Statistics of China

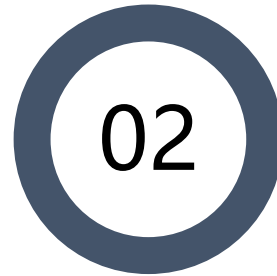
Li Na & Wang Jing



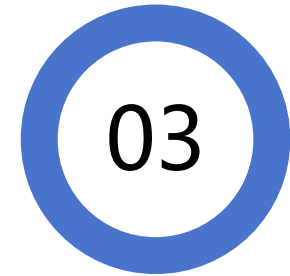
C O N T E N T S



**History and methodology of
ISP compilation**



Improvement of ISP



Introduction of SPPI



Index of Service Production

History and method of ISP compilation

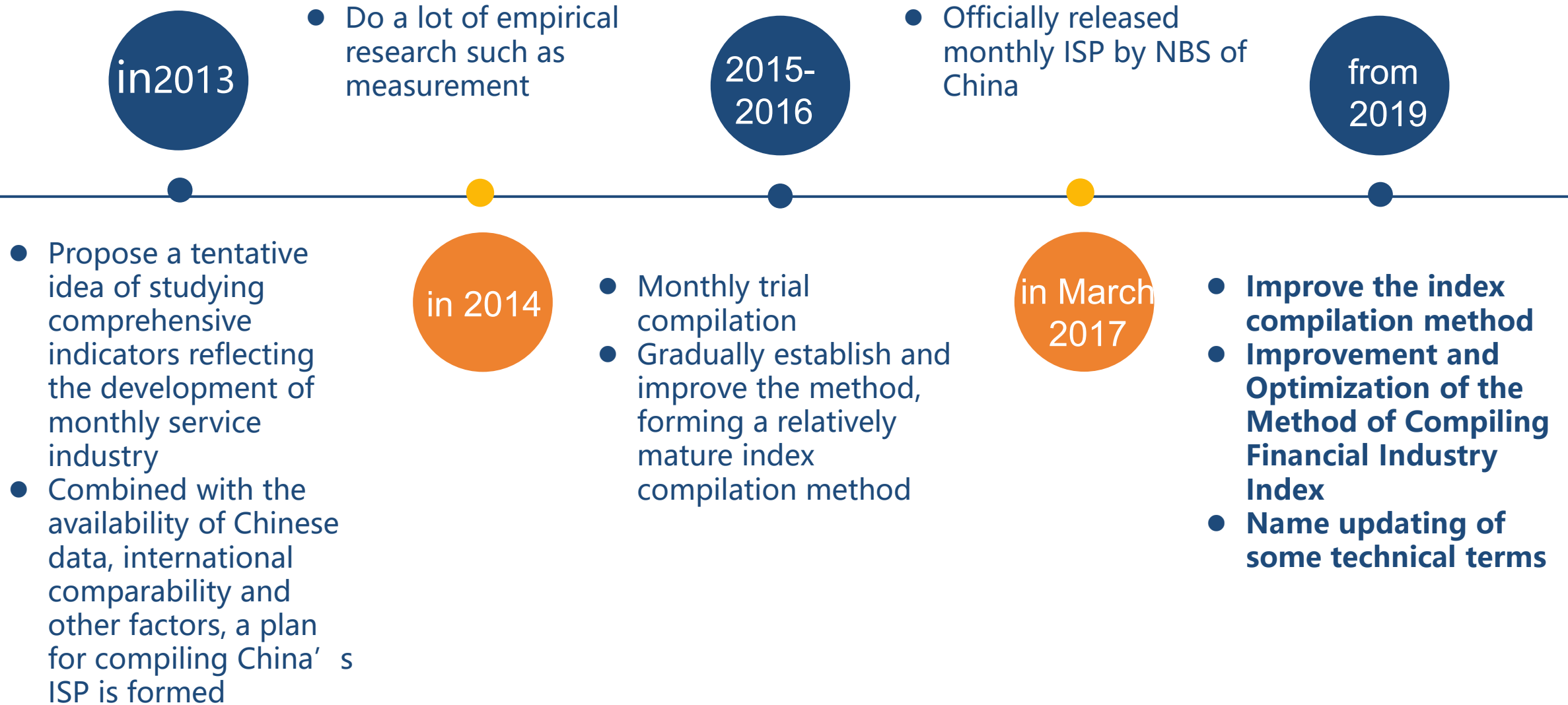
Basic concepts of ISP

It refers to the output change of the service industry during the reporting period relative to the base period after removing the price factor, mainly reflecting the short-term change of the service industry production:

with the base period of 100, if the index is greater than 100, it indicates that the service industry production is generally increasing; if it is less than 100, it indicates that the service industry production is generally decreasing.



History of ISP Development in China



ISPcore elements

4 core elements



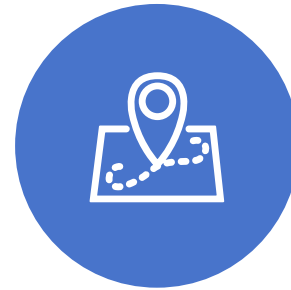
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output
indicators



—

price
reduction
factor



—

conversion
ratio



—

industry
weight

Selection of output indicators

output indicators

Value volume indicators require price deflators to eliminate price changes before comparison can be made, while physical volume indicators (or constant price indicators) can be compared directly.



- **value indexes**

Such as business income, business sales, stock turnover, etc



- **physical quantity indicators**

Such as cargo turnover, stock turnover, etc.

- **constant price index**

Such as the total amount of telecommunications services, postal services, etc.



Collection of output indicators



From a data collection perspective, the output indicator sources for the compilation of ISP consist of two main components:

National statistical survey information

It mainly refers to various statistical data obtained from the implementation of national statistical investigation projects organized by the National Bureau of Statistics, such as sales statistics of wholesale and retail trade, financial status statistics of service enterprises, and management statistics of real estate projects

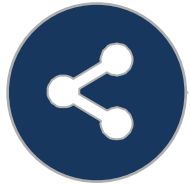
Collection of output indicators



Administrative records of other departments

It mainly includes relevant data from administrative departments such as the Ministry of Industry and Information Technology, the Ministry of Transport, the People's Bank of China, the China Banking and Insurance Regulatory Commission, the State Post Bureau, the indicators such as the total telecommunications business volume, and the local and foreign currency deposits and loans of the People's Bank of China and other information.

Selection of price reduction indices



exponential reduction

The function of the deflator index is to eliminate the price influence factors of the value index and make it comparable with the base period



SPPI

If output is mostly used for intermediate consumption, government consumption, or exports, then the optimal output price deflator is the services producer price index (SPPI) for that industry.



CPI

For industries where a portion of output is consumed by the household sector, a composite price index should be compiled by combining SPPI and CPI as a deflator.



———— Index of Service Production ————

Improvement of ISP

improvement and optimization

Needs of New Situation and New Requirements

First, governments at all levels and the public will pay more attention to the service industry;

second, the possibility of short-term economic fluctuations will increase;

Third, 5G, big data, large model and other new generation of information technology innovation, will produce more new industries, new formats and new business models.

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1

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3

the application of big data

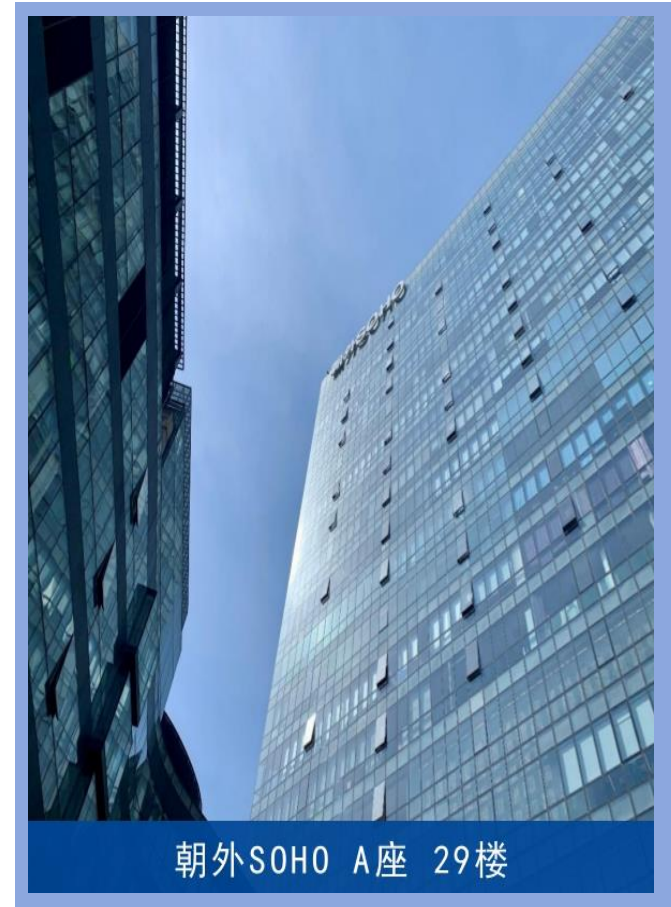
In recent years, big data has been applied in the compilation of the ISP.

Beijing Tengjing Big Data Applied Science and Technology Research Institute, referred to as "Tengjing Digital Research Institute", is a new research institution established to support the macroeconomic and long-term growth research of China Development Research Foundation.

GDP-Driven
Macroeconomic
Theory
Framework

Dynamic real-
time input-
output analysis
system
(MDEMS)

A cutting-edge
algorithm that is
highly integrated
with big data,
artificial
intelligence and
economic finance



the application of big data

01 “展示”板块

全景

速览

我的

02 “关系”板块

拉动

关联

结构

03 “数据”板块

宏观

行业

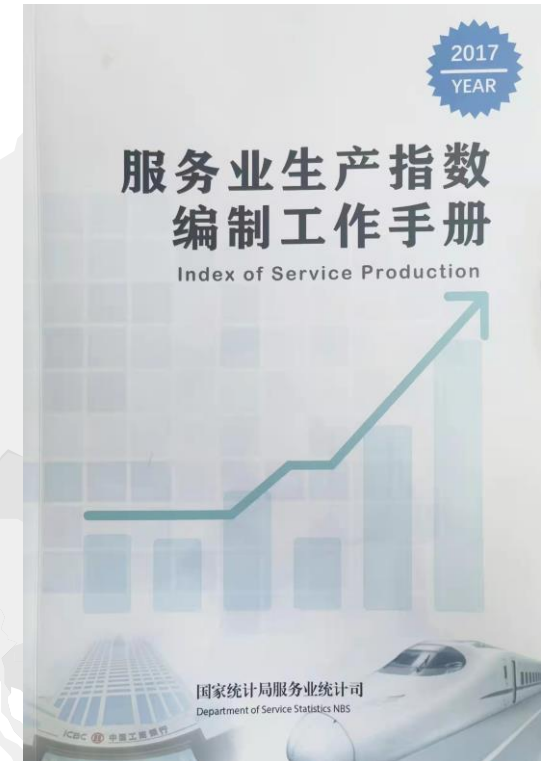
04 其他

研报

评估



strengthen publicity



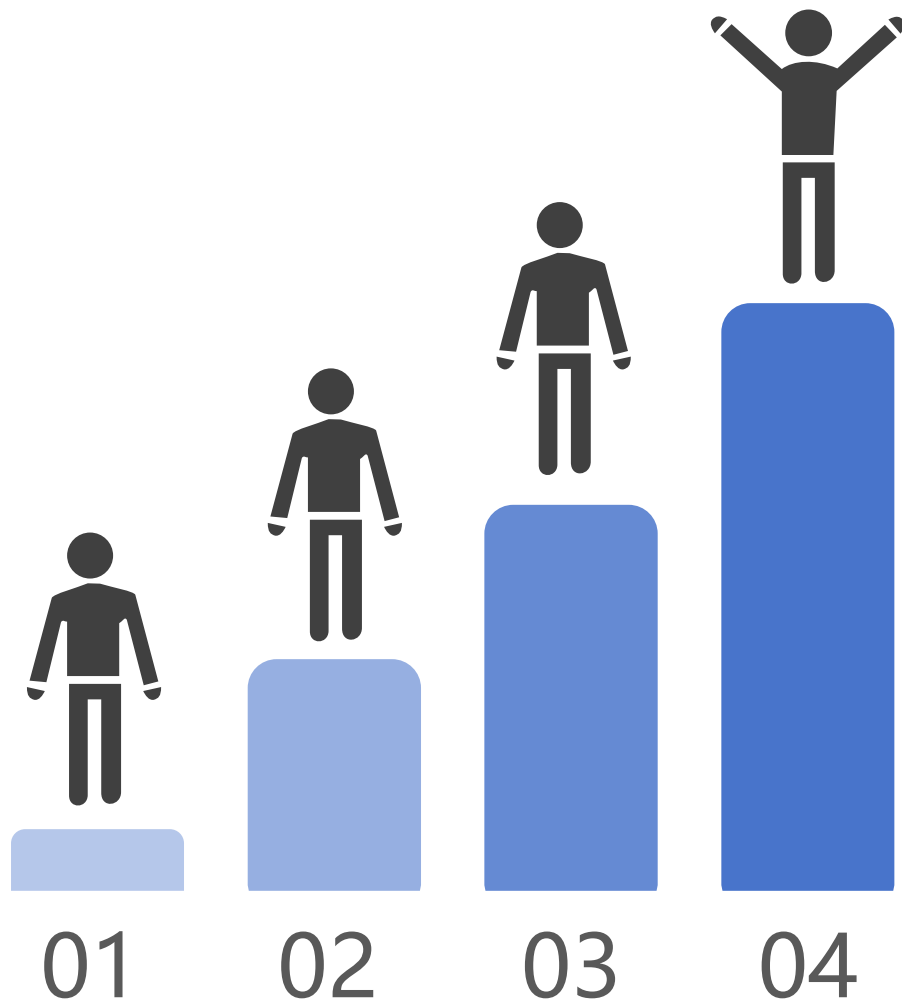
strengthen publicity

In order to increase the impact of the index of service production, we disseminate ISP by publishing articles in magazines and printing materials.



————— Index of Service Production —————

Introduction of SPPI



- Currently, China's SPPI formal reporting system
- includes the transportation and postal industries, while
- other service industries are also making active progress
- in research.



We adopt a diversified data collection strategy. The SPPI for the transportation and postal industries integrates:

CPI survey data;

price data collected by local statistical agencies;

sector-specific data (e.g., China Academy of Railway Sciences Corporation Limited provides railway freight transportation price data; the Research Institute of Highway Ministry of Transport and the China Federation of Logistics & Purchasing provide road freight transportation price data; the Shanghai Shipping Exchange provides ocean and coastal freight price data, and together with the Changjiang River Administration of Navigational Affairs, provides inland water freight price data; the Civil Aviation Administration of China provides air transportation price data; China Post Group provides postal service price data. etc.).



Index of Service Production

Thank you
for listening.