



OECD SHORT-TERM ECONOMIC STATISTICS WORKING PARTY
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Issues for the future evolution of short-term economic statistics in China: an OECD
perspective

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**ISSUES FOR THE FUTURE EVOLUTION OF SHORT-TERM
ECONOMIC STATISTICS IN CHINA: AN OECD PERSPECTIVE¹**

1. Introduction

1. In recent years China has developed a diverse range of economic statistics to help the country adapt to the transition from a planned to a market economy. To meet such needs considerable effort has been undertaken by Chinese statistical agencies to expand the scope of statistics to ensure that they reflect the rapidly changing economic circumstances within the country. Furthermore, the need for Chinese statistics are rapidly growing from an international perspective as the economic influence of China in the world economy expands. At the same time there is wide recognition both within China and outside of the need for the continued evolution of Chinese statistics. Such statistics should ideally be comparable with international standards and more transparent with respect to their compilation through the availability of additional metadata.

2. In this context, this paper outlines key issues for the future evolution of short-term economic statistics. It should be emphasised that the points raised purely reflect an OECD perspective which is derived from both the collection of short-term economic statistics for China in recent years by the Organisation, and the use of Chinese indicators in economic studies. Discussions are currently taking place within the OECD to identify a number of priority areas of possible future co-operation with China. These are likely to include economic monitoring which will necessitate the availability of adequate indicators and statistics across the board. Attachment 1 lists short-term economic statistics currently collected by the OECD, many of which are published monthly in the OECD *Main Economic Indicators* database.

3. The key issues for the future evolution of Chinese statistics from an OECD perspective covered in this paper comprise:

- improved periodicity and availability of key indicators;
- further improvement in international comparability of Chinese statistics;
- expansion in the scope of data publication;
- provision of additional methodological information (metadata).

2. Improved periodicity and availability of key indicators

2.1 Development of quarterly national accounts on the expenditure side

4. The National Bureau of Statistics (NBS) established the Chinese System of National Accounts in 2002 and has been implementing this system at the national level. NBS also began to publish the national

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accounts as a separate book in 2005. Chinese national accounts are currently adapting to the SNA 1993. However, there are several areas to be developed further for short-term analysis. These comprise:

QNA on the expenditure side:

5. Quarterly national accounts in China are currently compiled only on the production side. To capture economic activities from the demand side, it is necessary to compile expenditure side QNA estimates. Several studies have been undertaken to compile expenditure side QNAs by the NBS, but such data are not still available. To meet minimum user needs, the NBS should develop this series in the foreseeable future.

Quarterly balance of payments:

6. The compilation of QNA expenditure side estimates will necessitate the production of other elementary statistics such as quarterly balance of payments and to collect survey data on quarterly investment and consumption. Quarterly balance of payments estimates is the basic data for the external transactions sector in QNA. These are now compiled every six month by SAFE (the State Administration of Foreign Exchange). The publishing interval should be shortened to, at least, every quarter.

Utilisation of input/output tables:

7. Input/output tables are a means to apply the **commodity flow method** to the expenditure side QNA. The commodity flow method is used to derive ratios of each expenditure item (such as capital formation, final consumption, and their sub-items) over total expenditure. They can be utilized to estimate expenditure components through the commodity flow method with other supplementary survey data. Chinese input/output tables are compiled every two or three years, and the most recent data available are 2000 base year tables and there is a need for these tables to be applied more extensively for the compilation of QNA.

National account series required for China from the standpoint of the OECD SNA questionnaires are identified below in Attachment 2.

2.2 Development of short-term employment statistics

8. China has experienced dramatic changes in the social system in the last two or three decades. There was also considerable restructuring in public-run enterprises in the 1990s. These and other influences (such as the massive development of the services sector and in the number of small and medium sized enterprises) have resulted in extensive movements of residents between rural and urban areas. In order to understand the magnitude and geographic aspects of such movements there is high priority for the development of key structural and short-term indicators for the labour market in China.

Availability of short-term employment / unemployment data::

9. Employment statistics currently available for China differ considerably from those compiled in most OECD Member countries. The coverage of unemployment data is only for **registered** unemployed persons, not including private companies' data. The coverage of employment data are also calculated by the **registration status** (such as state-owned units, collective-owned units, other ownership units), not including private companies' data. In order to have a better understanding of changes taking place within

the Chinese labour market which could have a considerable impact on the economies of OECD Member countries (for example, through expanded international trade, etc.) it is therefore important to establish more comprehensive survey methods for the compilation of both structural and short-term employment statistics covering the entire country. Such statistics are also essential for the formulation of social policies by Chinese government agencies.

10. Related to this is the need for the compilation and availability of short-term unemployment rates for the entire country. Such rates are currently compiled annually. The only available quarterly data for unemployment is the ratio of worker-demand over worker-supply. Therefore, more labour-related figures such as quarterly unemployment rate and quarterly labour forces should be developed using methods similar to those in use in other countries.

3. Further improvement in international comparability of Chinese statistics

3.1 Provision of level indices for price statistics

11. The NBS currently publishes two forms of price indices, **comparable price indices** and **fixed base price indices**. The former are published both monthly and yearly. The latter is published on a yearly basis.

12. **Comparable indices** are more prevalent in China and are a means of measurement inherited from the planned economy. These price indices have fixed weights from the base year even though the indices have characteristics of chained indices (referred to as a **Sauerbeck index**). One of the defects of these indices is that they are not “level indices”, and therefore cannot be compared with the base year being expressed as 100.

13. **Fixed base price indices** in China are compiled merely by the accumulated multiplication of each year’s comparable price index from the base year. Therefore, the two price indices published by the NBS are not different in the calculation basis.

14. It is therefore desirable to provide level indices on a short-term basis (i.e. monthly) for the purposes of the comparison between countries and for the general economic analysis of the Chinese economy. Such level indices could be a supplementary index form apart from the current comparable price indices.

3.2 To separate individual quarterly data from the accumulative data

15. One of the characteristics of Chinese statistics is that quarterly data are expressed as a **cumulative** series during a year. For example, quarterly GDP data are only published as a cumulative series. Similarly, other real sector data, for example, semi-yearly balance of payments estimates are also produced as cumulative data. Such series are useful to reflect the progress of annual goals on a yearly basis, however, their suitability for analyzing each period’s performance (especially for seasonally-adjusted data to identify the economic trend on the quarterly basis) is somewhat limited. Therefore, it is desirable to provide each period’s data for diverse users.

3.3 To coordinate with the international industry classification system

16. In 2003, China introduced a new classification system for industrial activities in accordance with **ISIC (Revision 3)**. The new system corresponds to the international classification system at the division

level. If the new system is fully implemented, it will be possible to compare Chinese data to those of other countries. However, data currently published such as employment series and national accounts still follow the old classification system. There should be more coordinated implementation of ISIC for all key indicator series in all regions in China and by all Chinese statistical agencies.

4. Expansion in the scope of data publication

4.1 To expand the data scope of annual national accounts

Constant price data on the production side:

17. The NBS currently publishes GDP and related figures only at current prices. GDP estimates at constant prices are necessary for detailed items to trace causes / areas of real growth by industries or by expenditure items. For example, when calculating the contributions of each industry to GDP growth rate, the amounts at constant prices are required. Constant price data are also used to derive GDP deflators.

Real income data:

18. Real Gross National Income and **real GNI per capita** are means for measuring the living standard, and its growth rate is an important indicator as much as GDP growth rate. To compile the real GNI, it is also necessary to compile the real gross domestic income (GDI).

Institutional sector accounts:

19. **General government accounts** provide extensive information on governmental activities, and the importance of the availability of such account information has increased for OECD Member countries. For China, data for government revenue and spending are relatively more plentiful than other sector accounts. It is desirable to provide accounts in more detail, including tax revenues and its detailed items.

5. Provision of additional methodological information (metadata)

20. While the Chinese statistical system is undergoing such rapid change there is a general need for the availability of more detailed metadata across the broad range of short-term economic statistics outlining both current practices and where series currently available depart from existing international statistical guidelines and recommendations and practices in OECD Member countries. In particular, there is a need:

5.1 To clarify the valuation criteria in national accounts

21. In deriving the value added of each industry in GDP, it is preferable to clarify the prices criterion, that is, market price or producer's price (or basic price) used. The price system reflects the country's market transaction practices, and it is important to explain the valuation criteria to identify the detailed components of GDP such as FISIM, "taxes on products" and "gross value added".

5.2 To distinguish between gross and net concept in the national accounts

22. It is more accurate to identify the consumption of fixed capital in the national accounts and, therefore, to distinguish between GDP and NDP.

Short-term Economic Statistics for China currently included in the OECD *Main Economic Indicators Database*

Item	Frequency of publication
Average wage of urban units	quarterly
Employment: total	yearly
Registered unemployment: Total	yearly
Registered unemployment rate	yearly
Construction - Business situation: present	quarterly
Construction - Business situation: future tendency	quarterly
Construction - Employment: future tendency	quarterly
Construction - Orders inflow/Demand: future tendency	quarterly
BOP Balance on income	semi-annually
BOP Balance on services	semi-annually
BOP Balance on goods	semi-annually
BOP Balance on current transfers	semi-annually
BOP Current account balance	semi-annually
BOP Capital and financial balance incl. reserves	semi-annually
BOP Net errors and omissions	semi-annually
BOP Reserve assets incl. valuation change	monthly
Retail trade - Business situation: present	quarterly
Retail trade - Business situation: future tendency	quarterly
Retail trade - Employment: future tendency	quarterly
Retail trade - Volume of stocks: level	quarterly
Manufacturing – Business situation: present	quarterly
Manufacturing – Business situation: future	quarterly
Manufacturing - Rate of capacity utilization	quarterly
Manufacturing - Employment: future tendency	quarterly
Manufacturing - Finished goods stocks: level	quarterly
Manufacturing - Order books: level	quarterly
Manufacturing - Production: future tendency	quarterly
Manufacturing - Selling prices: future tendency	quarterly
Manufacturing - Exports order books: level	quarterly
Services - Business situation: present	quarterly
Services - Business situation: future tendency	quarterly
Services - Employment: future tendency	quarterly
CNY/USD exchange rate monthly average	monthly
CNY/USD exchange rate end period	monthly
Consumer prices: all items	monthly
Consumer prices: food	monthly

Consumer prices: services	monthly
Consumer - Confidence indicator	monthly
Consumer - Expected economic situation	monthly
Treasury bond trading rate	monthly
Bank rate	monthly
Monetary aggregate (M2)	monthly
Monetary aggregate M2 s.a.	monthly
Monetary aggregate (M1)	monthly
Monetary aggregate (M1)	monthly
Producer prices: total	monthly
Production of buildings - floor space of completed buildings	monthly
Production of electricity	monthly
Production of total industry	monthly
Production of coal	monthly
Production of crude petroleum	monthly
Production of crude petroleum tons	monthly
Production of cement	monthly
Production of manufactured crude steel	monthly
Total retail trade (Value)	monthly
Total retail trade (Value) s.a.	monthly
Gross domestic product, current prices	quarterly
GDP at factor cost, current prices s.a.	quarterly
GDP Agriculture, forestry and fishing, current prices	quarterly
GDP Industry (including construction), current prices	quarterly
GDP Services, current prices	quarterly
Shanghai Composite Index (19/12/1990)	monthly
SDR Reserve assets	monthly
ITS Exports/Imports	monthly
ITS Exports/Imports s.a.	monthly
ITS Exports f.o.b. total	monthly
ITS Exports f.o.b. total s.a.	monthly
ITS Exports f.o.b. to EU countries	monthly
ITS Imports c.i.f. total	monthly
ITS Imports c.i.f. total s.a.	monthly
ITS Imports c.i.f. from EU countries	monthly
ITS Net trade (f.o.b. - c.i.f.)	monthly
ITS Net trade (f.o.b. - c.i.f.) s.a.	monthly
ITS Net trade (f.o.b. - c.i.f.) with EU countries	monthly

National account series required for China from the standpoint of the OECD SNA questionnaires

Common to all tables:

- All data on national accounts are published at current prices. Neither constant price data nor real income data are available.
- No recording on **consumption of fixed capital**. (NNP, NNI, and NNDI are not available.)
- FISIM and **taxes less subsidies on products** are not identified on the production side data.
- No valuation criteria such as market price, basic price, producer price.

1.3, 1.6 There is no **external account** compiled at the national currency. Only lump-sum data for import and export are shown in the annual national account.

1.4 No distinction between **households** and **NPISH** in the final consumption expenditure. No separation between individual and collective consumption in the general government. Therefore, no actual final consumption is available.

1.5 No detailed data on fixed capital formation by products.

1.10 Official figures on unemployment are confined to **registered** unemployed persons (and rates) in the urban areas. There is a difference between the published figures and the figures derived from **the economically active population minus employed persons**. No distinction between employees and self-employed persons is available.

1.12 Compensation of employees by industry is not available. Only the wages of urban units (state-owned units, urban collective-owned units, units of other types of ownership) are available.

1.13 Classification of industries for gross value added does not correspond to ISIC at the section level (one digit) in some industries. For example, service industries are not exactly matched to ISIC 1 digit categories, and primary industry is not divided into sub-industries.

1.14 Classification of industries for employments figures does not correspond to ISIC at the section level, and is more detailed than that of national accounts in the primary and secondary industries.

1.16, 5.1 COICOP data are not available.

1.17 Final consumption of household by durability is not available.

1.18 Gross operating surplus by industry is not available.

2. The classification of government levels is not available.

3.1 Value added and its components by industries are not available. Input/output table provides 2-3 years intervals.

3.2 Capital formation by industries is not available.

8. Consolidated economic accounts by institutional sectors are not available.

9. Detailed receipts of general governments are not available.

11. COFOG data are not available.

14. Fixed assets by industries are not available.

20. Cross classification by industries and products is not available.

26 Balance sheets for non-financial assets are not available.

** All numbers are table numbers of the OECD SNA questionnaire.*