Introduction to China’s Official Statistics & Sentiments Surveys

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Brief Introduction to China’s Official Statistics

Sentiments Surveys

Challenge to Short Term Economic Monitoring in China
China’s Official Statistical System

1. Legal System
2. Organizations
3. Data Collection System
4. Data Release
Legal System

- Objective: Reality, Accuracy, Completeness, Timeliness of the Statistics.
- Guarantee the Independency of the statistical agencies of the statistical work.
- NBS is authorized to supervise the Statistical Law.
- Especially Fighting against fake data.
Organization

- NBS: Headquarter of Statistical Institutions
- Survey Organizations: Local office of NBS, in provincial, prefectural level (more than 300) and county level (close to 900), Parts of NBS.
- Local Statistical Bureaus: in provincial, prefectural and county level. Parts of Local Governments.
- Statistical Agencies in Ministries
Major Statistical Departments in NBS(I)

- Industry: Industrial Statistics
- Energy: Energy production and consumption
- Investment: Investment, Real-estate, Construction
- Trade: wholesale and retail, international trade, tourism
- Service: Transportation and Telecom, other service sectors
Major Statistical Department in NBS(II)

- **Rural:** Agricultural production, purchasing price of agricultural goods.
- **Urban:** Price statistics (CPI, PPI, Price for house, price for investment goods), city statistics
- **Household:** Income and expenditure for both rural and urban residents
- **Population:** population, labor force, employment,
- **Social and Science&Tech:** Science&Tech, environment...
**Major Statistical Department in NBS(III)**

- Statistical Design: Methodologies
- National Accounting: GDP
- Comprehensive: Economic Analysis, press release
- China Economic Monitoring & Analysis Center: Business tendency survey, composite indicators, consumer confidence survey, experts survey...
Survey Organizations

- Price (PPI, CPI, etc),
- Income & Expenditure,
- Agriculture,
- SME survey
- PMI
- Important Special Survey
Statistical Agencies in Ministries

- Finance, Public Finance, Tax, Import&Export,
- Education, Health Care, Science-Tech,
- Culture, Sports, Social Security, House, Transportation, News and Publications,
- Knowledge Property, Natural Resource, Weather, Water Control……
Data Collection Method

- Periodic Census: Population (10 years), Agriculture (10 years), Economic Census (5 years)
- On-line reporting directly to NBS: enterprises with size above certain level (RMB 20 million for manufacturing)
- Sample survey: enterprises below certain size, income & expenditure, price, annual population, agricultural productions......
Data Release

- NBS Joined GDDS (General Data Dissemination System) of IMF in 2002, Releasing China’s official statistics in IMF web site in a regular frequency.
Publications

- Statistical Yearbooks (Industry, population, labor, Trade, Finance, Customs, ……)
- Monthly: “China Monthly Economic Indicators” (CEMAC)
- China Information (Newspaper)
Economic Monitoring Approaches in NBS

- Composite Index Approaches
- Business Tendency
- Consumer Confidence Survey
- Economist Survey
- PMI Survey
Compilation of climate index

(1) Compilation of leading index

- Market Interest Rate Spread Between Short-term and Middle-term Treasury Bill
- Industrial Ratio of Sales to Output
- Logistics Index
  - Total Freight Traffic
  - Volume of Freight Handled in Major Coastal Ports
- Hang Seng Mainland Free float Index
- Number of Investment Projects in Fixed Assets Newly Started
- Leading Index of Investment in Real Estate
  - Area of Commercial Buildings Newly Started
  - Area of Land Purchased For Real Estate
- Money and Quasi-Money (M2)
- Consumer Expectation Index

Leading Index

The composite index of six indicators
Compilation of climate index

(2) Compilation of Coincident Index

- **Industrial Production Index**
- **Number of Employee of Industrial Enterprises**
- **Social Demand Index**
  - Completion of The Amount of Investment In Fixed Assets
  - Total Retail Sales of Consumer Goods
  - Total Value of Imports and Exports at Customs
- **Social Income Index**
  - Total Profits of Industrial Enterprises
  - State Tax Revenue
  - Disposable Income of Urban Households
Leading index V.S. Coincident Index: roughly 3 month of leading
Early Warning Index
Business Tendency: sampling size of sectors

1. Industry (Manufacturing, Mining, Public Utility) 70,000
2. Construction 1400
3. Wholesale and Retail 2000
4. Transport & Post 1000
5. Hotel & Catering 1000
6. IT 600
7. Real Estate 1200
8. Social Services 800
Approaches

- Quarterly survey, conducted in the end of March, June, September, and December
- Online survey, fixed sampling units. Sampling Scheme: PPS
- Business Climate: Assessment & Expectation for operation of own company
  
  \[ \text{Index} = 40\% \text{Satisfaction} + 60\% \text{Expectation} \]

- Entrepreneur Confidence Index: Assessment & Expectation for Industrial Situation.
Main Questions

- Common Questions: assessment of the current economy and expectation for the future, orders, profit, price, inventories, finance, labor wanted, investment plan

- Special questions: special to sectors:

- Such as reserve rates for hotel, purchasing price, land purchased, etc.
The Expectations for the future are much more fluctuated than the assessment of the current situation.
The orders with “Normal” or “Above Normal” is about 80%
The firms willing to increase their investment in the next period is also around 80%
Firms with stocks higher than normal is declining.
Consumer Confidence Survey

- Sample size: 3400: 12 provinces
- Monthly, CATI
- \[ CCI = \text{Satisfaction Index} \times 40\% + \text{Expectation Index} \times 60\% \]
Questions

- Three Major Questions: Income, Employment, Willingness to buy goods
- CPI, Price for House, What to buy
CCI (Consumer Confidence Index) is in a tendency of going up.
More people are willing to spend in buying goods/services than Saving in 2014.
Economist Survey

- Started from 2004, quarterly, 80 responses in average each wave.
- 30 questions, including 10 fixed questions.
- Confidence Index = Avg (Assessment + Expectation)
ECI (Economists Confidence Index) is somewhat below average.
Expectations are getting better
Annual growth of 7% in 2015 were predicted
PMI /Non-Manufacturing PMI Survey

- 31 sectors in Manufacturing Industry; 21 in Non-Manufacturing Industry
- Sample size: PMI 3000; Non-M PMI 1200
- Sampling Approach: PPS in Sectors, Allocating samples with the share of total value added of sectors.
- Indicators: Output, New Orders, Export Orders, Current Orders, Stocks, Purchasing Value, Import, Purchasing Price, Material Inventory, Employment, Time for Suppliers, Expectations.
PMI Calculation

- Weighted Average:
  - PMI: New Orders * 30% + Production 25% + Employmenets * 20% + Time for Supplying * 15% + Material Inventory * 10%

- Seasonal Adjusted
Non-Manufacturing PMI is Greater Than PMI Indicating a Better Situation of Service Sector
PMI Is Not Closely Correlated with Growth Rate of Value Added of Industry, No Obvious Leading
Challenge to Short Term Economic Monitoring in China

- Lack of statistics in service sector V.S. plenty of information in manufacturing, while the proportion of service is greater than half of GDP now.

- Dramatically structural changes is making economic growth much more complicated, especially the change of driving force. Historical experience might now work now: power, freight, loans are not coincident with economic growth.
Challenge to Short Term Economic Monitoring in China (Continued)

- Declining of potential growth rate is enhancing the difficulty of judgement of normality of economy.
- Extremely different situation for employment between immigrating labors (from rural area) and newly graduated is also making trouble in judging the normality of employment.
Finally, how to explain the relationship between Stock Index and GDP Growth Rate?
THANKS!