### Introduction to China's Official Statistics & Sentiments Surveys

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### TO BE PRESENTED

- 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

- Statistical Law of P.R.China, 1<sup>st</sup> Issue in 1983, 2nd Issue in 1996, 3<sup>rd</sup> Issue in 2009.
- 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.
- 4 times of News Conference, Annual conference in late of January, quarterly conference around 20<sup>th</sup> of April, July, October.
- Major Statistical Resource: <u>www.stats.gov.cn</u>, Statistical Museum

### 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





### Compilation of climate index

#### (2)Compilation of Coincident Index





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. Whosale and Retail 2000
- 4. Transport& Post 1000
- 5. Hotel & Cartering 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
- Index=40%Satisfaction+60%Expection
- 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=Satisfaction Index\*40%+Expectation Index\*60%



- 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.



预期未来6个月家庭余钱的主要用途(%)

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%+Employments\*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.
- Extreamly 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!