Understanding China Data & Business Research

November 19, 2020 (60 minutes)
for BLC / Professional Development Alliance

Edward Junhao Lim (he/him/his)
Business & Entrepreneurship Librarian, University of Connecticut

Jiebei Luo (she/her/hers)
Data Services Librarian, Boston College
Today’s Agenda

At the end of this session, we hope that you will be able to:

● Identify information custodians in China.

● Identify and use suitable tools to find and access different information sources related to China.
Overview

- Welcome, self-introductions
- Thinking about data on China
- Finding known data on China
- Chinese companies & industry reports
- Conclusion, questions
Activity: Self-Introductions

- Name & institution
- Why you signed up for this
- Share more about your role / interest in this webinar
Thinking about data on China

(5 mins)
Taiwan

Nation

Regions

33+T Provinces

5 Autonomous Regions

Guangxi
Inner Mongolia
Ningxia
Tibet
Xinjiang

22+T Prefectures

Provincial

*Sub-provincial-level

300+

Prefectures

~2,800

Counties

~40,000

Townships

660,000+

Basic level

City cluster/
Megalopolitan

2 SARs

Hong Kong
Macau

Beijing
Chongqing
Shanghai
Tianjin

4 Municipalities

Prefecture-level cities
Prefectures
Autonomous prefectures
Leagues

Source: Administrative divisions of China
Art, not science: China’s city-tier classification

- Unofficial: 4-tier classification
  - number of Starbucks outlets
- SCMP (2016) China’s tiered city system explained: 4-tier classification
  - GDP
  - Politics
  - Population
- Yicai Global (2020) definition: 6-tier classification
  - Concentration of commercial resources
  - City’s pivotability / Urban hub
  - Citizen vitality / Activity of urban residents
  - Lifestyle diversity
  - Flexibility in the future / Future Plasticity
Jumpstarting your data sources

- Looking at the relevant literature in your field
- Be flexible, consider combining datasets
- Who collects this, why, and how?
- What conditions are required to get data?
- What do you want to achieve with the data?
- Are you comfortable reading Chinese?
Finding aggregated/commercial data sources on China

1. China statistics
2. Census data
3. Survey data
4. Geo-file resources
5. International data sources
China Statistics Yearbook (publications)
### Annual Data

#### Statistical Database

- Monthly Data
- Quarterly Data
- Annual Data
- Census Data
- Other Data

#### Table

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
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</tbody>
</table>
Example: Per Capita Disposable Income of Urban Households by Region (2018)

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tr>
<td>National Average</td>
<td>26467.0</td>
<td>28843.9</td>
<td>31194.8</td>
<td>33616.2</td>
<td>36396.2</td>
</tr>
<tr>
<td>Beijing</td>
<td>44563.9</td>
<td>48531.8</td>
<td>52859.2</td>
<td>57275.3</td>
<td>62406.3</td>
</tr>
<tr>
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<td>31506.0</td>
<td>34101.3</td>
<td>37109.6</td>
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<td>Hebei</td>
<td>22226.7</td>
<td>24141.3</td>
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<tr>
<td>Shanxi</td>
<td>22258.2</td>
<td>24069.4</td>
<td>25827.7</td>
<td>27352.3</td>
<td>29131.8</td>
</tr>
</tbody>
</table>
Challenges in understanding China Statistics Yearbook

- Not all government data are freely accessible, e.g., 1st level political divisions.
- Consistent Classification in NBS Publications:
  - 1980-84 (13 industrial sectors, with a very limited number of variables)
  - and 2012- (41 industrial sectors following GB2011)

### 6-23 Per Capita Disposable Income of Urban Households by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
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</tr>
<tr>
<td>Shanghai</td>
<td>44878.3</td>
<td>48841.4</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 9-15 Per Capita Annual Income of Urban Households by Sources and Region (2008)

<table>
<thead>
<tr>
<th>Region</th>
<th>Disposable Income</th>
<th>Total Income</th>
<th>Income from Wages and Salaries</th>
<th>Net Business Income</th>
<th>Income from Properties</th>
<th>Income from Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td>15780.76</td>
<td>17067.78</td>
<td>11298.96</td>
<td>1453.57</td>
<td>387.02</td>
<td>396.58</td>
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<tr>
<td>Beijing</td>
<td>24724.89</td>
<td>27677.94</td>
<td>18738.96</td>
<td>778.36</td>
<td>452.75</td>
<td>776.54</td>
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<td>Tianjin</td>
<td>19422.53</td>
<td>21174.04</td>
<td>12849.73</td>
<td>863.52</td>
<td>256.87</td>
<td>724.68</td>
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<td>Hebei</td>
<td>13441.09</td>
<td>14141.41</td>
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<td>1078.67</td>
<td>224.86</td>
<td>399.24</td>
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<td>Shanxi</td>
<td>13119.05</td>
<td>13856.98</td>
<td>9019.35</td>
<td>903.21</td>
<td>202.31</td>
<td>304.27</td>
</tr>
</tbody>
</table>
Finding Data: China statistics

National Bureau of Statistics of China (NBS)

National Data | National Bureau of Statistics of China (NBS Data)

Sources: National Bureau of Statistics of China; National Data
## Annual Data: National Data on NBS of China

**Indicators**
- General Survey
- National Accounts
- Population
- Employment and Wages
- Investment in Fixed Assets and Property
- Foreign Trade and Economic Cooperation
- Energy
- Finance
- Price Index
- People’s Living Conditions
  - Income and Consumption Expenditure
    - Savings Deposit of Urban and Rural Residents
    - Sources of Per Capita Income
    - Per Capita Annual Consumption Expenditure
    - Ownership of Major Durable Consumer Goods

**Download**

<table>
<thead>
<tr>
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<td>Hebei</td>
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<td>32,977.18</td>
<td>30,547.76</td>
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<td>Inner Mongolia</td>
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<td>Liaoning</td>
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<td>2001-2018, link to national bureau</td>
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<td>Regional (by province)</td>
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<td>Same year range as national monthly, quarterly, annual</td>
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</table>
## CNKI Statistical Yearbooks

### Per Capita Disposable Income of Urban Households by Region

<table>
<thead>
<tr>
<th>Region</th>
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<tr>
<td>上海 Shanghai</td>
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<td>48841.4</td>
<td>52961.9</td>
<td>57691.7</td>
<td>62595.7</td>
</tr>
</tbody>
</table>

Source: Chinese Yearbook Full-text Database - CNKI
CEIC China Premium Database

Source: Table CN.HF: Disposable Income per Capita: Prefecture Level City: Urban
Census Data: 2010 Population Census (NBS)

Sources: 中国2010年人口普查资料; Tabulation of the 2010 Population Census of the PRC
Census Data: National Bureau of Statistics of China (NBS)

Statistical Database
- Monthly Data
- Quarterly Data
- Annual Data
- Census Data
- Other Data

2010 Population Census
2013-04-23 14:00

Total 1 pages 1
Census Data Access: Nation Bureau Chinese Through Google Translate

http://www.stats.gov.cn/tjsj/pcjjs/

<table>
<thead>
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<th>Census</th>
<th>Sixth Census Data</th>
<th>Fifth Census Data</th>
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<td>(aggregated data of main indicators at the national and)</td>
<td>(analyzed agricultural volume rural)</td>
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<td></td>
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<td>volume foreign volume comprehensive</td>
</tr>
</tbody>
</table>
Activity: Look for the Difference

Annotate!
A new version of the NBS Database
We now have online a new version of the NBS.
# NBS & NBS Data: English site vs. Chinese site

<table>
<thead>
<tr>
<th>NBS English</th>
<th>NBS Chinese</th>
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<tr>
<td><strong>Census data</strong></td>
<td><strong>Census data</strong></td>
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<tr>
<td>2010 Census (6th wave) *Listed but NOT Accessible*</td>
<td>2010 Census (6th wave)</td>
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<td>2000 Census (5th wave)</td>
<td>*2000 Census (5th wave)*</td>
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<tr>
<td>R&amp;D Census: 2009</td>
<td>*R&amp;D Census: 2009*</td>
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<td><strong>NBS Data English</strong></td>
<td><strong>NBS Data Chinese</strong></td>
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<tr>
<td>Regional data</td>
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</tr>
<tr>
<td>Department data</td>
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What about survey data? China Survey Data Archive

Source: Peking University Open Research Data Platform
CFPS and Access to other Dataverse survey data
CFPS and Access to other Dataverse survey data
China General Social Survey (CGSS)

CHINESE GENERAL SOCIAL SURVEY

— Digital Chronicle of Chinese Social Change

The Chinese General Social Survey (CGSS) launched in 2003, is the earliest national representative continuous survey project run by an academic institution in China mainland. CGSS is aimed to systematically monitor the changing relationship between social structure and quality of life in both urban and rural China. Social structure refers to dimensions of social group and organization as well as networks of social relationships. Quality of life is the objective and subjective aspects of the people well-being both at the individual and aggregate levels.

Source: 中国综合社会调查
Geofile resources

Recommended resources:
  ● China Data Online

Free Resources:
  ● Center for Spatial Sciences at the University of California, Davis
  ● The Humanitarian Data Exchange (HDX): China - Subnational Administrative Boundaries
  ● Socioeconomic Data and Applications Center (sedac)
  ● China In Time and Space
Make use of your library resources

Many times you might know of an original source for data, but it can be faster and less cumbersome to use your library’s licensed extraction tool to get what you need. For example, try:

- **Data-Planet** Yes! China too! (China Statistics Yearbook - national level)
- **OECD Library** - China, People’s Republic, e.g. OECD Economic Surveys: China
- **Statista**: Country Outlook - China, (economy, business environment, labor force… from multiple resources)
- Other Publicly available resources: [UNData-China](https://undata.china), IMF & WorldBank (country profile-China)
Chinese companies & industry reports

(15 mins)
Annotating major rivers

1. Brahmaputra River
2. Lancang River
3. Liao River
4. Nujiang River
5. Pearl River
6. Yangtze River
7. Yellow River

Source: China_rivers.svg
Megalopolises in China

Jing-Jin-Ji Megalopolis
- **Beijing, Tianjin, Hebei**
- ~112 million (2016), 8% of China’s GDP (2019)

Yangtze River Delta
- **Shanghai, Jiangsu, Zhejiang, & Anhui**
- ~105 million, 20% of China’s GDP (2018)

Guangdong-Hong Kong-Macau Greater Bay Area aka Pearl River Delta
- **Guangdong, Hong Kong, & Macau**
- ~70 million (2017), 12% of China’s GDP (2019)

Source: The Economist
Corporate Listing – many choices

- **Shanghai Stock Exchange (SSE)**
  - A & B shares

- **Shenzhen Stock Exchange (SZSE)**
  - A & B shares
  - SME and ChiNext boards

- **Stock Exchange of Hong Kong (SEHK)**
  - H shares
  - Growth Enterprise Market

- **Others**
  - New York Stock Exchange (NYSE) or NASDAQ as N shares,
  - London Stock Exchange (LSE) as L shares
  - Singapore Exchange (SGX) as S shares

No. of firms listed on China’s stock market

Source: Annual Review of Financial Economics, The Development of China’s Stock Market and Stakes for the Global Economy
Chinese Company Research

More challenges than working with U.S. data

- Different accounting and disclosure rules
- ‘Only’ 3,485 listed companies in China (2017), but ~77 million registered

Key Issues with Chinese Company Research Data

- Backfiles not as far back (vs. U.S. public companies)
- Company IDs
  - Complicated landscape; more issues with linking
- More data providers!
Being mindful with names

English vs. English translation of the Chinese name

● Jolly Information Technology Co. Ltd. vs. Zhejiang Zhiyu Information Technology
  ○ 浙江执御信息技术有限公司

● Home King vs. Haokang (Xiamen) Information Technology Co., Ltd
  ○ 好慷（厦门）信息技术有限公司

Alternative names

● JD Digits vs. Beijing Jingdong Financial Technology Holding Co., Ltd
  ○ 京东数字科技控股有限公司

Abbreviations & spotting the differences
Identifiers

Important to

- Track entities and securities across time
- Merge datasets
- Filter data

Commonly used identifiers (outside of China)

- Ticker Symbol
- CUSIP
- ISIN (International Securities Identification Number)
- SEDOL
Major Identifiers in China

Commonly used identifiers

- **Stock Code (STKCD)** – used by Shanghai & Shenzhen Stock Exchange
  - Same but not the same: e.g. appears as 000022 in CSMAR vs. 000022.SZ in WIND
- **18-Digit Registration Number / 统一社会信用代码 (“Unified Social Credit Code”)**
- **组织机构代码 (“Organization Code”)**
- **注册号 (“Registration Number”)**
### Chinese Fundamentals (Financials)

Primary fundamentals databases you may have access to:

<table>
<thead>
<tr>
<th>Database</th>
<th>Identifier</th>
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</thead>
<tbody>
<tr>
<td>S&amp;P NetAdvantage, Capital IQ</td>
<td>Ticker</td>
</tr>
<tr>
<td>Thomson ONE, Refinitiv Eikon, Workspace</td>
<td>SEDOL &amp; SIC</td>
</tr>
<tr>
<td>BvD Orbis, Osiris, Oriana</td>
<td>BvD ID</td>
</tr>
<tr>
<td>CSMAR via WRDS, CSMAR – China Listed Firms Research Series</td>
<td>Stock Code ISIN (for overseas listed companies)</td>
</tr>
<tr>
<td>Wind 万得</td>
<td>Unified Social Credit Identifier</td>
</tr>
</tbody>
</table>
What about Chinese *private* companies?

Suggested databases you may have access to:

- Wind 万得 – Chinese Enterprises module
- S&P NetAdvantage / Capital IQ
- BvD Orbis
- Thomson ONE / Refinitiv Eikon / Workspace
- CB Insights
- PitchBook
- Crunchbase – ‘free’ but...
Market Research on China

Looking for industry reports? Databases you may have access to:

- eMarketer
- Economist Intelligence Unit (EIU) – Access China
- IBISWorld – China Industry Reports
- Mintel Reports – China
- Passport GMID
- Statista – Global Consumer Survey
- Warc
- iResearch reports?
Buzzwords in business & economics

One Belt One Road (OBOR) – 2013 ➡ Belt (and) Road Initiative (BRI) – 2017

- land route: Silk Road Economic Belt
- maritime route: 21st Century Maritime Silk Road (“String of Pearls”)
- involving 60+ countries – no defined list!

Resources:

- **Factiva** Expert Search > Belt and Road Initiative
- **News:** Bloomberg, Caixin Global, The Economist, Financial Times, SCMP
- RWR Advisory Group’s IntelTrek & Belt and Road Monitor
- The American Enterprise Institute (AEI)’s China Global Investment Tracker
- The Mercator Institute for China Studies (MERICS)’s Belt and Road Tracker
- Deloitte Insight’s 2018 report
Conclusion: the panda analogy

Source: South China Morning Post
Thank you, questions?

Let’s have a conversation

- We don’t have all the answers
- Share a question you may have in the Q&A / chat

Continue the conversation over email

- edward.lim@uconn.edu
- jiebei.luo@bc.edu