



TIP Conference

TIP@50: What have we learnt? Where is innovation policy heading?

PARIS, 11 DEC. 2017

Future Innovation Development Policy: Uncertainty & Challenges

Professor Dr. Mu Rongping

Center for Innovation and Development
Chinese Academy of Sciences

Outline

I. Innovation Policy Practices in China

II. Transition to Innovative Development Policy

III. Key Issues of Innovative Development Policy

I. Innovation Policy Practices in China

Chinese government has taken a series of policy measures:

- **Decision on Reforming S&T System in 1985**
- **Decision on Deepening S&T System Reform in 1995**
- **National M&L Term Plan for S&T Development (2006-2020) in 2006**
- **The supportive policies and 78 detailed policy documents to implement the MLP since 2006.**

I. Innovation Policy Practices in China

National High-Tech Industrial Development Zone (146)

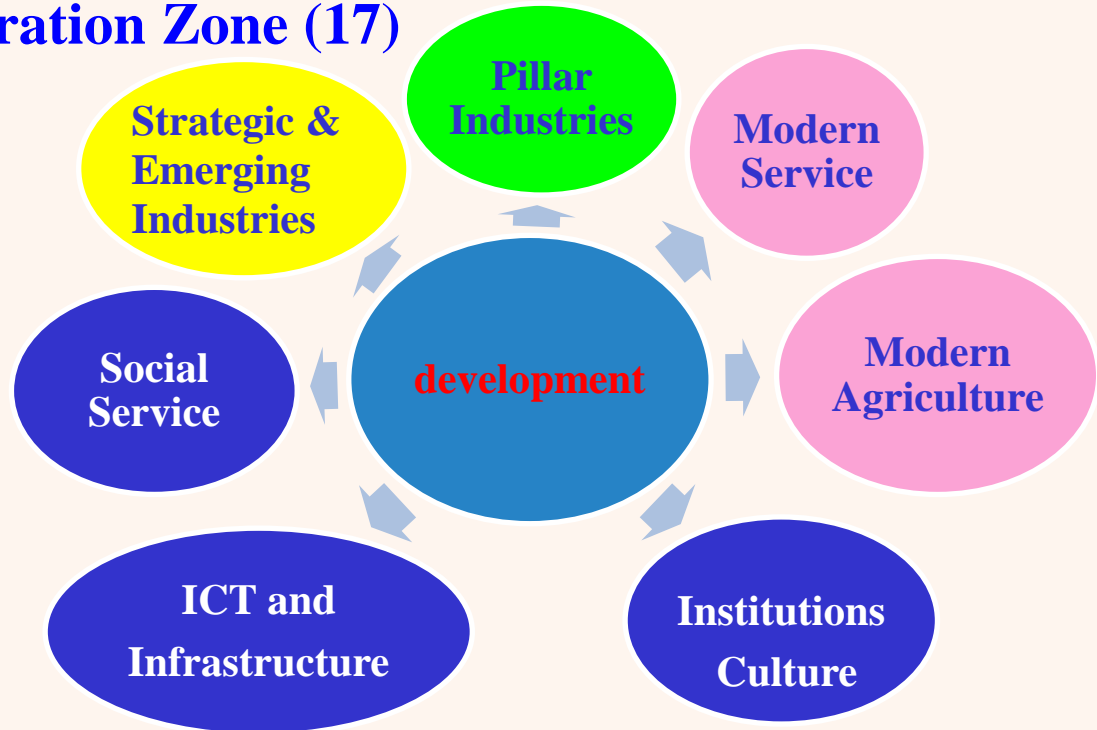
National Innovation Demonstration Zone (17)

National Innovation City (61)

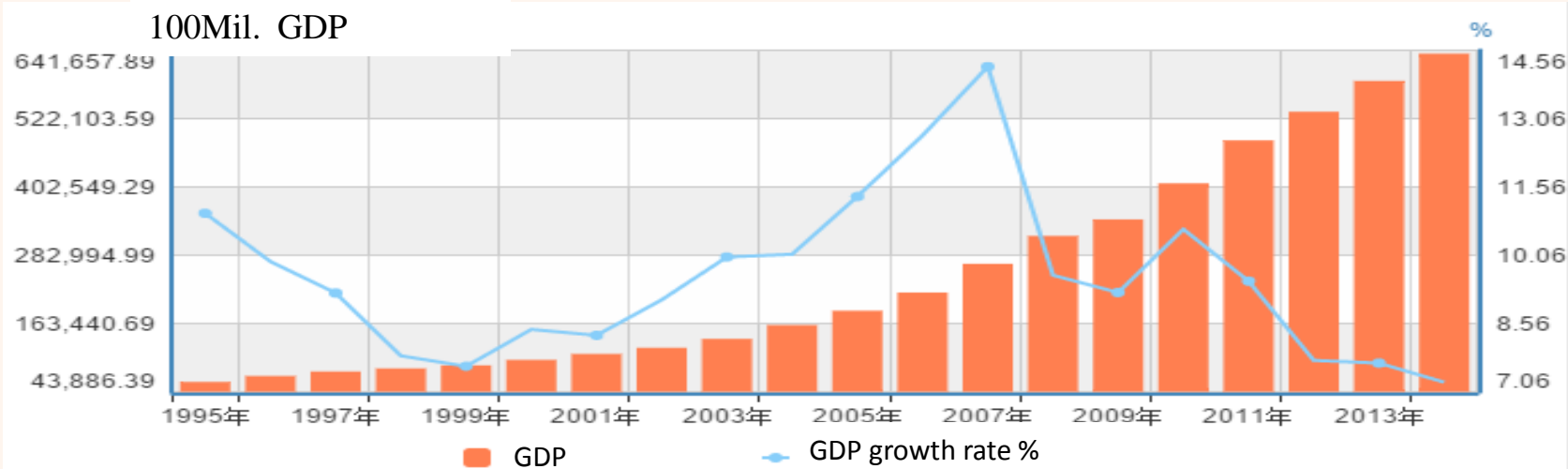
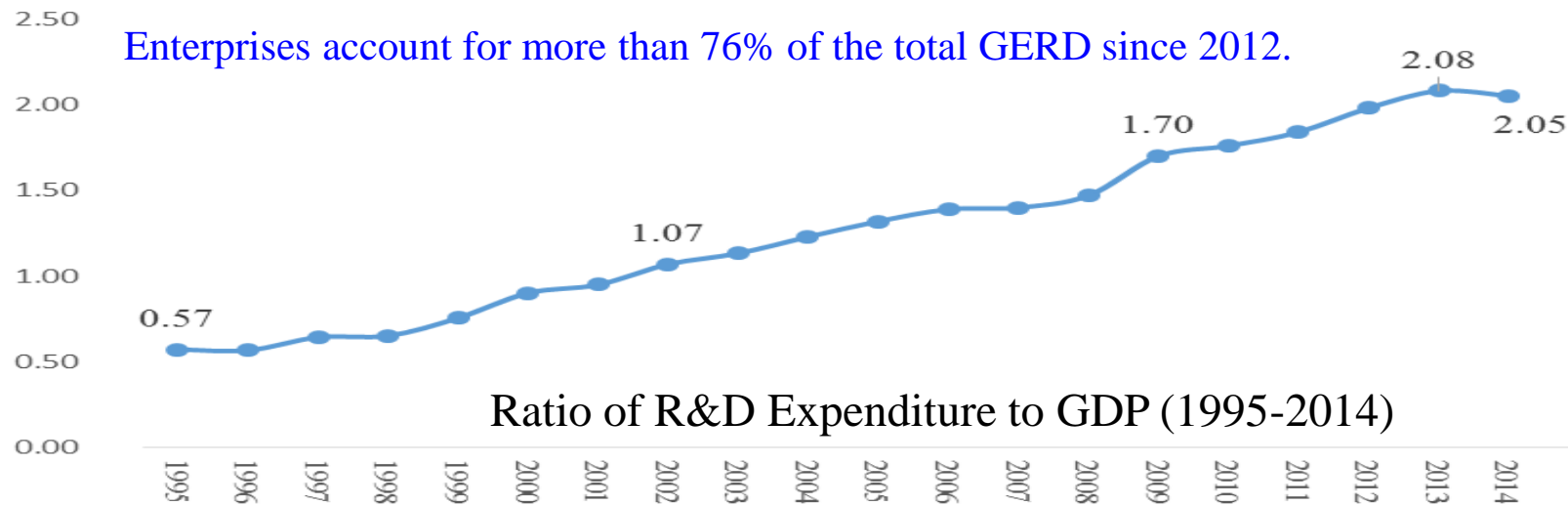
National Engineering Labs

National Enterprises' TDC

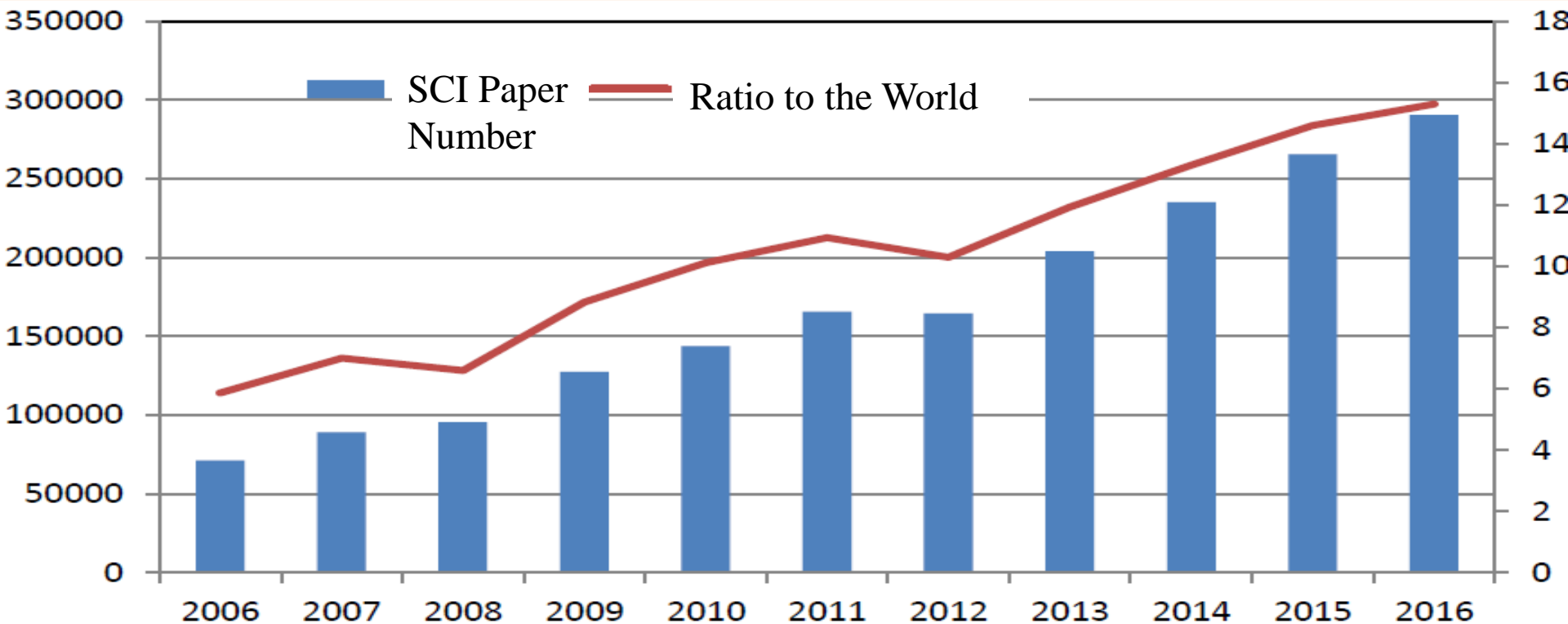
- Priority-setting
- Capacity-building
- Policy experiment



Enterprises account for more than 76% of the total GERD since 2012.

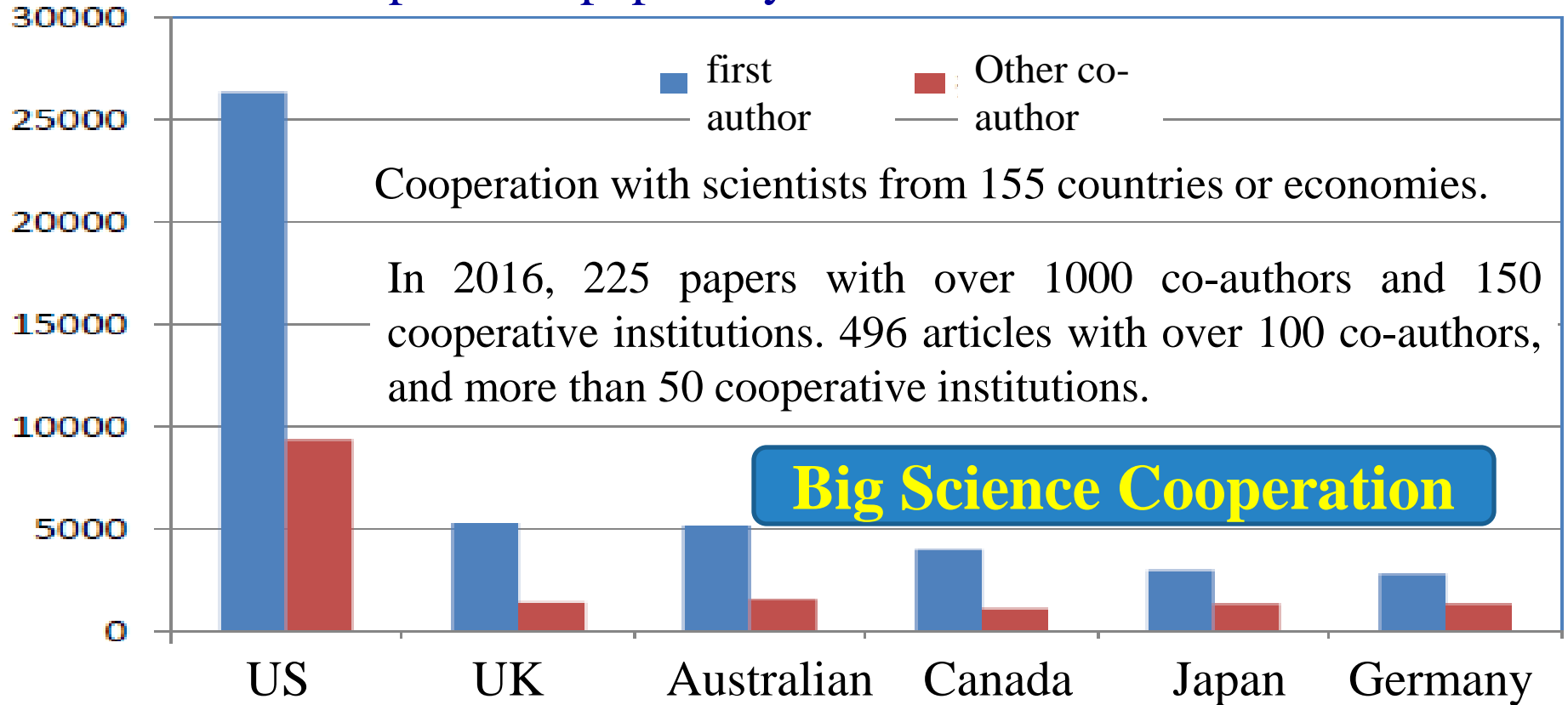


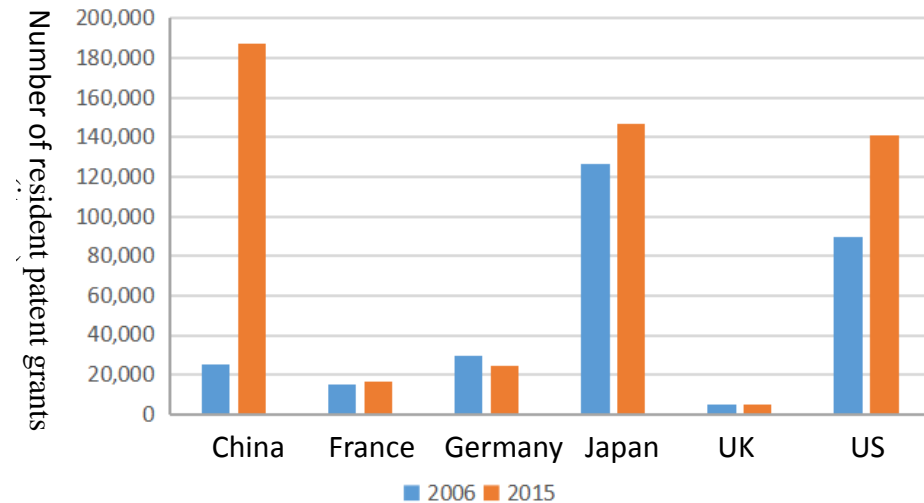
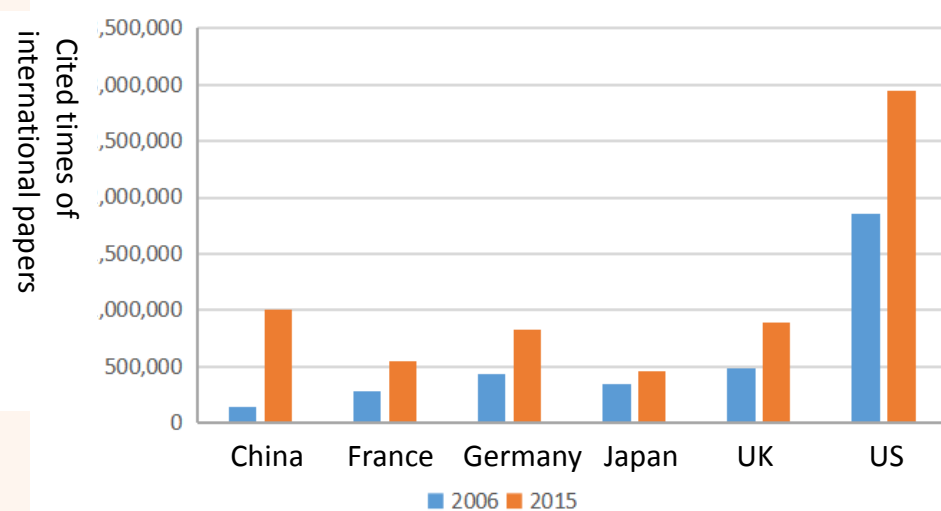
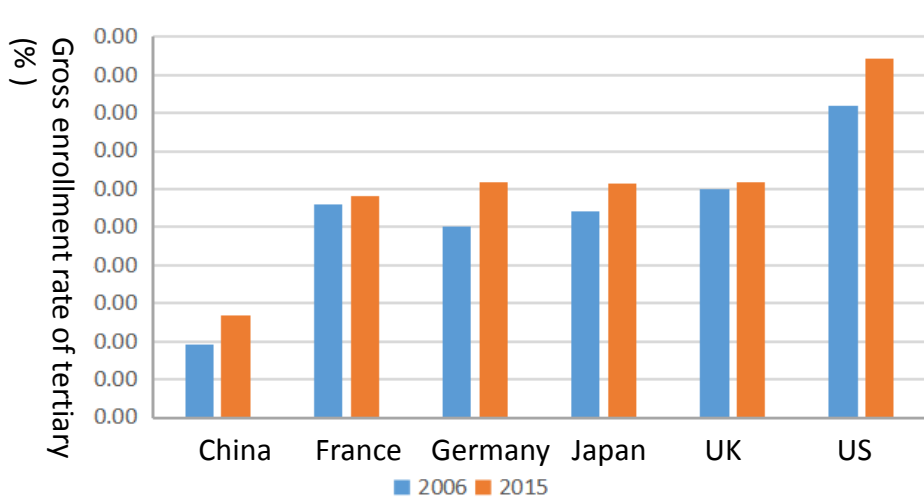
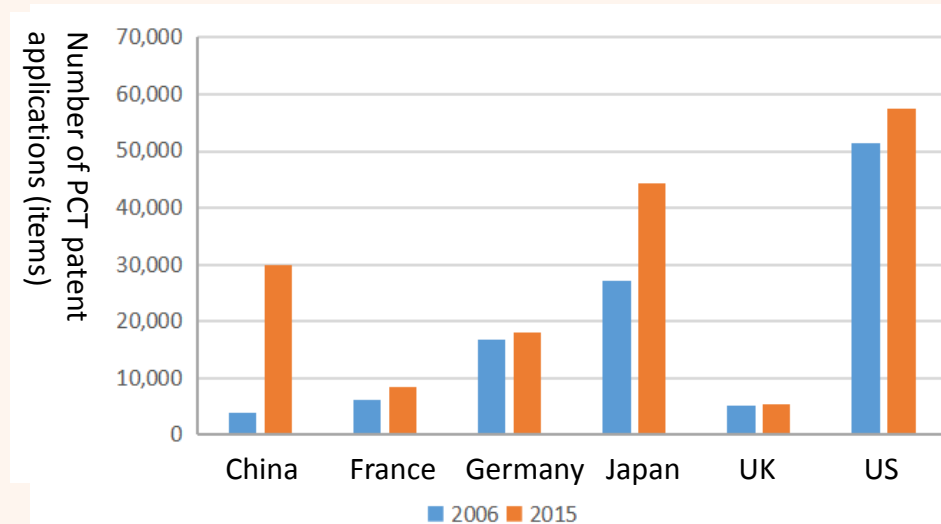
I. Innovation Policy Practices in China



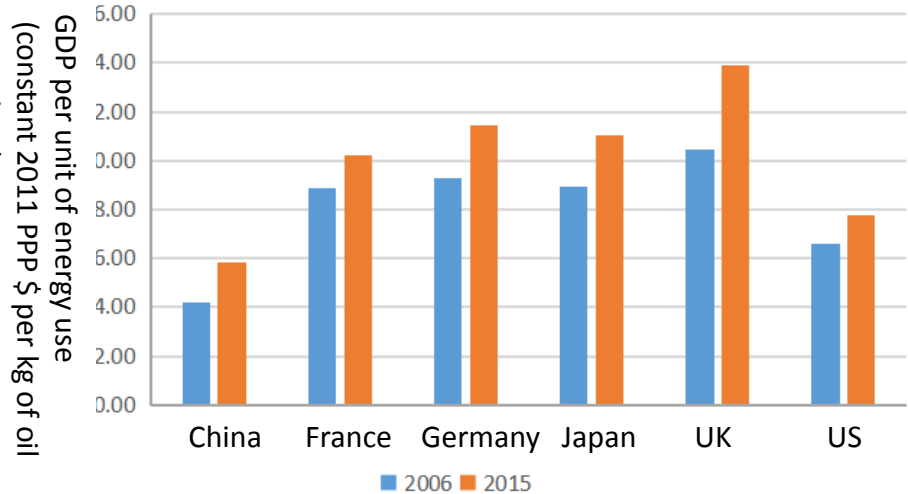
I. Innovation Policy Practices in China

International cooperation papers by Chinese scholars as the first author

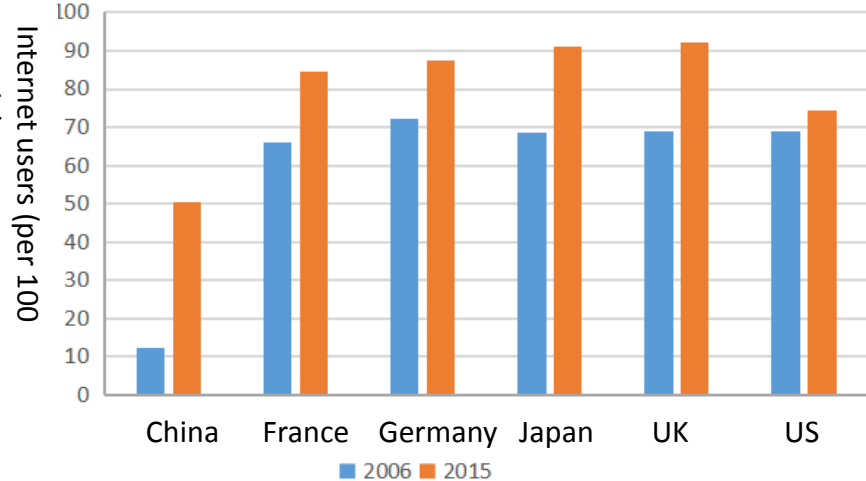




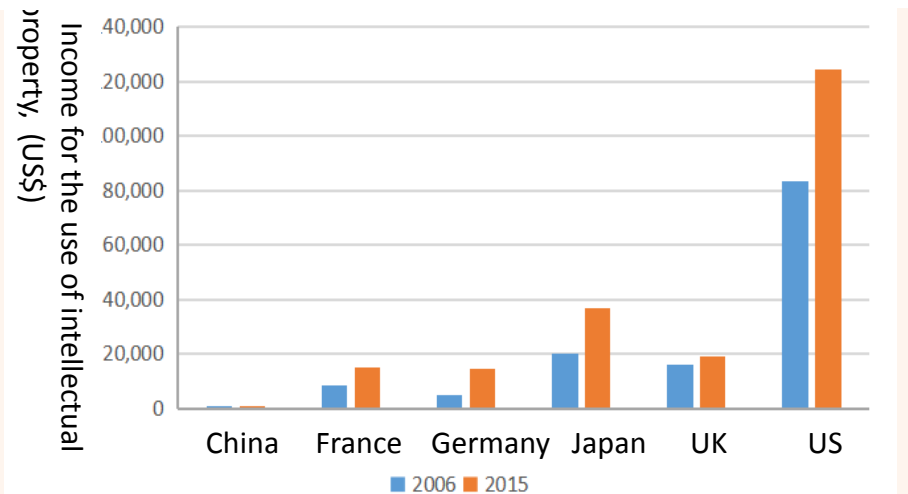
equivalent)



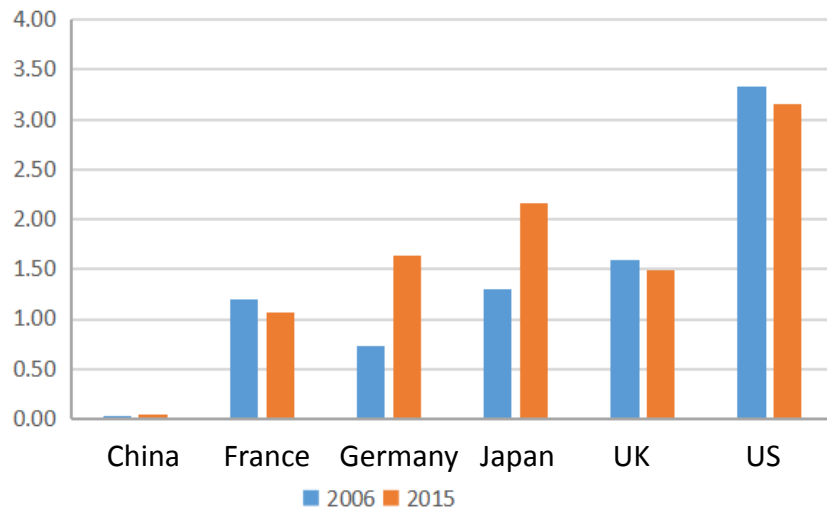
Internet users (per 100 people)

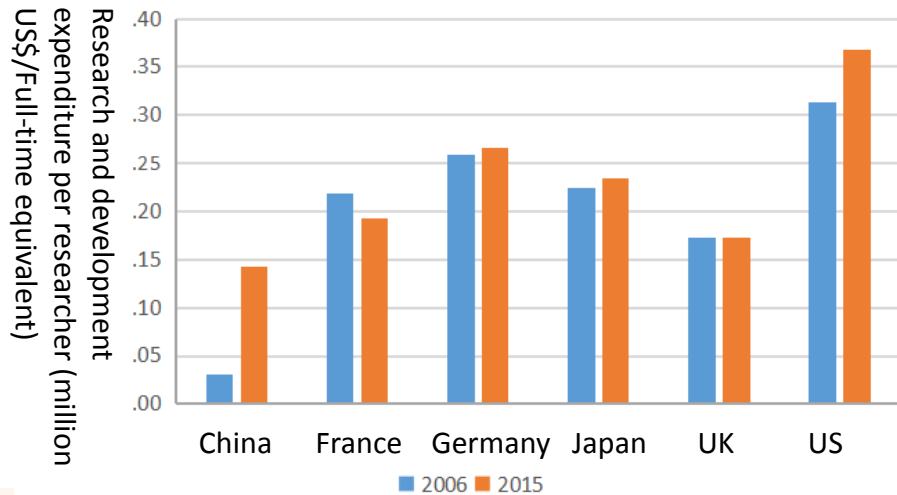
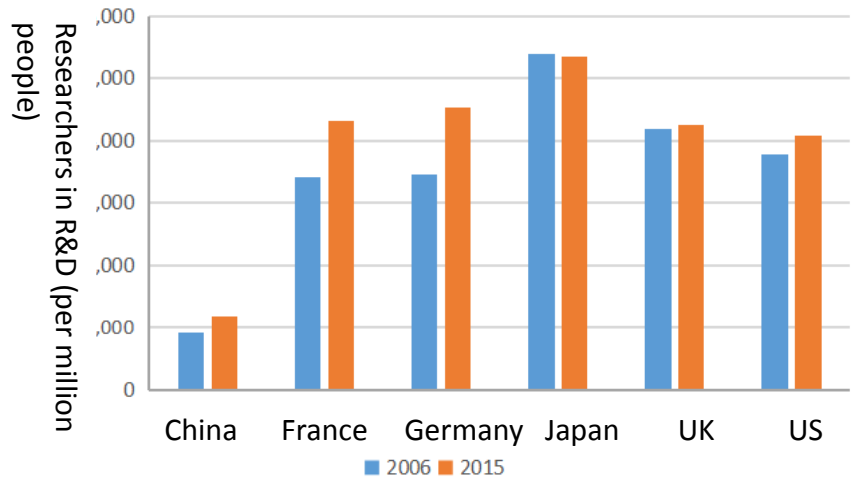
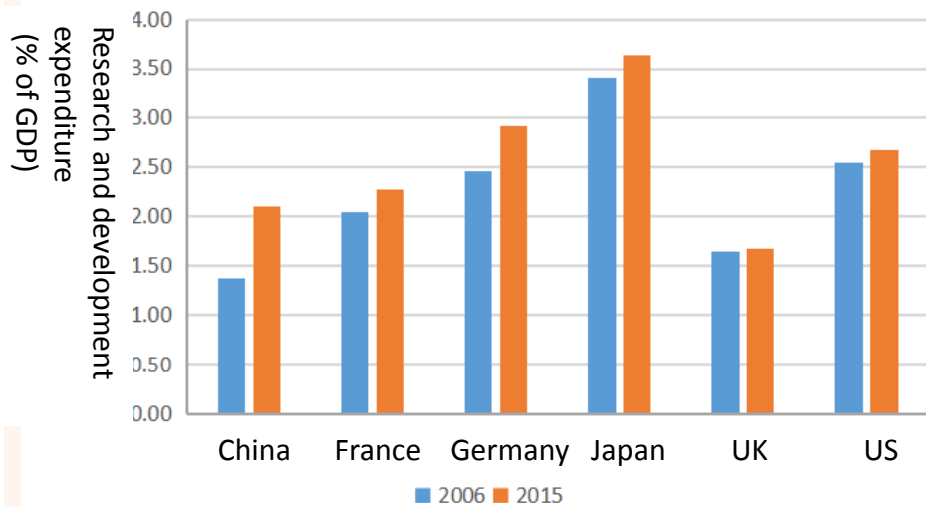
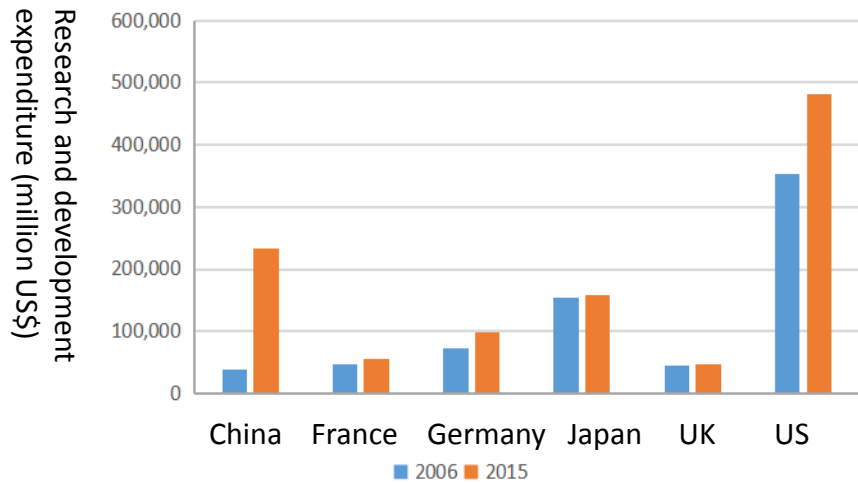


property, (US\$)



Income and expenditure ratio
for the use of intellectual property (%)





II. Transition to Innovative Dev. Policy

Innovation policy practices in China have shown that Innovation policy should focus development issues, namely: science and technology development, economic development, social development, and environmental development.

Understanding the Development

- ❖ **Economic development**
- ❖ **Economic & natural (environmental) development**
- ❖ **Economic & natural & societal development**
- ❖ **People-centered development**

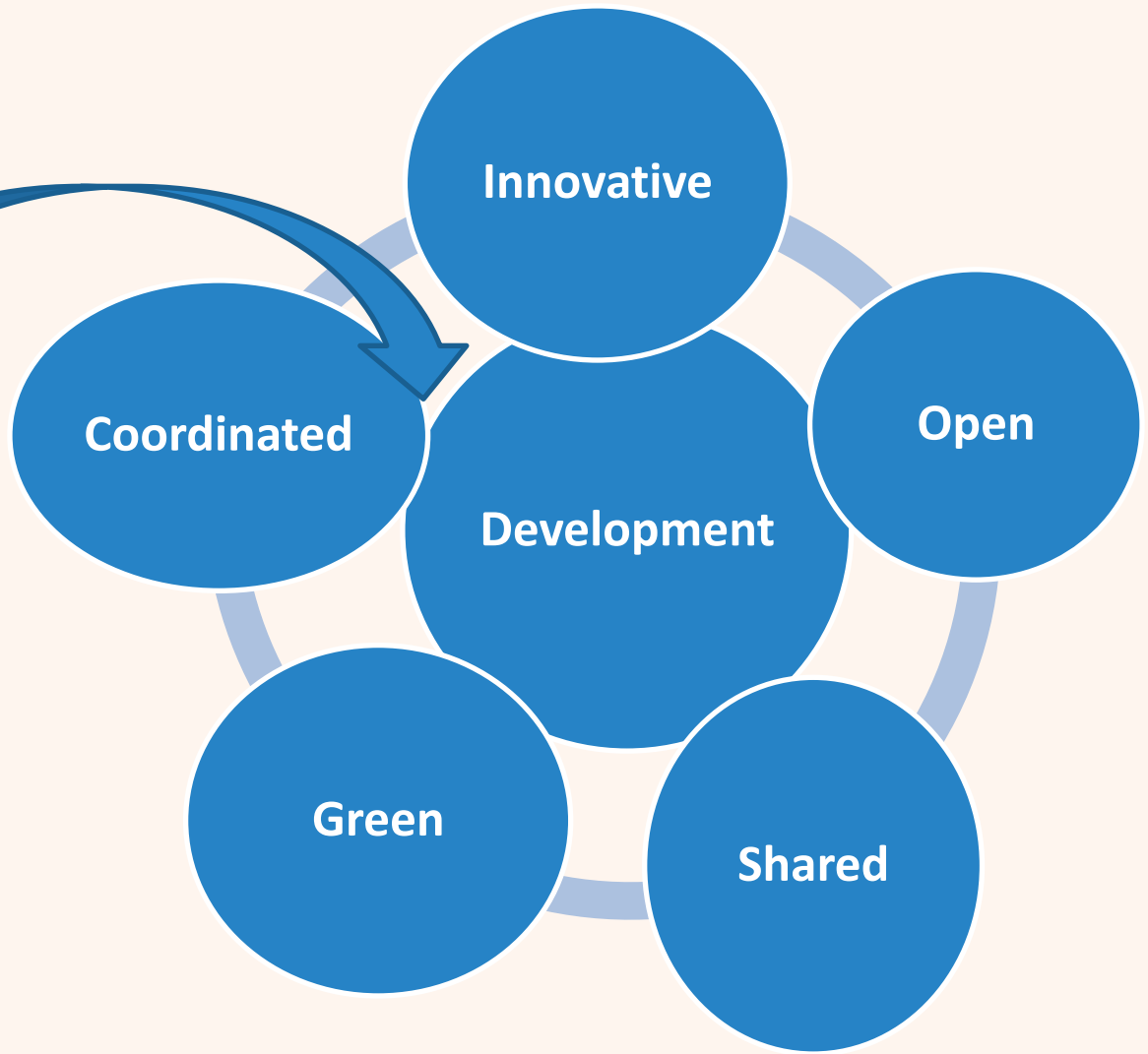
Visions and Goals

- **New Way for Industrialization in 2002**
- **Scientific Outlook on Development in 2003**
- **Resource-saving and Environment-friendly Society in 2004**
- **Harmonious Society in 2005**
- **Innovation-driven country by 2020 in 2006**
- **Eco-civilization Society in 2012**

National Strategies

- Sustainable Development Strategy in 1992
- Reinvigorating Nation through S&T&E in 1995
- Reinvigorating Nation through Talents in 2002
- Innovation-driven Development in 2012
- Rural Revitalization in 2017
- Regional Coordinated Development in 2017
- Military-civilian Integration in 2017

**To Meet New
Development
Concepts**



SDGs to some extent determine the goals of innovative development policy and the time schedule to implement



From Innovation Policy to Innovative Development Policy

Innovation is a complex process of value creation, including: scientific value, technological, economic value, social value, and culture value.

-----Rongping Mu

The orientation of innovative development policy is to seek the efficiency and benefit of value creation under the certain development concept.

The innovative development policy emphasizes the guidance of the development concept, and emphasizes the decisive influence of the development concept on the innovation resource allocation and the value judgment of innovation output.

III. Key Issues of Innovative Dev. Policy

1. Uncertainty and Challenges

- ① AI and Digital Transformation
- ② Industry and Production Revolution
- ③ Data Governance and Digital Security Risk Management
- ④ Safety Assessment of Emerging Technology

III. Key Issues of Innovative Dev. Policy

2. S&T Development

- ① Data-Driven and Smart Innovation System: Infrastructure
- ② International S&T Collaboration and Global Challenges
- ③ International Mobility of STI Talents
- ④ Smart and Open Public Research Institutes (Labs)
- ⑤ Technology Capacity-building in Enterprises

III. Key Issues of Innovative Dev. Policy

3. Innovation for Economic Development

- ① Innovation & Entrepreneurship
- ② Digital and Internet Economy
- ③ Smart Manufacturing and Skills
- ④ Productivity and Global Value Chain
- ⑤ Industrial Innovation Policy

III. Key Issues of Innovative Dev. Policy

4. Innovation for Social Development

- ① Smart Healthcare
- ② Smart Education and Training
- ③ Smart Transportation
- ④ Smart Public Security
- ⑤ Smart City and Communities
- ⑥ Smart Villages and Rural Revitalization

III. Key Issues of Innovative Dev. Policy

5. Innovation for Environmental Development

- ① Climate Change and Global Governance
- ② Green Development and Environmental Policy
- ③ Green Growth and Eco-Innovation
- ④ Green Rural Development and SDG:

Thanks for your Attentions

Prof. Dr. Mu Rongping

mrp@casipm.ac.cn

