



REGIONAL INNOVATION & POLICY MAKING IN CHINA

Dr Lun Liu

Assistant Professor & Research Scientist
School of Government, Peking University

Nov 2021

- 1 Background**
- 2 Territorial dimension**
- 3 Governance system**
- 4 Three Cases**
- 5 Policy recommendations**

- 1 Background**
- 2 Territorial dimension
- 3 Governance system
- 4 Three Cases
- 5 Policy recommendations

Background

“Building China into an innovative country”

OPINIONS AND POLICY DOCUMENTS FROM THE CENTRAL GOVERNMENT

- Central Committee of the Communist Party of China and the State Council (2012). Opinions on Deepening the Reform of Science and Technology System and Accelerating the Development of National Innovation System.
- General Office of the State Council (2016). Opinions on Strengthening the Dominant Position of Enterprises in Technological Innovation and Comprehensively Improving the Innovation Capabilities of Enterprises.
- General Office of the State Council (2016). Implementation Plan for Deepening the Reform in the Science and Technology System.
- State Council (2015). Opinions on Several Measures to Push Forward Widespread Entrepreneurship and Innovation.
- State Council (2017). Opinions on Strengthening the Implementation of Innovation-driven Development Strategy and Further Deepening the Development of Widespread Entrepreneurship and Innovation
- State Council (2018). Opinions on Promoting High Quality Development of Innovation and Entrepreneurship and Creating an Upgraded Version of “Mass Entrepreneurship and Innovation”.

Background

“Building China into an innovative country”

Specific policy instruments include


- regular high-level dialogue
- innovation-based transformation on leading enterprises
- tax reduction
- enterprise-led industrial innovation alliances
- NDRC: Guiding Catalogue for Industrial Structure Adjustment

Background

Achievements

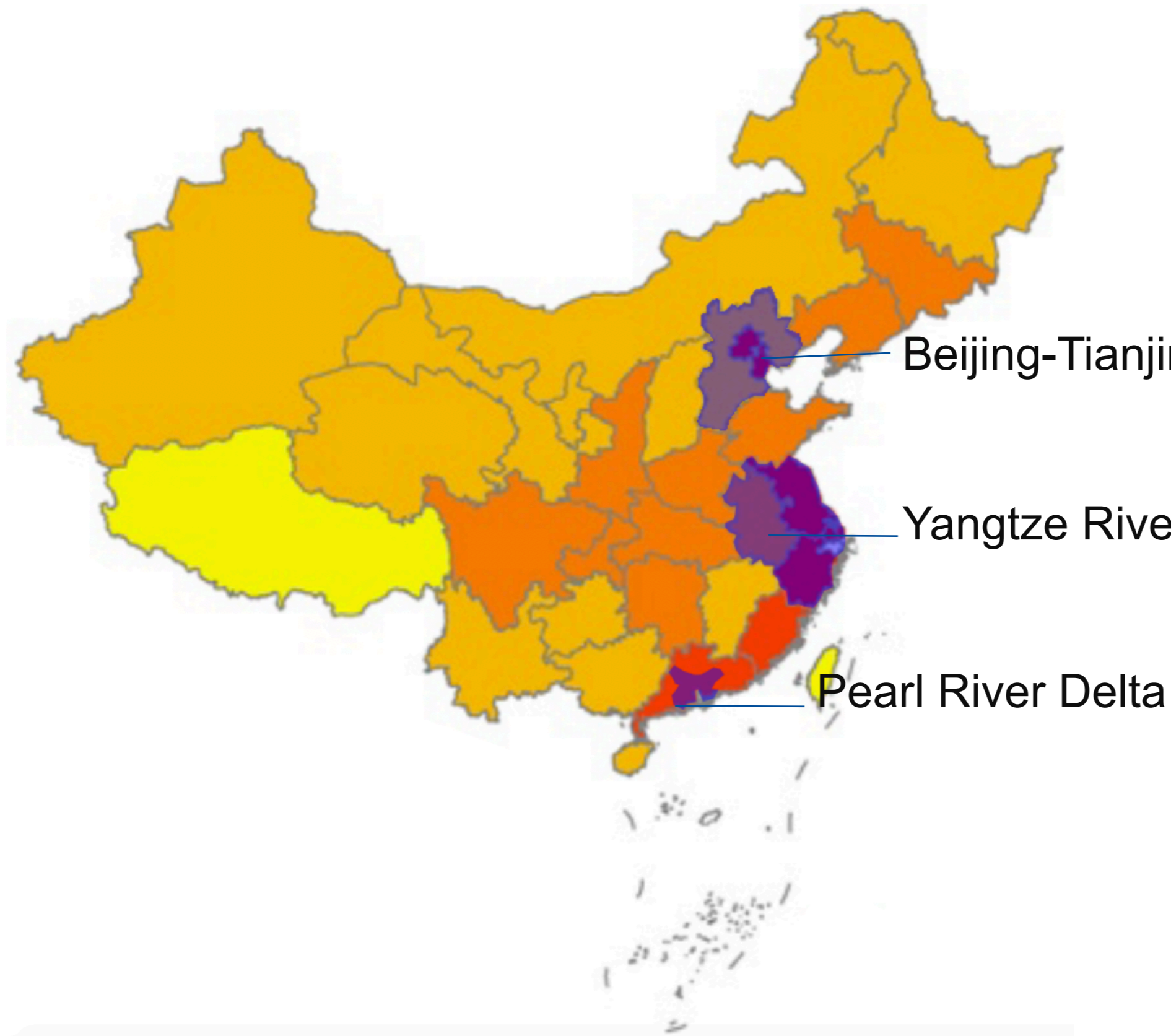
- Top in equivalent patent grants (WIPO, 2018)
- Second in the world both in terms of total paper citations and the number of highly cited papers (Thomson Reuters, 2019)

Challenges

- Regional disparity
 - Old and new driving forces
 - Low marketization rate of invention patents by universities
 - Enterprise-led innovation system is not completely formed
- 

- 1 Background
- 2 Territorial dimension**
- 3 Governance system
- 4 Three Cases
- 5 Policy recommendations

Regions in China



Beijing-Tianjin-Hebei

Yangtze River Delta

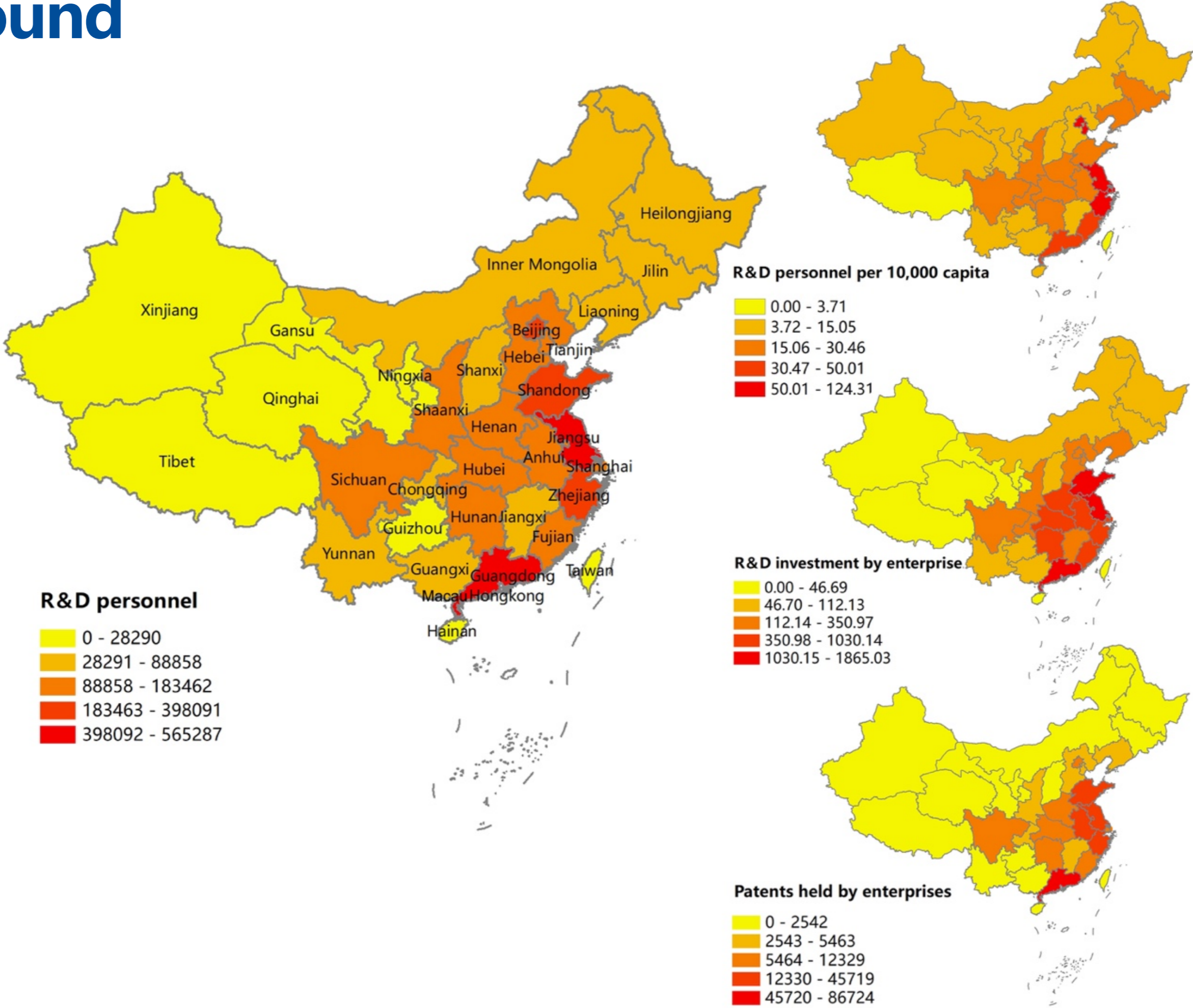
Pearl River Delta

30% R&D investment
43% high-tech enterprises
38% patents.

“Region” can be

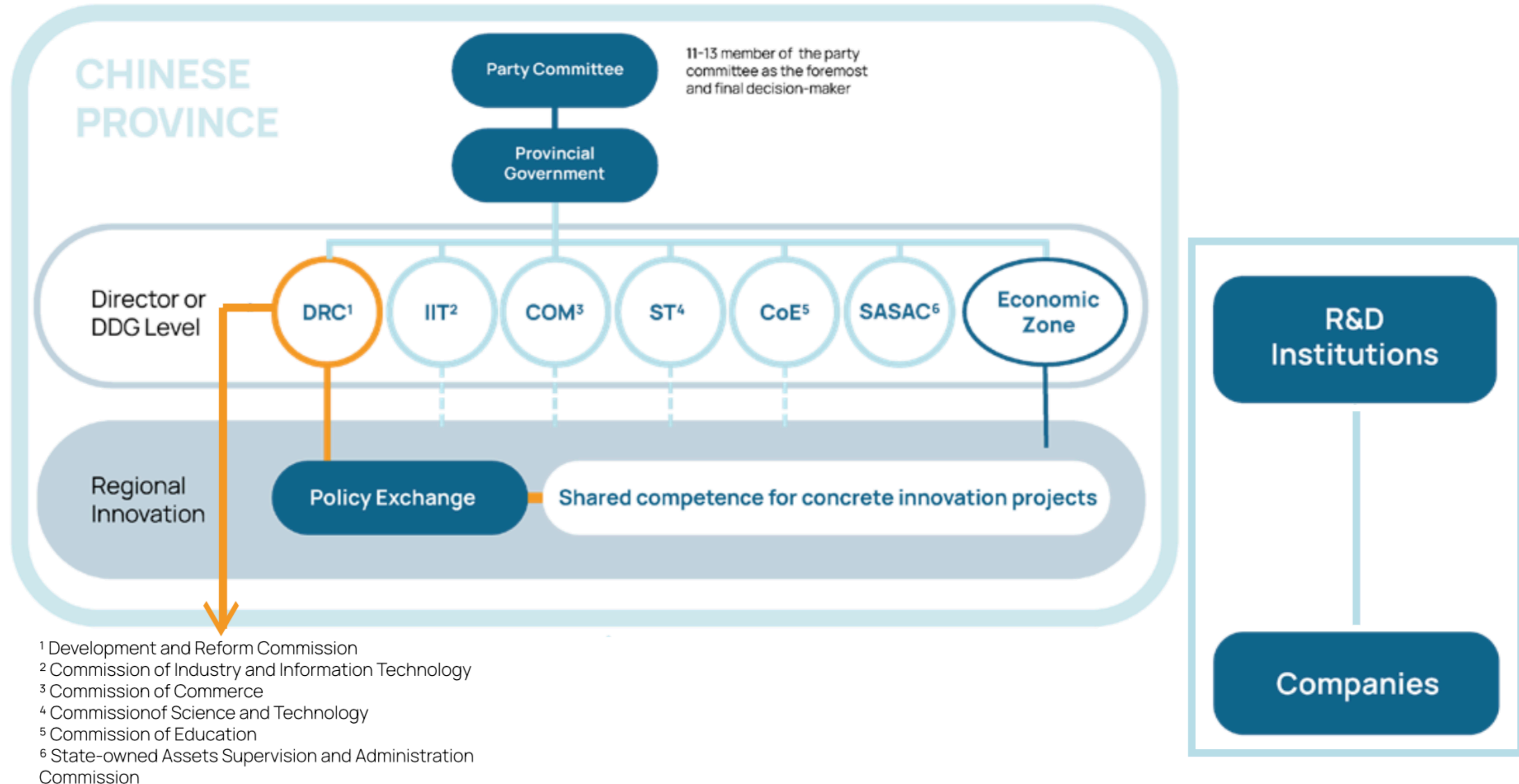
- Multiple provinces
- One province
- Two or more cities

Background



- 1 Background
- 2 Territorial dimension
- 3 Governance system**
- 4 Three Cases
- 5 Policy recommendations

Governmental Departments



Central - Local

- **Tailoring strategies by central government**
- **E.g.**
- Catalogue of Encouraged Industries for Foreign Investment by NDRC and MOC
- A general, national list
- A dedicated list for each of the 23 provinces in west and middle China
- A Catalogue of Encouraged Industries in West China

Central - Local

Top-down + Bottom-up

- The central government makes national strategies
- The provincial governments echo, and tailor their own strategies
- The municipal governments further tailor their own strategies

E.g. Priorities of Shandong Province

- Information technology (emerging)↵
- Advanced equipment (emerging)↵
- Renewable energy (emerging)↵
- New materials (emerging)↵
- Modern marine industry and health industry (emerging)↵
- Chemical industry (to-be-upgraded)↵
- Agriculture (to-be-upgraded)↵
- Cultural industry (to-be-upgraded)↵
- Tourism (to-be-upgraded)↵
- Finance (to-be-upgraded)↵

} A subset of national priorities

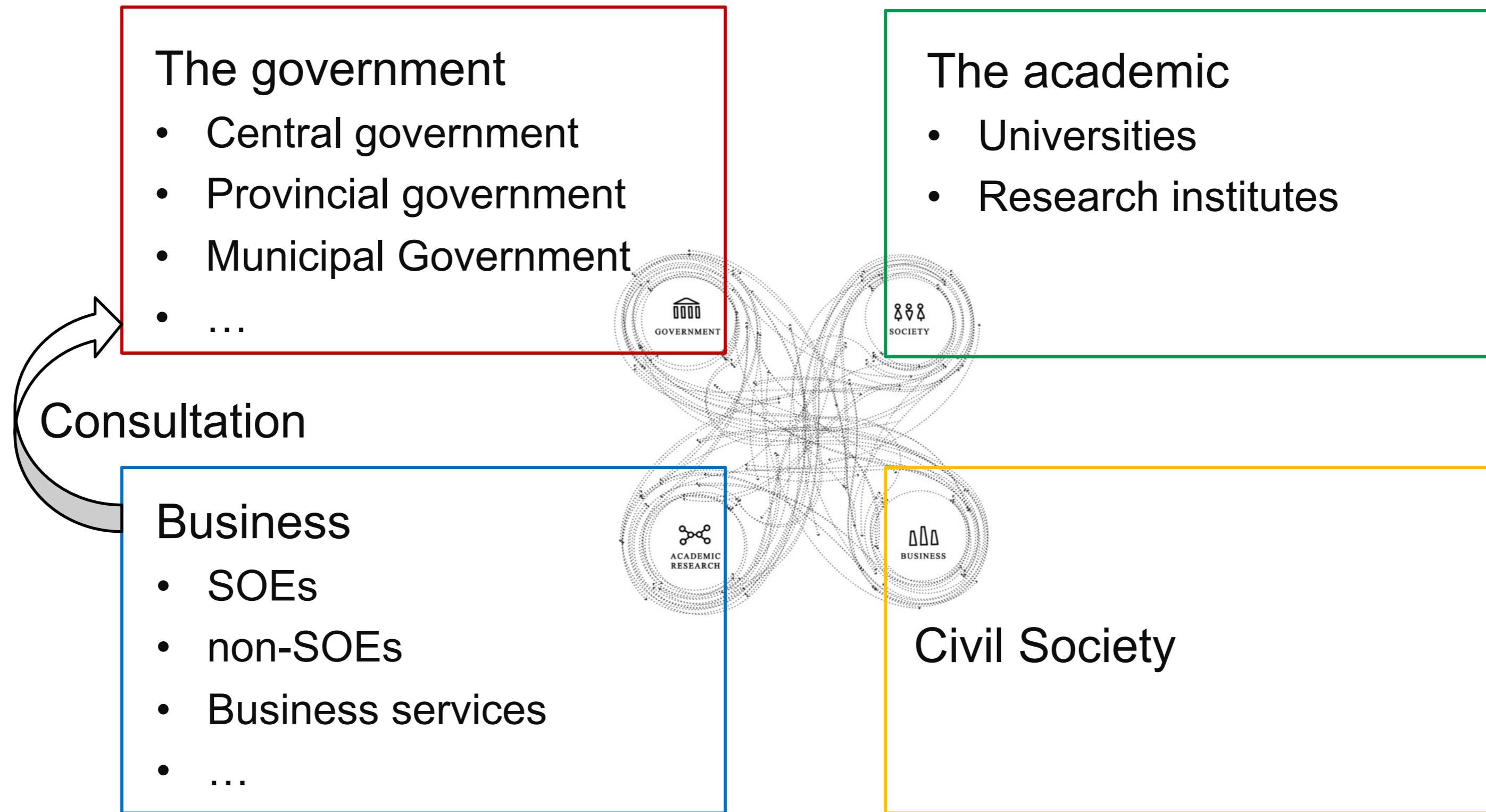
Central - Local

Non-one-size-fits-all policies

- Provincial government level
- Integrated circuit plan in Jiangsu
- Integrated circuit plan in Shandong



Stakeholders



Innovative Provinces

INNOVATIVE COUNTIES PREFECTURES AND PROVINCES
IN CHINA (2020)



Innovative Provinces

Jiangsu
Anhui
Zhejiang
Shaanxi
Hubei

Guangdong
Fujian
Shandong
Hunan
Sichuan

Principal Actions

Tertiary Education

Including making long-term and comprehensive plans for the training and absorption of professional personnel according to demands of industrial development, improving the education and training system at all levels, and providing training programs on starting-up for young entrepreneurs such as coaching, business operation courses and legislation courses.

Technology Development Support

Including providing technical support and consultation to assist enterprises in technological innovation, directly funding technology diffusion and transfer or support the innovative transition of leading enterprises.

Funding

Providing direct financial support for the innovation activities of enterprises.

Financial Support

Including helping with financing and venture capital, providing subsidies, special permissions, loan guarantee, export credit, etc.

Tax incentives

Including tax exemption, accelerated depreciation, and tax credit for enterprises and individuals involved in innovation activities.

Principal Actions

Extended Services

Providing extended public services for innovation activities, including launching associations and discussion platforms, organizing exhibitions, building science parks or incubator, etc.

Procurement / Outsourcing

Providing a clear and stable market through bulk purchase of new products, so as to reduce the uncertainty confronted by enterprises in the early stage of innovation, also including the outsourcing of R&D demands of the government.

Regulation

Making regulations on fair trade, intellectual property right, monopoly behavior as well as environmental and health standards, so as to provide favorable environment for innovation.

Encouragement and Advocacy

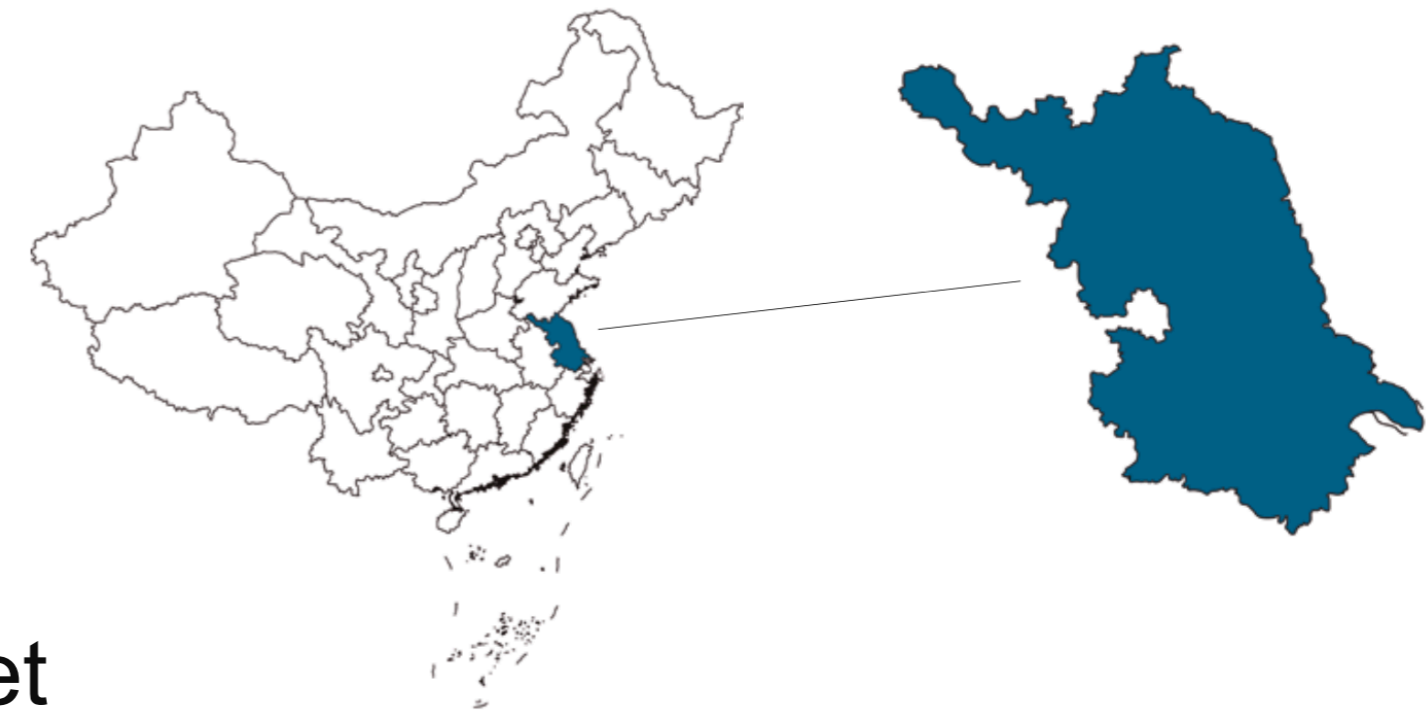
Proposing a series of encouraged activities in favor of industrial innovation such as encouraging enterprises to cooperate or form alliances, encouraging technology import, etc. However, such policy items often do not indicate detailed implementation measures, hence more concrete follow-up measures are still needed.

- 1 Background
- 2 Territorial dimension
- 3 Governance system
- 4 Three Cases**
- 5 Policy recommendations

Jiangsu

Aiming to be globally competitive

- Per-capita GDP: 123,600 RMB in 2019
- 11% of China's industrial value-add
- Challenges
 - Not competitive enough in the global market
 - Share similar problem as Shandong
 - Disparity within the province



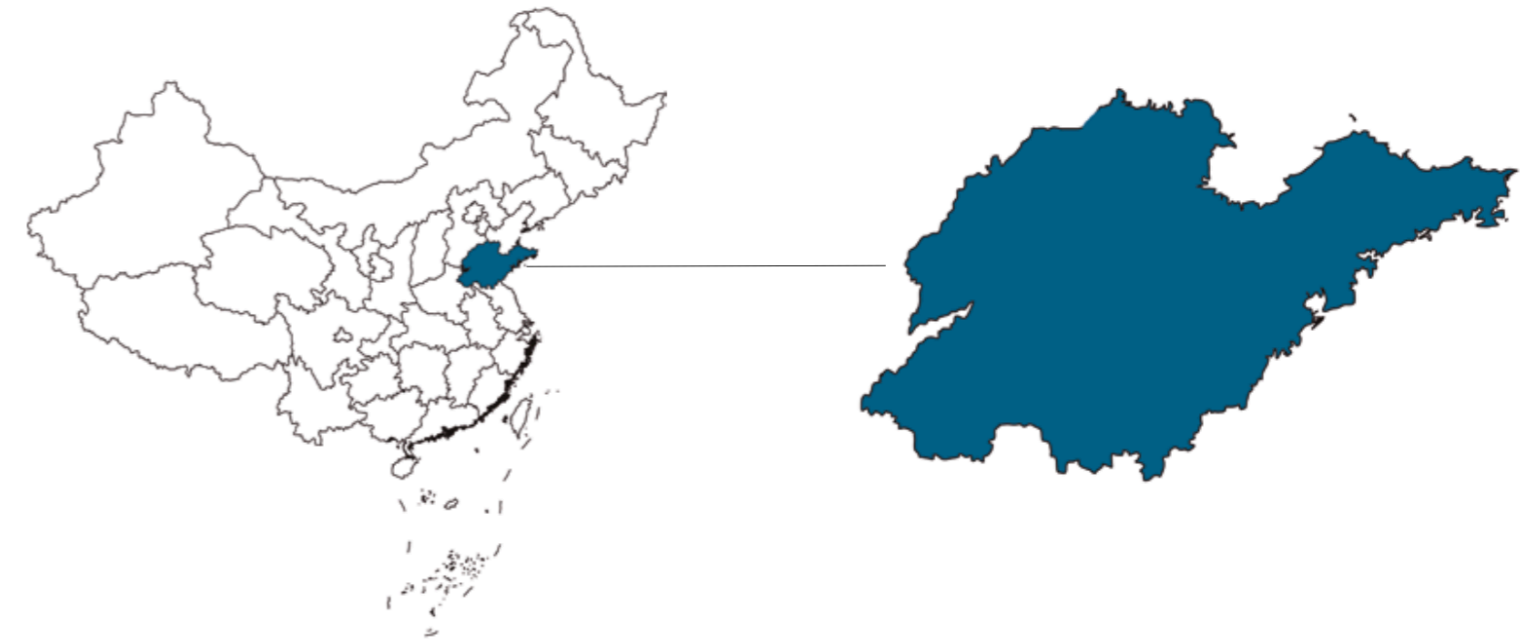
Strategies

- Jiangsu “Action Plan for Made in China 2025” (2015) :15 advanced sectors on electronics, engineering, energy and bioscience.
- Upgrading traditional industrial base: machinery, petrochemicals, metallurgy, and textiles
- “Future” sectors: nanomaterials, quantum communication, robotics, etc.
- Strategies by the 13 administrative cities, e.g. Huaian, Suzhou

Shandong

Transforming the driving force of development

- Per-capita GDP: 70,653 RMB in 2019
- Challenges
 - Medium-to-lower-end industries
 - Typical in China



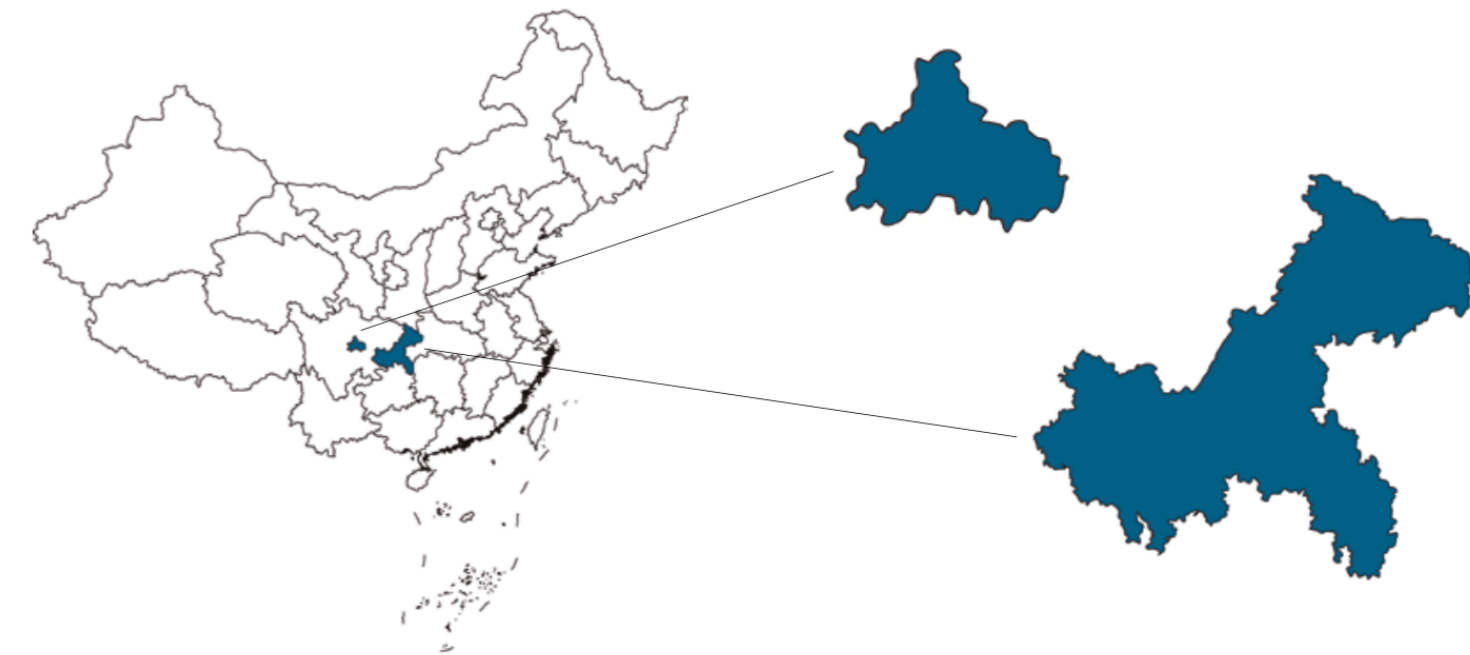
Strategies

- 5 to-be-upgraded traditional industries: chemicals; agriculture; cultural industry; tourism; finance.
- 5 emerging industries: information technology; advanced equipment; renewable energy; new materials; modern marine industry; health industry.
- the precise areas of specialization reflect the different innovative capacities
- Government-oriented to business-oriented

Chengdu-Chongqing

Twin-city growth pole for West China

- Per-capita GDP: 89,600 RMB in 2019
- Challenges
 - Overlap in the industrial base
 - Administrative obstacles
 - Lack of attractiveness to innovative firms and personnels



Chengdu-Chongqing

Strategies

- New governance arrangements, e.g. establishing joint committees
- Form a value chain within the region
- emphasis on attracting and retaining highly qualified human resources

- 1 Background
- 2 Territorial dimension
- 3 Governance system
- 4 Three Cases
- 5 Policy recommendations**

Policy recommendations

- Experience exchange in EDP
- Pairing between EU and Chinese regions
- Business opportunity identification to promote business cooperation

Thanks !

liu.lun@pku.edu.cn

www.citiesandregions.cn