

徑山報告
JINGSHAN REPORT

FINANCIAL INNOVATION SUPPORTING HIGH QUALITY DEVELOPMENT IN CHINA

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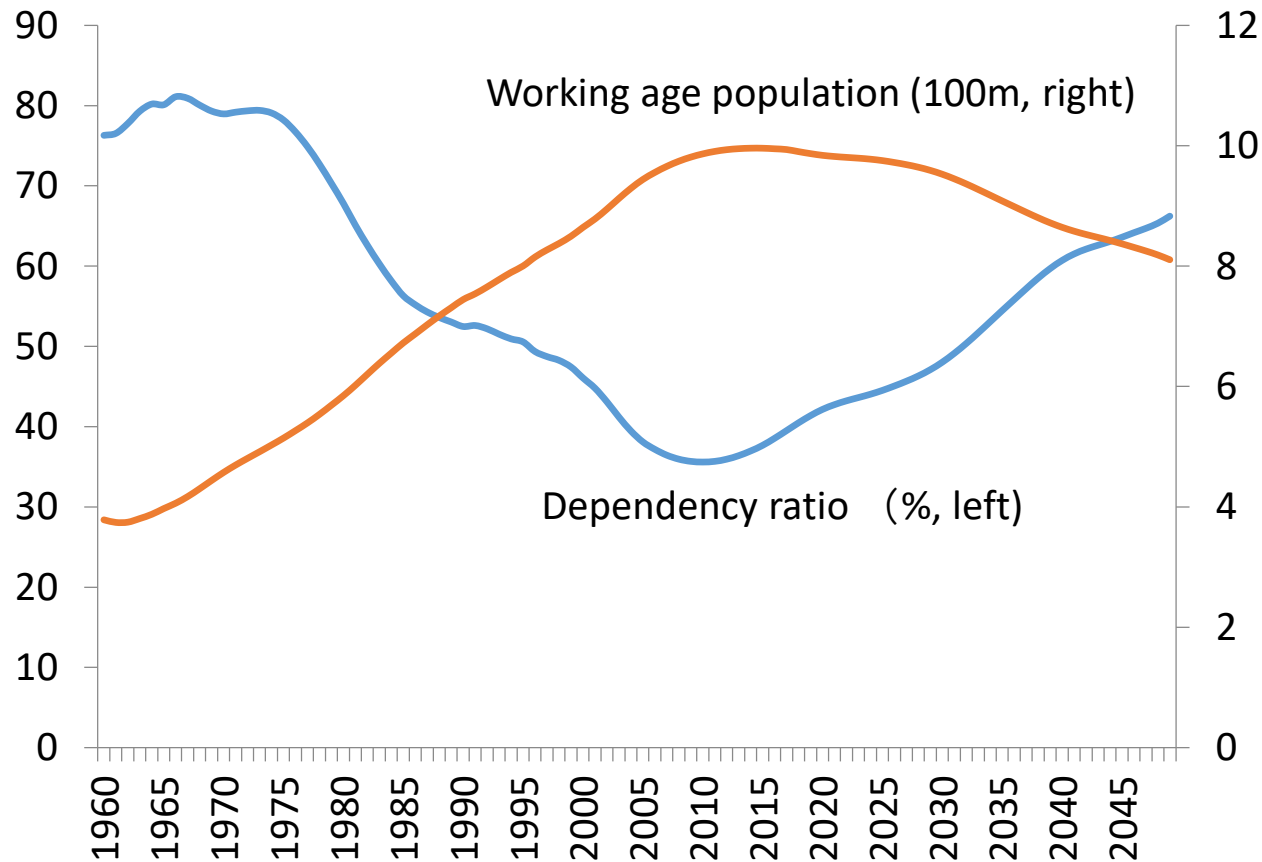
China Finance 40 Forum & Peking University

November 6, 2019, Washington DC

The Jingshan Report

- 2017: financial opening; 2018: financial reform; 2019: financial innovation
- Central question:
 - High quality economic development in China calls for what kind of financial innovation?
- Members of the research team
 - Justin Yifu Lin, Professor, Peking University
 - Tian Xuan, Professor, Tsinghua University
 - Yang Kaisheng, former President, Industrial and Commercial Bank of China
 - Xiao Gang, former Chairman, China Security Regulatory Commission
 - Huang Zhuo/Shen Yan, Professors, Peking University
 - Guo Kai, Deputy Director-General, People's Bank of China
 - Huang Yiping, Professor, Peking University

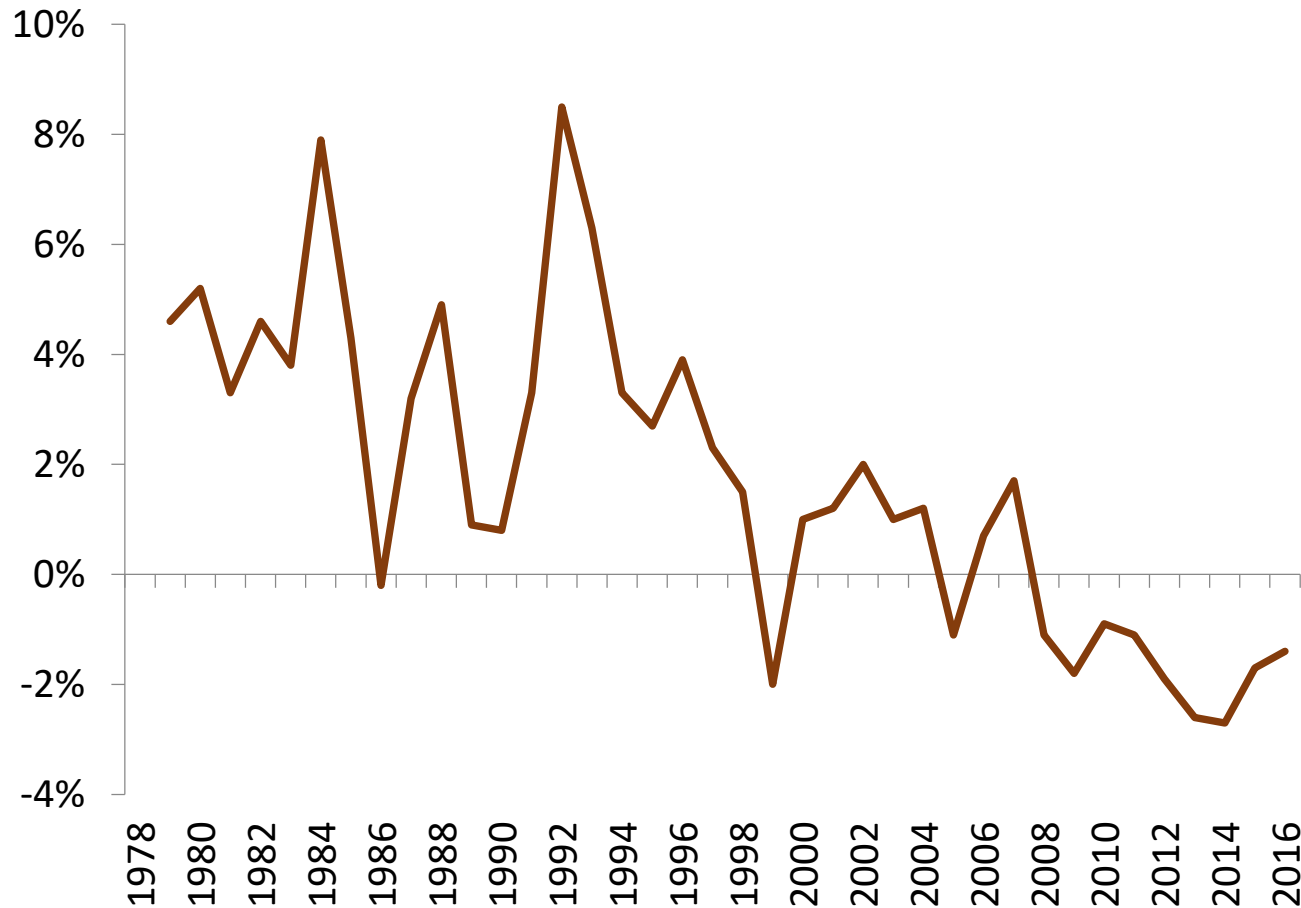
Need for a new growth model



- Loss of low cost advantage
 - GDP per capita rose from \$2,600 in 2007 to \$9,736 in 2018
- Ageing of the population
 - Dependency ratio could rise from 1/3 in 2010 to 2/3 in 2049
- Anti-globalization
 - Trade wars

Working age population (right) and dependency ratio (left)
Source: Joint project by Peking University and Brookings Institution.

High quality economic development

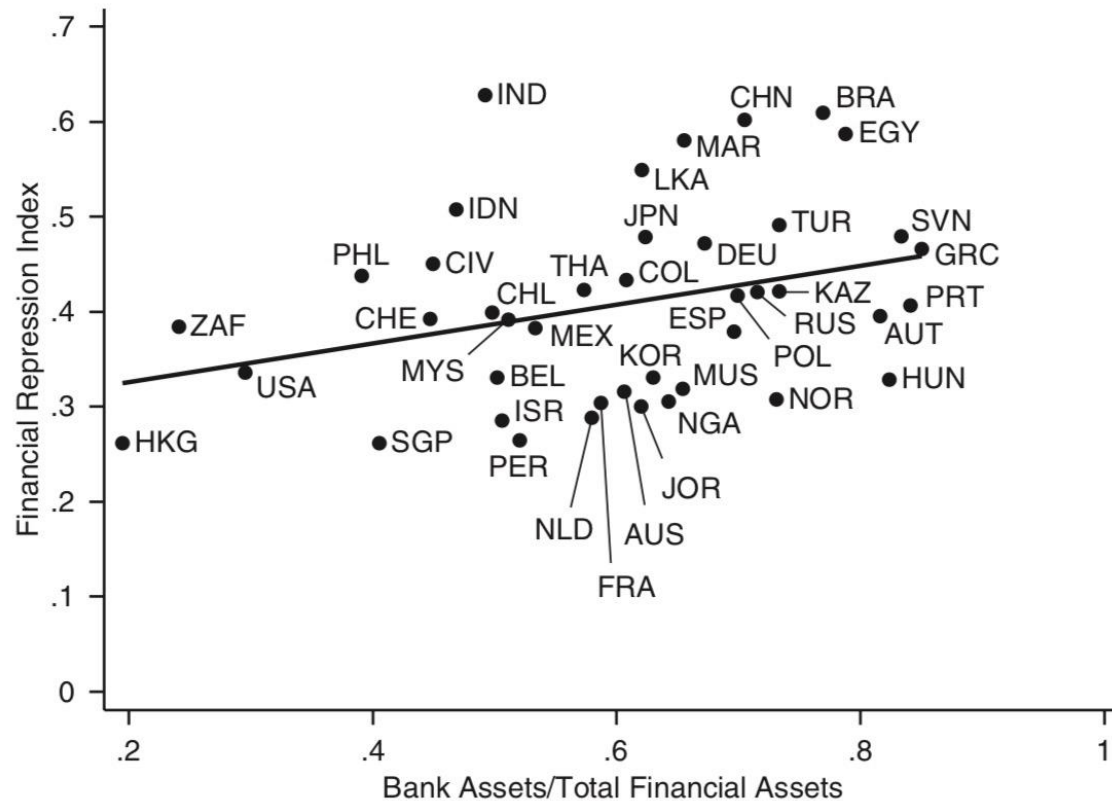


Growth of China's total factor productivity
Source: 2018 Jingshan Report

- High efficiency of the production inputs: labor, capital, resources, energy and environment
- High returns to participants: investors, enterprises, workers and the government

“Finance no longer supports the economy”

CHINA'S FINANCIAL SYSTEM IN
INTERNATIONAL COMPARISON, 2015



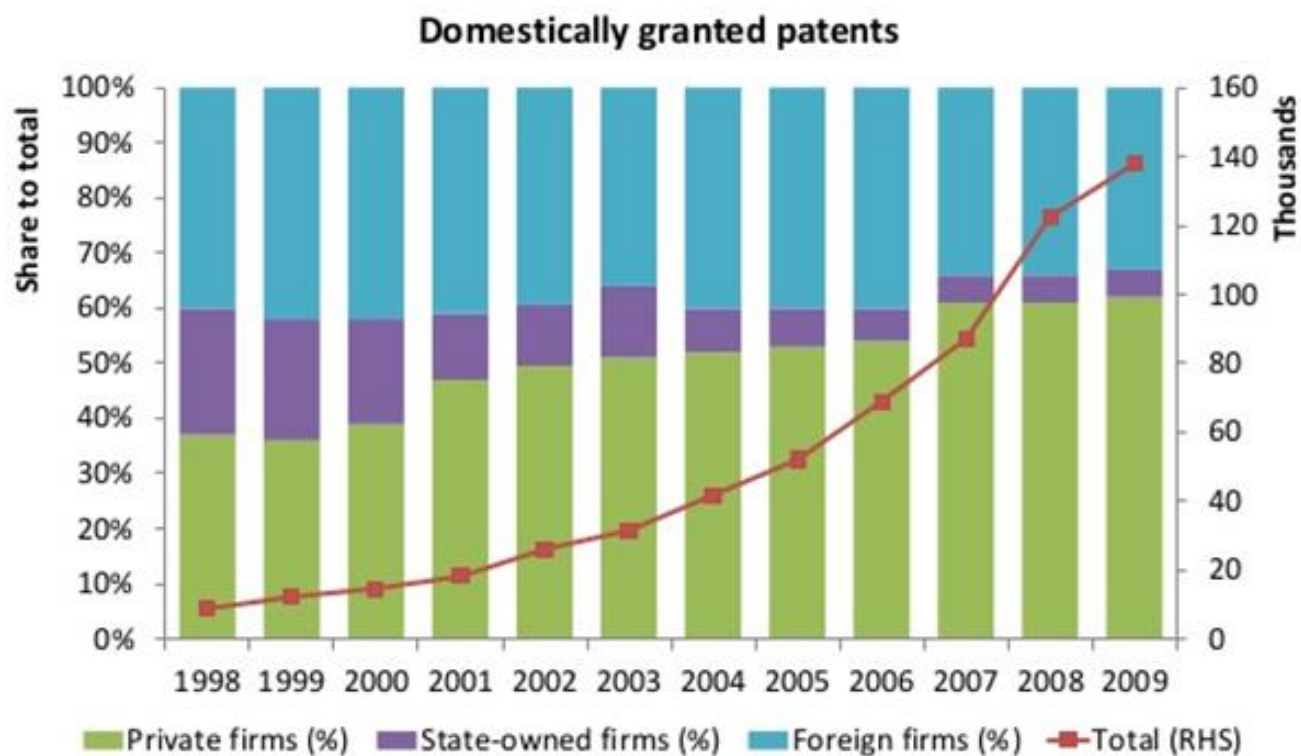
SOURCE: Huang et al. (2018).

Financial repression (vertical) and proportion of banking assets (horizontal)

Source: 2018 Jingshan report.

- This financial system worked well before in supporting economic growth and financial stability
- But now a range of demand for financial services is not satisfied
 - Household demand for asset-based income
 - SMEs demand for credit
 - Government need to raise funds

Good vs bad financial innovation

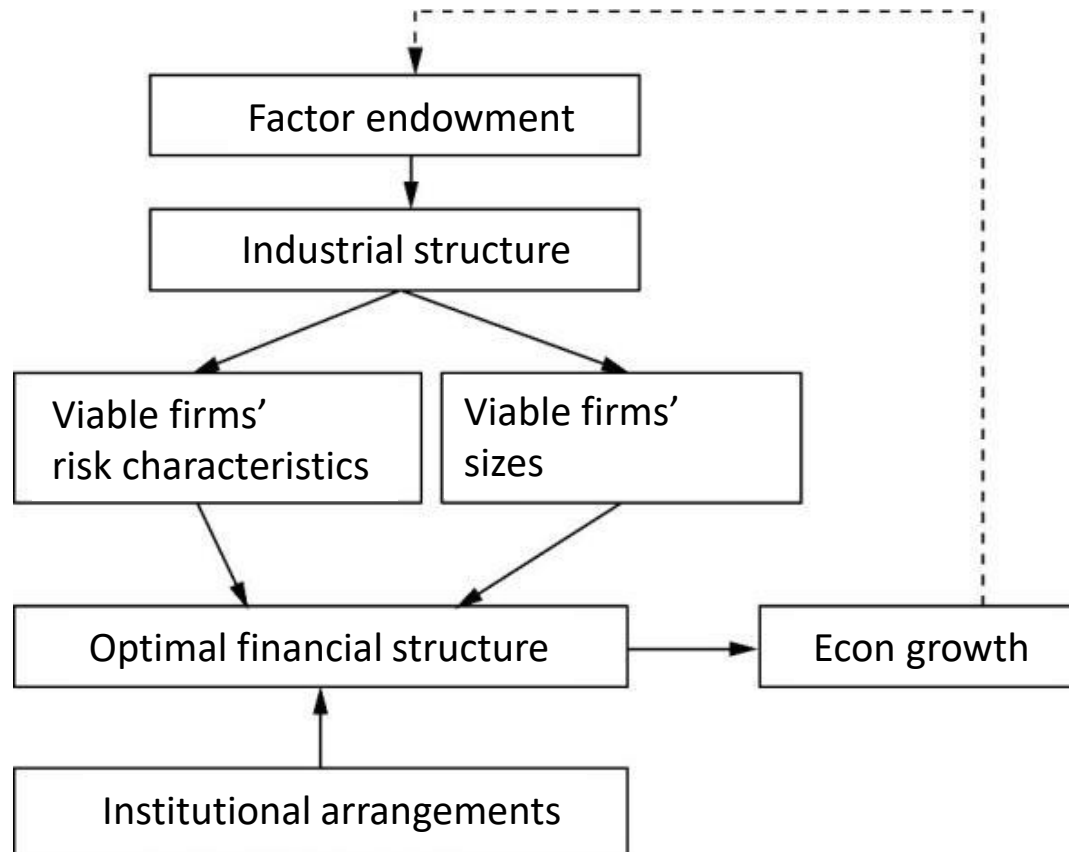


- Challenge:
 - Economic innovation: long cycle, significant uncertainty and high probability to fail
 - Financial investment: short term, low risk and high return
- Needed changes
 - Patient capital
 - New risk management
 - Tolerance of failure

Domestic patents by ownership of enterprises (%)

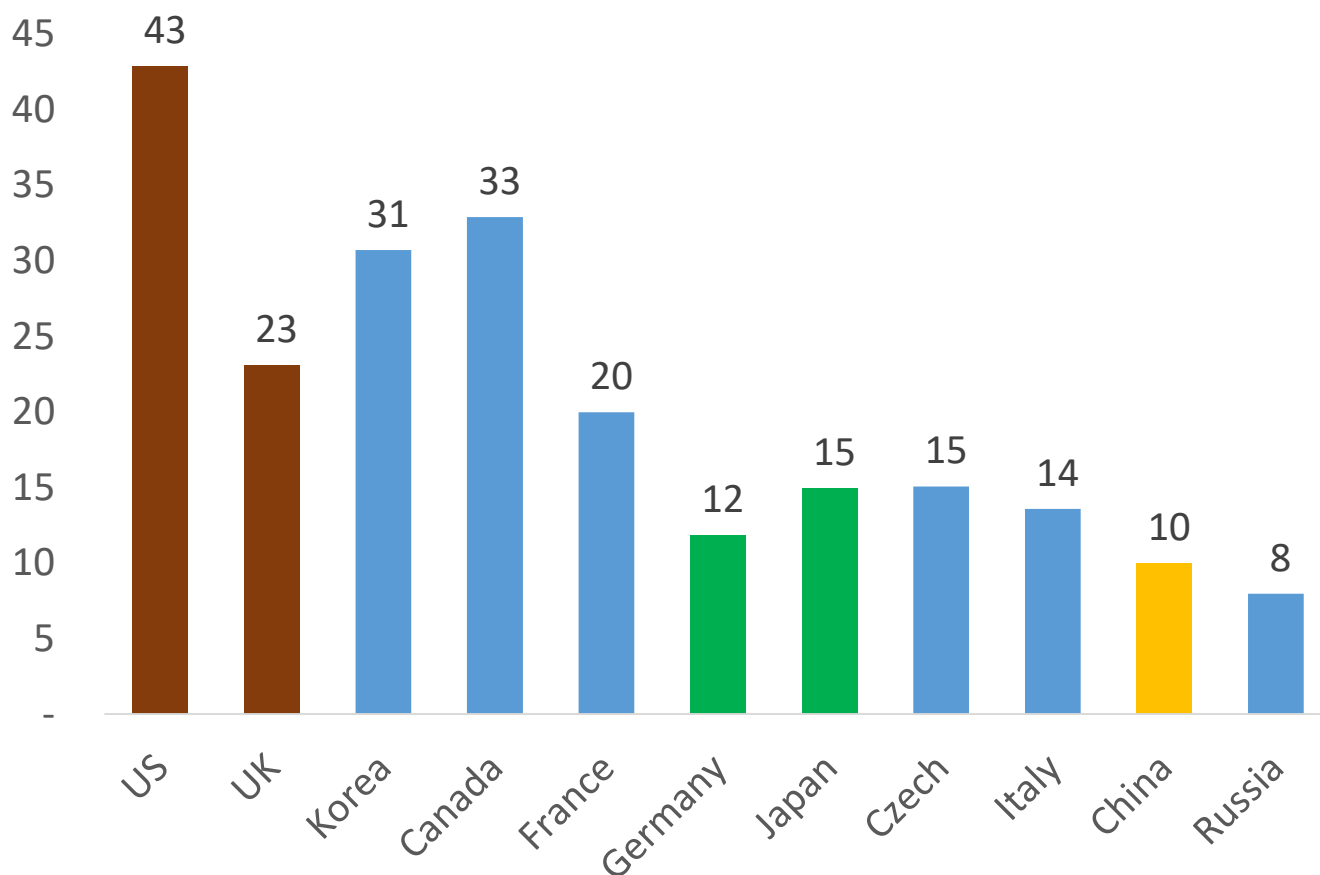
Source: Shang-Jin Wei & Zhuan Xie & Xiaobo Zhang, 2017. "From "Made in China" to "Innovated in China": Necessity, Prospect, and Challenges," Journal of Economic Perspectives, American Economic Association, vol. 31(1), pages 49-70, Winter.

“Optimal financial structure”



- Structure of financial supply should be compatible with that of financial demand (Justin Lin)
 - Small vs large financial institutions, direct vs indirect financing
 - **Form or function?** (financial structure changes slowly)

Very limited roles of capital markets

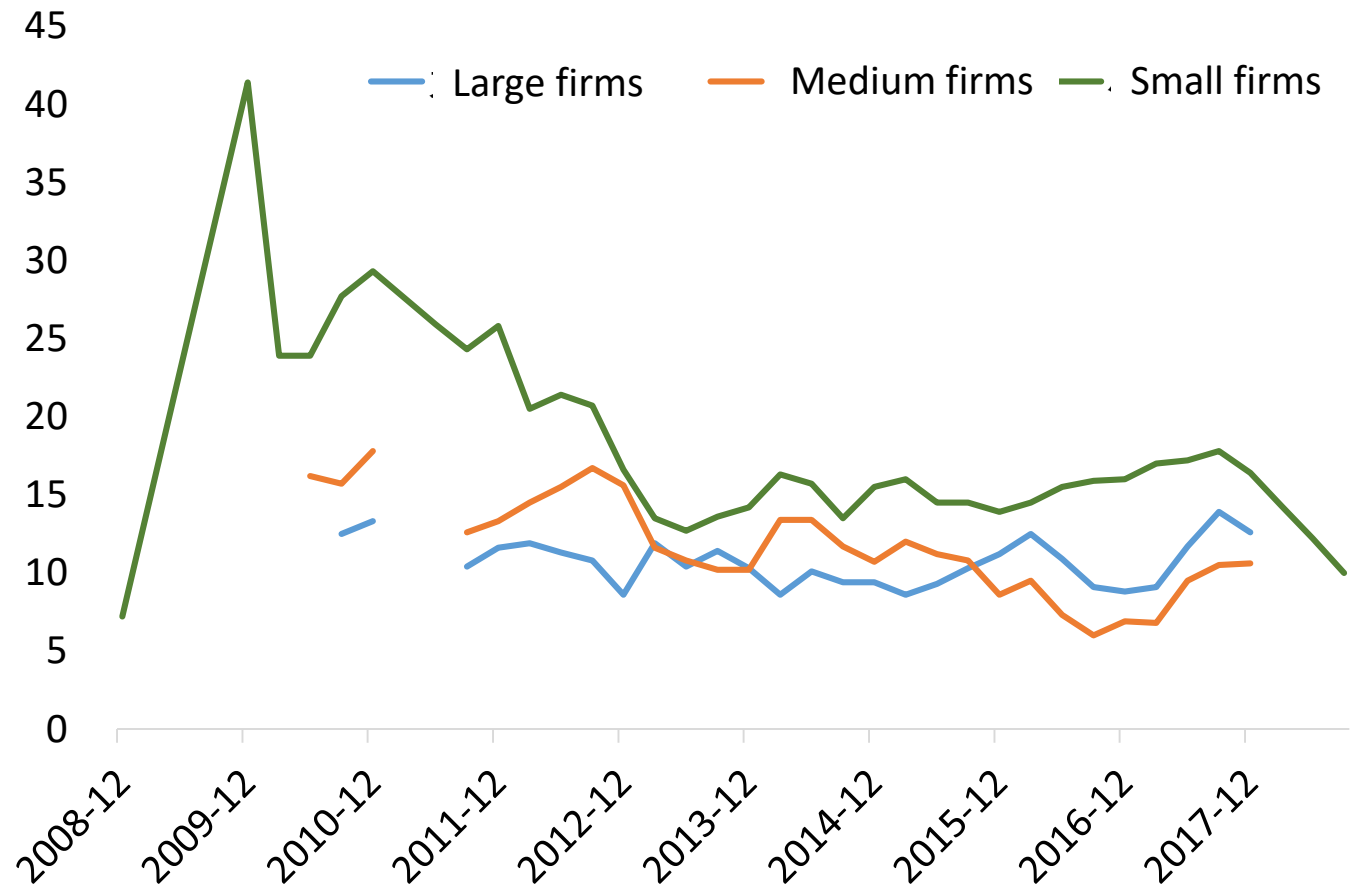


- Capital markets have advantages in supporting innovation
- The regulators manage markets the same ways as they manage banks
 - IPO issuance, pricing and state credit
- Capital markets also have some deficiencies
 - Lack of patience

Proportions of direct finance in various countries, 2017 (%)

Source: OECD.

Banks are not up to the task

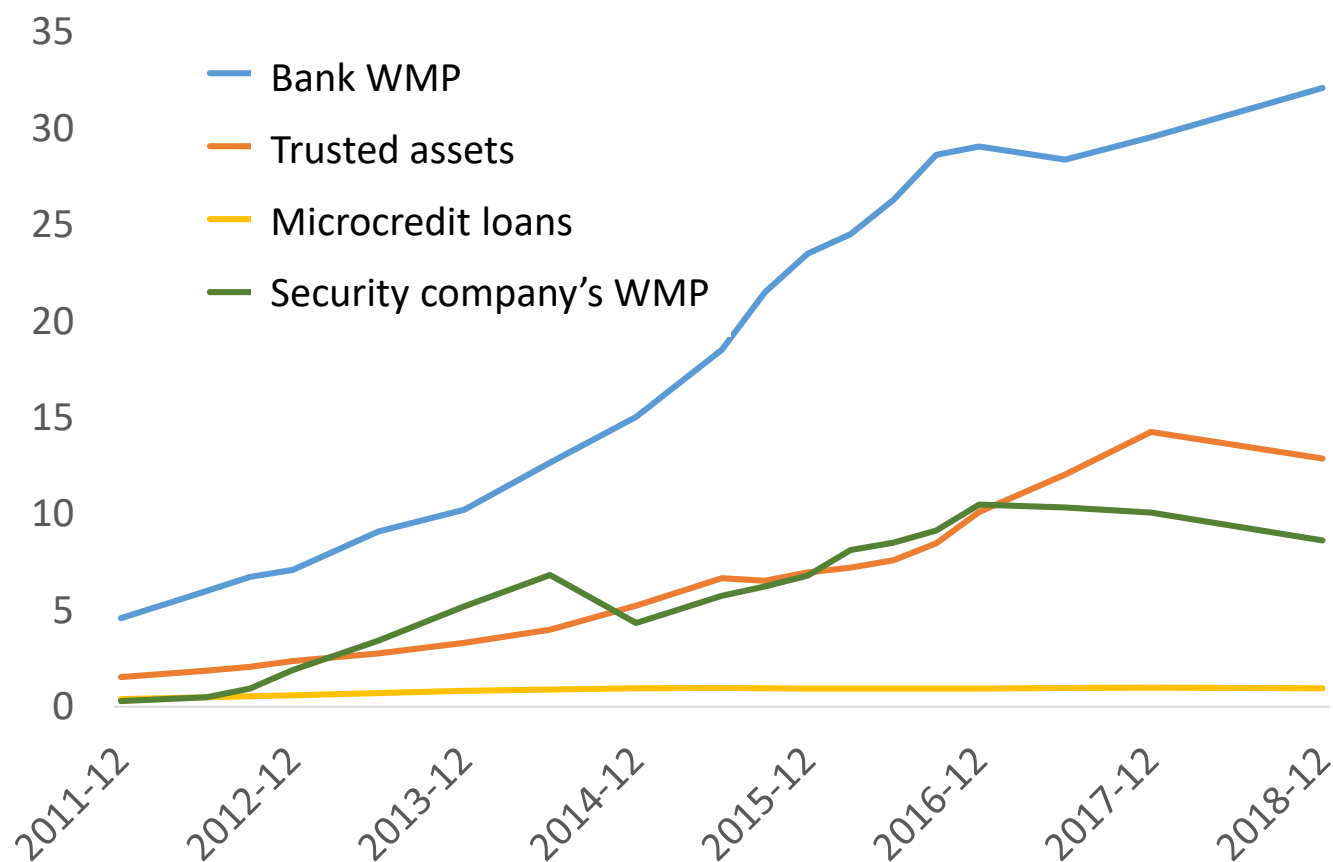


- Innovation by Chinese banks
 - Tech branch, supply chain finance and investment/lending coordination
 - Deep cultivation, credit factory and digital finance
- Barriers
 - Interest rate liberalization, government guarantee, credit culture

Year-on-year growth of outstanding loans by enterprise sizes, 2008-2018 (%)

Source: 2019 Jingshan Report

Shadow banking “right thing, wrong approach”



- Chinese shadow banking is actually shadow of banks
- It satisfies some real demand, in addition to by-passing the regulation
- Risks: mismatches and “guaranteed returns”
- New regulations are effective but also generated side effects: rising funding costs, slowing fixed asset investment and greater difficulties of SME financing

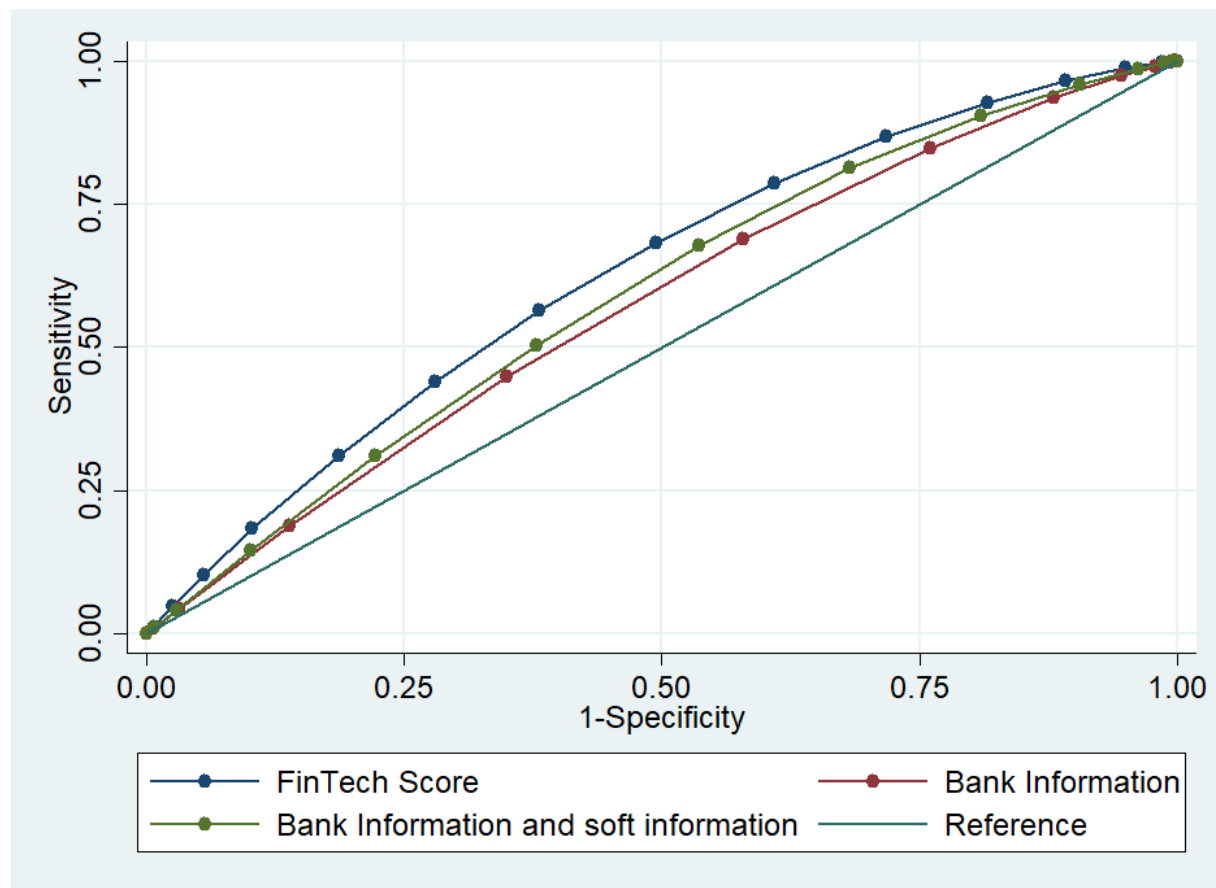
Sizes of shadow banking transactions (trillion RMB)
Source: 2019 Jingshan Report

Scale of online lending



- An experiment in Yunnan province of the Grameen Bank: 13 staff, served 130 poor farm households
- Each of the three online banks extends about 10 million SME and individual loans every year
- “310” model (3minutes to apply, 1 second the fund is at the account, 0 human interference)

Fintech credit scoring model works better

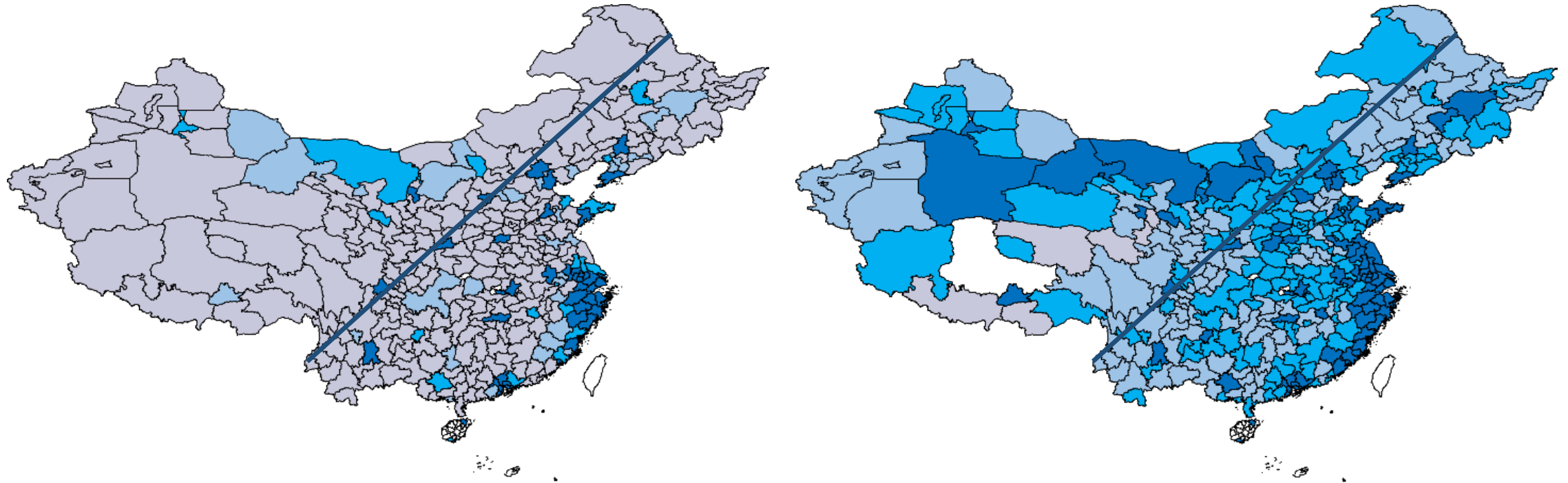


Receiver Operating Characteristics (ROC) Curve for each credit scoring model

Source: Gambacorta, L., Huang, Y., Qiu, H. and Wang, J., 2019, How do machine learning and big data affect credit scoring? Results from a Chinese fintech firm. Draft, Bank of International Settlement and Institute of Digital Finance, Peking University.

- The fintech model (machine learning + big data) outperforms other models
- This result is even stronger following regulatory policy shocks
- The highest nonperforming loan ratio among the three online banks is 1.34%

Crossing the “HU Huanyong Line”

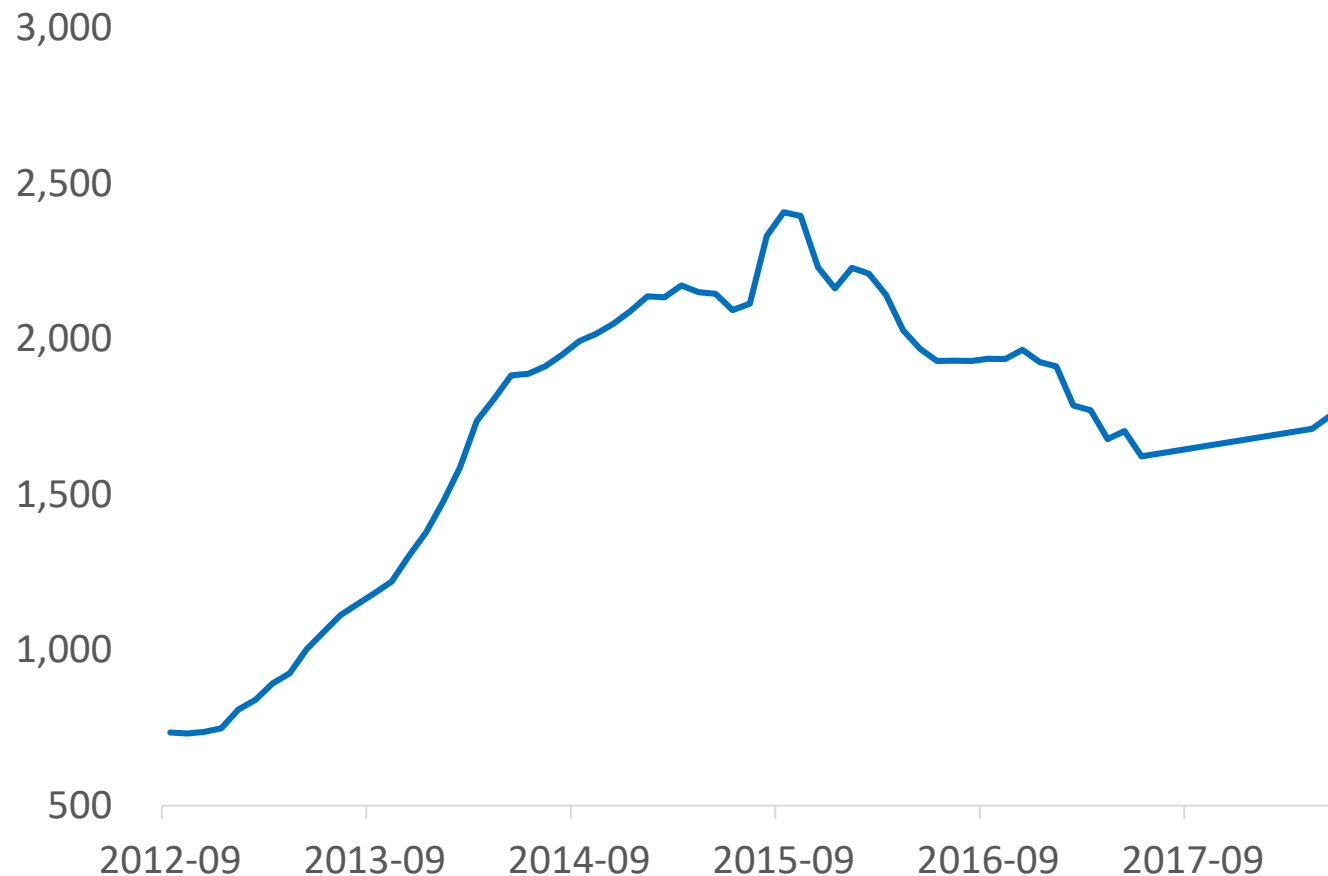


Peking University Mobile Payment Coverage Sub-index of PKU-DFII, 2011 (left) and 2018 (right)

Note: Prefecture-level cities are divided into four tiers separately by darkness of color. The Hu Huanyong Line links Heihe in Heilongjiang and Tengchong in Yunnan. More than 90 percent of the population lives in the region on the right.

Source: Institute of Digital Finance, Peking University

Re-starting RMB internationalization



RMB internationalization index
Source: 2019 Jingshan Report

- Supports high quality development (Financial opening, policy compatibility and less currency mismatch)
- Past issues: inadequate policy coordination and lack of support from the public
- RMB significant gaps from major global currencies
 - Size of the economy, openness, three function of currency and offshore markets

Policy recommendations

- 1. Create policy environment that support innovation, protect intellectual property rights, implement competitive neutrality, improve the legal system pertaining to bankruptcy and restructuring, and promote market-based risk pricing.
- 2. Rebuild an “optimal financial structure” by developing multi-level capital markets and provide impetus to financial institutions to better serve innovative activities and small and medium-sized enterprises (SMEs).
- 3. Reduce the government’s direct “control” over the capital market and reduce policy uncertainty. Open the financial markets more systemically. Introduce more institutional and long-term investors.
- 4. Explore new business models linking banks with capital markets. Utilize soft information and big data for develop innovate risk assessment approaches. Establish a policy bank supporting innovative enterprises and small and micro enterprises.

Policy recommendations (continued)

- 5. Carefully pace new policies regulating shadow banking, and reduce policy distortions, which gave rise to shadow banking businesses. Unify regulatory standards for all types of asset management products to reduce arbitrage.
- 6. Support application of digital technology in financial services by both tech companies and financial institutions, through unified regulation, improved credit culture and better fintech infrastructure such as big data.
- 7. Make internationalization of RMB as the anchor of further financial opening policies, build a transparent monetary policy framework and exchange rate system, shift from “positive list” to “negative list” management.
- 8. Improve the regulatory system to strike a balance between innovation and stability. Strengthen policy coordination and adopt supervisory technology to adapt to the cross-industry, cross-regional and new technology business characteristics of financial innovation.



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Thanks 感谢