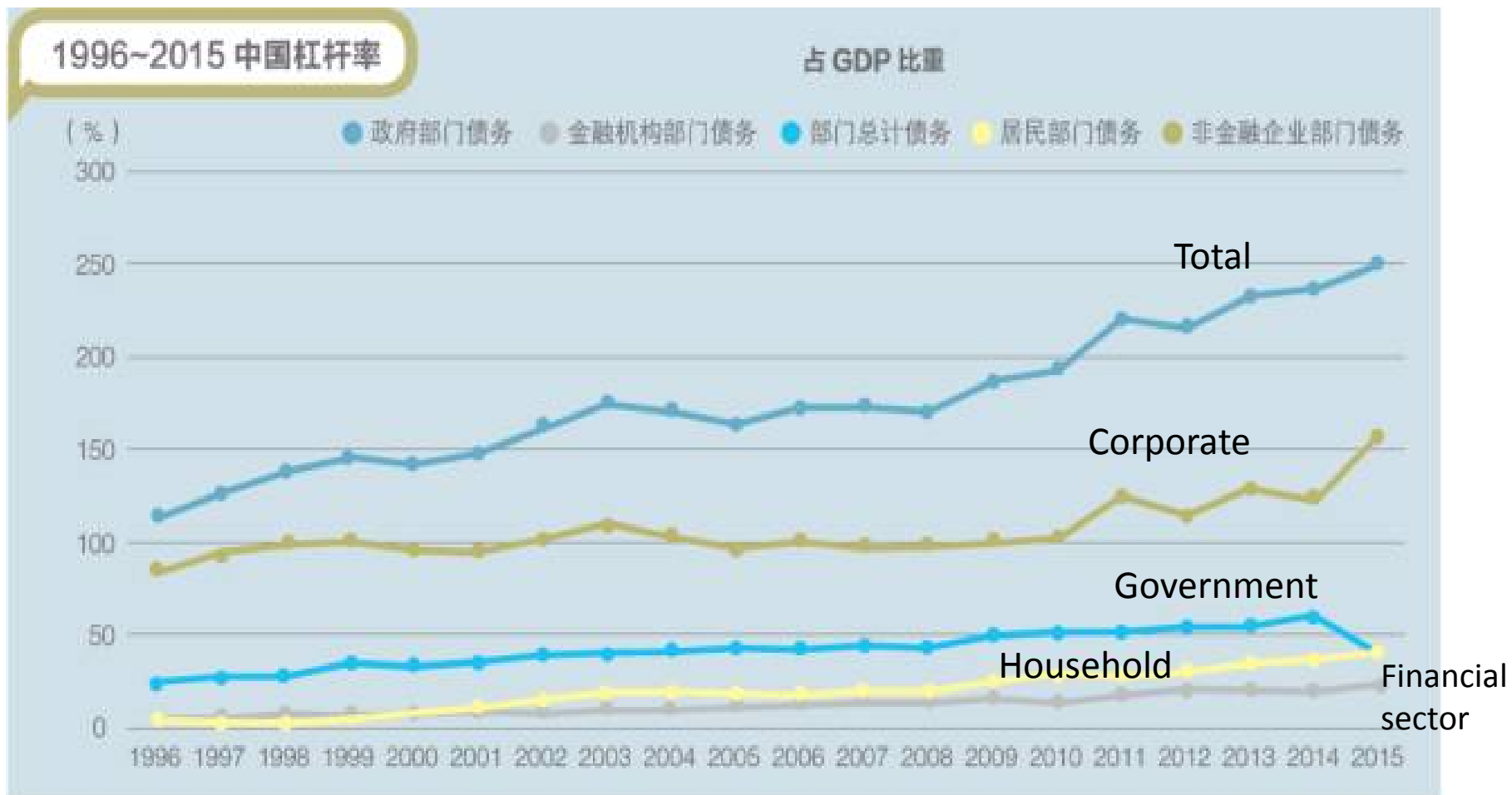


The High Leverage Ratio in China: Risks and Opportunities

Shang-Jin Wei

Columbia University and NBER

Gross Debt/GDP, China, 1996-2015



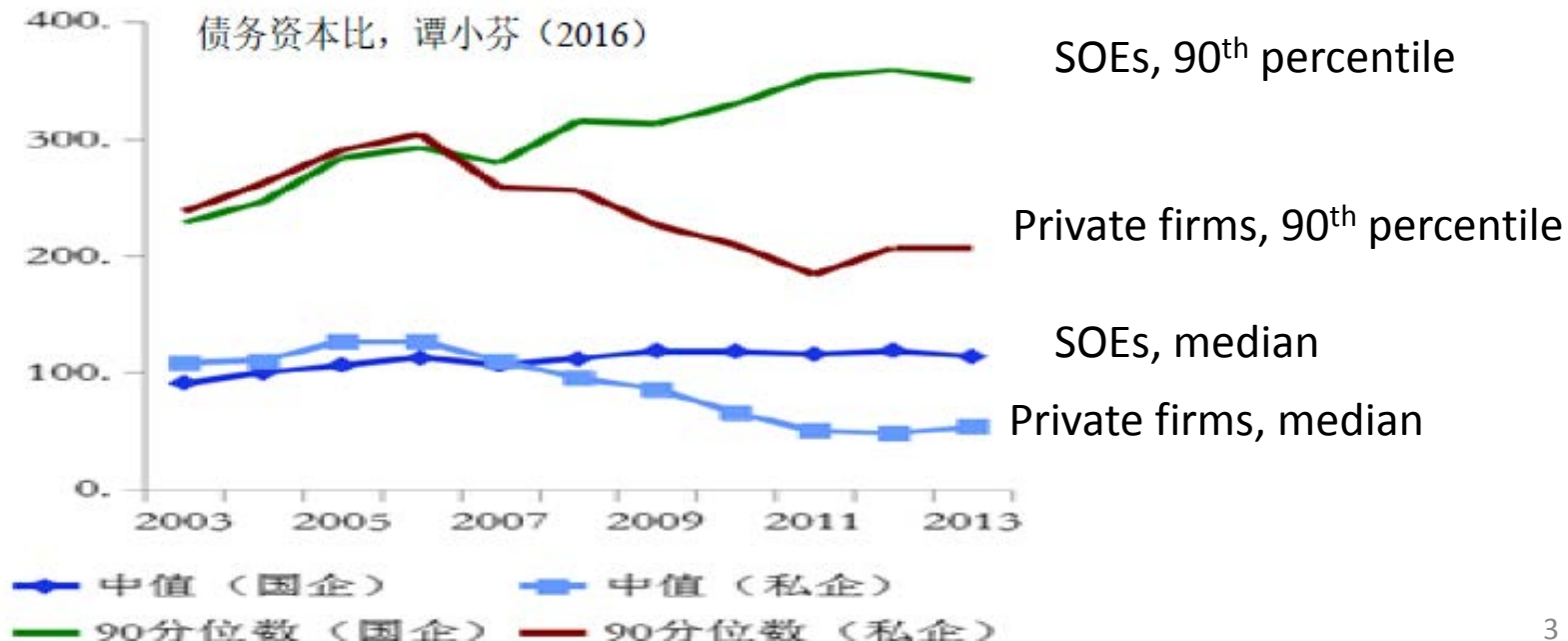
数据来源：中国社会科学院

But structural aspects need to be taken into account

- Asset/GDP is rising too
 - Based on annual survey of above-scale industrial firms:

	1995	2005	2015
Debt/asset ratio	66%	60%	56%

- Divergence between private sector firms and state-owned firms



First point

- Opportunity

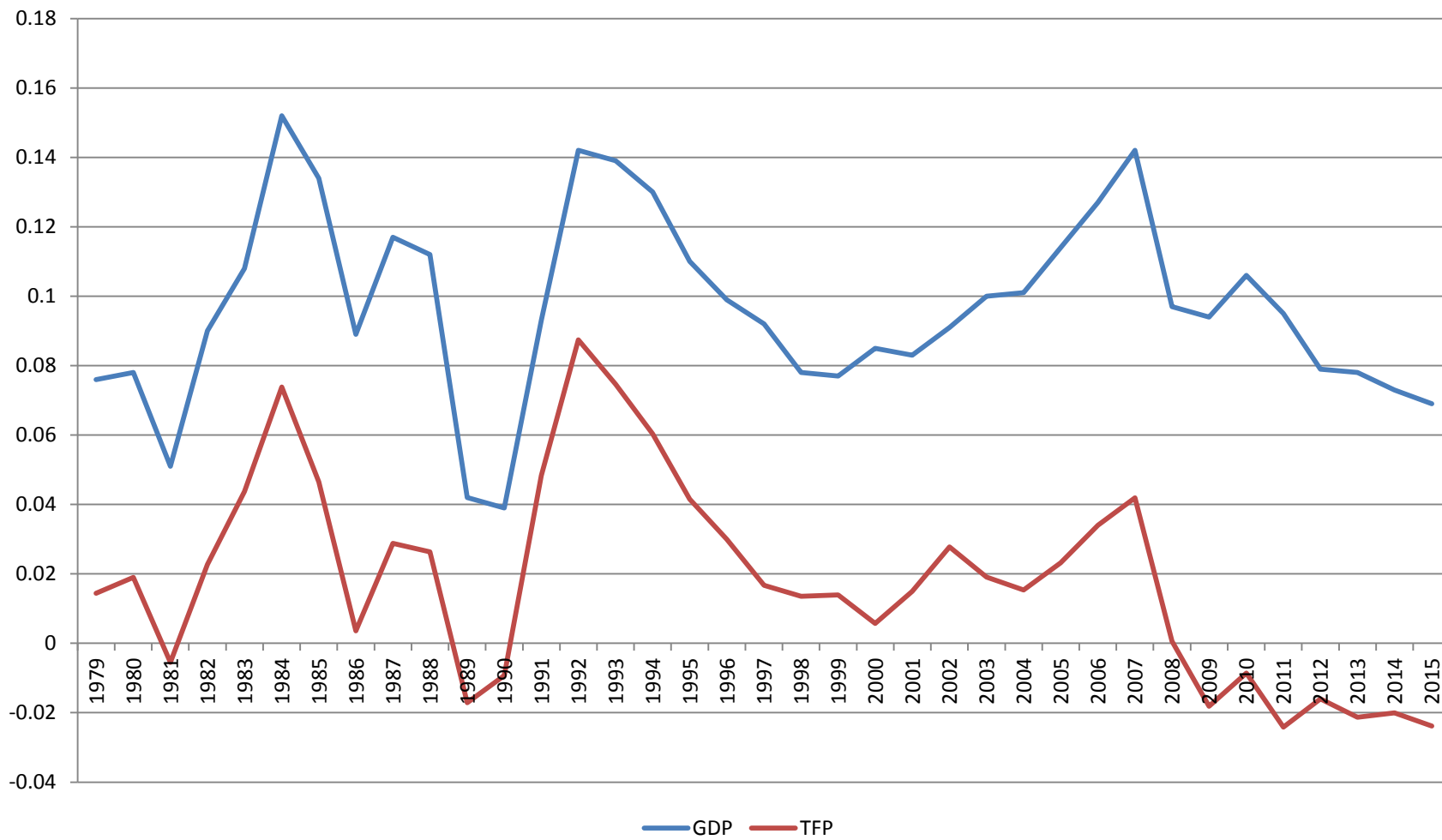
- De-leveraging and SOE reforms could be pursued in a complementary manner, with low risk for a financial crisis

- Policy risk

- Reluctance to let go of the SOEs
- Evergreening the loans to SOEs
 - Worsening the overall leverage problem

- Second point
- In the medium term, whether the debt/GDP ratio will improve or develop into a crisis also depends on whether GDP can grow at a healthy rate.

Growth rate of GDP and TFP



Let capital share=0.5

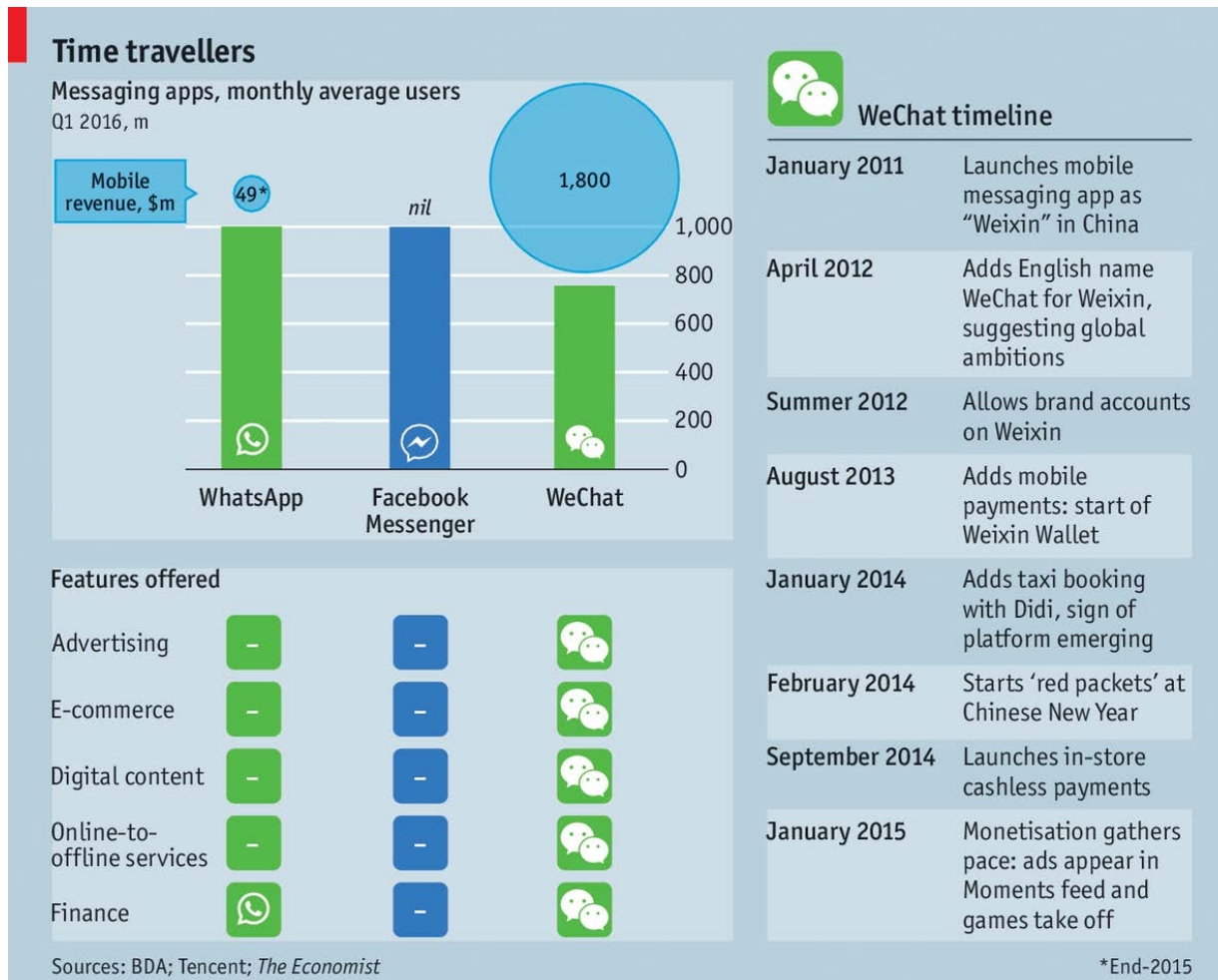
- Can the growth model transition from “made in China” to “innovated in China”?

If you want to look reasons to say no, you can find them

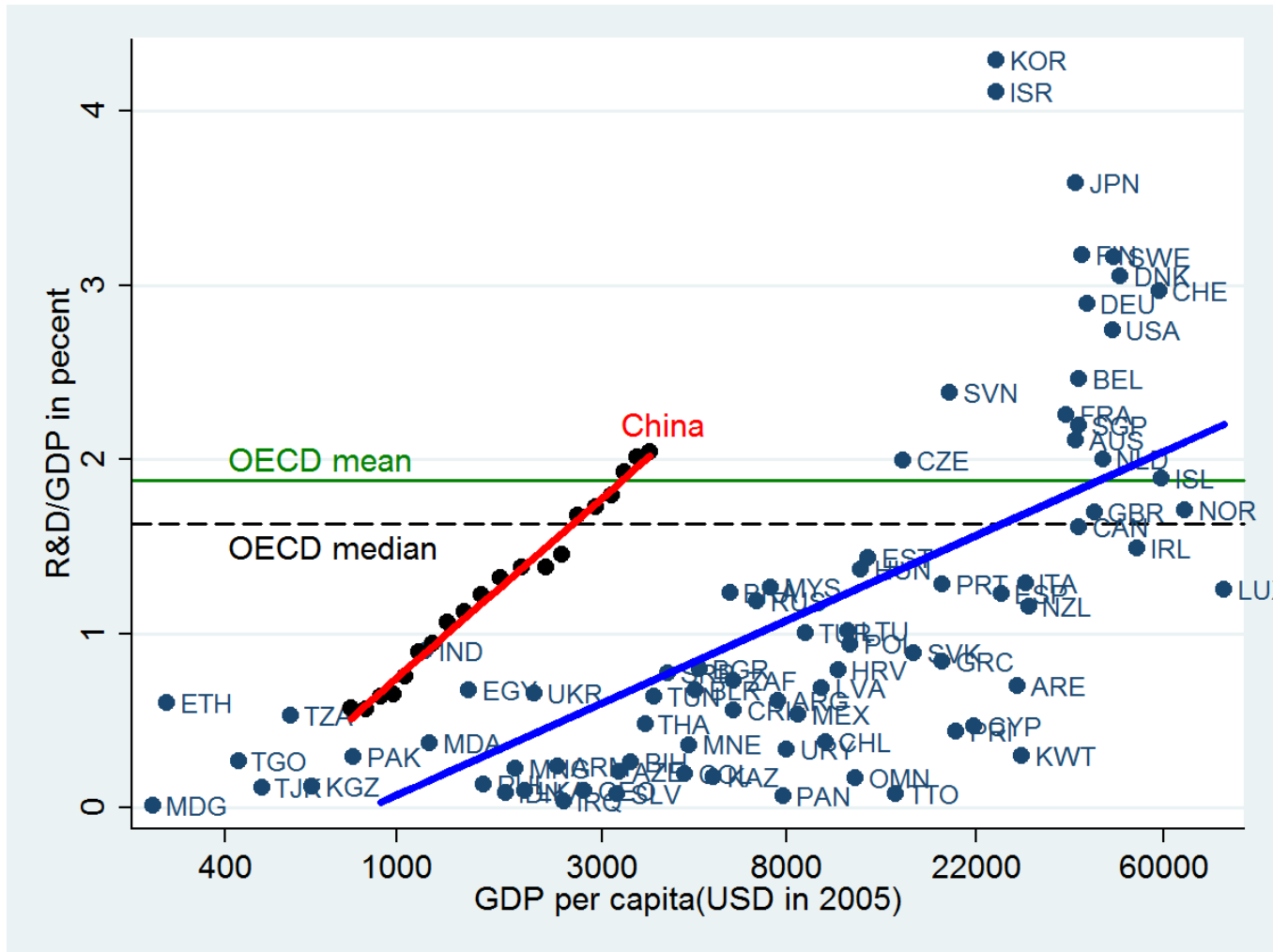


If you wish to look for optimistic examples, you can find them too.

WeChat's world



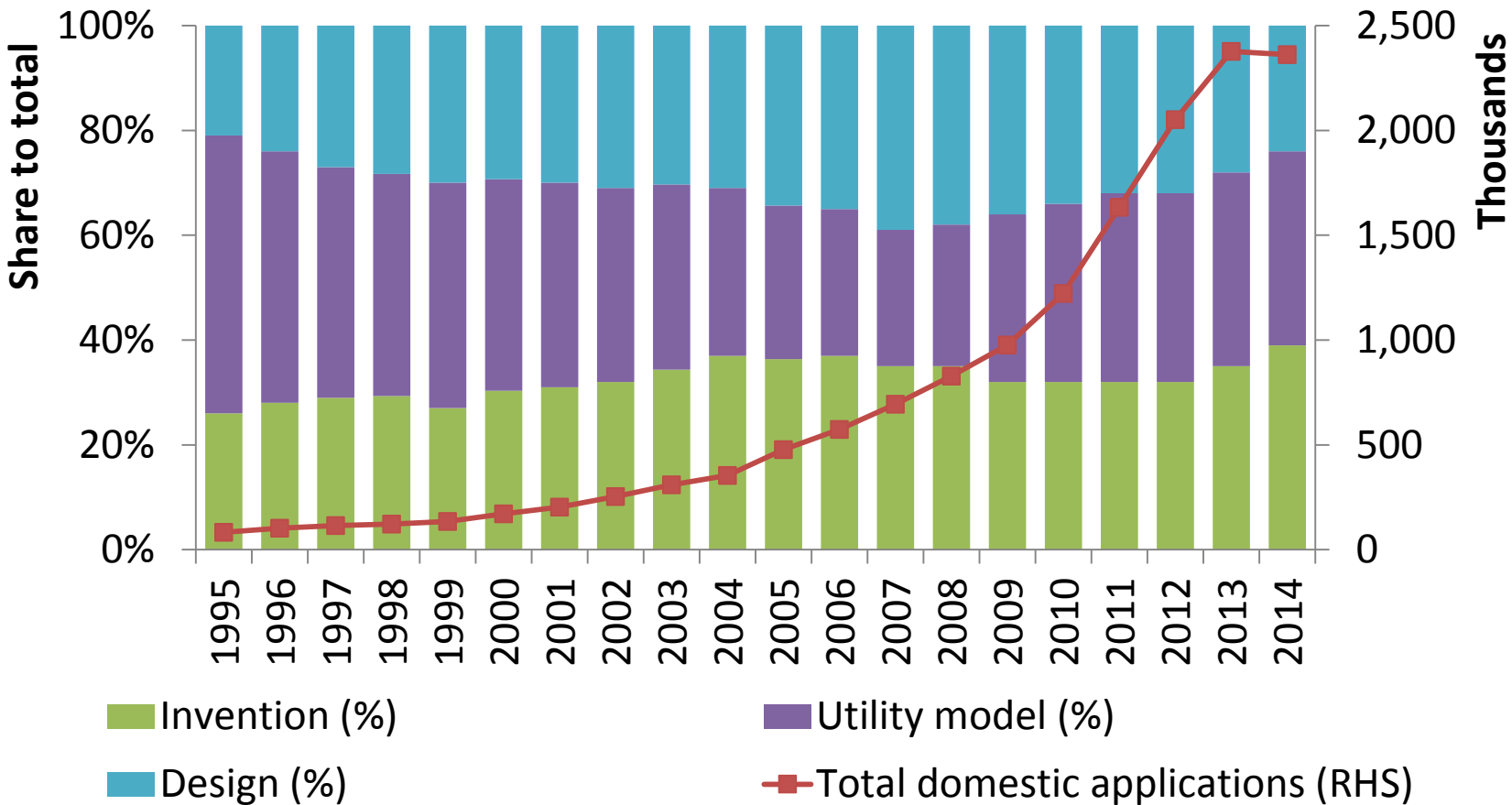
R&D/GDP vs GDP per capita



Note: data for China are from 1995 to 2014, and data for all other countries are for 2014 or the latest year available. Source: OECD database and World Bank.

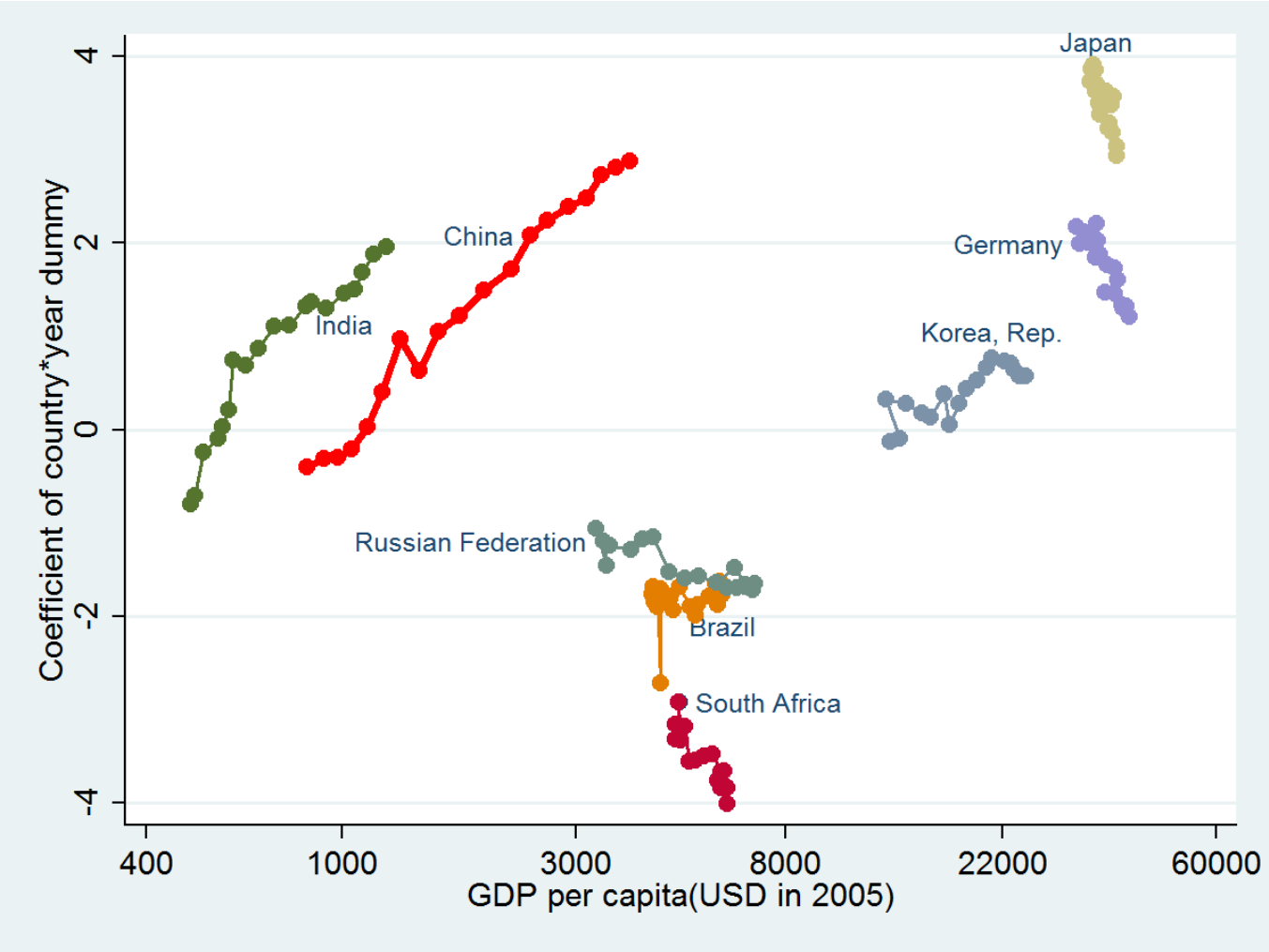
Number of Chinese patents has exploded

Chinese patent applications



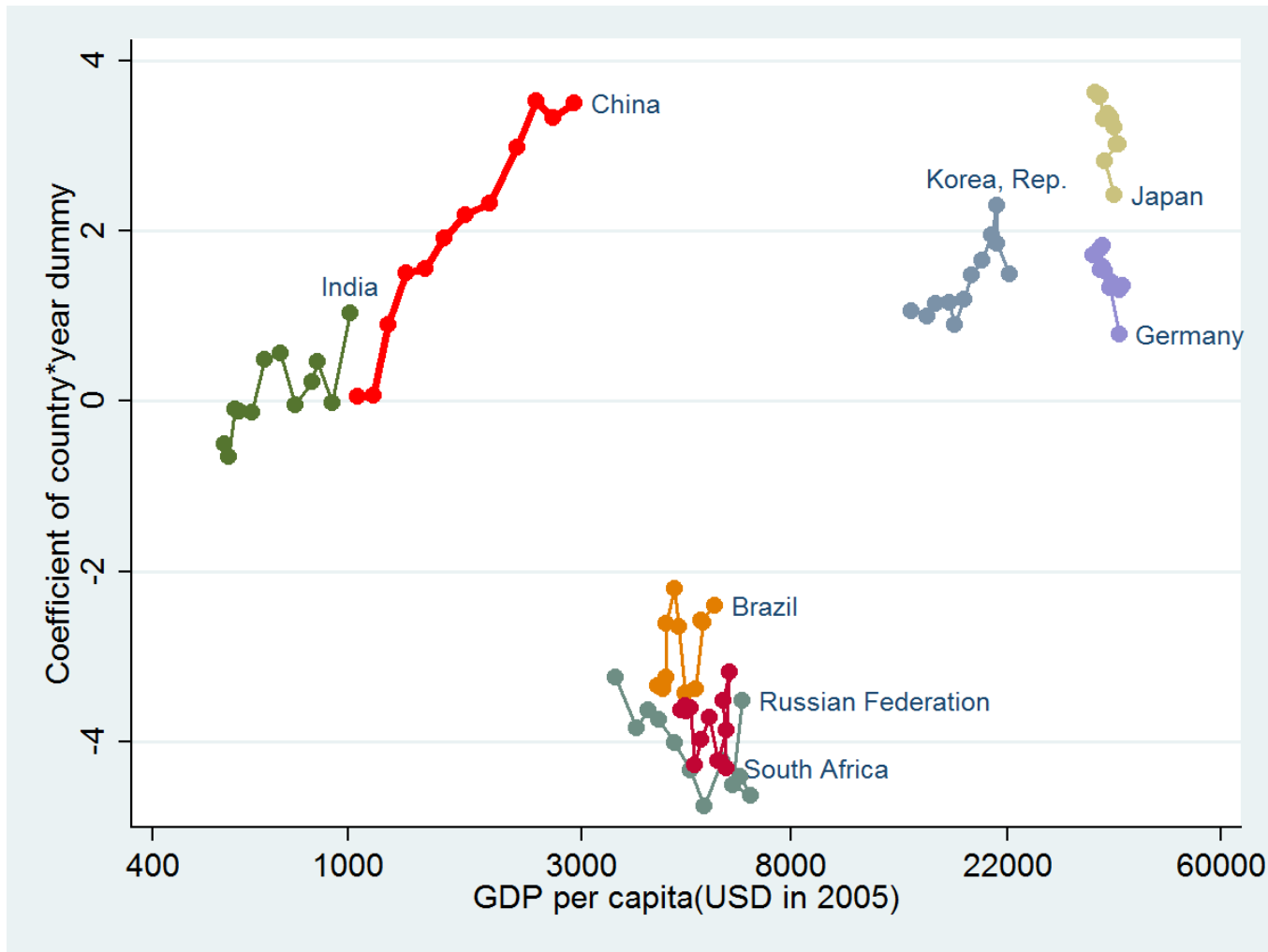
Invention patents in the US show a rising trend

Invention Patents Granted in USPTO by Different Countries



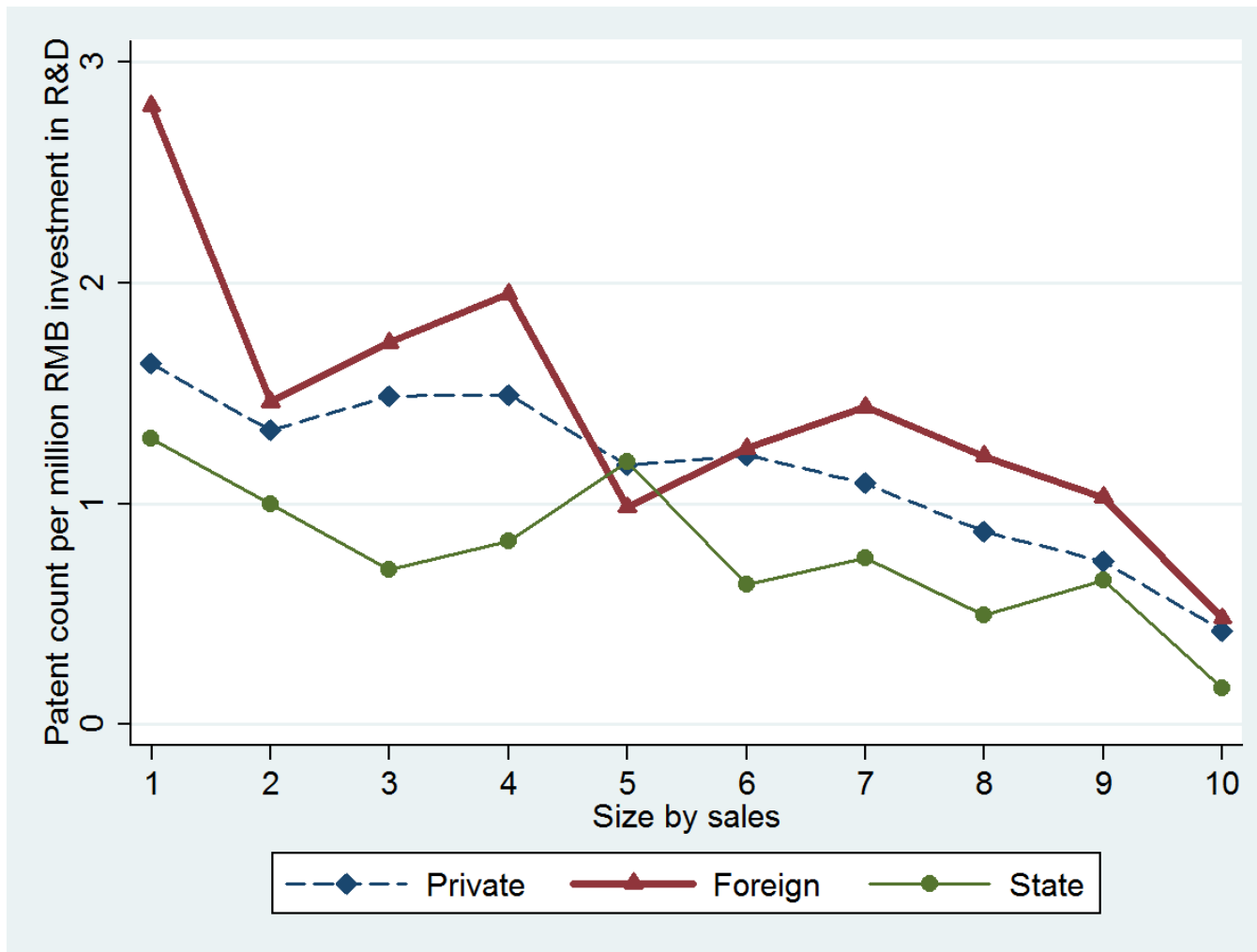
Growing patent citations indicate quality improvements

Citations on Invention Patents Granted by USPTO: Cross-country Comparison

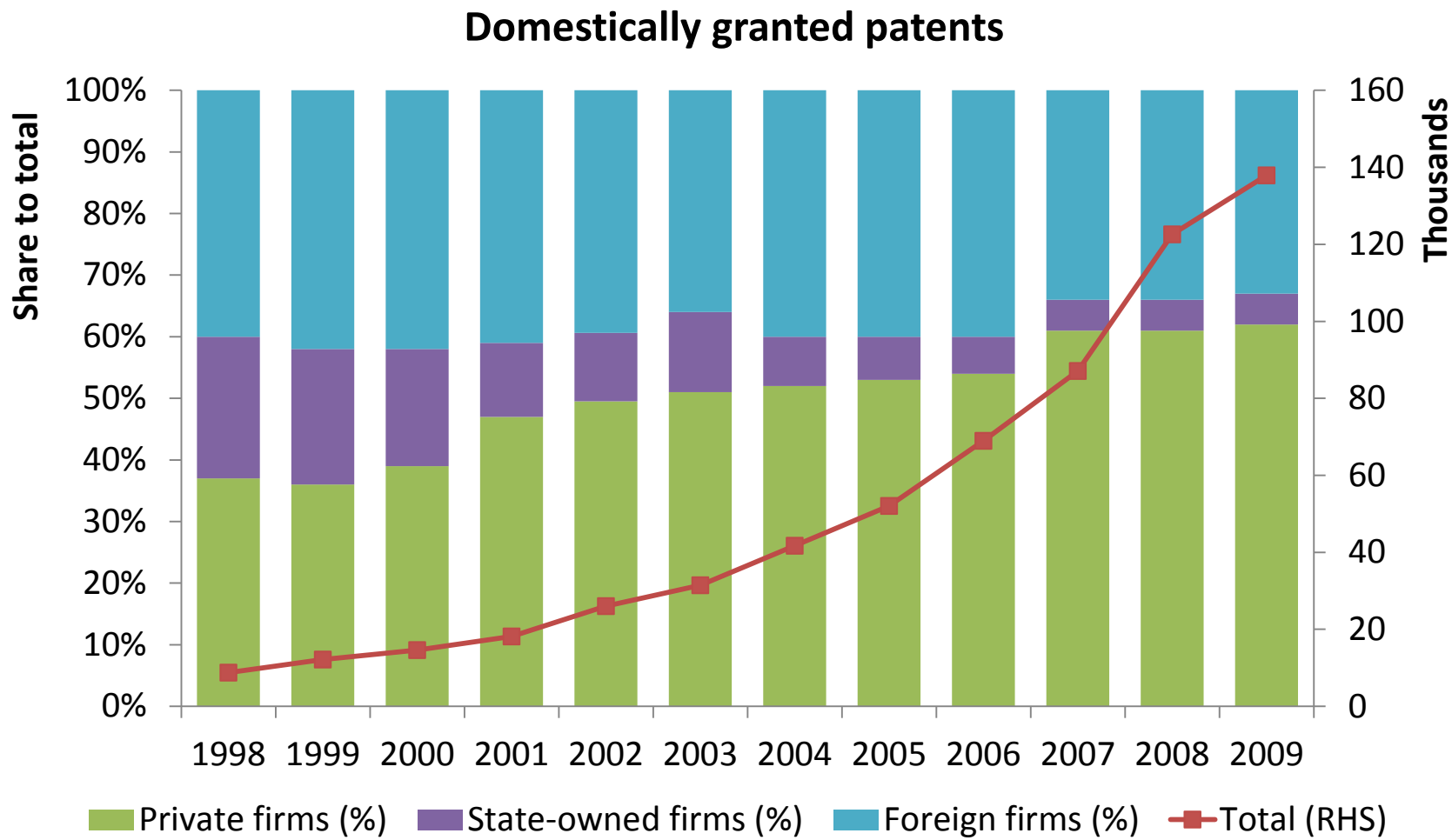


But evidence of resource mis-allocation: SOEs are granted more subsidies

Ratio of Subsidies to Sales by Firm Ownership and Size



...but lag behind private firms in patent generation, and less efficient in converting R&D's to patents



Summary

- The rising debt/GDP takes place together with rising asset/GDP
- Divergent patterns in leverage between SOEs and private sector firms also imply an opportunity to pursue SOE reforms and deleveraging in a complementary way
- Future GDP growth is important for keeping the leverage ratio manageable
- Future growth depends on innovation and productivity growth
- Chinese firms can innovate but resource misallocation needs to be addressed