

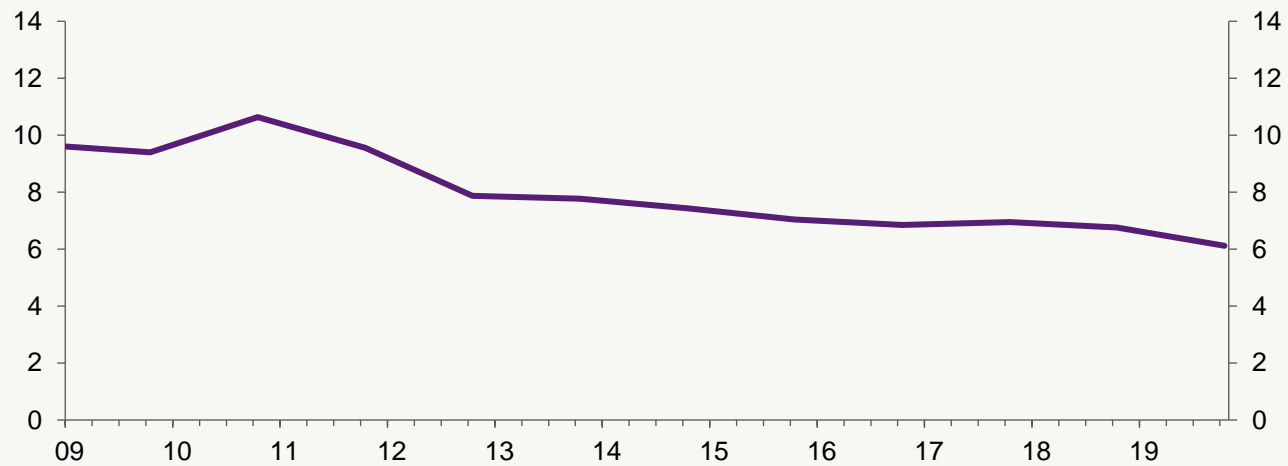
# China's long-term growth: What to predict?

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China has been an example of growth model in the past, but the growth rate were slowing down in the recent decade

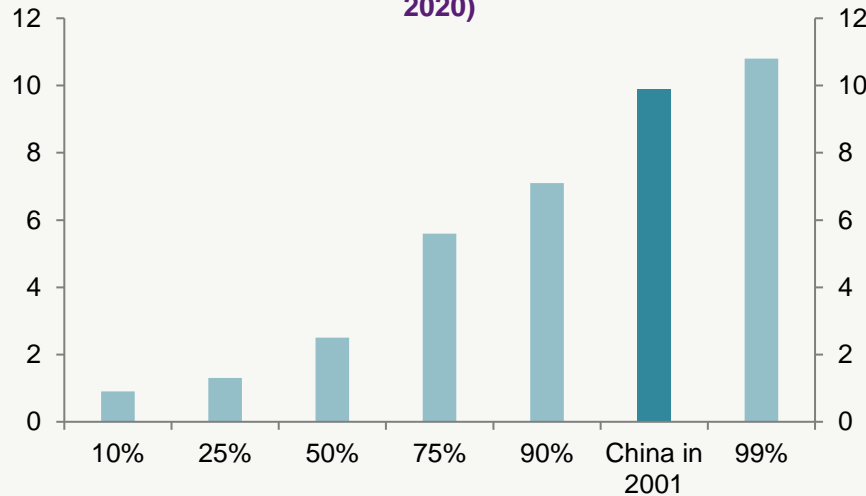
China Real GDP Growth Rate (% YoY)



Source: Natixis, NBS

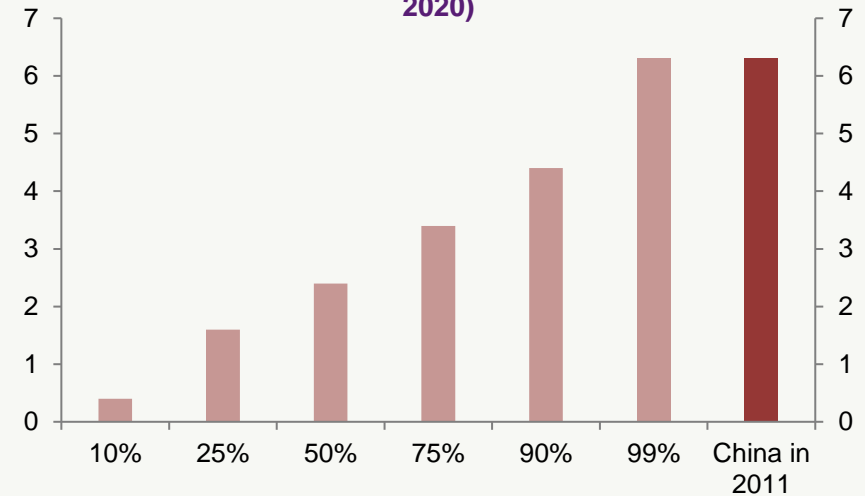
Still, China beats 90% global peers after reaching 1,000 USD per capita and 99% global peers after reaching 5,000 USD per capita. Will this continue after having reached 10.000 USD per capita?

**Growth Rate of Real GDP per capita Over The Next Decade After It Passed 1,000 USD**  
(by percentile, based on world's GDP over 1960-2020)



Source: Natixis

**Growth Rate of Real GDP per capita Over The Next Decade After It Passed 5,000 USD**  
(by percentile, based on world's GDP over 1960-2020)



Source: Natixis

If we continue to assume China's GDP per employment (namely, labor productivity) to converge at the same pace as in the past decade, its growth rate will fall to 3.6 on average during the next five-year plan (2026-30) and even lower for the one after next (2.4%)

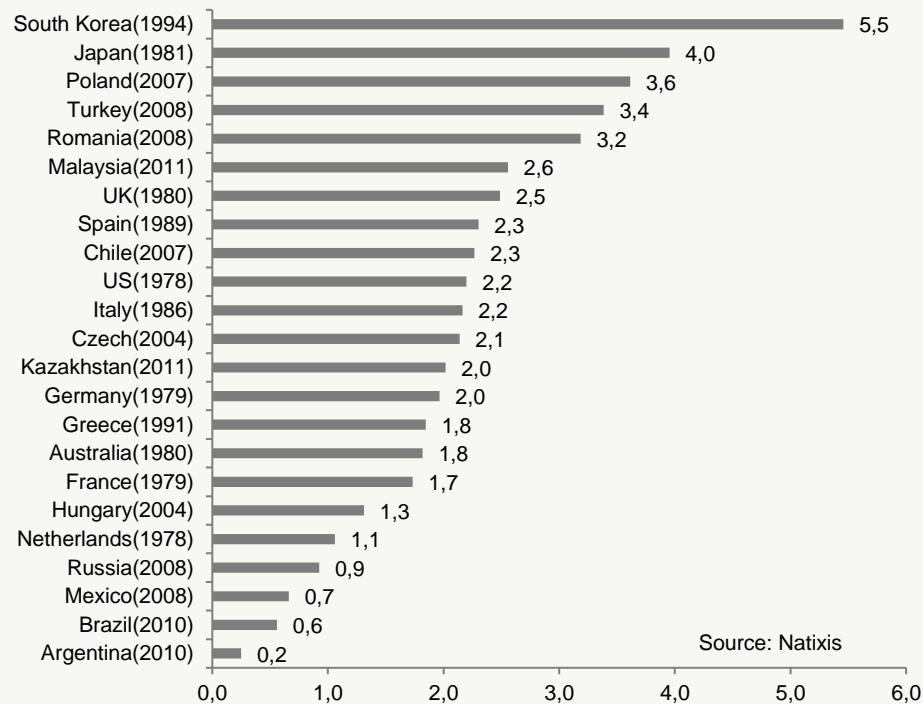
### Forecast of China's potential GDP growth (%)

	Output	Labor productivity	Employment rate	Labor participation rate	Adult population growth rate
<b>2021-2025 *</b>	4.9	4.9	-0.1	-0.3	0.4
<b>2026-2030 *</b>	3.6	3.8	-0.1	-0.5	0.4
<b>2030-2035 *</b>	2.4	3	-0.1	-0.7	0.2

N.B. \*Average growth rate during each period. Source: Natixis

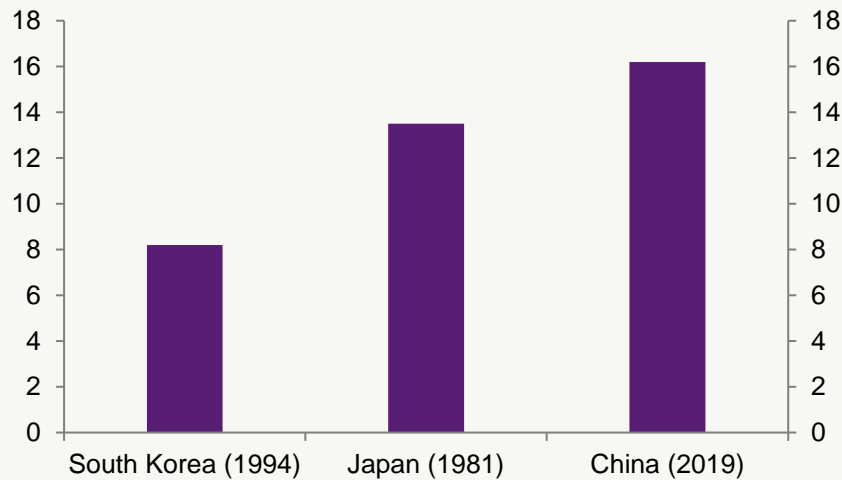
This will place China's future at a level similar to Japan and Poland in terms of growth after reaching the middle income, but not South Korea

### 10-Year Average Growth Rate (%) After The Economy Passed 10,000 USD GDP per capita



Furthermore, China will be in a more challenging position than Japan and Korea were when reaching 10,000 USD: two main headwinds are more rapid aging population and higher debt environment

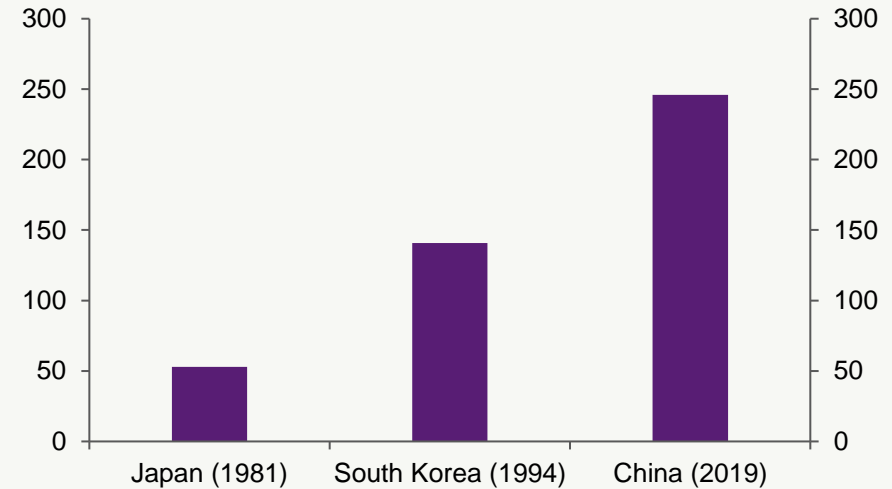
**Elderly Dependency Ratio (%)**



N.B. Elderly dependency ratio is defined as elderly population (aged above 65) divided by working-age population (aged between 15-65).

Source: Natixis

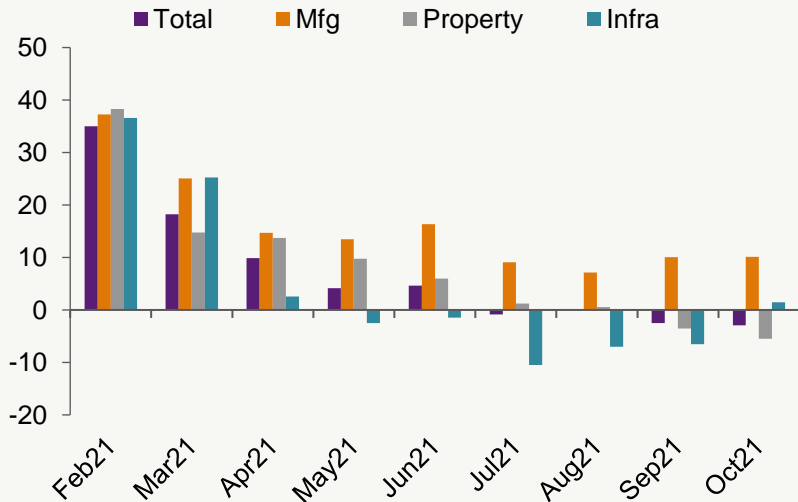
**Debt-to-GDP Ratio (% of GDP)**



Source: Natixis, BIS, FRED

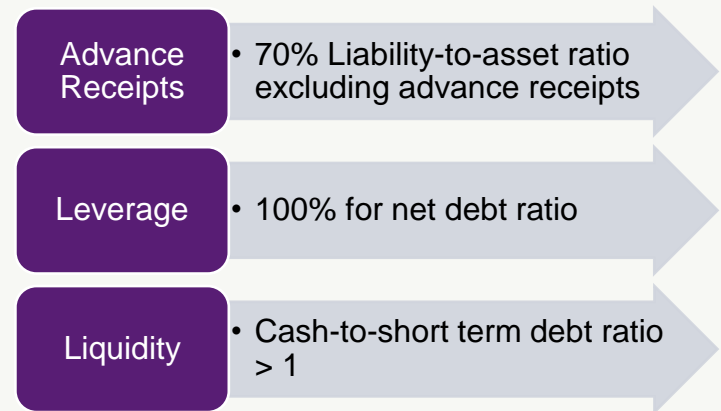
To ensure sustainable growth, China seems determined to abandon the old growth model relying too much on investment, especially real estate investment

**China's Investment Breakdown 2021  
(% YoY)**



Source: Natixis, CEIC

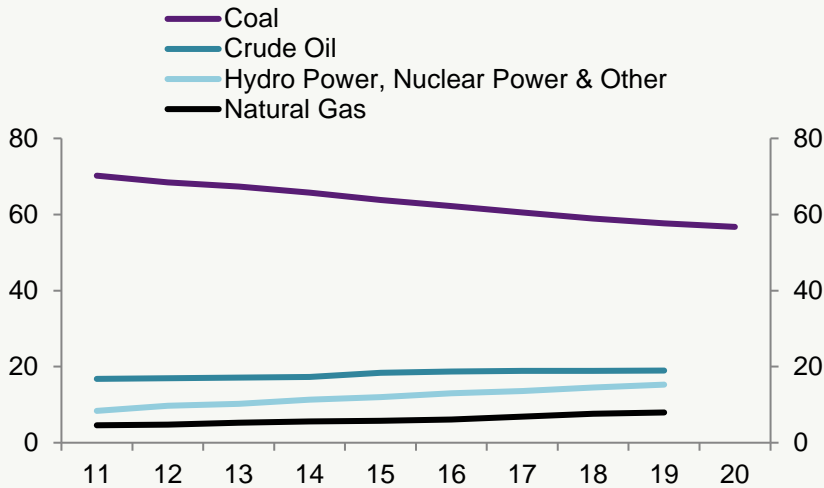
**The Three Red Lines for Real Estate Firms Since August 2020**



Source: Natixis

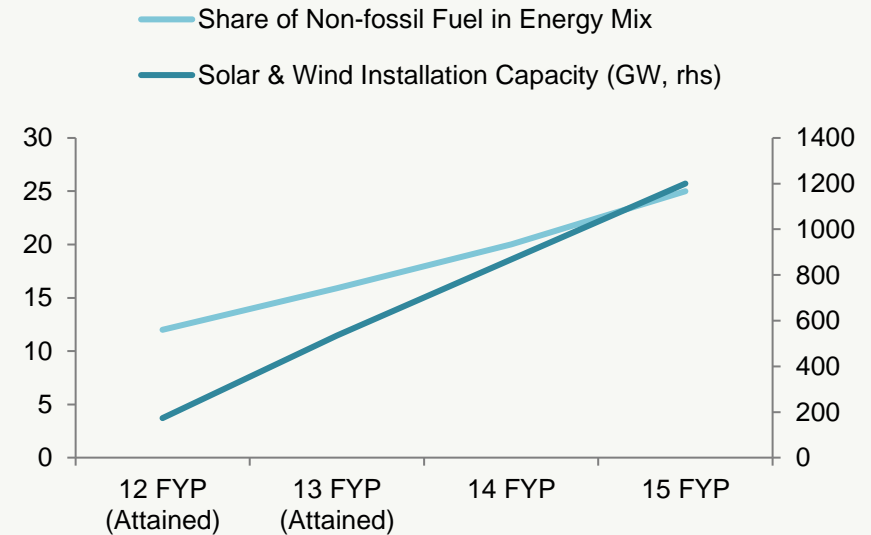
China's role as the largest emitter globally has pushed it to pledge on emission peak in 2030 and carbon neutrality in 2060. The difficulties in implementation have been showcased in the recent energy crunch, but there are also opportunities with regards green investment

**China: Electricity Consumption by Fuel Source (%)**



Source: Natixis, NBS, CEIC

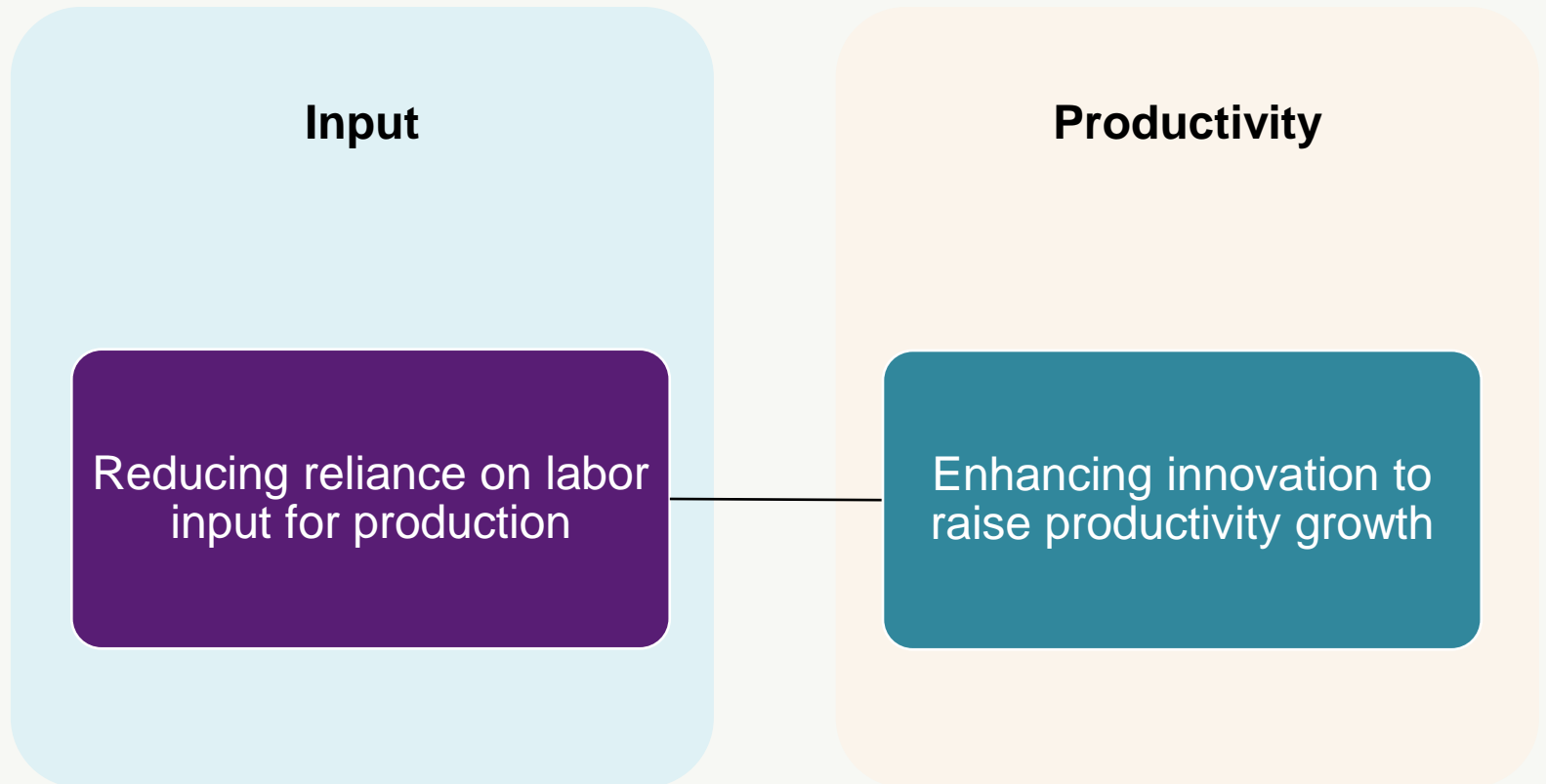
**Renewable Targets on Five-Year Plan**



Source: NDRC, Natixis

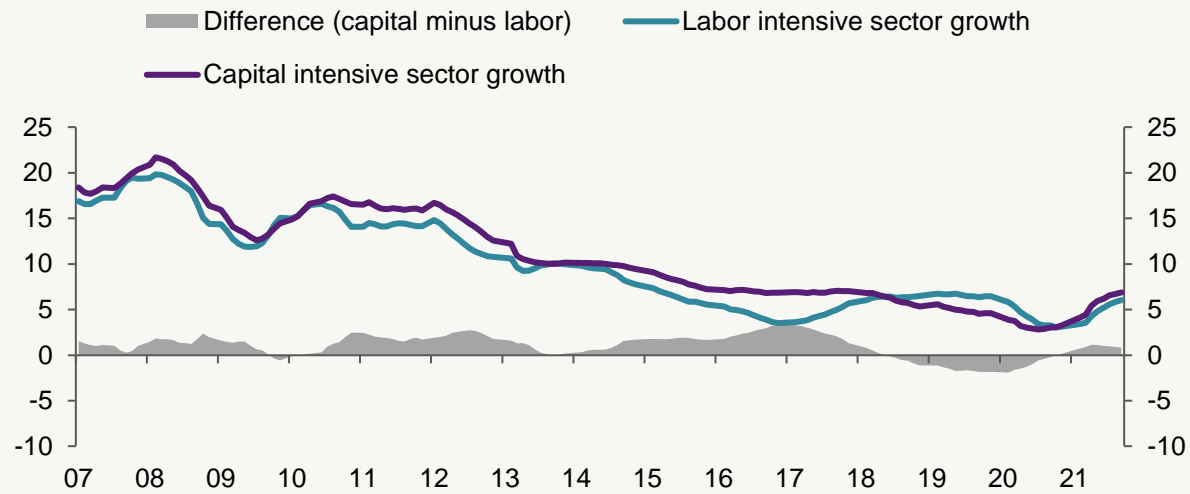


As such, China needs to stand on a new growth model, with reducing reliance on labor as a key solution. But what will the new model look like?



China's industrial transformation from labor-intensive to capita-intensive sectors is needed. The trend was opposite from 2018 to 2020 until it reverted again recently, indicating volatility in the process of transformation

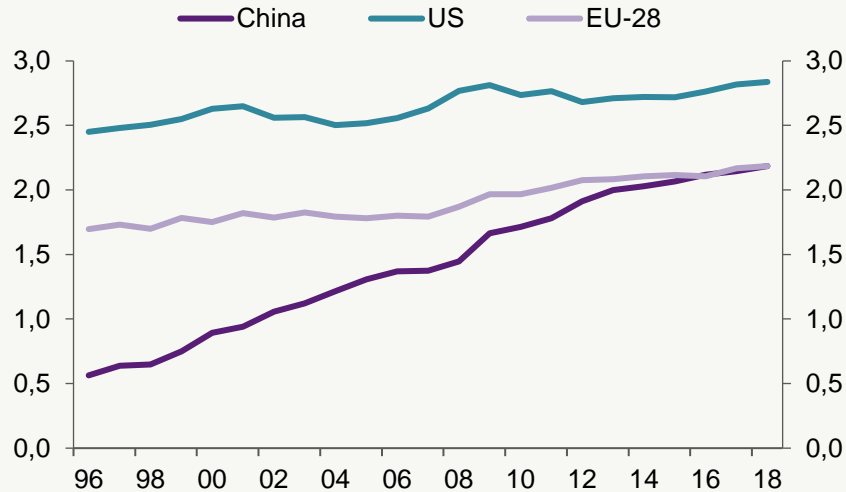
### Industry Value-added Growth (% , 12-month moving average)



N.B. We define the sectors with higher labor-to-value-added as labor intensive sectors whereas those with lower labor-to-value added as capital intensive sectors. The classification is based on relative criterion across sectors.  
Source: Natixis, CEIC

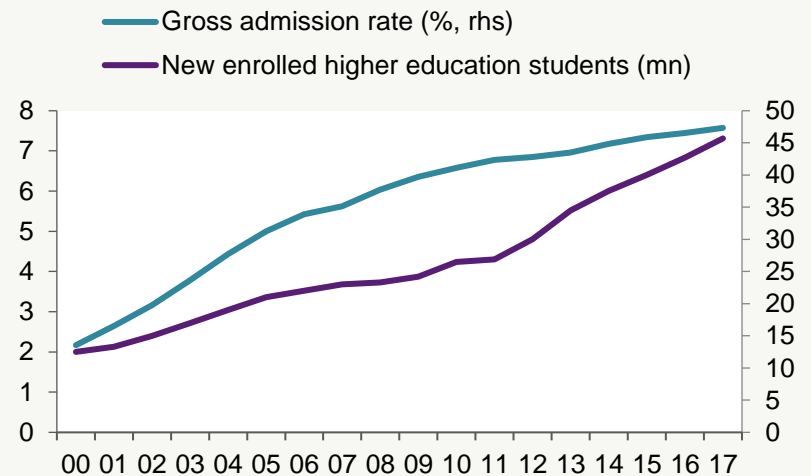
On the positive side, China has been spending more on R&D expenditure as well as encouraging more college admission to foster innovation

**R&D Spending as Share of GDP (%)**



Source: Natixis, World Bank

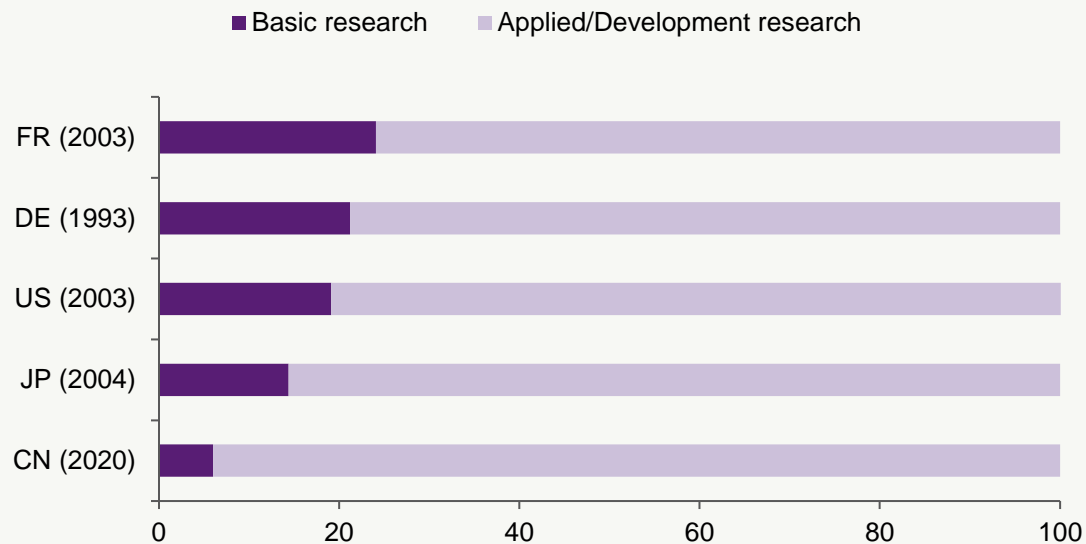
**New Enrolled Higher Education Students and Gross Admission Rate**



Source: Natixis, Chinese Ministry of Education

However only 6% of R&D is invested in basic research, casting doubts about the impact of R&D on productivity

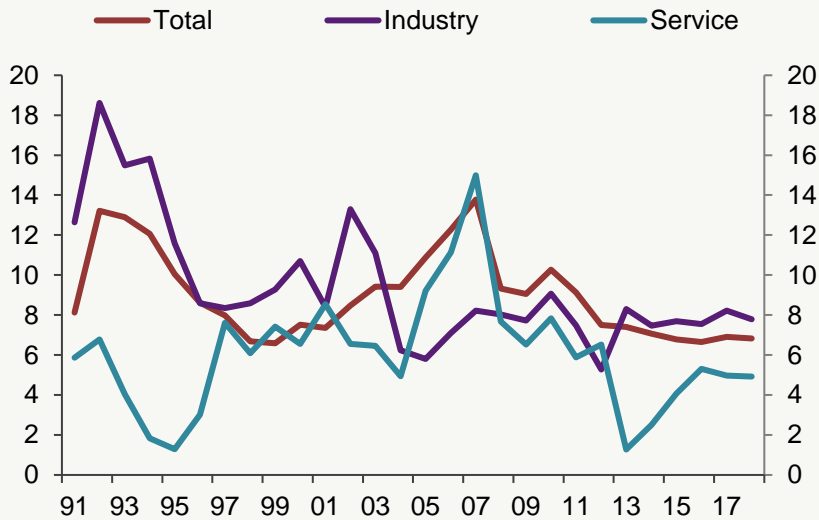
### R&D Expenditure by Character of Work (%)



N.B. Numbers in parentheses stand for Fiscal Year.  
Source: Natixis, MEXT, NBS

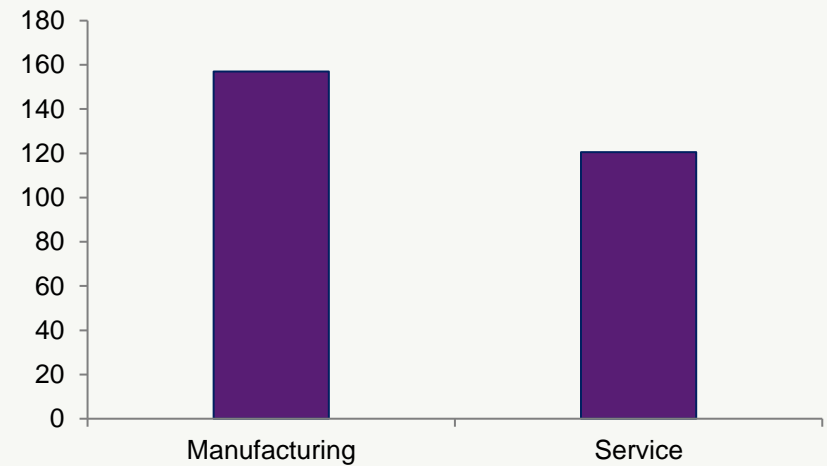
So far, the fast-growing R&D does not seem to have resulted in faster labor productivity. This might be explained, at least partially, by China's transitioning towards a service economy with generally lower labor productivity

**China's Labor Productivity Growth (%)**



Source: Natixis, Wind

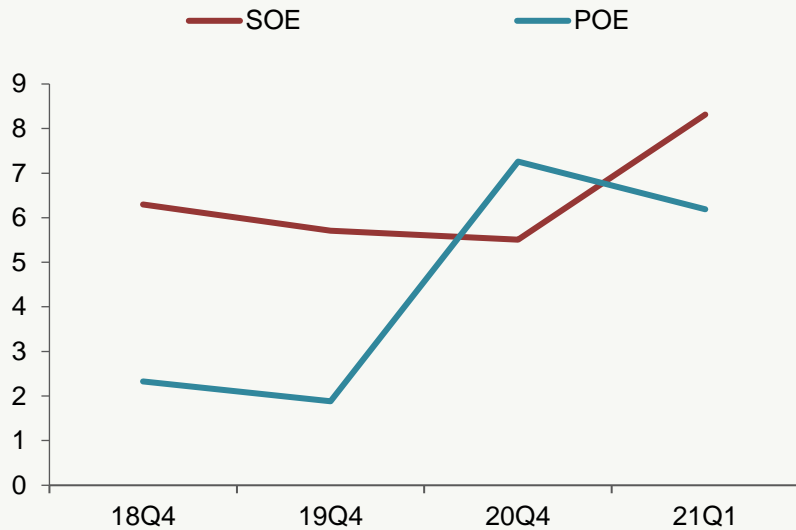
**China's Average Labor Productivity in 2018  
(thousand yuan per person, annual)**



Source: Natixis, Wind

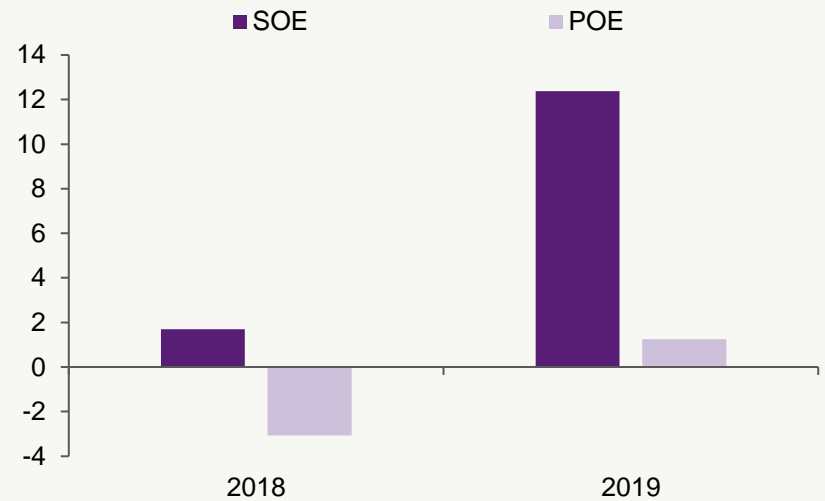
Furthermore, China has been using its state-supported institutions to focus on strategically important sectors while SOEs remain much less productive (for example, the ICT sector)

Return on capital for the ICT sector (%)



Source: Natixis, WIND

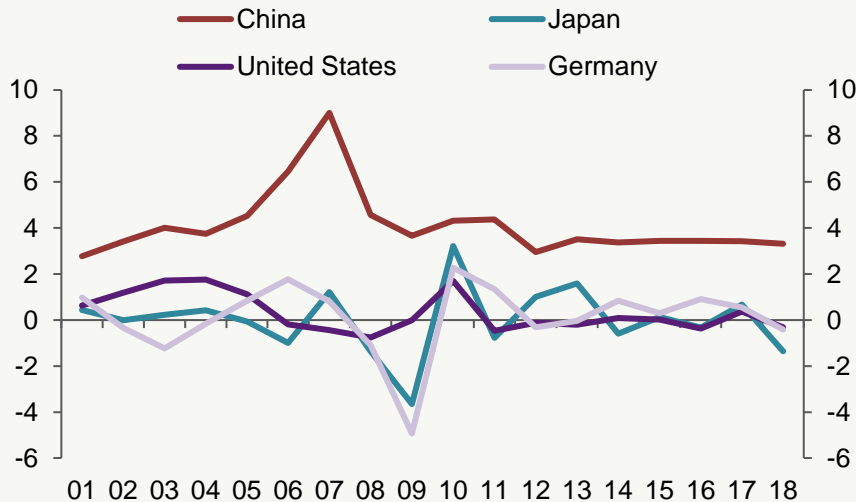
Fixed Asset Investment in ICT Sector: SOE vs POE (YoY %)



Source: Natixis, WIND

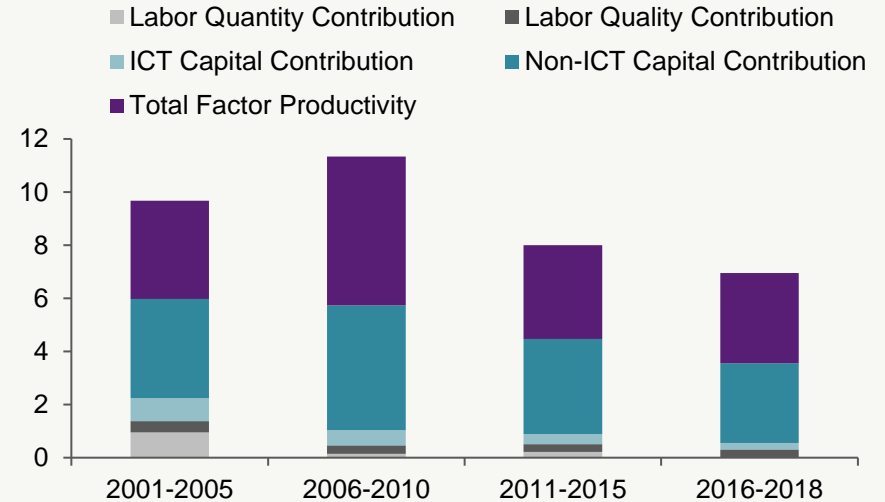
The good news, though, is that China was able to maintain a stable total factor productivity growth from 2011 to 2018. While this is not able to fully offset the declining contribution of capital and labor to growth, it has so far supported China's growth convergence with the developed world

**Contribution of TFP to GDP Growth (%)**



Source: Natixis, Conference Board

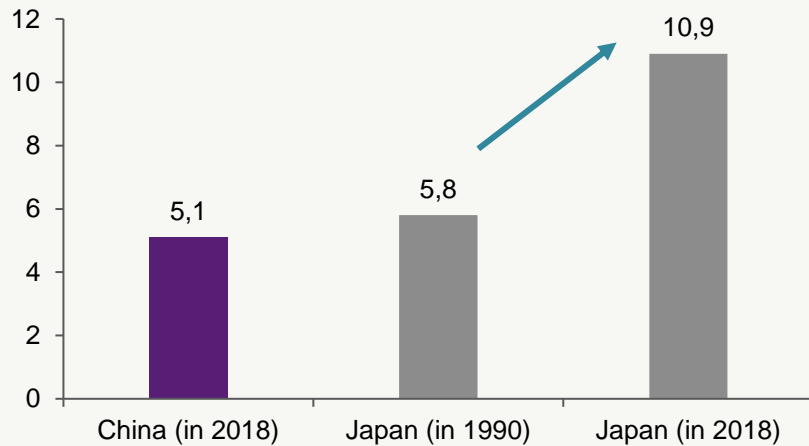
**Sources of growth in China, 2001-2018 (%)**



Source: Natixis, Conference Board

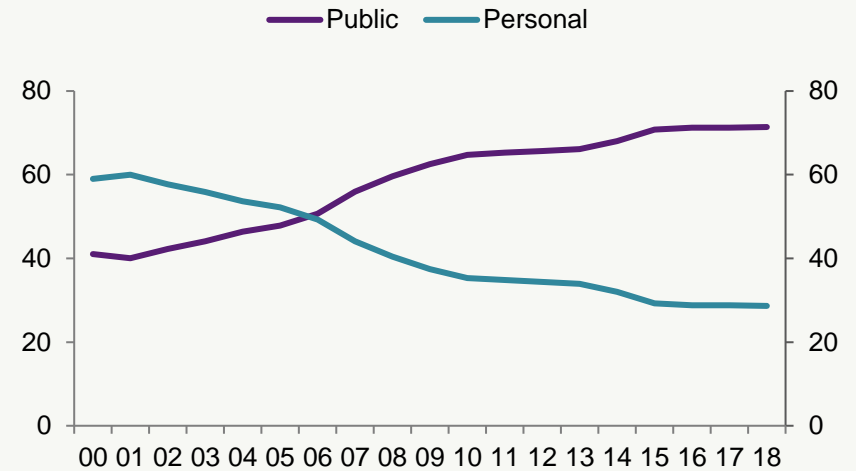
That said, a fast-aging society also implies more public resources to support related public expenditure (pension and health)

**Total Healthcare Expenditure (% of GDP)**



Source: OECD, Natixis

**Healthcare Expenditure by Sector (%)**

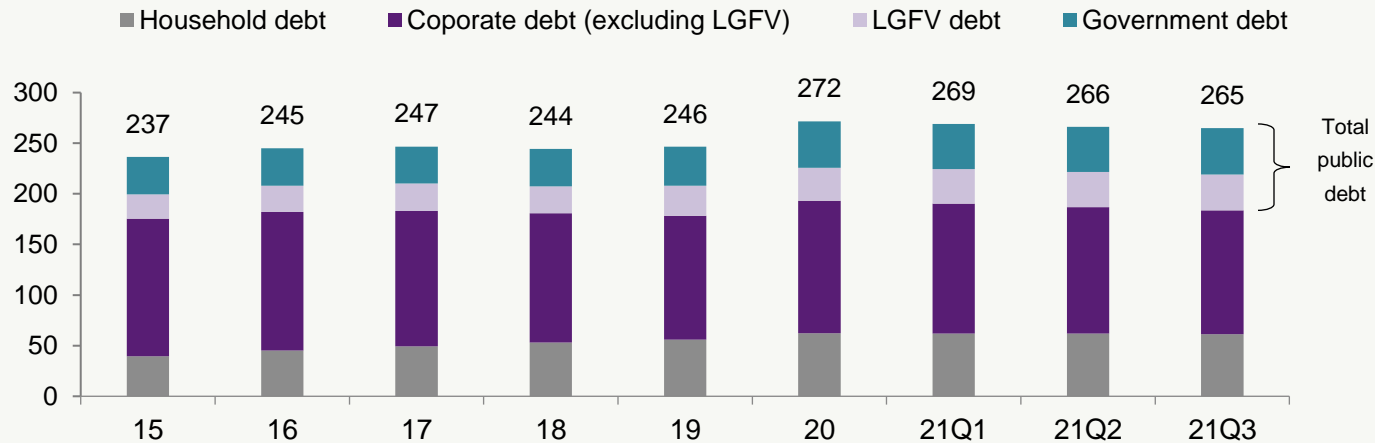


Source: Chinese National Bureau of Statistics, Natixis  
 N.B. Public expenditure equals the sum of government and collective expenditure



China's public debt remains more moderate than that of major economies, but it is growing. Furthermore about 2/3 of corporate debt is generated by SOEs. All in all, fiscal space to deal with an aging population might not be as large, potentially constraining the financing of R&D which is still very much state-driven

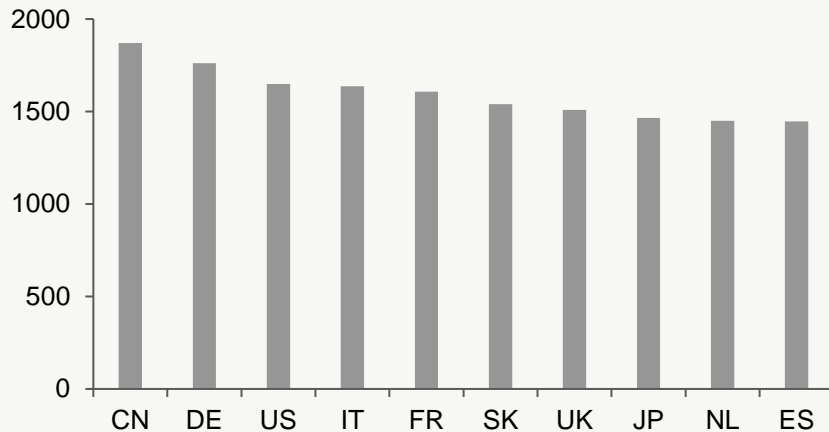
### China's Debt by Sector (% of GDP)



N.B. LGFV means local government financing vehicles and only includes the marketized value for all the entities that publicly report financial statements or issue bond. Source: Natixis

In addition to the domestic challenges, China is also facing a less accommodative global environment, especially as regards trade measures

**Affected Countries by the Harmful Intervention Measures (ranked by the number of measures)**



Source: Natixis

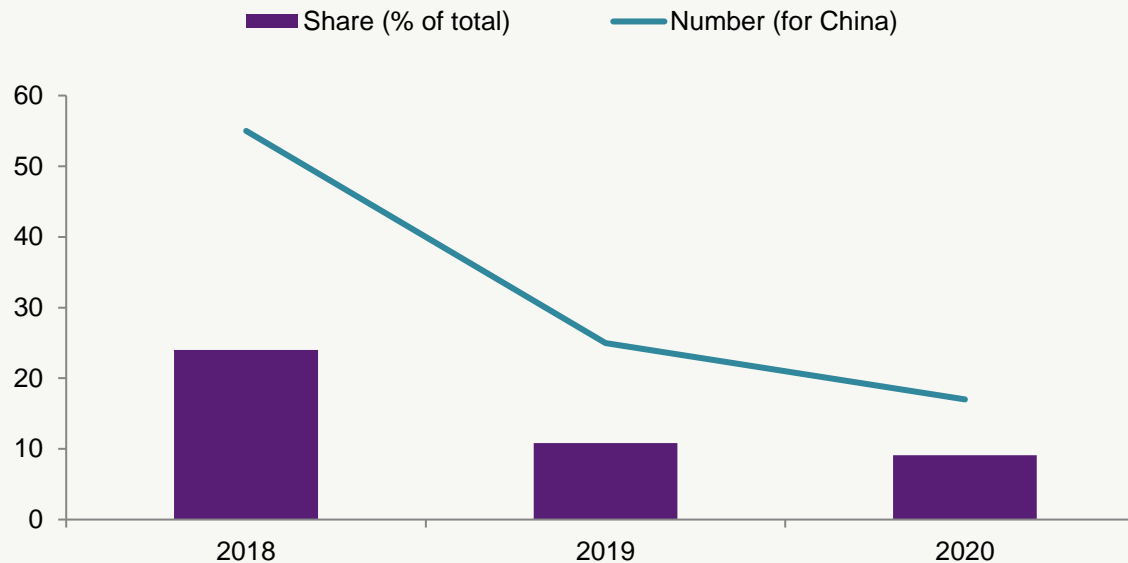
**International Harmful Intervention Measures against China (adjusted at the cut-off date on December 31th)**



Source: Natixis

The same is true as regards' China's quest to narrow the technological gap with overseas acquisitions. The US's reform of CFIUS and the EU's investment screening framework are good examples

### Covered Notices by Acquirer Home Country or Geographic Economy, 2018-2020



Source: Natixis, CFIUS - ANNUAL REPORT TO CONGRESS - CY 2020

## Some takeaways

- China has been very successful in reaching the status of a middle-income country.
- However, the structural deceleration points to China's move towards a high-income country being slower than anticipated.
- When compared with the two most successful cases, South Korea followed by Japan, China's faces more headwinds, notably faster aging that it was for them when they reached middle income and a much tougher external environment.
- Innovation seems to be the tool that China has in its hands to cushion structural deceleration. So far, the impact of a very fast increase in R&D on productivity has been muted but it might be too early to tell.
- Finally, a potential constraint for innovation to be the ultimate solution to China's growth woes is the increasingly limited fiscal space, which is caused not only by the increasing fiscal costs of aging (health and pensions) but also that of a state-led economic model with growing subsidies and the state's crucial role in financing innovation.

# Thanks!