

China's 14th Five Year Plan: New Policy Directions

Elder Academy Event
University of Victoria Retirees Association
October 20, 2021

Mark Kruger
Senior Fellow, Yicai Research Institute
Opinion Editor, Yicai Global



China's 14th Five Year Plan



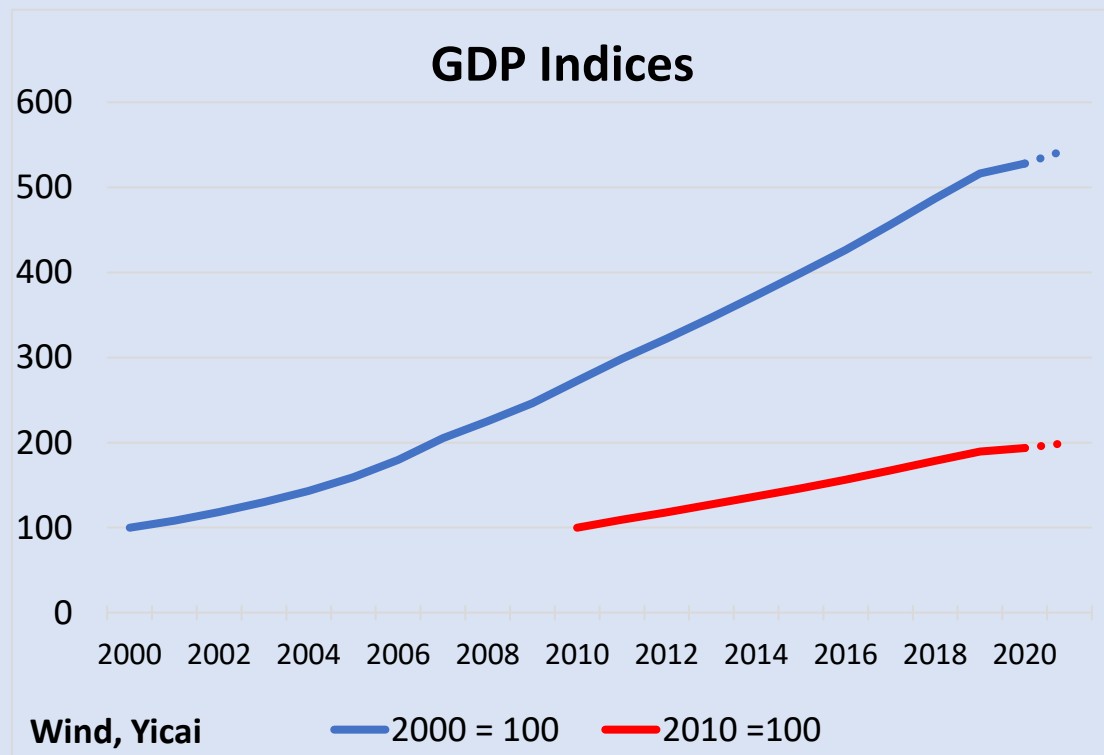
- Earlier this year, China released the final version of its **14th Five Year Plan**
- Planning documents outline the government's **medium-term strategic thinking**
- Required reading for those who want to know where the **leadership** wants to take the country
- 14th Five Year Plan represents a **turning point** in China's economic development

Establishing the *moderately prosperous society*



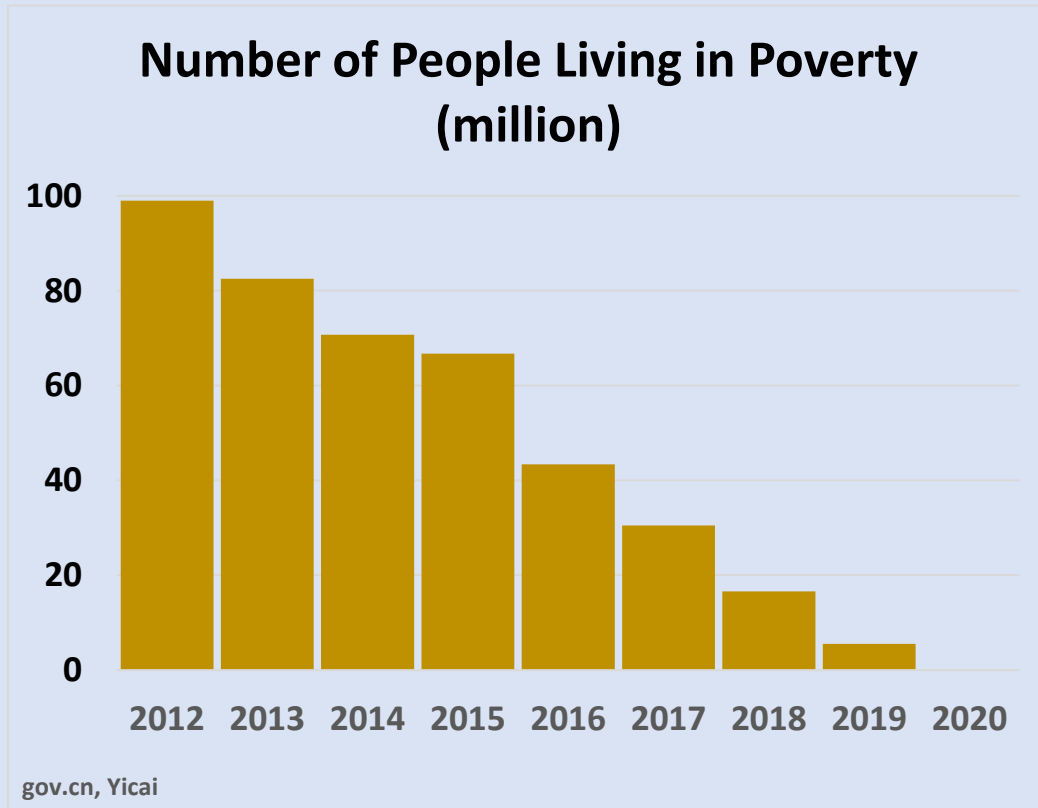
- *Moderately prosperous society* (小康社会) anchored **development policy**
- Deng Xiaoping late 1970s
- Confucian *Book of Rites* (礼经)
- *Moderately prosperous society* presented as **second-rate** state of affairs
- Unfavourably contrasted with the **utopian great community** (大同)
- Deng's choice was **intentional**
- He wanted to avoid **unrealistic expectations**

Establishing the *moderately prosperous society*



- Deng's vision was a **qualitative**: scarcity to relative comfort
- Jiang Zemin: **quadrupling** of GDP between 2000 and 2020
- Implies average annual growth of **7.2%** for 20 years
- Growth was **significantly higher** during Jiang's tenure and Hu Jintao's
- After Xi Jinping took office, growth still **exceeded 7%**
- By **2015**, GDP was essentially 4X higher than in 2020
- Xi Jinping called for a **doubling** of GDP between 2010 and the celebration of the Party's 100th anniversary in 2021
- We reached moderate prosperity sometime **this summer**

Establishing the *moderately prosperous society*



- China has attained a reasonable standard of **material well-being**
- In 1980, China's per capita GDP (PPP basis) ranked in the **bottom 1%** of all countries
- By 2020, it ranked in the **top 40%**
- China does have a high degree of **income inequality**
- But has made efforts to share the fruits of growth with the **least fortunate**
- **Extreme poverty** eliminated last year

Building a *modern socialist country*



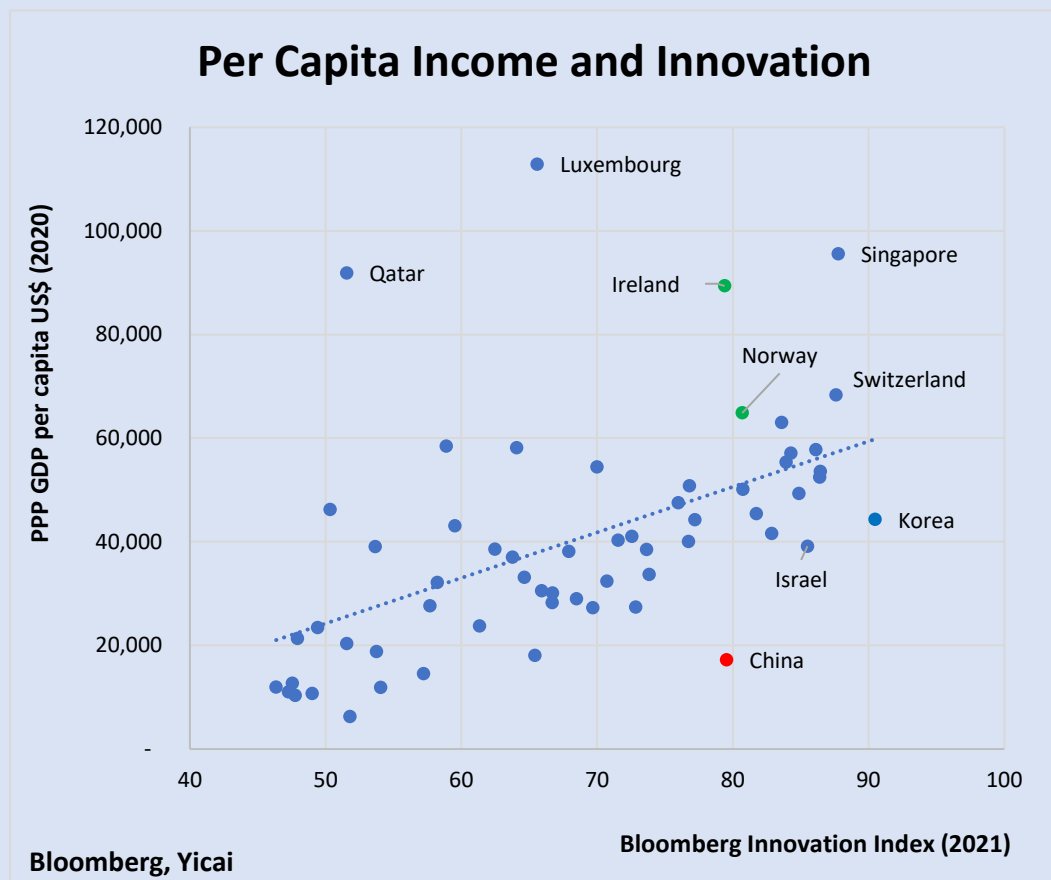
- The 14th Five Year Plan ushers in a **new stage** in China's economic development: building a *modern socialist country*
- **Quality** rather than quantity of development
- **No growth target**
- With a basic level of material comfort achieved, a greater stress will be put on:
 - **Innovation-driven development**
 - **Promoting green growth**
 - **Creating a strong domestic market**

Innovation-driven development



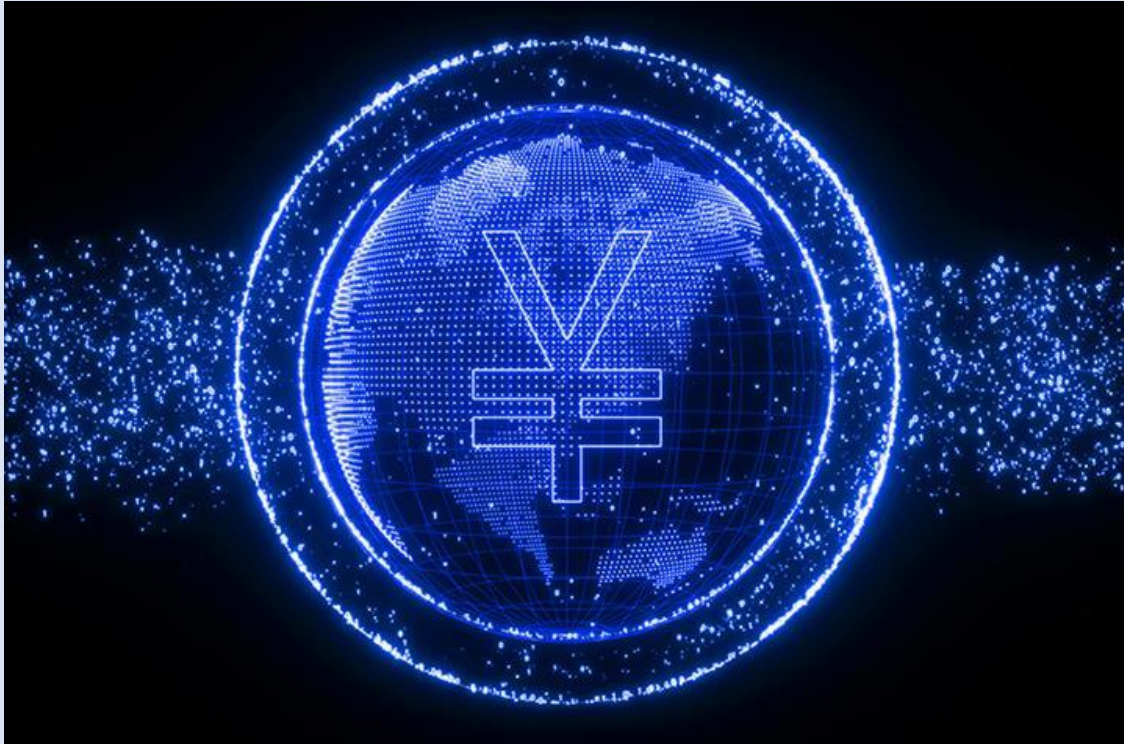
- It is easy to see why the 14th Five-Year Plan **emphasizes innovation**
- China's working age population is **shrinking**
- Its investment rate is already **very high**
- Rapid increase in **debt** in recent years
- How much **more** can capital accumulation can contribute to growth?
- This leaves **raising productivity** as the most rational way to develop

Innovation-driven development



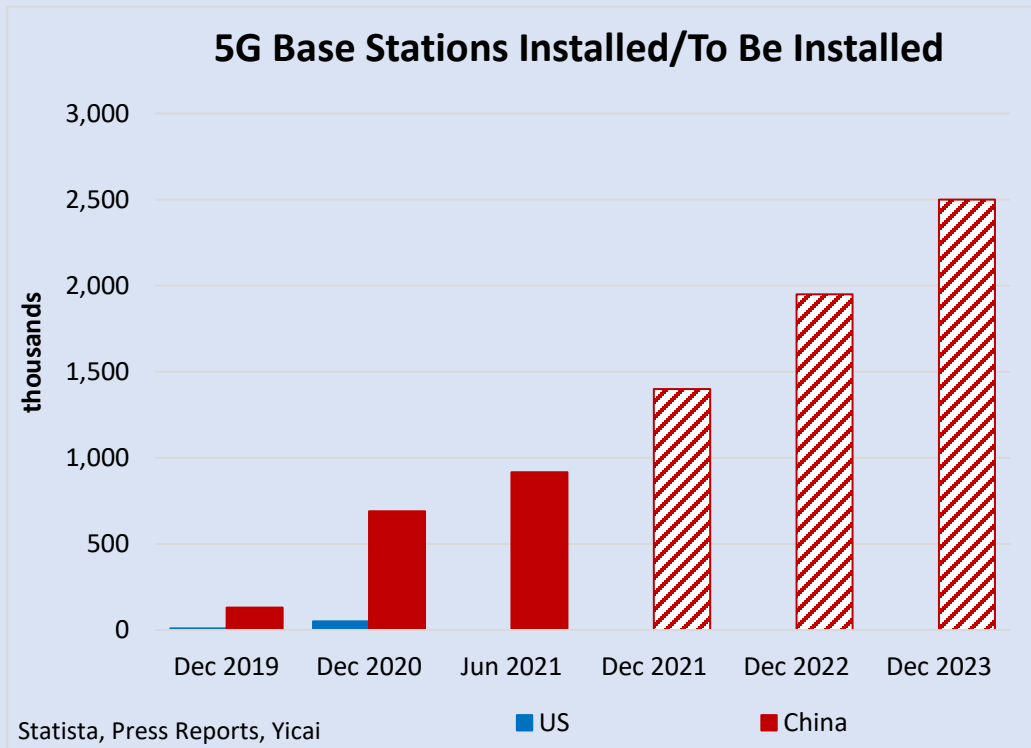
- So, **how innovative** is China?
- Bloomberg Innovation Index (2021):
 1. Productivity
 2. Manufacturing value added
 3. Creating high-tech companies
 4. Tertiary education
 5. Patent filings
 6. Spending on R&D
 7. Engaging R&D staff
- China ranked **16th of 60** countries between Norway and Ireland

Innovation: Digital Currency (e-CNY)



- China is **well-advanced** in developing its digital currency
- Pilot projects in **10 cities**
- By June 30, 21 million personal and 4 million corporate **digital wallets** had been opened
- e-CNY had been used in **71 million transactions** with a value of CNY34.5 billion
- The e-CNY to be showcased during the 2022 **Winter Olympics** in Beijing

Innovation: 5G



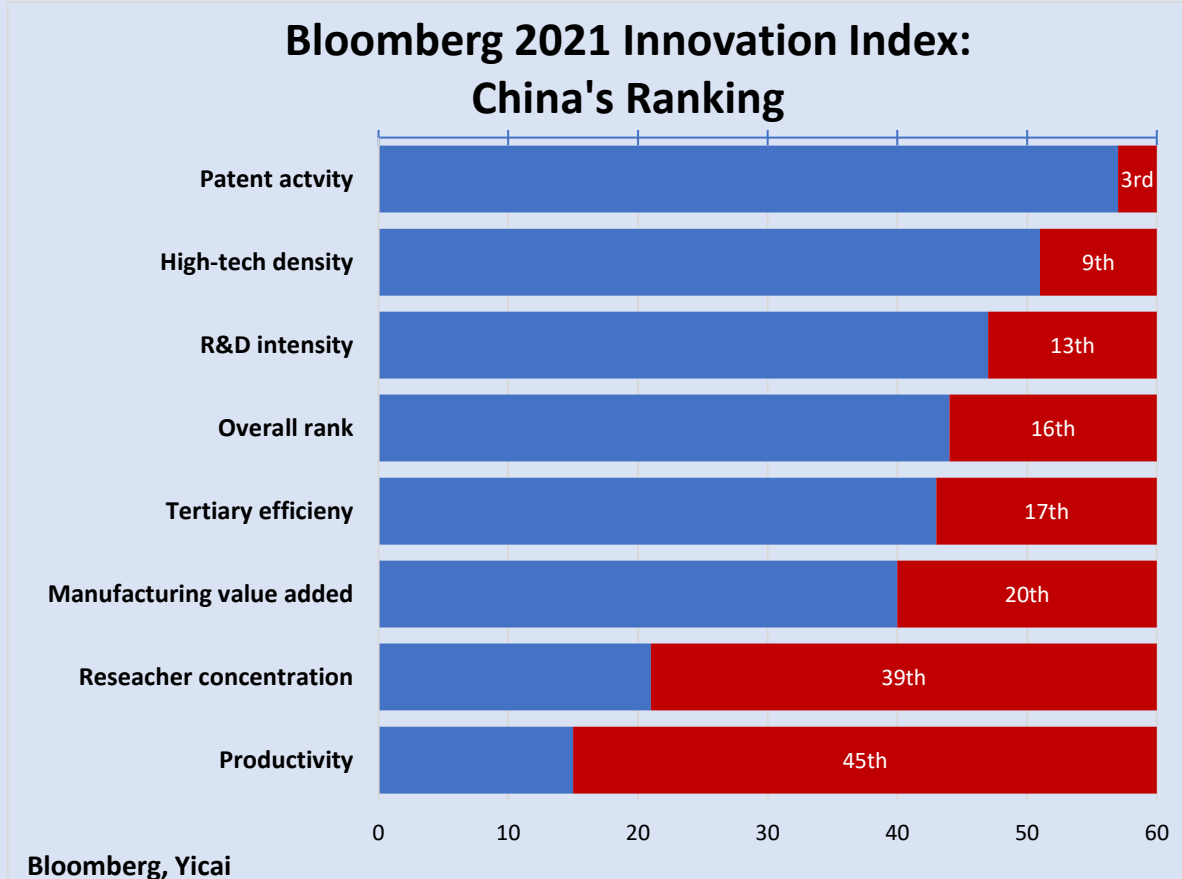
- End 2020, China had installed close to **700,000** 5G base stations, compared to only **50,000** in the US
- China plans for **2.5 million** by 2023
- **Incentive-compatibility** problem: huge up-front investments and a disconnect between the network's social and private returns
- **Chicken and egg** problem: 5G system is not yet fully in place, so few 5G-specific applications have been developed – and vice-versa
- China has made 5G development a **national priority** – developing both **system** and **applications**

Innovation: High-Speed Rail (HSR)



- President Xi: China's HSR successful example of its **independent innovation**
- China did not invent HSR, but it has made the technology its own
- About 90% of China's HSR supply chain is **made in China**
- 38,000 km network is more almost **70%** of world's total
- Advances in **railcar design** and **engineering**
- HSR's **carbon footprint** can be up to 14 times smaller than car travel and 15 times smaller than travel by plane

How can China enhance its ability to innovate?



- Bloomberg's Innovation Index points to areas for **improvement**
- China does well on **patent filings**, creating **high-tech companies** and **spending on R&D**
- Its weak spots are **productivity** and **researcher engagement**

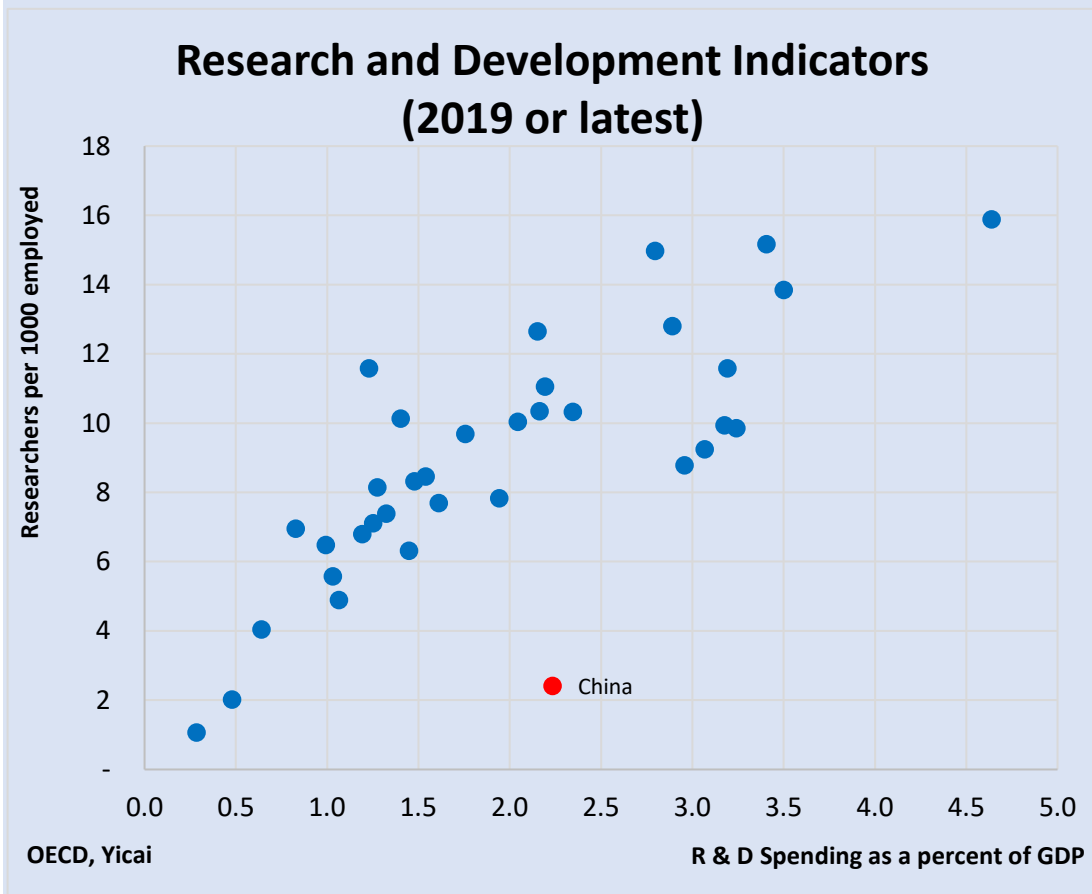
Innovation-driven development

Manufacturing Sector Indicators (2019)

	US	China	China/ US
Value added (US\$ billion)	2,346	3,828	1.6
Workers (million)	12.5	38.3	3.1
V/A per worker (US\$)	187,969	99,897	0.53

- China's poor productivity performance echoes the recent comments made by **Miao Wei** (former Minister of Industry and Information Technology):
 - China is at least 30 years away from achieving its goal of becoming a strong manufacturing power*
- Manufacturing **productivity gap** compared to US
- Value added of China's manufacturing sector was 1.6 times as large as the US's (2019)
- Output was produced by more than three times as many workers
- Value added per worker – **only ½ as high as US**

Innovation-driven development



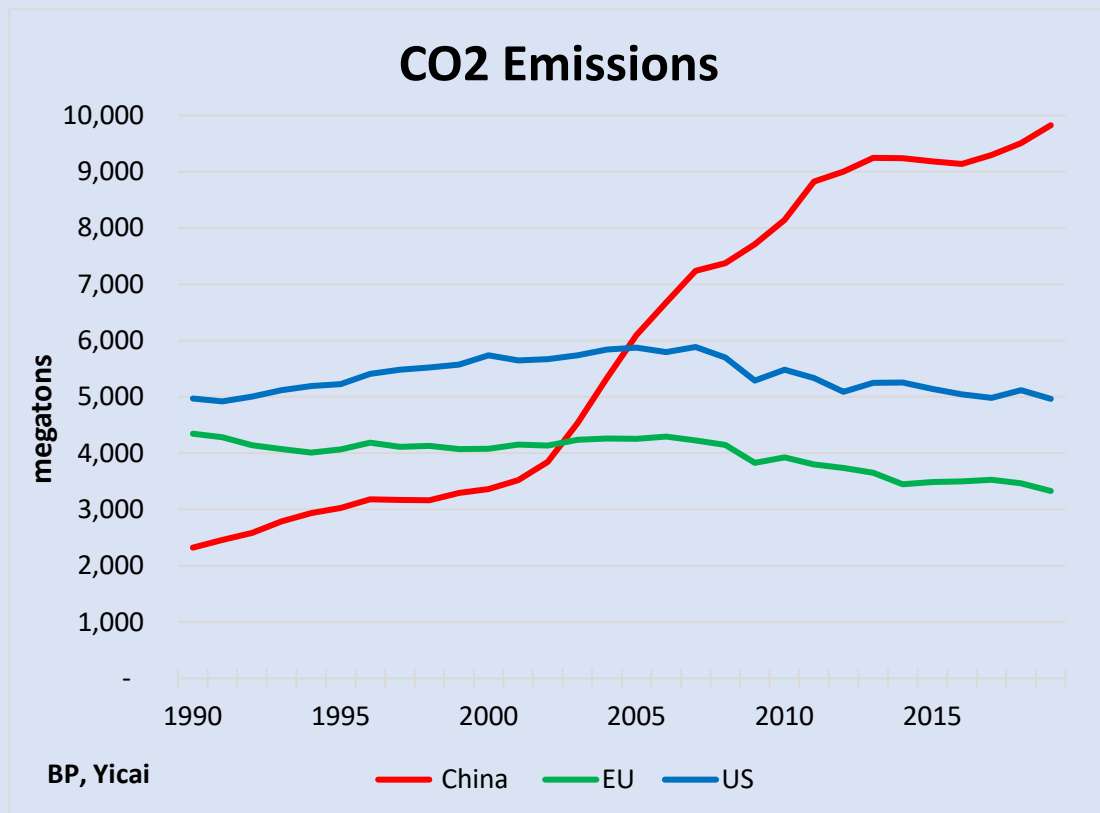
- China **spends** a lot on R&D
- But it is less successful at **human resources**
- Bloomberg ranked it 39th in **employing researchers** (as a share of the workforce)
- Based on the experience of other countries, China should be employing **five times** more researchers

14th Five Year Plan: Innovation-driven development



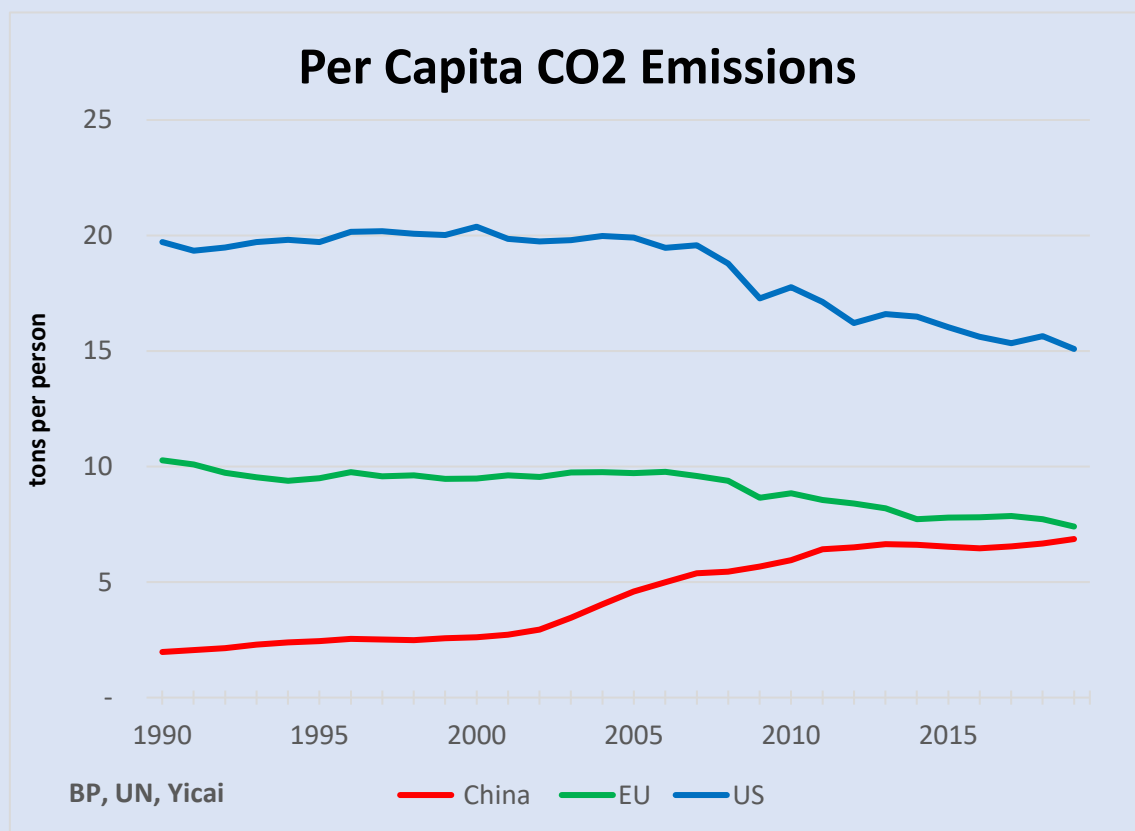
- **Businesses** encouraged to innovate
- Labour **productivity** faster than GDP growth
- **Breakthroughs** in AI, quantum computing, chips, and biotech
- Boost **R&D spending** by more than 7%
- Increase working age populations' average years of **education** from 10.8 to 11.3
- Increase number of **patents** from 63 to 120 per 1000 population
- **Explore** deep space, deep earth, deep sea and the poles

Promoting green growth



- China is the world's **largest** emitter of CO2
- It alone accounts for **30%** of global emissions

Promoting green growth



- Chinese people do not lead particularly **carbon-intensive** lifestyles
- China's per capita emissions are about $\frac{1}{2}$ **US levels** and about 7% less than in Europe
- But there are **almost twice as many** Chinese as Americans and Europeans combined
- China is more **industrial** than Western countries
- China is the world's **largest exporter**
- Portion of emissions support **consumption elsewhere**

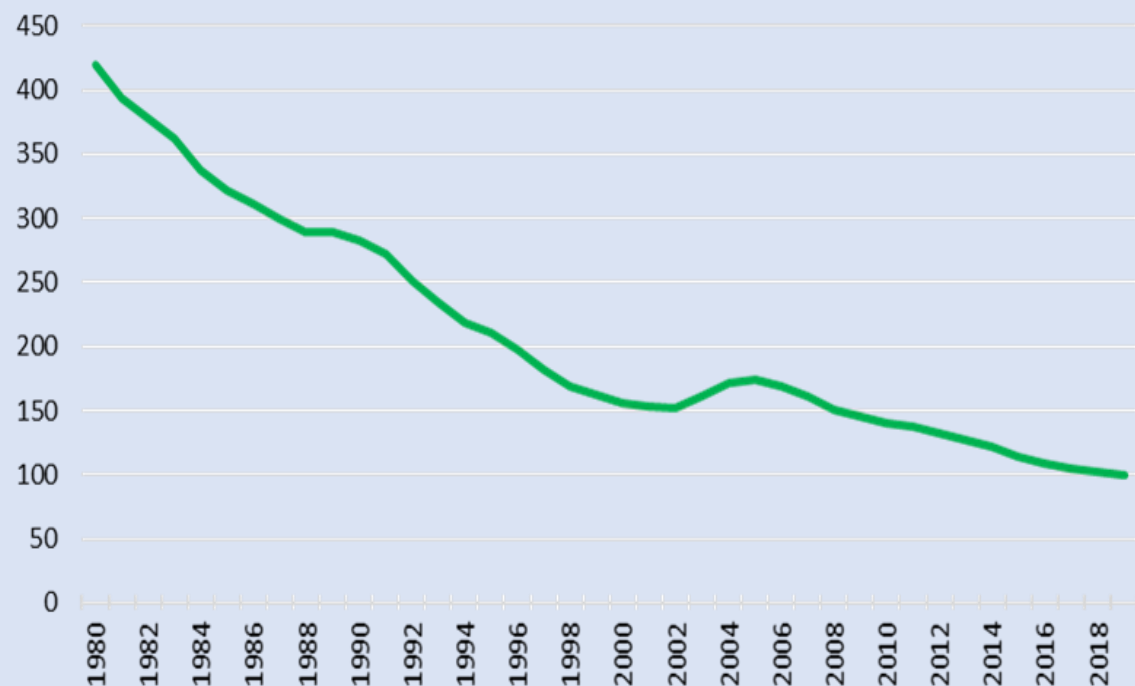
Promoting green development



- President Xi's has committed to **carbon neutrality** by 2060
- This entails a massive **structural change**
- China has not yet published a **detailed roadmap** for how it will attain its goal
- However, there appear to be **three margins** upon which it can operate

1. Reduce the energy-intensity of GDP

Energy Consumption Per Unit GDP
Index (2019 = 100)

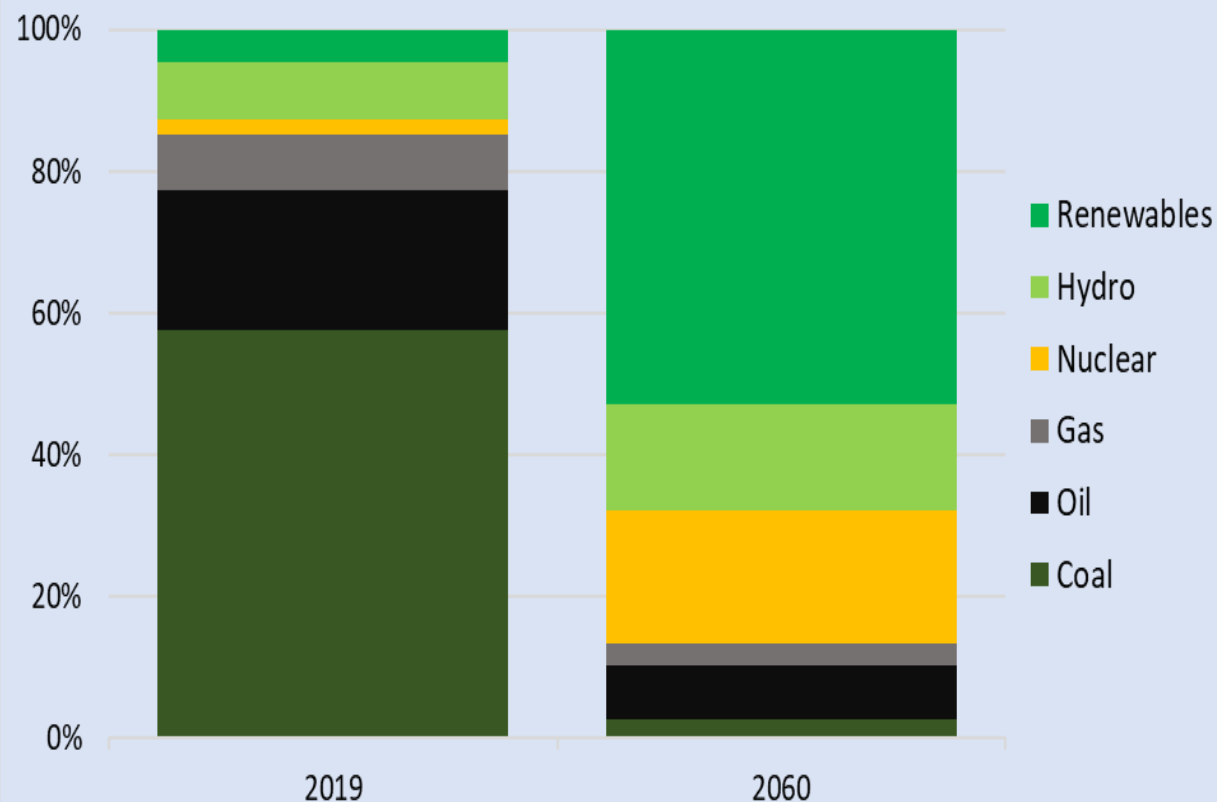


BP, Wind, Yicai

- China has become increasingly **energy efficient** over time
- The amount of energy needed to produce one unit of GDP has **fallen steadily**
- In future years,
 - slower urbanization
 - a declining population
 - a more service-based economywill help **further reduce** energy intensity

2. Reduce the carbon-intensity of the energy supply

Energy Generation by Fuel Source



BP, Bloomberg, Yicai

- China burns **coal** for almost 60% of its energy needs
- Hydro, nuclear and renewables are much **less carbon-emitting**
- Tsinghua University **projects**:
 - fossil fuels' share of energy generation will fall from 85 to 13%
 - nuclear's will rise from 2 to 19%
 - renewables' will jump from 5 to 53%

3. Increase the use of carbon sinks



- China will **still consume** some fossil fuels in 2060
- Given the size of its economy, China will likely emit a **significant amount** of carbon
- China needs to explore is the increased use of **carbon sinks**
- Options include:
 - Carbon capture and storage
 - Reforestation
 - A greater use of wood in construction
 - More sustainable farming techniques

14th Five Year Plan: Promoting green growth



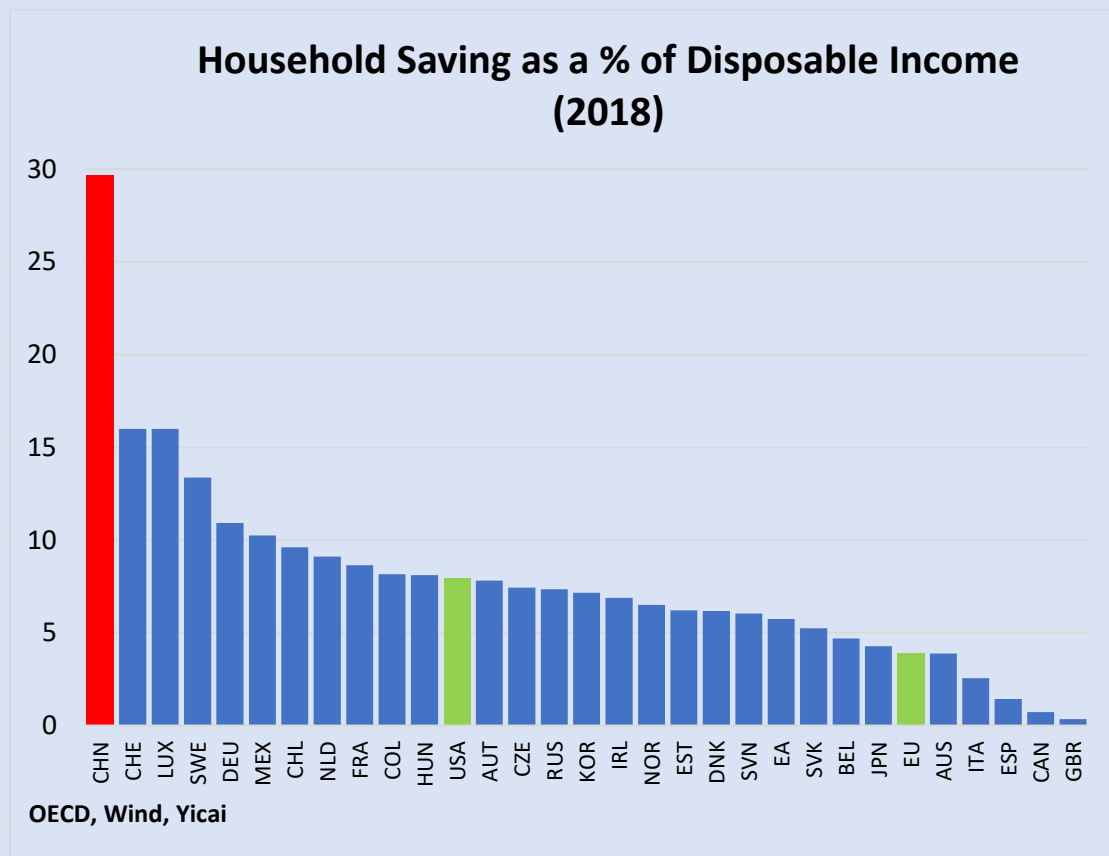
- Reduce the **energy consumption** per unit GDP by 13.5%
- Reduce CO2 **emissions** per unit GDP by 18%
- Increase **forest** cover from 23.2% to 24.1%

Creating a strong domestic market



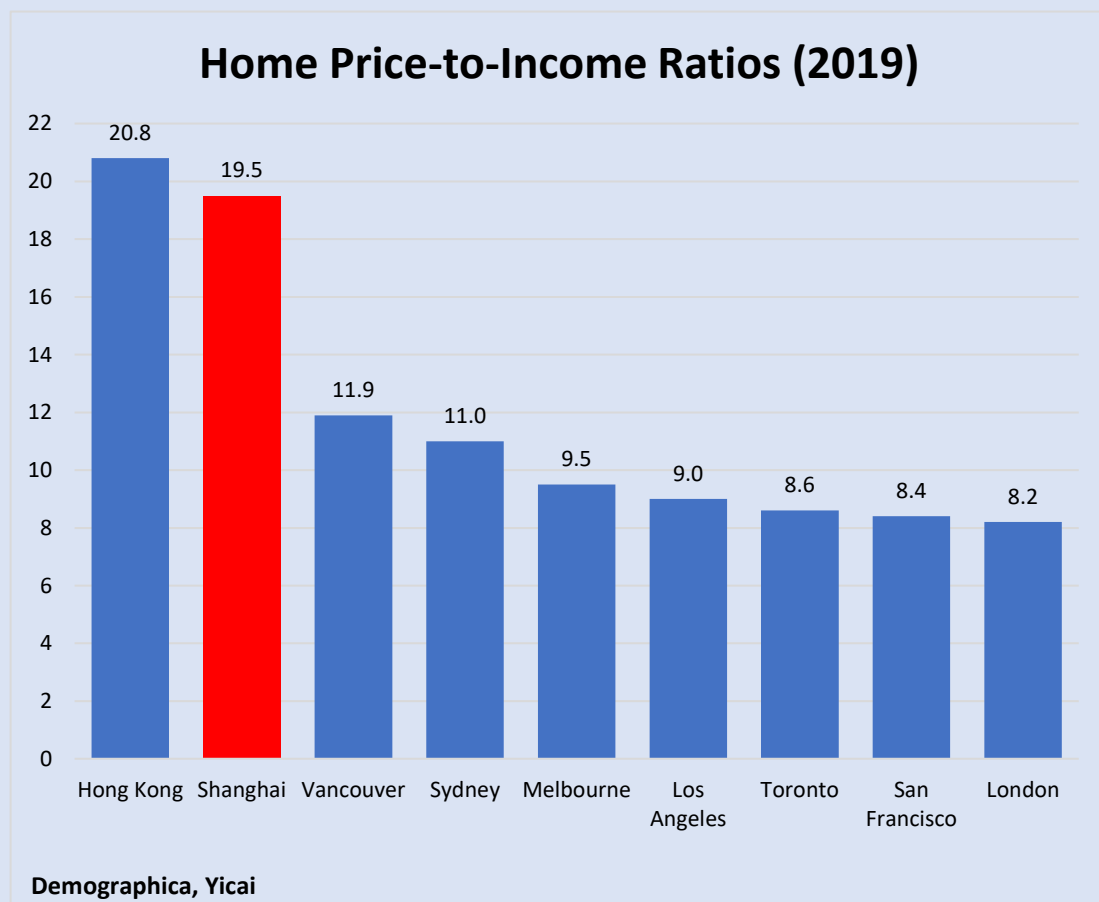
- 14th Five Year Plan calls for the “**strategic expansion** of domestic demand”
- It wants to “enhance the **fundamental role** of consumption in economic development”
- China will continue to **grow more rapidly** than its trading partners
- Its massive population is now **wealthy** enough to be a *bona fide* engine of growth

Creating a strong domestic market



- But consumption in China is held back by a very high household **savings rate**
- Chinese households save close to **30%** of their income
- Households in other countries only save **7%**
- China's savings rate is **well above** US's (8%) and the EU's (4%)
- How can the government **nudge** people to spend more and save less?

Creating a strong domestic market

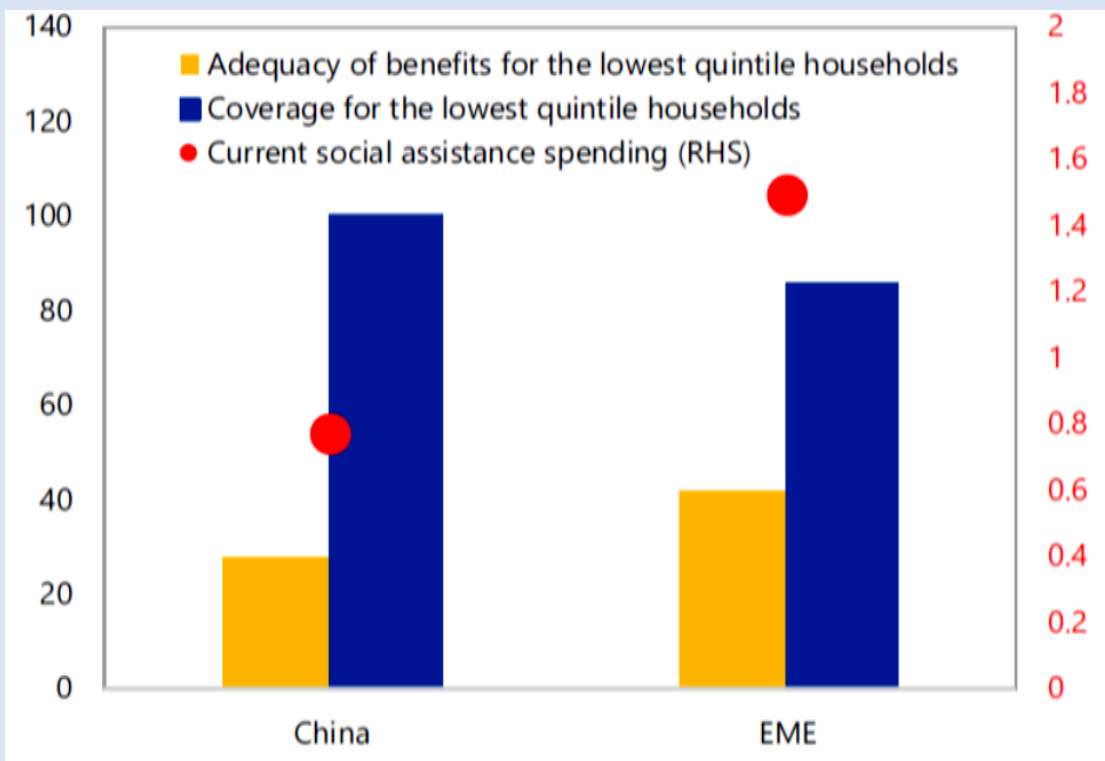


- One of the reasons that Chinese families save so much is to **buy a home**
- The **cost of housing** in China's cities, relative to income, is exceptionally high
- Families buy rather than rent because of **uncertainty** over the future stream of their rental payments
- At the same time, many apartments are left **vacant**
- A recurrent **property tax** would be a good way to keep these apartments occupied

Creating a strong domestic market

Social Assistance Indicators

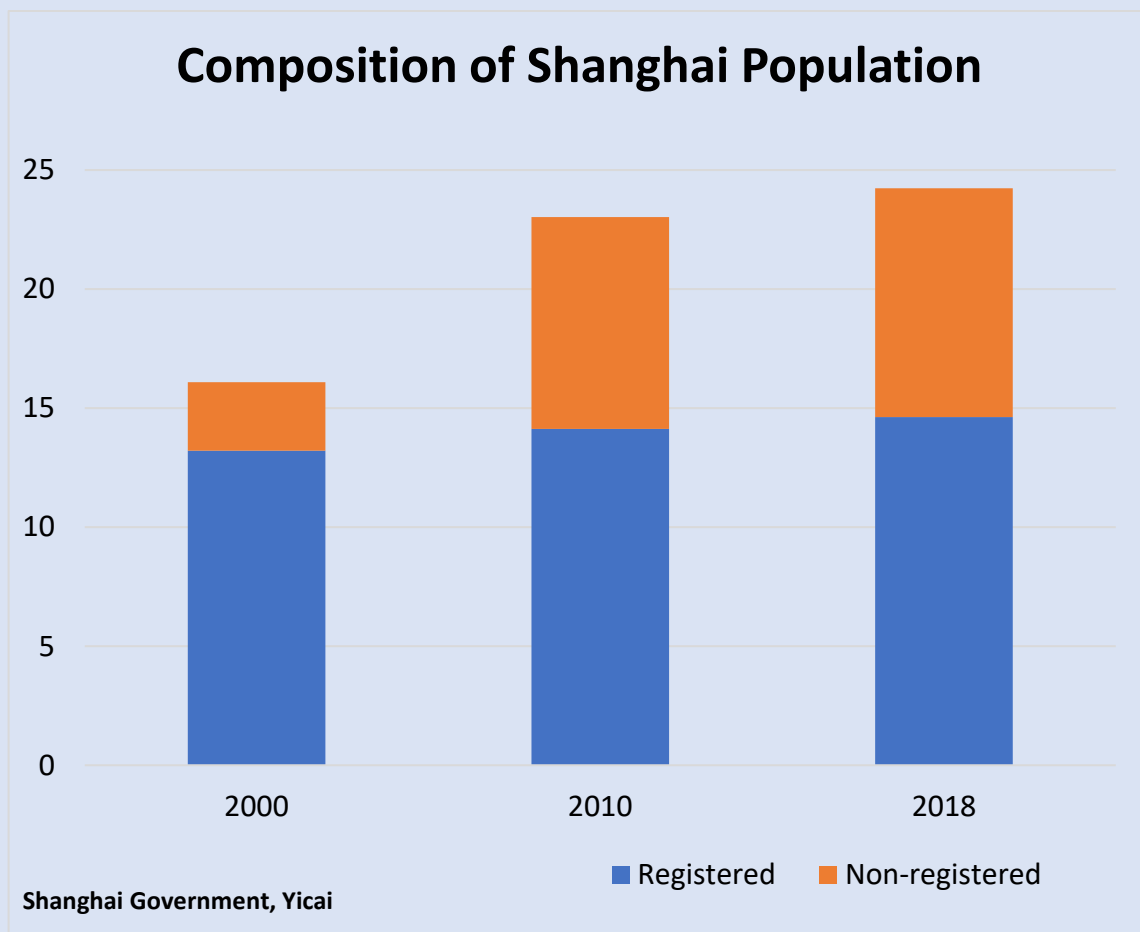
(left scale = percent, right scale = % of GDP)



IMF 2020 China Article IV Report

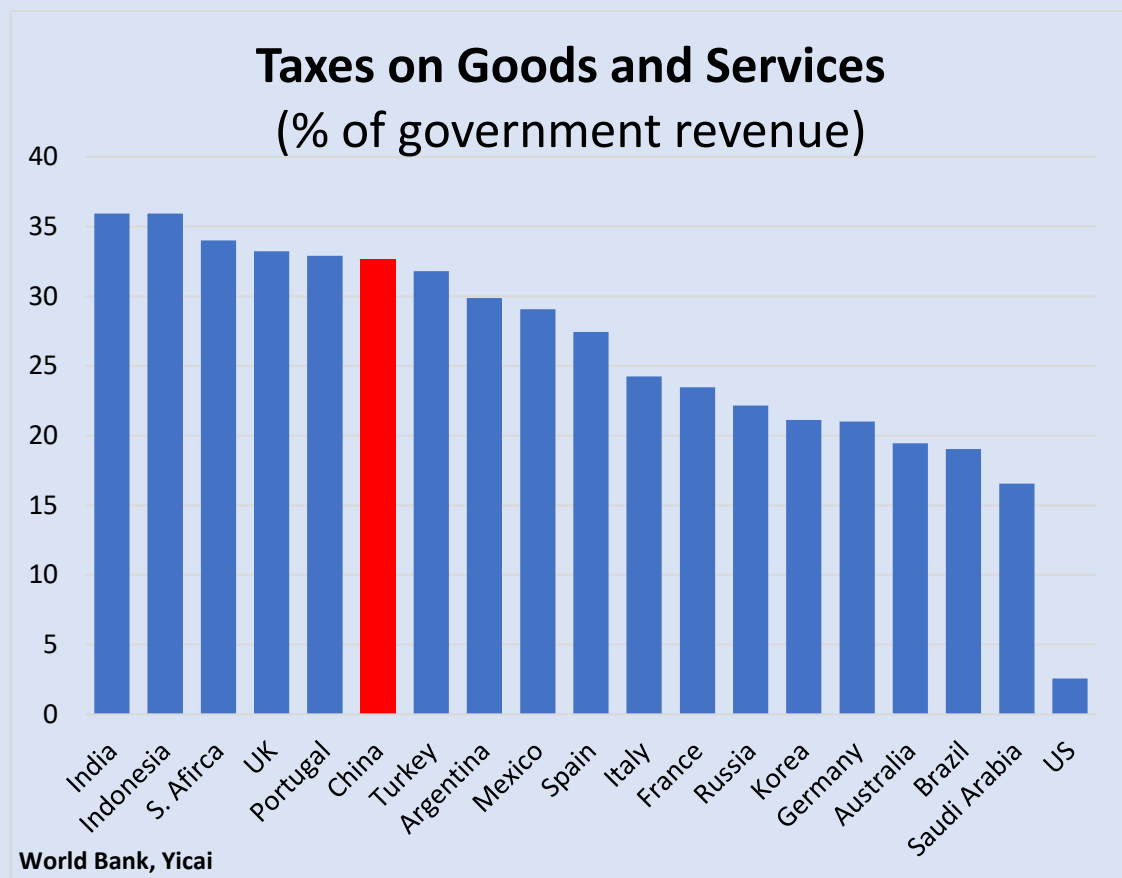
- Another of households' key motivations to save is to **insure themselves** against unforeseen events, such as **job losses** or **debilitating illnesses**
- One way to reduce such precautionary savings is through **risk pooling** mechanisms, like employment and medical insurance
- While China does have such programs, the **amount of coverage** can be expanded

Creating a strong domestic market



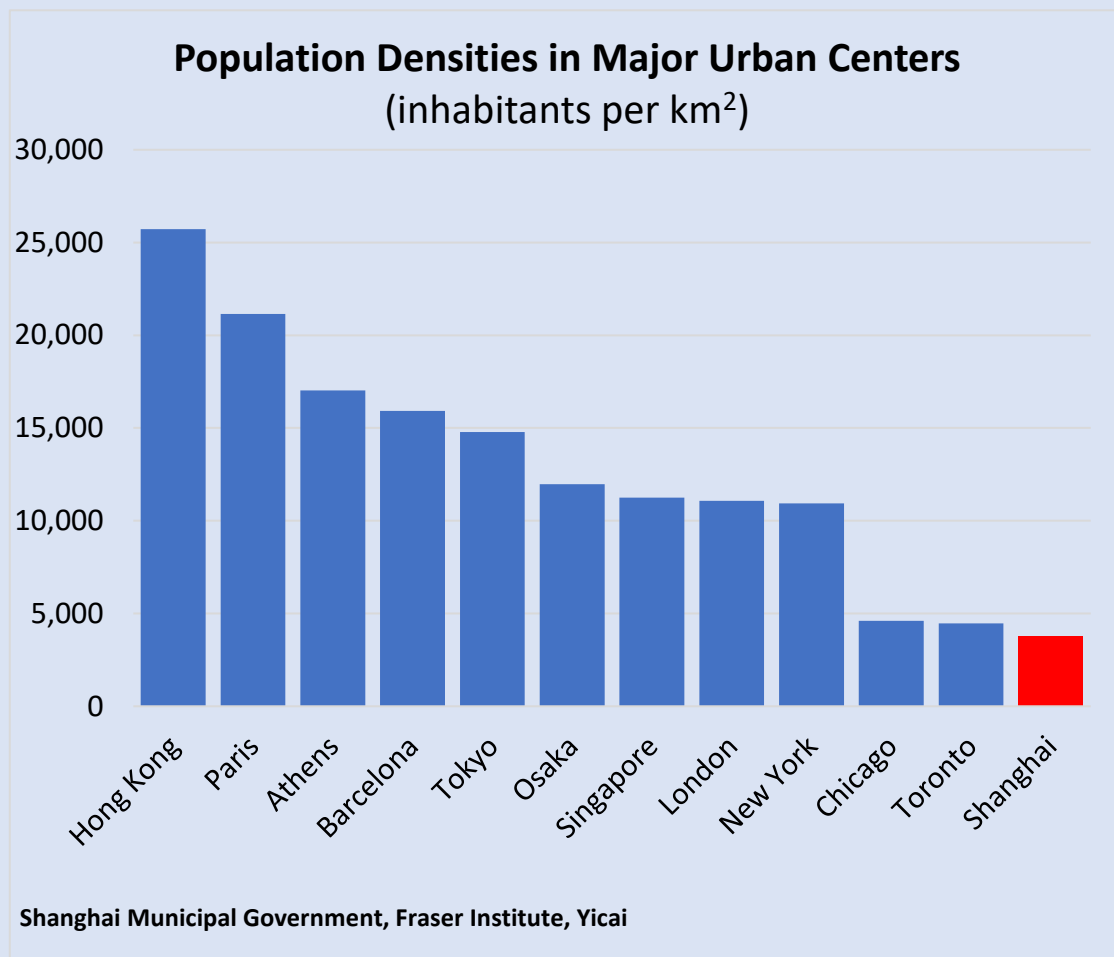
- Over the years, Chinese cities have attracted a significant number of **migrants** from across China
- Shanghai's non-registered population has likely exceeded **10 million**
- Many of these new migrants are unable to obtain ***hukou***
- Their consumption possibilities are constrained by their lack of easy access to certain **public services**

Creating a strong domestic market



- The Chinese tax system relies relatively heavily on **indirect taxes**
- These taxes are easy to collect but they **penalize consumption** and reward saving
- They are also **regressive**, since poorer households typically spend a relatively large fraction of their incomes
- A **rebalancing of tax policy** – from indirect to direct taxation – could redistribute income from savers to spenders and support consumption

Creating a strong domestic market



- Although Chinese cities are large, their **density** is not particularly high
- Many Chinese cities have the capacity to increase their resident **population**
- High-density cities permit enhanced **sharing, matching, and learning**
- Raising China's urban **population density**, in a rational way, can **increase incomes** and **boost consumption**, while maintaining a livable urban atmosphere

14th Five Year Plan: Promoting people's wellbeing



- Increase **life expectancy** from 77.3 to 78.3 years
- Increase number of **doctors** from 2.9 to 3.2 per 1000 population
- Raise **urbanization** rate from 60.6 to 65%
- Increase basic **pension** coverage from 91 to 95%
- Raise **nursery school** enrollment from 1.8 to 4.2 per 1000 population
- **Common Prosperity** (共同富裕) initiative aims to address income inequality

Conclusions



- There is an undercurrent of **self-reliance** in the 14th Five Year plan
- **Supply-side**: innovation-driven development and agricultural development
- **Demand-side**: domestic consumption
- Orientation is understandable in the context of increasing **protectionism** and **backlash** against globalization

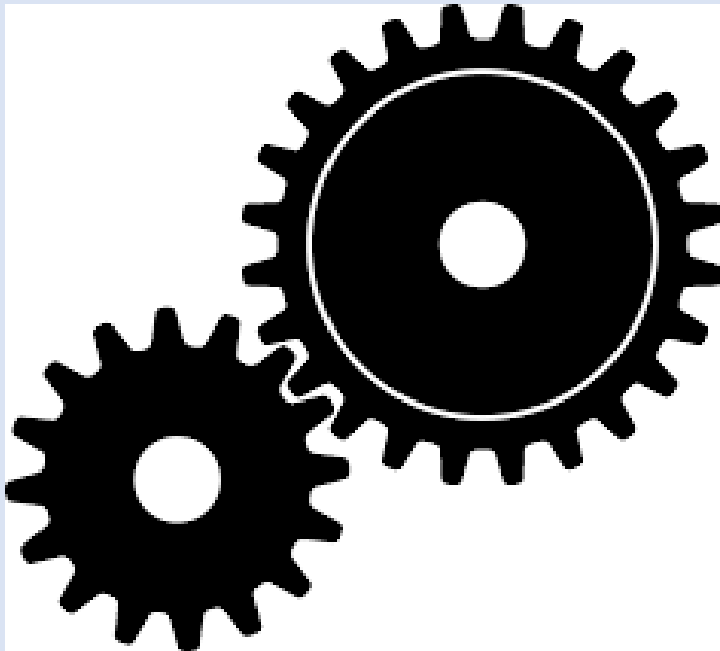
Conclusions



- Self-reliance does not mean that China is **turning its back** on the rest of the world
- It will improve transparency for foreign investment in services (the **negative list**)
- China will deepen the interconnection of domestic and foreign **capital markets**
- It will further open up **opening up** financial services to foreign capital
- It has applied to participate in the **Comprehensive and Progressive Trans-Pacific Partnership (CPTPP)**

Conclusions

- **Dual Circulation Strategy:**
 - Strengthen the leading role of the **domestic circulation**
 - Use the **international circulation** to improve the domestic circulation's efficiency
 - Achieve **mutual benefit**



Thank You!

多谢!



For more data-driven insights into China's economy:
<https://www.yicaiglobal.com/opinion/mark.kruger>