

**JIIA-CSIS Webinar
on High-Tech Supply Chain Security
Session 1: China's 14th Five Year Plan
and Dual Circulation Strategy**

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My reading of the Fifth plenum Proposal (1)

**“The world is in the midst of a period of unprecedented upheaval”
“profound adjustment in the international balance of power”**

Unwritten recognition: **the decline of the U.S. and the rise of China**

“The superiority of CCP leadership and Chinese Institutions proven”

An Optimism: **time will tell in China's favor**

Focus on “Domestic Grand Circulation”

Avoid dependence on foreign demand: a bid to prepare for the struggle with the US

Previous optimism on the (future of the) globalization receded

Even if the globalization is reversed, China that has a huge domestic market can survive on internal circulation

“Dual Circulation” is meant to declare that China will not be inward-looking and continue to benefit the rest of the world

My reading of the Fifth plenum Proposal (2)

An unprecedented Focus on "Innovation, Science and Technology" as a driving force of economic growth

- Focus on AI, semiconductors, quantum computing life and health, biological seedlings, aerospace, deep-sea, etc.
- Strengthen basic research in advanced fields → "Emphasis on life sciences such as genetics, infectious diseases, immunology, etc."

securing and upgrading supply chain

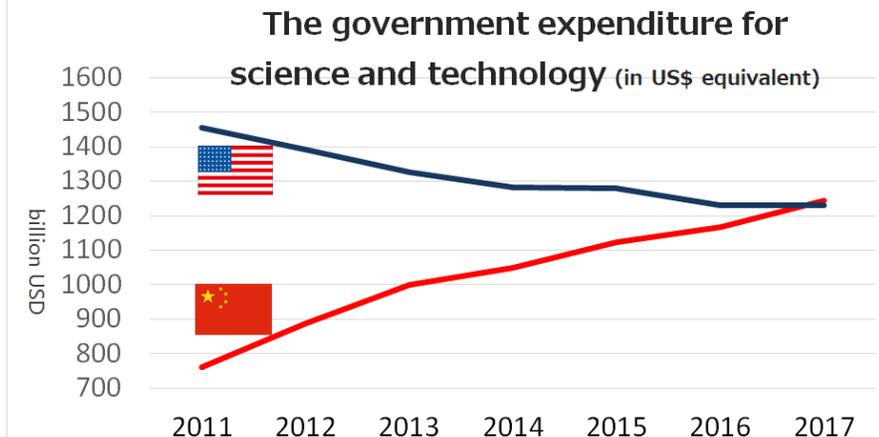
- Ensure industrial safety and national security, create a safe and reliable supply chain
- Let others depend on China's supply chain

The number of STEM students in the U.S. and China (per academic year)

	bachelor	master	doctor
China	1,505,576	218,981	32,700
The U.S.	354,806	129,095	28,101
of which foreign students	23,461 6.6%	66,278 51.3%	12,253 43.6%

for the U.S.; aggregation of STEM (Science, Technology, Engineering, Mathematics) students
for China, aggregation of Science and Engineering students
[source]

the U.S.: The National Center for Education Statistics (NCES) Number and percentage distribution of science, technology, engineering, and mathematics (STEM) degrees (2015-16)
China: China Education Statistical Yearbook 2017



source: 国家财政科学技术支出 (MOF), U.S. R&D Funding by Federal Government (AAAS; American Association for the Advancement of Science)

US hi-tech cold-war tactics brought about serious side-effects

1. Huawei will never die

People turned on the traditional psychological switch of "**fight against foreign enemy**"
The government will do everything it can to make the company alive

2. The Western semiconductor industry is being hit hard too

Western companies may also take a hit, but they won't get the equivalent protection as Chinese

3. China's fierce move toward domestic production of semiconductors

Future international **semiconductor market will be disrupted**

4. Fear of falling behind China in the race to build the 5G & IoT

Millimeter-wave band Investment will be more costly than China=>diffusion will be slower

5. The semiconductor embargo is a big blow, but China may make efforts to overcome it by evolving its technology and products?

"**Cloud Mobile**" which does not need high-end chip could transform the mobile-phone market

Does China play the game on a level playing field? Why do we feel China is so alien?

The wealth and power is highly concentrated to the Govt.

- **Urban land is state-owned** and so is the vast amount of wealth thereof
- **2/3 of the market value of listed shares belong to 0.03% accounts**
- The concentration is accelerated further due to the “**IGG**”

Chinese govt. can mobilize a a huge amount of resources that are incomparable with other countries' Govts.

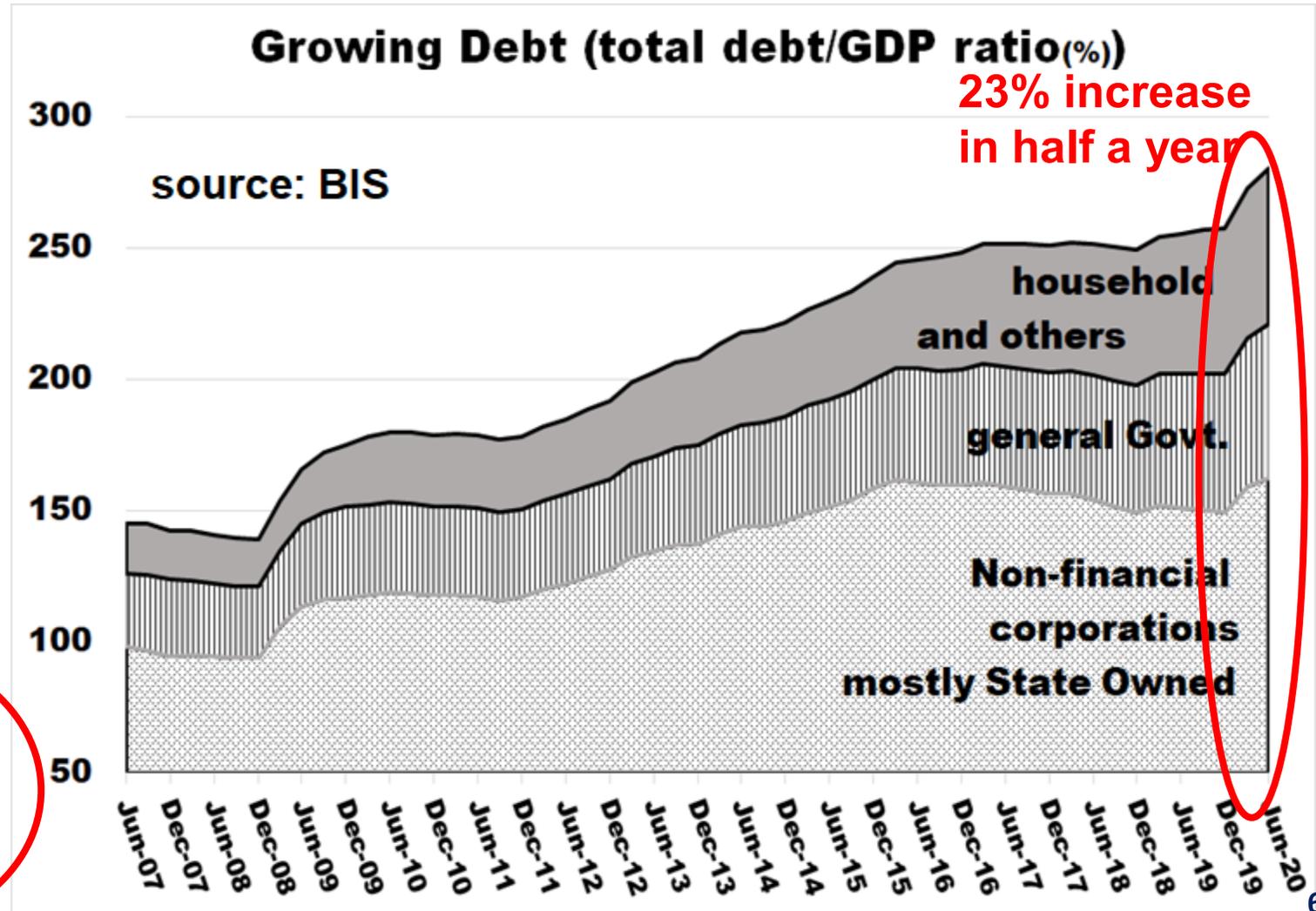
- To **fight against COVID-19**, injects a huge amount of resources to Wuhan
- To **support domestic semiconductor industry**, injects a huge amount of subsidy
- To **sustain financial stability**, provides **Implicit Government Guarantees (IGG)**

These injections will take some effects, but simultaneously waste a huge amount of money (unwise spending)

Behind the worlds' fastest recovery, lie Growing government deficit and cumulating debt

Growing Govt. Deficit

unit: billion Yuan		2020	2019 result
National General Public Budget	Revenue(A)	18,027	19,038
	Tax Revenue	-	15,799
	Non-tax revenue	2,998	3,239
	of it Revenue from State-Owned Capital Management	398	396
	of it Surplus from Previous Years	0	2,216
	Total Revenue(B)	21,025	21,254
Governmental Fund	Expenditure(C)	24,785	23,887
	Other Expenditure	0	127
	Total Expenditure(D)	24,785	24,014
Fiscal Deficit	Revenue	12,913	8,452
	of it Revenue from Land transfer	7,041	7,258
	of it Special Local Govt. Bond	3,750	2,150
	of it Special treasury bond	1,000	0
	Expenditure	12,812	9,136
	Official deficit (B-D)	▲ 3,760	▲ 2,760
GDP ratio	3.9%	2.8%	
Fiscal Deficit	Simple Deficit (A-C)	▲ 6,758	▲ 4,849
	GDP ratio	7.0%	4.9%
	if include Special Local Govt. Bond	▲ 10,508	▲ 6,999
	GDP ratio	10.8%	7.1%



How to maintain middle speed economic growth? The prescription is simple, but Xi can't make it



New Economy

Driven by technology, new business model

I : digital technology, AI, Big Data

E : EV

B : Big Science (space, energy)

Lead role: Private Enterprises



Old Economy

Heavy Industries, Real Estate, Public infrastructure

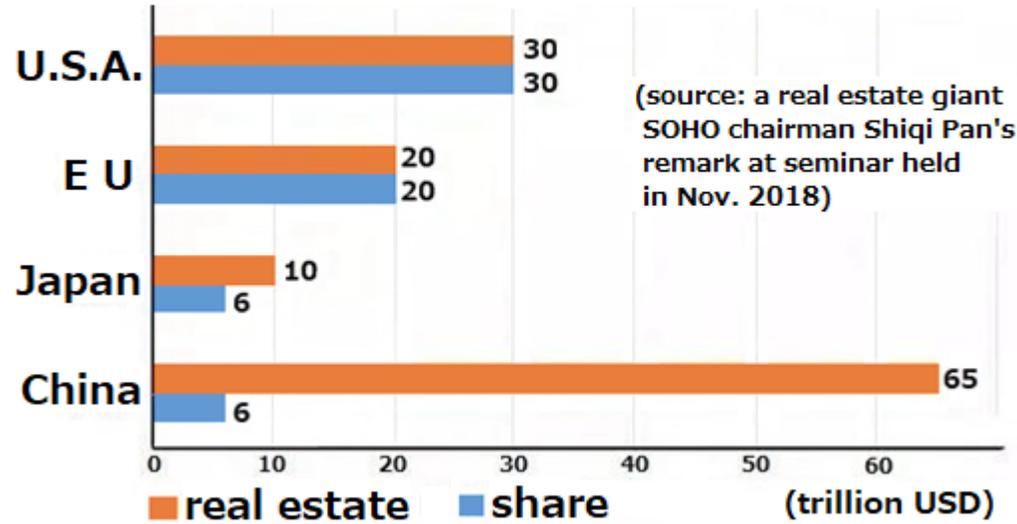
Heavily reliant on Debt

Lead role: State Enterprises, Governments

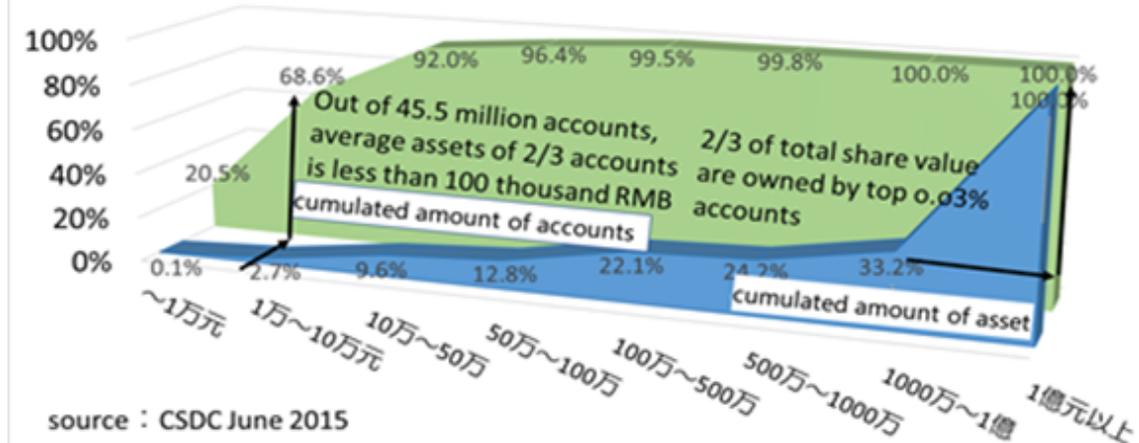
- **The prescription; grow private sector; downsize state sector; fix NPL problem even it is painful**

Seriously uneven distribution of wealth (real estate bubble and share holding)

Market Value of Real Estate and Shares



Concentration spectrum of listed company share ownership



real estate prices/ average income of workers (2019)

Out of 50 major cities, 39 cities' ratios > 10
Shenzhen 35.2, Shanghai 25.1, Beijing 23.9

rent/property price (investment yield) (2020)

Shanghai 2.1%, Beijing 1.7%, Guangzhou 1.5%,
Shenzhen 1.3%,
Average of 10 major cities 1.7%

⇔ Prime rate for bank loans is 4.5% (2021)

Two third of total share value is owned by 0.03% of Accounts

8300 corporations and 3700 natural persons

Average asset value owned by two third of total accounts (≐ 30 million accounts) is less than RMB 10 thousand

Implicit Government Guarantees' Cost is so huge

IGG

Assumption

- outstanding financial assets: **RMB300 trillion**
- of which **20% are non-performing** (criterion: interest expense > EBITDA)
- averaged **ROA: 5%**

➔ **RMB3 trillion paid to creditors who are not entitled to it every year = unjustifiable income transfer (3% of GDP annually) to:**
① **state-owned financial institutions, ② wealthy depositors**

- **Excessive debt**
- **“State sectors advance, Private sectors retreat”**
- **Widening gap between the rich and the poor**

**A common cause
Is the IGG**

⊗ **The Chinese bubble problem is how further will the economy be distorted and deteriorated this way, rather than when will it burst**