### Comments on Modernizing China

#### PARI-IMF workshop on Asian Economies Mariko Watanabe (Gakushuin University)

University of Tokyo/ IMF Workshop On Modernizing China (Mariko Watanabe)

# My points

- China under industrial transformation
- Progressive and Regressive powers
  - 1. Old Pillar Industry: SOEs
    - Steel, Chemical, Cement: Overcapacity Industry
  - 2. Emerging and New Pillar industry: Private
    - E-commerce, ICT.
    - Semiconductor
- Where will be an equilibrium?
  - Depends on good soft infrastructure of enforcement

### Dr. Shipke's slide Investment in "soft" infrastructure and political economy

- "overcoming institutional challenges"
   ...greater emphasis on "soft areas" (Premier LI, September 2016)
- Overcome strong vested interest groups (President XI, September 2016)
- External anchors (e.g. WTO accession in 2001) fostered competition and enterprise restructuring

# "Institutional Voids" existed/exists

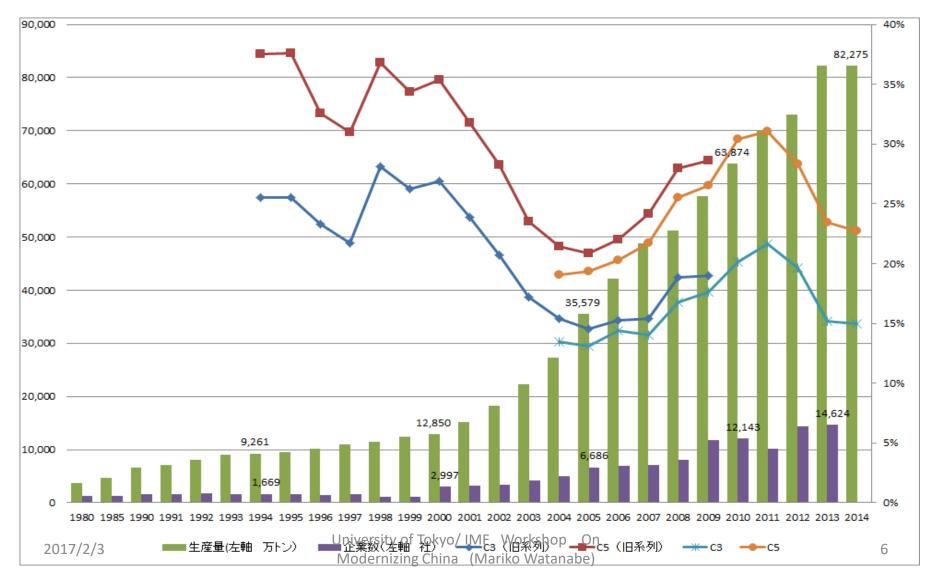
- "Intuitional Voids" generates;
  - 1. Dysfunctional institution
    - Needs to be "modernized". It still suffers China seriously.
  - 2. New industry and industrial development, at the same time.
    - Modernized China" more than developed economies.
    - Heavy reliance of internet economy due to inmmatured service sector.

Soft budget constraint and overcapacity, environmental costs,

#### **DYSFUNCTIONAL INSTITUTION**

#### **Overcapacity in Steel Industry**

Analmac of China Steel Industry, various issues



#### One Big Source of Heavy Air Pollution

#### A documentary video Chai Jing's review: Under the Dome – Investigating China's Smog

An interview with Hebei Province Environmental Enforcement Official.

 No enforcement to Iron and Steel factory who violate the regulation because the local government protection.

From 29 min. https://youtu.be/T6X2uwIQGQM



#### Soft budget constraint: Hebei Steel 2014: Non operation Income

- Government Subsidy 70. 9 million RMB
- Income from wealth management product (理財商品):

100.59 million RMB

				単位: フ
项目	2014 年金额	2013 年金额	2012 年金额	说明
非流动资产处置损益(包括已计提资产减 值准备的冲销部分)	-28,997,081.92	-3,498,117.56	-12,768,484.39	
计入当期损益的政府补助(与企业业务密 切相关,按照国家统一标准定额或定量享 受的政府补助除外)	70,904,110.30	84,286,423.63	33,997,322.66	
债务重组损益	167,178.46	2,970,374.72	6,346,949.67	
对外委托贷款取得的损益	100,592,591.82	93,117,510.03	6,918,055.56	
受托经营取得的托管费收入	3,000,000.00	3,000,000.00		
除上述各项之外的其他营业外收入和支出	-3,506,112.46	-3,270,216.29	-2,026,843.37	
其他符合非经常性损益定义的损益项目				
减:所得税影响额	32,662,394.05	-137,634.53	56,439.22	
少数股东权益影响额(税后)	-247,808.34	-805,485.59	4,294,842.50	
合计	109,746,100.49	177,549,094.65	28,115,718.41	

河北钢铁股份有限公司 2014 年年度报告全文

单位:元

## New industry

- E-Commerce in China
  - It is flourishing because inmatured
- Alipay
  - It explosively developing because of awkward payment facilities (No credit card,
- IC industries improve their capability

#### Alibaba

- E-Commerce in China
  - It is flourishing because inmature
- Alipay
  - It explosively developing because of awkward payment facilities (No credit card





#### HUAWEI

They are gaining technological innovation capability. ZTE, Huawei's SOE rivals, are loosing their status.

### Investing in/anchoring which area?

- 1. Competitive Neutrality of SOEs
- 2. Enforcement power of the rule
  - Enhancing enforcement of "market friendly"
- 3. Government under the law and constitution

### Subsidy affect market price and share

Mariko Watanabe (2016)Identifying Competition Neutrality of SOEs in China https://ssrn.com/abstract=2750341

- Firm A and B compete in a market
- When Firm A' faced with soft budget constraint
  - Generic marginal cost = c
  - Firm A can lower their price due to subsidy D, but firm B No.

$$p_A \ge c-D = c_A$$

 $p_B \ge c_B$ 

# Price and Market Share are function of subsidy

• Prices and market share at new equilibrium.

$$p_{B} = (3c-2D+t_{B}+2t_{A}+B_{A}-B_{B})/3 \quad (1)$$

$$p_{A} = (3c-D+t_{B}+2t_{A}+B_{A}-B_{B})/3 \quad (2)$$

$$x_{A} = (2t_{A}+t_{B}+B_{A}-B_{B}+D)/3(t_{A}+t_{B}) \quad (3)$$

#### Estimate these equations

	(1) Hard Constraint OLS	(2) Soft budget constraint OLS
	ln price <sub>constraint</sub>	$\ln price_{softbudget}$
ln benefit <sub>own</sub>	$4.527^{***}$	6.354***
	(0.000)	(0.000)
$\ln benefit_{others}$	-3.995***	-6.127***
	(0.000)	(0.000)
ln <i>mc<sub>softbudget</sub></i>	0.097	0.277***
in mosofibuager	(0.163)	(0.000)
ln mc <sub>constraint</sub>	0.308***	0.016
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(0.000)	(0.609)
ln debtown		-0.047***
		(0.000)
ln debt <sub>rivals</sub>	0.076	
	(0.496)	
constant	-3.466	4.589***
	(0.264)	(0.000)
City Dummies	+	+
Year Dummies	+	+
Brand Dummies	+	+
Ν	5734	6377
$R^2$	0.709	0.709

Figure 11: Price Benefit Supply Curve (Structural form) - CTV market

*p*-values in parentheses

\* p < 0.1,\*\* p < 0.05,\*\*\* p < 0.01

(Note) Marginal costs (mc) are computed from the equation:  $p_{jt} - mc_{jt} = -q_{jt} \frac{\partial p_{jt}}{\partial q_{jt}} \frac{\partial p_{jt}}{\partial q_{jt}}$  is estimated from demand estimates in previous section.

### A SUMMARY

### A tug war between Progressive and Regressive Powers

- 1. Regressive power
  - SOEs manages Sunset Industry. Difficult but
- 2. Progressive power
  - Private. Leading virtual and hardware industries. They are gaining global competitiveness.
- 3. Problem: Which power will win?
  - 1. If progressive power is weak, disparity and pollution will sharpen.
  - 2. To weaken regressive power, need a reform of enforcement system including the party and power.
- 4. External anchor is necessary.

At the same time, they are gaining power to set the international rule.