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Industrial policy in China

Strategic Industrial Policy in China: historical evolution

The strategic approach is dominant in China since the **transition process** beginning in the **1980s**.

- **The "Open-door policy" from 1980s**:
  - gradual opening to **foreign trade and FDI.** 1979 Law on FDIs allowed joint ventures with 25% of foreign capital and Chinese management.
  - building of **4 Special Economic Zones:** 3 of those are in Guangdong Province (Shenzhen, Zhuhai and Shantou) that was chosen for its strategic location. It was gradually granted with higher administrative and fiscal autonomy.
  - **Export-oriented strategy** (e.g., Belt and Road initiative) and (after the 2008 crisis) **Go-domestic policy** (aiming at the growth of domestic market)

- **However**:
  - Specific **conditions were imposed to foreign investors**, and investment in **specific sectors** was privileged.
  - Other areas of the economy, such as **capital flows**, were maintained strictly under the control of the central government and did not experience any liberalization up to date.
  - **State-owned enterprises** were later reformed and "privatized" but strict control was maintained on the majority of shares of those companies considered "strategic" (e.g., the automobile industry and the energy-related sectors).

Current stage: the "dual-circulation strategy"

- The 2015 China's industrial policy masterplan (**Made in China 2025**) exhibited Chinese ambition to become **self-sufficient**.
- Since Trump's push for a **trade and technology war** against China and, later, **the pandemic** reduced international trade further, the Chinese government has been relying on a **dual circulation strategy** to support China's growth:
  - Make the **domestic economy** self-sufficient from the rest of the world in terms of natural resources and technology, vertically integrating its production (with obvious negative consequences for major exporters of technology, such as Germany, Japan, South Korea, and the U.S.).
  - Boosting **external demand**, in particular through **the Belt and Road Initiative (BRI)**, to ensure open markets in the emerging world (especially in a context of Western containment).
- In essence, dual circulation is part of China's masterplan to become self-reliant in terms of resources and technology but also in terms of demand through its huge market as well as through third markets available through the BRI.

Chinese industrial policy: main tools

- **Five-Years Plans**
- **FDIs policy** (e.g., list of banned industries/products to foreign production, the role of Joint ventures for technology transfer)
- **Governing the geography of productions:** Special economic zones, Development Zones, Specialized Towns, …
- **The role of State-Owned Enterprises (SOEs)**

Five-Years Plans

- **Five-Year Plans** have been the main programming tool of the Chinese governments since the 1950s, defining **long-term policy goals**. Even though they now aim at providing *guidelines*, rather than defining binding targets, five-year plans give precise indications on the industries that are to be considered strategic.
  - **Policy documents** issued every 5 years by the national government
  - Followed by **Provincial (and city) plans** following the same general strategy and implementing on the local level
  - They identify **"pillar" industries** or **"key" industries**, together with "**strategic emerging sectors**"**:** very strong **signalling effect** for investment, market structure, …
  - The identification of strategic sectors in the five-year plans goes hand in hand with the **catalogues of the MOFCOM** (Ministry of Commerce) that identify, permit, encourage, restrict and prohibit **investment projects**.
- **Not only general plans**
  - Implementing documents define subsidies and policies
  - Sectoral plans (pharmaceuticals, automotive) define the specific measures for the sector of interest

Settori/Piani Quinquennali	IX (96-00)	X (01-05)	XI (06-10)	XII (11-15)
Food				
Drinks				
Tobacco				
Textiles	P	P	P	P
Wearing apparels				
Leather				
Wood				
Furniture				
Paper making				
Printing				
Sports and culture products				
Petroleum, coke and nuclear f.	P		P	P
Petrochemicals	P		P	P
Nuclear fuels	E			
Chemicals		P	P/E	E
Medicines and Pharmaceuticals				
Biotech	E	E	E	E
Traditional Chinese Medicine				
Rubber				
Plastics				
Non mineral metals	P	P	P	P
Smelting of ferrous materials			P	P
Metal products				
General purpose machinery	P			
Special purpose machinery		P	P	P
Packaging				P
Mechatronics		P		
Transport vehicles and equip.	P	P		
Automobiles	P	P	P	P
Ecological vehicles				E
Aerospace	E	E	E	*E*
Shipbuilding			P	*P*
Electric equipment	P			
Computer and electronics			E	P
Broadband, digital devices, satellites		E		E
Optoelectronics				
Measurement instruments				
Other manufacturing industries				
Production and supply of electric power and heat power			P	E
Production and distribution of gas			P	

Source: Our elaboration on National Five-Year Plans

Table I.
Pillar industries and emerging strategic sectors: five-year plans (1996–2015)

Special economic zones

"By concentrating activities in a specific place we make administrative control and programming easy to implement" (Head of SEZ administration, 1985)

"A special economic zone is a medium for introducing technology, management and knowledge" (Deng Xiaoping as quoted by Kamath, 1990: 109).

- **Objectives**: studying capitalism; **test** different policies; acquire technological knowledge; increase exports, employment and foreign exchange; increase competition across regions
- Even nowadays Special Economic Zones are used as "**laboratories**" to observe new production mechanisms, while maintaining the ability to control and govern the change (Yao e Whalley, 2015).
- **Greater autonomy** of local government (under specific evaluation mechanisms);
- **Shenzhen**, the first special economic zone:
  - 70% of production is in computer and electronics – Chinese capital city in this sector
  - From small city to metropolis in a decade

Shenzhen before and after …

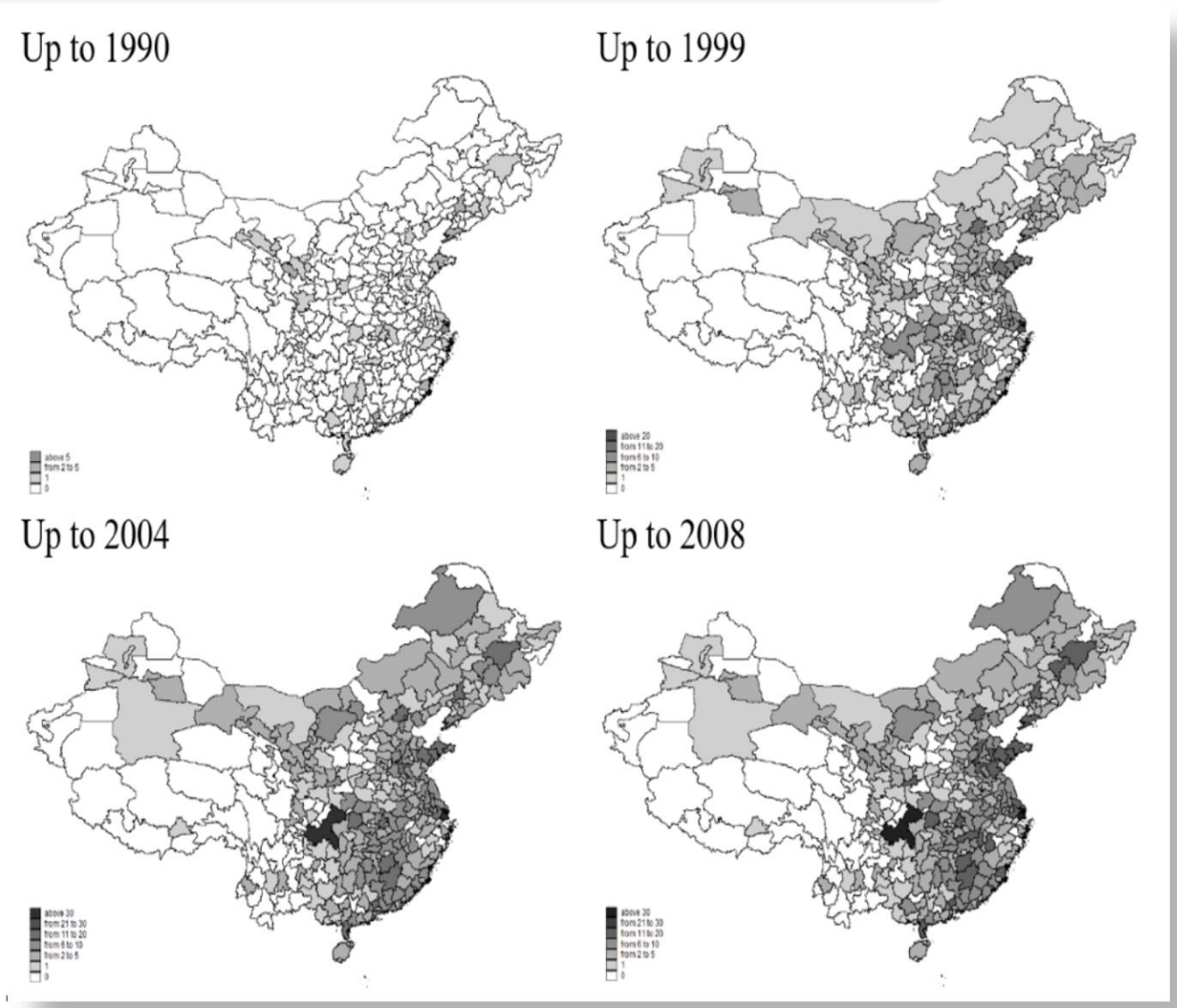
Economic Development Zones

- From the experience of Special Economic Zones, various types of Economic Development Zones have been created as:
  - Bounded areas
  - Preferential Policies
  - Various administrative levels (national, provincial, city)
  - Various (and evolving) objectives

- Various types of economic zones:
  - Economic and Technological Development Zones
  - High-tech Industrial Development Zones
  - Export Processing Zones
  - Free Trade Zones
  - Industrial Parks
  - Border-Cooperation Zones
  - Transfer Parks
  - …

Geographical evolution of Development Zones in China

- 1990 – Experimentation phase in the coastal regions
- 1999 – Increase in the geographical scale
- 2004 (and 2008) – Increase in the intensity



Specialized towns

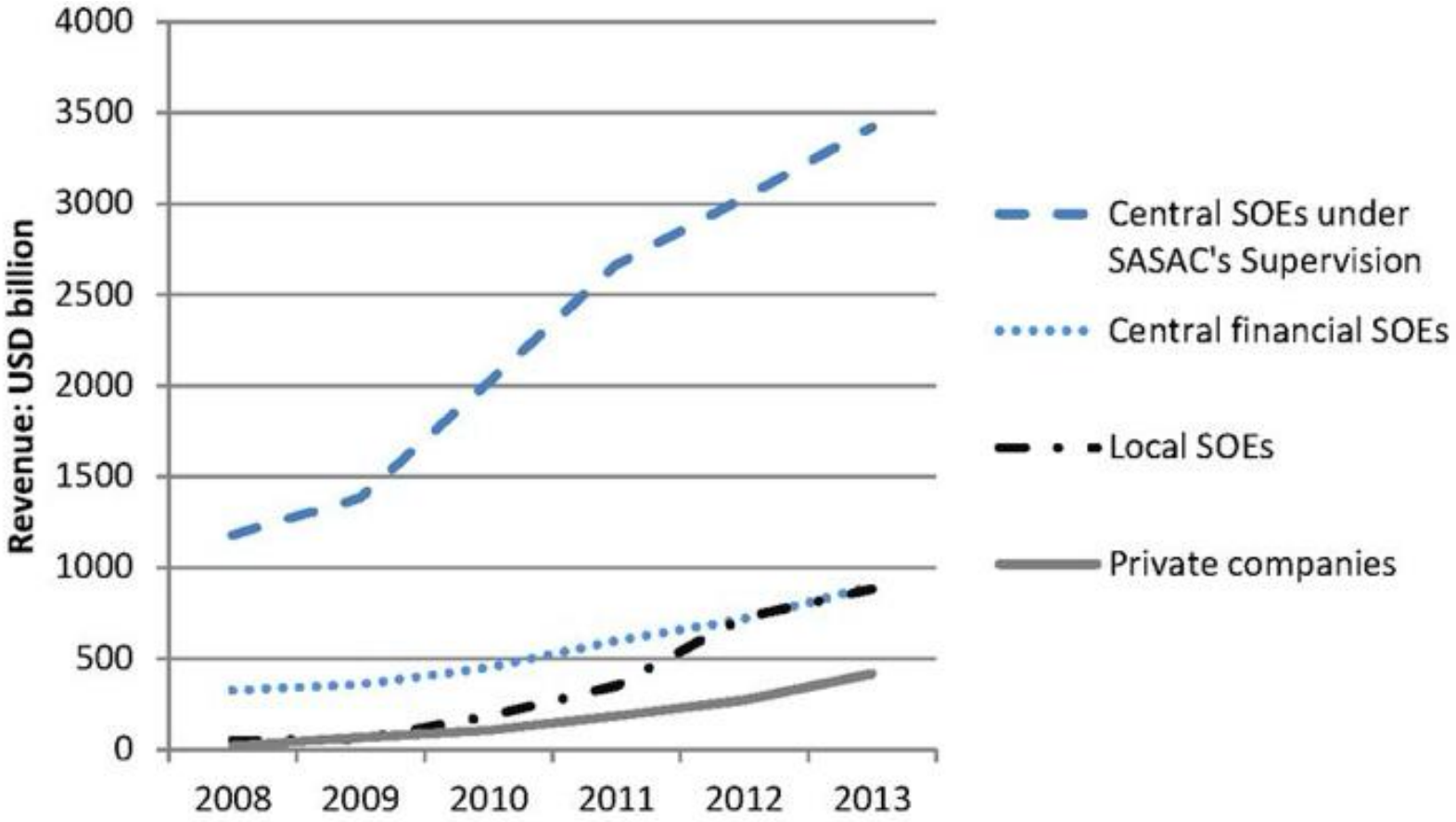
- Territory characterized by the presence of a specific industry
- To be recognized as a specialized town, a territorial entity must meet the following criteria:
  - From an administrative point of view, it has to be a '**township**' (less frequently a 'county' or a 'urban district')
  - At least **30%** if its industrial output has to come from 1 sector or product – specialized sector
  - The annual value of the industrial output has to exceed **2 billion** RMB (about 260 m. €)
- The officially recognized STs are then entitled to receive a subsidy for the establishment of an **innovation platform**
  - co-funding proportion is 1 (province): 10 (city): 50 (town)

The role of State-Owned Enterprises (SOEs)

- In 1978, nearly **80%** of enterprises were SOEs, the remaining 22% were "collectively owned" enterprises.
- Over subsequent years, China has taken a sharp turn away from SOEs: in 2013, SOEs only accounted for **45%** of all Chinese industrial output.
- However, strict control was maintained on the majority of shares of those companies considered “strategic” (e.g., the automobile industry and the energy-related sectors), where **national state-owned champions** were **nurtured** to be the leading actors of those sectors (**see Empirical section**).
- SOEs remain today a crucial element of Chinese economy: about **170,000 SOEs** operate today in China, producing between **23 and 28 percent of China's GDP** (Lin et al, 2020; Zhang, 2019).
- Most SOEs are currently market players with mixed ownership (public-private), where it is difficult to identify the **specific public interest** pursued by each of them.
- The persistence of state control makes possible to guarantee **financial stability**, to implement **strategic industrial policy choices**, or to **avoid hostile takeovers**.

❖ In China, the number SOEs that have joined the **Global 500 list**, which includes the top 500 economic groups in the world based on turnover, has been steadily increasing over the past years.

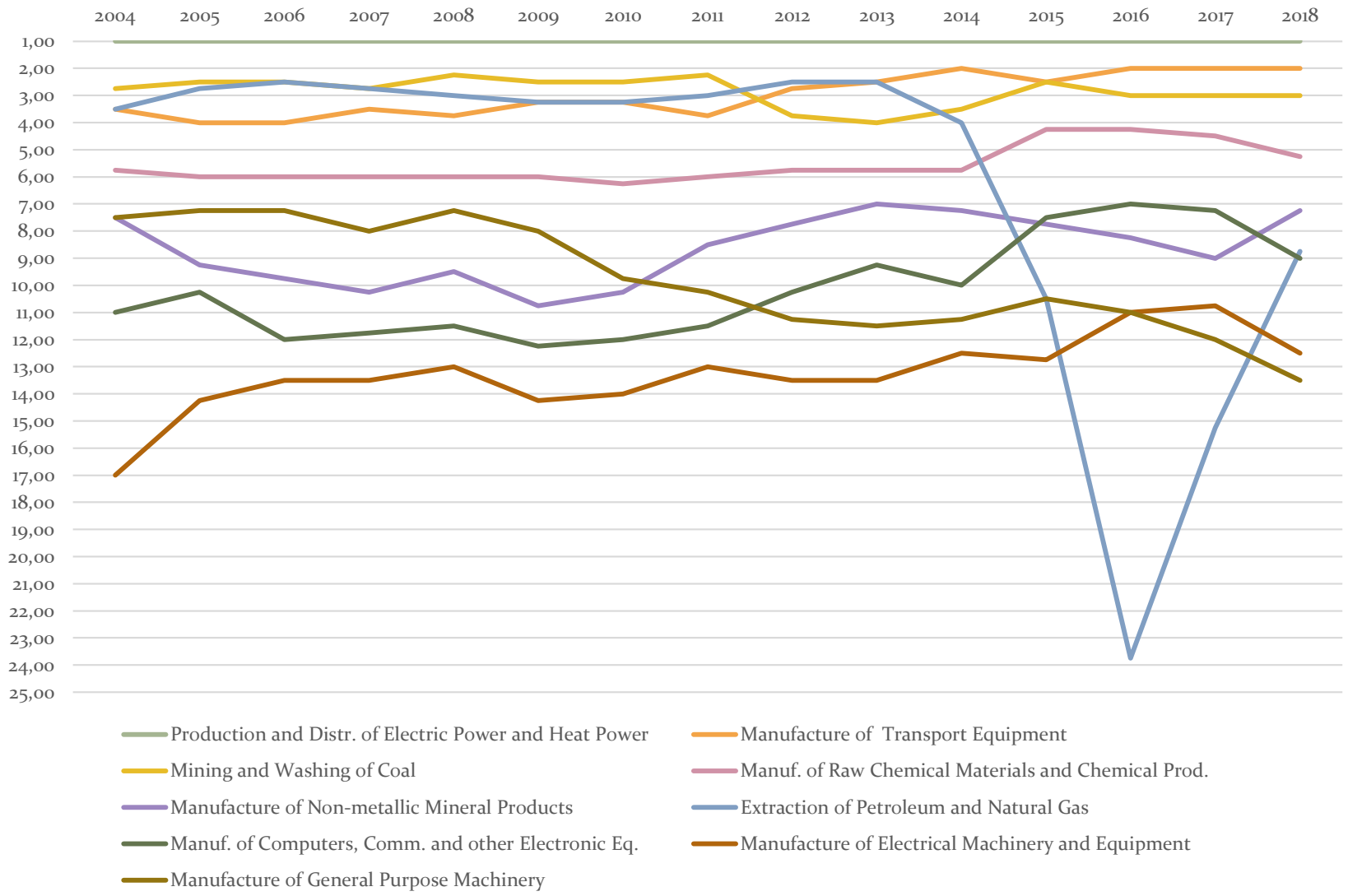
Chinese SOEs entering the list of the Global 500



Fonte: OECD, 2016

	Government-presence-intensity (GPI) Index (assesses the presence of State-holding Industrial Enterprises in 37 industrial sectors) - Rankings 2018	Additive rule	Fisher rule	Logistic rule	Liptak rule	Minimum rank	Maximum rank	Average rank
		2018	2018	2018	2018	2018	2018	2018
High	Production and Distr. of Electric Power and Heat Power	1	1	1	1	1	1	**1,00**
	Manufacture of Transport Equipment	2	2	2	2	2	2	**2,00**
	Mining and Washing of Coal	3	3	3	3	3	3	**3,00**
	Smelting and Pressing of Ferrous Metals	4	4	4	4	4	4	**4,00**
	Manuf. of Raw Chemical Materials and Chemical Prod.	5	5	6	5	5	6	**5,25**
	Processing of Petroleum and Nuclear Fuel, and Coking	6	6	5	6	5	6	**5,75**
	Manufacture of Non-metallic Mineral Products	7	7	8	7	7	8	**7,25**
Medium-high	Extraction of Petroleum and Natural Gas	10	10	7	8	7	10	**8,75**
	Smelting and Pressing of Non-ferrous Metals	9	9	9	9	9	9	**9,00**
	Manuf. of Computers, Comm. and other Electronic Eq.	8	8	10	10	8	10	**9,00**
	Manufacture of Electrical Machinery and Equipment	11	11	14	14	11	14	**12,50**
	Production and Distribution of Water	13	13	13	12	12	13	**12,75**
	Manufacture of Tobacco	14	16	11	11	11	16	**13,00**
	Manufacture of Beverages	15	14	12	13	12	15	**13,50**
	Manufacture of General Purpose Machinery	12	12	15	15	12	15	**13,50**
Medium	Manufacture of Special Purpose Machinery	16	15	16	16	15	16	**15,75**
	Manufacture of Medicines	17	17	17	17	17	17	**17,00**
	Production and Distribution of Gas	18	18	18	18	18	18	**18,00**
	Manufacture of Metal Products	19	19	20	20	19	20	**19,50**
	Processing of Food from Agricultural Products	20	21	19	19	19	21	**19,75**
	Mining and Processing of Non-Ferrous Metal Ores	21	20	21	21	20	21	**20,75**
	Manufacture of Foods	22	22	22	22	22	22	**22,00**
Medium-low	Manufacture of Rubber and Plastic Produtcs	23	23	24	24	23	24	**23,50**
	Printing, Reproduction of Recording Media	24	24	25	25	24	25	**24,50**
	Manufacture of Textile	25	25	26	26	25	26	**25,50**
	Manuf. of Measuring Instr. and Machinery for Cult./Office	26	26	27	27	26	27	**26,50**
	Mining and Processing of Ferrous Metal Ores	31	31	23	23	23	31	**27,00**
	Manufacture of Chemical Fibers	27	27	28	28	27	28	**27,50**
	Mining and Processing of Nonmetal Ores	29	29	30	30	29	30	**29,50**
	Manufacture of Wearing Apparel, Footware, and Caps	30	30	29	29	29	30	**29,50**
	Manufacture of Paper and Paper Products	28	28	31	31	28	31	**29,50**
Low	Manufacture of Articles For Culture, Education and Sport	32	32	32	32	32	32	**32,00**
	Manuf. of Wood, Bamboo, Rattan, Palm, and Straw Prod.	33	33	33	33	33	33	**33,00**
	Utilization of Waste Resources	34	34	34	34	34	34	**34,00**
	Manufacture of Furniture	36	36	35	35	35	36	**35,50**
	Manufacture of Artwork and Other Manufacturing	35	35	37	37	35	37	**36,00**
	Manufacture of Leather, Fur, Feather and Related Prod.	37	37	36	36	36	37	**36,50**

GPI Index - Trend 2004/2018
Selected high and medium-high performing industries



Final remarks

- **Industrial policy** and government support in **strategic sectors** continue to be relevant in China, despite government orientation toward market economy.

- Sectors where the "**strategic presence of the government" (SOEs)** has been **persisting over time** include: Production and Distr. of Electric Power and Heat Power; Manufacture of Transport Equipment; Mining and Washing of Coal; Manuf. of Raw Chemical Materials and Chemical Prod.; Manufacture of Non-metallic Mineral Products; Manuf. of Computers, Comm. and other Electronic Eq.; Manufacture of Electrical Machinery and Equipment; Manufacture of General Purpose Machinery

- These industries can *de facto* be considered as "**sectoral priorities**" in China, where the persisting presence of government could continue to play an important role in **protecting and promoting Chinese industrial system in international arena**.

- Chinese industrial policy needs to include **marginal areas and groups** in the development process, recomposing the general interest of the country as crucial element for future **environmental and social sustainability**: the "**dual circulation strategy**" responding to the changing international scenario (pandemic and protectionism) could be a viable way to address these issues.