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Introduction

Comparing Industrial Development Process in China and India: Our Aim and Preliminary Outcomes

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1 Aim and Design

Though massive amount of studies and reports on economic and business development of China and India have been continuously produced, however, academic comparative studies that scrutinize their way or process of development using a common framework are not many indeed. It is particularly so for the micro/firm-level study that examines the details of technology, management, labor-relations, etc, with substantial first-hand surveys. We all know that China and India grow, but we are not sure how they do it. We want to know how much and why their developmental trajectories are similar and different. By knowing it, the rest of the world would be more prepared to cope with the unprecedented impact caused by the rapid rise of the two super-large developing economies in the contemporary world.

The design of our study is as follows. We select some important industries and, by comparing their process of development, in particular that of the leading firms, try to grasp the commonalities and differences between the two. In the next stage, we try to figure out the causal factors of them. In particular, we put our focus on the domestic factors that consist the economic system or market society of their own characteristics, such as various levels of governments, capitalists/entrepreneurs, engineers/workers, educational/training institutions, research institutions, size and quality of domestic market, various infrastructures (both hardware and institutional settings), and so on.

In a sense, we use the study of the industrial development as a window to look into the wider images of economic system or market society of the research target country. The author expects that each of the chapters of this volume provides essential

parts that consists a large picture of the economic system in China and India.

Although the target of the whole study is very broad, but we have some common areas of interest among us; the way of capability formation and institutional settings that go together in the course of the evolution of the society. This inclination is based on the widely-shared assumption that “the institutional framework will shape the direction of the acquisition of knowledge and skills, and …… that direction will be the decisive factor for the long-run development of the society” (North 1990, p78). Our study as a whole is trying to explore and advocate types of sets of institutions/system and the way of capability formation with Chinese and Indian characteristics.

2 East Asian Model

In exploring the type of Chinese and Indian economic system of capability formation, our rudimentary reference would be East Asian countries including Japan, Korea, and Taiwan. They have succeeded in escaping from homogeneous price competition by accumulating “proprietary” capability that enabled them continuous innovation. In the stylized East Asian Model (EAM), their leverage was active strategic interventions to a market allocation, and it was government, large leading firms, or other forms of collective organizations that played the most pivotal role in accumulating enough capabilities within them by massive strategic investments in resource building (nurturing), especially in human resources. Government restricted the number of firms in the competition, and concentrated resources to the selected firms. Large firms also nurtured smaller transaction partners by monitoring their performances and giving them incentives to upgrade, and individuals were nurtured in a systematic way within the firm under the condition that staffs/workers were employed in a fairly stable manner. Under the well-coordinated catching-up system of EAM, either at national-level, firm-level, or individual-level, the learning of existing knowledge in the incremental manner was been pursued, and the rapidness of climbing up capability ladder mattered since they were driven by catching-up mentality (“developmentalism”).

3 Preliminary Outcomes: Coordination System of Capability Building

As shown below, it seems that the cases of China and India do not necessarily fit into

the EAM picture very well. Using some of the major findings in the chapters of this volume, let us think about a rough image of the possible framework to compare China and India as a preliminary outcome of the study.

This year, as the first year of the two year project, we have put focus on the industries that either China or India (or both China and India) has prominent international competitiveness. They include textile (cotton product), IT service, electronics, automobile, and motorcycle industries.

To begin with, two basic questions are raised to contrast the differences of industrial development process in the two countries.

3.1 Question 1: Why China is competitive in traditional manufacturing industries (ex. textile) and for India it is contemporary service industry (ex. IT service)?

Broadly speaking, Chinese firms seem larger and stronger in traditional labor-intensive manufacturing sectors than India, and Indian firms seem more competitive and larger in another kind of labor-intensive sector, service sector. For example, in textile industry, China has been very competitive for decades in particular for the large scale factories, but in contemporary Indian textile industry, firms are far smaller and less-integrated, and hence less competitive. On the contrary, in IT service industry, India is no doubt one of the leaders in the world while Chinese counterpart is smaller and less competitive (Chapter 3).

Established literatures point out several critical reasons to explain the difference. They say there exist disadvantageous factors in Indian side such as (1) regulations that caused rigidity in labor liquidity and preferential policies for small scale industry (typically in textile industry), and (2) low quality of infrastructure and high cost of financial resource. And also critical difference was caused externally by (3) the role of foreign firms and markets (Indian IT service developed thanks to the specific demand in US and England, and the same is true for Chinese textile industry to Japan).

As an additional explanation, this study might raise one hypothesis from the viewpoint of the different mode of capability/skill formation; Indian firms might not be good at organizing in large volume the lower layer of workers with generic and unsophisticated skills required in traditional labor intensive manufacturing, typically textile industry. However, it does not apply to the modern sector which is solely organized by modern elites with more than bachelor degree in IT service industry. Whereas in China, organizing such low layer workers is not as difficult as India, and more importantly, workers are more motivated to upgrade their skills with incentives

provided by the firm and with more chances of moving up in the society.

This intuition is drawn from the fact that Indian labor market seems more segmented and closed, and the gap between the layers is larger, whereas in China, workers can move more openly beyond sectors both horizontally and vertically. Table 1 gives us collateral evidence: the high-end staffs in IT service (with higher educational background and expertise) in India earn higher than Chinese counterparts, and the low-end workers (with lower education and very generic skill) in the textile industry earn far less compared to China. This means that the skill gap or the gap in the possibility to earn by using different skills is far larger in India and China. At the same time, the gap within each box, say difference between staff and worker, is also larger in India than China. And in addition, as Chapter 7 shows, the possibility of moving-up within the same firm is far limited in India than China. Indian labor market seems far segmented and fixed both by types of skills and educational background, and both within and outside the firms. In such a circumstance, the more we descend the ladder of industrial order, the more Indian firms might face difficulty in effective organizing the labor. On the contrary, Chinese workers have more open space in the challenge of skill upgrading due to they have more chances in changing works and to more opportunity to receive trainings (OJT or Off-JT) both in and outside the firms. The large difference in quality and quantity of primary and secondly education and the accumulated effect in the different labor pools between China and India is also considered as one of the important causes, as Chapter 2 clearly shows.

Table 1: Hierarchic Nature of Labor Market in China and India:
Average Monthly Wage Rate in Various Industrial Clusters

(US$)

	India		China	
Skill: expert Edu: high	IT Service	Bangalore		Dalian
		SE	2000	SE	800
		Entry level	500-700	PG	250
	Motorcycle Parts	Pune		Chongqing, Zhejiang	
		Staff	420	Staff	370
		Worker	200	Worker	210
Skill: generic Edu: low	Textile (Knitting)	Coimbatore		Shandong	
		Worker	60-80	Worker	150-180

Note: SE=system engineer, PG=programmer.

Source: Interviews by the author.

3.2 Question 2: Why there is a large gap in the mode of competition in the same industrial sector between China and India?

As Chapter 4 (electronics: TV sets), 5 (automobile), and 7 (motorcycle) mainly argues, the mode of competition often differs in a same industry between China and India even though they produce the same types of products (Table 2). The common figures in these sectors are: (1) larger numbers of indigenous competitors in China (smaller in India), (2) harsher price competition in China (more quality/development oriented in India), (3) higher profit in India (low in China), but Chinese tend to cover it by size, (4) Chinese firms seem to pursue mainly sheer size/market-share whereas Indians are profitability and stability, (5) the mode of capability formation is more in-house oriented in India but not in China, (6) Chinese tend to use piece-rate massively, whereas Indians decide wages in terms of evaluated skills.

Table 2: Different Mode of Competition in Selected Industries

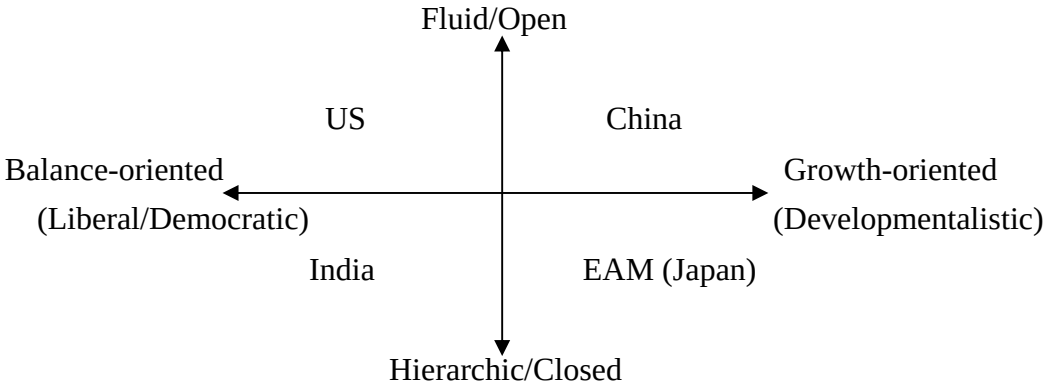
	China	India
Number of Competitors	large	small
Stability (change in market share)	unstable	stable
Focus of Competition	price	quality
Profitability	low	high
Production Size	large	small
Aim of Firms	size	profit
Mode of Capability Formation	outsouced	in-house
Incentive Mechanism	piece rate	evaluation

If the above lists are the cases, we can raise possible answers including, apart from the same ones as the Question 1, (1) rural market: China's rapid growth of rural market (demand) after 1990s, that accommodated the lower priced/standardized goods in a large volume, and (2) larger source of entrepreneurs: China seem to have larger seeds bed of entrepreneurs who challenge to enter the competition. In China, we can easily (in case of motorcycle parts suppliers, usually) hit upon the founders who used to be workers, farmers, fisher-mans, and even teachers/officers, whereas in India, I seldom met such type of firm owners (except for the founders who used to be engineers/managers). These points also have something to do with the social liquidity or dynamic movement of people beyond the hierarchy or segments as we saw above.

4. Concluding Remark: An Example of Social Characteristics Mapping

As an interim and preliminary outcome of the study, let us introduce a mapping of the characteristic societies of our interest as Figure 1. Industrial development takes place in each country/area in a way it accommodates and reflects respective characteristics. Two axes are introduced, (1) the degree of the aggressiveness in pursuit of growth, and (2) liquidity or openness in resource mobilization (especially labor) either in-house or outside firms. The former factor is very much influential to the mode of governmental interventions and infrastructure settings in industrial promotion. The latter is more directly influential in the formation of firm-level coordination system. The characteristics of the ways of capability building would be formed in such a broad backdrops.

Figure 1: Characteristic of Market Societies



This is not our conclusion, of course, but a working assumption for further scrutinizing and constructing our framework of comparative study of industrial development in different countries. In the second year of the research, we would be more focused in the industries of latest technologies and innovative activities, and try to check the adaptability of this image to them.

Reference

North, Douglass. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge and New York: Cambridge University Press.