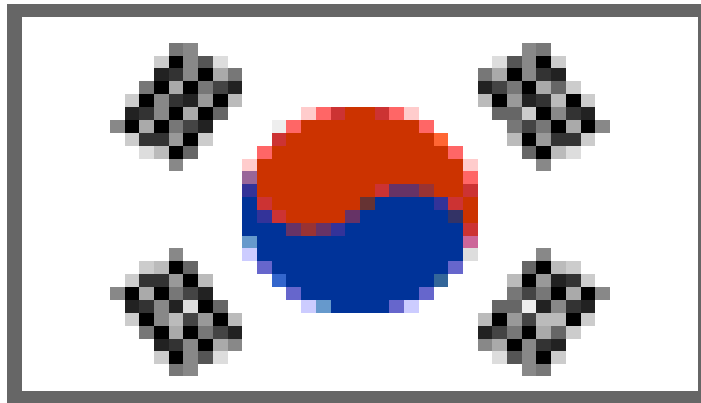


Korea's Industrial Development: Views from Afar

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**The Korean Economy: Six Decades of
Growth and Development, August
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Organization of My Remarks

- A. Questions Posed and Proposed Answers in the Paper by Dr. DoHoon Kim
- B. Some Other Relevant Questions of My Own
 - On Role of Linkages
 - On Influence of External Factors
 - On Role of Institutional Factors and Changes
 - On Role of Development Theory and Implications
 - On the Services Paradox
 - On Future Prospects

His Question 1: Which were the “Key” Industries which Led Development?

1. Different in Different Periods, in each case they had advantages
 1. 1950-65 Primary Industries Agric, Fishing and Mining (?)
 2. 1960s and 70s Labor intensive export led manufacturing: food, textiles, plywood, wigs
 3. 1970s-1980s Transition to HCI
 4. Late 1980s until Now : High tech industries (electronics, computers, IT, green technology)
 5. Construction sector important in most periods

His Q. 2 What Were the Factors Allowing these Key Sectors to Emerge?

- Naturally these too differed by period
 1. Agric: Land reform in period 1, Green revolution in Period 2, low per capita income, wartime destruction in cities
 2. Construction in each period: Strong linkages , cultural inclination for hard work and discipline, later as foreign exchange earner
 3. Fertilizers: Needs of farmers but public enterprise
 4. HCI: government led finance
 5. High tech: GRI as well as firm specific R&D, university, industry and government networking, Human capital
 6. All factors classified into (a) Internal conditions, (b) External conditions and pressures, (c) Government-business relations , (d) Institutions

His Question 3 What Role of Government?

- Government important in each phase. Often a new Government ministry created to lead institutional and other changes to facilitate growth of key sectors
- But the role gradually changed from direct to indirect
- In some cases government had to be pushed by external forces? IMF in regulation of firm behavior
- Government important but not at the expense of market forces. Government makes use of incentives.
- Underappreciated in places?
 - Incentives to textiles to upgrade and to engage in outward FDI. Rarely have LDC governments tried to help in FDI outflows

My Questions

- **Many of my questions** (and related suggestions) have to do with wanting to know the extent to which it might be possible to draw upon the findings of **academic and institute-based research to demonstrate the findings more thoroughly?**
- Examples:
 - **Quantification of linkages** in each relevant case
 - **Sources of finance** for each sector's emergence, especially earnings from key industries in previous periods
 - **How was technology change was induced** in each sector? How much finance –driven, government induced, chaebol firm induced, how much from externalities, competition driven, entrepreneur-driven?
 - More specifically **why did Korea succeed in upgrading in textiles and garments whereas many other textile and garments exporting countries have not?**
 - Any studies about the specific benefits of **agglomeration economies** in the different key industries?
 - **Quantification and decomposition of TFP growth** by sector and source?

More Examples of Questions (Perhaps answered in other studies in this project)

- To what extent was the rise of female labor force participation to fill jobs in labor intensive manufacturing connected to fertility decline and increases in education? Any differences across regions and over time?
- Given rapid change in sector composition of employment , how has education avoided the mismatch problem that has arisen in many countries?
- Given long hours and hard work but changes in sector composition over time, how has Korea's development tracked in terms of subjective indexes of well-being and happiness?

Other Questions

- 1. Adverse Japanese Colonial Experience Exaggerated?
 - De-industrialization What about woven textiles in Taegu area?
 - Intimacy of Japanese industrial experience and ability to copy it when successful
 - Even if de-industrialization correct, the rapid growth of Japan may have allowed Korea to grow much more rapidly than otherwise it could have

Question 2: Were the Effects of US food aid and forced liberalization of imports really so negative?

- Some recent research on trade reforms shows that liberalization of inputs may have earlier and more beneficial effect on manufacturing TFP than final goods liberalization. Might this be true in this case?
- The countries which have access to locally produced raw materials for textiles, e.g., Egypt, Morocco, Pakistan, often have much more trouble exporting finished goods than those countries which simply import raw materials or even intermediates
- Such countries may be less vulnerable to costly long term agricultural subsidies

Question 3 Could the role of Property rights (recognized as important in agriculture) be underappreciated in transition to HCI and High Tech?

- Government and GRI research given credit in **fiber optics** in wake of Corning Glass refusal in mid 1980s
- But why would the copper cable firms be willing to invest so much of their own into the technology **if not given some IPR? Gunarte and Park's data on patent protection show that between 1985 and 1990 Korea's index rose from 2.65 (just above the world average) to 3.69 (75% above the world average) on a 5 point scale.**
- If IPR was important, what were the political economy or other factors that made this possible? Relative importance of internal and external factors? If not, why did it not affect success?

Question 4 How Relevant Has Development Theory been to the evolution of the key industries over time? Which Theories Hold Up Best in the Light of Korean Experience?

Surplus labor in light manufacturing development

- SOC priority in electricity, transport power,
- Hirschman linkages in HCI, taking advantage of chaebol structure to avoid entrepreneurial scarcity
- Growth poles and agglomeration economies
- **Opening up advantages:** static allocation advantages as relative factor endowments change, learning dynamics, imperfect competition perspectives. Which are most important and best supported by the evidence?
- Eliminating financial repression and other gross sources of inefficiency?
- How much of Korean success is due to the **collective** nature of Korean firms

Q. 5. How did Korean policy makers manage to accomplish the remarkable change in the role and type of government policy over time

- To what extent did the PhD laden- multiple institute model of Korean government policy help or hurt in this process
 - Allowed Specialization
 - Allowed for relative importance to be changed over time with changing needs
 - Or make for too much diffusion of policy and research talent, making inter-agency competition in making even stronger, harder to change and adopt?

The Services Paradox: How to explain it?

- Paradox: Throughout the 60 Year Period Service sector is large and indeed gradually growing but never a “key” sector
- Possible explanations
 - No real paradox: Its importance underappreciated
 - Esp. if construction is included (as it often is) it was key
 - Entrepreneurial experience: from importers to manufacturing, exporters to marketing success in manufacturing
 - High tech as services
 - Services as shock absorber
 - Is there something different, e.g., in severity of regulations, access to finance, smaller linkages that may have impeded development of services or made it easier so it was less important?

Future Prospects

- Shouldn't North – South relationship play a more important role in this?



- How would the future prospects be affected by alternative possibilities?

Overall Assessment

- Especially for an outsider, the **paper provides a very enlightening treatment of Korea's most impressive industrial development throughout its Six Decades**
- Questions posed are interesting and answers provided generally persuasive. Nicely and concisely written
- My hope is that there will be room in the 60 Year project or its follow up on the paper to **draw on more specific research on the Korean economy to dig even deeper and provide more quantitative proof for the arguments made and to quantify the relative importance of the different factors identified. This could only further enhance the value of the 60 Year project**