The Hollowing-Out of Japan’s Economy: Myths, Facts, Countermeasures

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My Assignment

Promoting Innovation: Can Japan produce the next wave of trend-setting products?

◆ What is in a “product”?
  ➢ We need a new “country of origin” logic
◆ New Japan’s role in the global supply chain
  ➢ The new style of Japanese innovation
◆ Does hollowing-out effect this new type of innovation?
Repositioning:
“New Japan’s” innovative leadership has moved upstream. While some consumer product manufacturers remain, upstream industries are growing in relevance.

“Choose and Focus” strategies have advanced this transition:
Choose: what business to be in?
Focus: how to compete?

This process began in the mid-1990s.

The “Smiley Curve” of Profits

Capturing Value in the Global Supply Chain

For every iPhone sold:

Apple gains at both sides of the “smiley curve”

and

somebody in Japan earns

$178.96 * 34% = $60.94

Source: WSJ 12/16/2010
Japan is gravely underestimated in our trade statistics

Who Makes LCD Panels?

Samsung, LG/Philips, Sharp, AU Optronics, Chuangwa Picture Tubes, Chi Mei Optoelectronics

Most profits are generated by New Japan firms, such as in the materials and component industries.
New Japan’s Dominance: Upstream and Midstream

Example: Japan’s Global Market Share in High-End Household Electronics in 2003

Upstream: Semiconductor materials, layers/films/adhesives (production equipment: 54%)
Midstream: semiconductors, flat panel parts, cell phone parts
Downstream: Flat panel TVs, DVDs, HDD, cell phones, digital cameras, navigation systems, TV games

Global Market Dominance (Examples)

- Electronic components (highly specialized): 40%
- Fine chemicals for electronics: 70%
- NiMH Batteries: 84%+ (automotive: 90%+, Panasonic)
- Power Steering: 70% (Mitsubishi Electric)
- Brush DC Motors: 86% (Mabuchi)
- HDD Motors: 70% (Nidec)
- Camera shutters: 70% (Nikon)
- Ceramic Condensers: 75%
- 400nm Laser Pickups: 100%
- Carbon-fiber: 65%+

And many more: green technologies (batteries, storage), energy, medical devices, …

Source: Monitor Group 2008

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South Korea and Taiwan have a growing trade deficit with Japan

Trade Statistics: The China Fallacy

- Trade statistics indicate final assembler as export partner: only China is counted
- Value-added of China on average: 25%
- Value-added of China in consumer electronics: 5%
  - China buys parts from South Korea and Taiwan
  - South Korea and Taiwan buy materials and components from Japan
- It is because of the way we keep our trade statistics, and the focus on China, that you don’t know that Japanese parts are making the quality difference
20% of Japanese Production Already Abroad

Innovation in these new industries

3 characteristics of the product areas where Japan assumes world leadership

- Part of a platform
  - system-integrative, expandable
- Contains protectable IP
  - Valuable, can be maintained
- Is difficult to manufacture
  - tacit knowledge, accumulated learning
Will these components and materials industry “hollow out”?

How likely is this to move abroad?

- Going abroad is costly and difficult.
  - Most “hollowing-out” is in cost-intensive parts of manufacturing
  - Innovative Japan leaders are happy at home
  - If they don’t have to, they will not go abroad
- Trickle-down effect?
  - One important aspect of innovation in input materials and components is co-location
  - What if assemblers move R&D abroad?
  - What if buyers are foreigners?
Policy Recommendations

◆ Challenges
  ➢ There may be a negative feedback loop
  ➢ Important to keep the assemblers (buyers) in Japan

◆ Policy recommendations
  ➢ Deregulation
    ■ Level-playing field, no “zombie” policies
  ➢ Reduce uncertainty (energy prices)
  ➢ Leave them alone

Thank you!

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