

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

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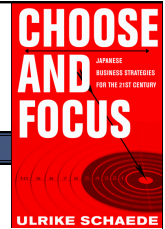
The Brookings Institution, February 20, 2013

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?

“Choose and Focus” 選択と集中



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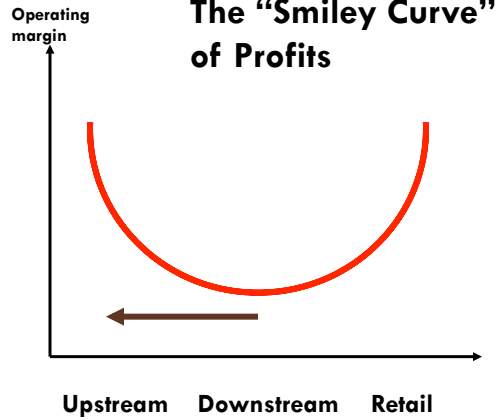
Repositioning:

“New Japan’s” innovative leadership has moved upstream. While some consumer product manufacturers remain, upstream industries are growing in relevance.

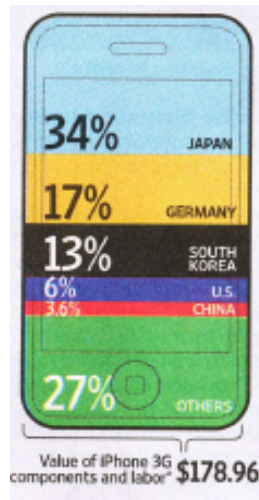
“Choose and Focus” strategies have advanced this transition:
Choose: what business to be in?
Focus: how to compete?

This process began in the mid-1990s.

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Capturing Value in the Global Supply Chain



For every iPhone sold:

Apple gains at both sides of the “smiley curve”

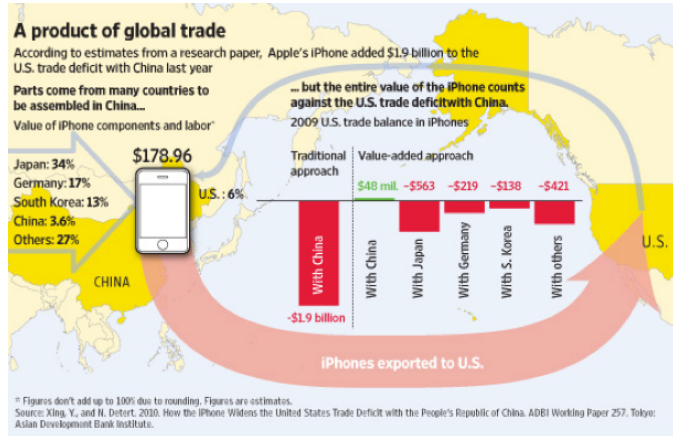
and

somebody in Japan earns
 $\$178.96 * 34\% = \60.94

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Source: WSJ 12/16/2010

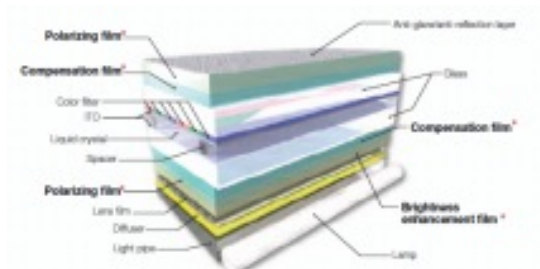
Japan is gravely underestimated in our trade statistics



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Who Makes LCD Panels ?

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



Source: Nitto Denko Annual Report 2006

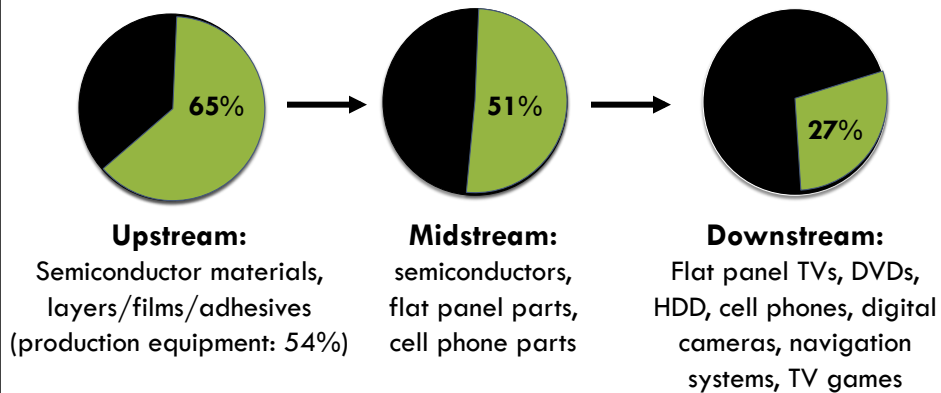
**Most profits are generated by New Japan firms,
 such as in the materials and component industries.**

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New Japan's Dominance: Upstream and Midstream

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



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Source: 2005年版ものづくり白書

Global Market Dominance (Examples)

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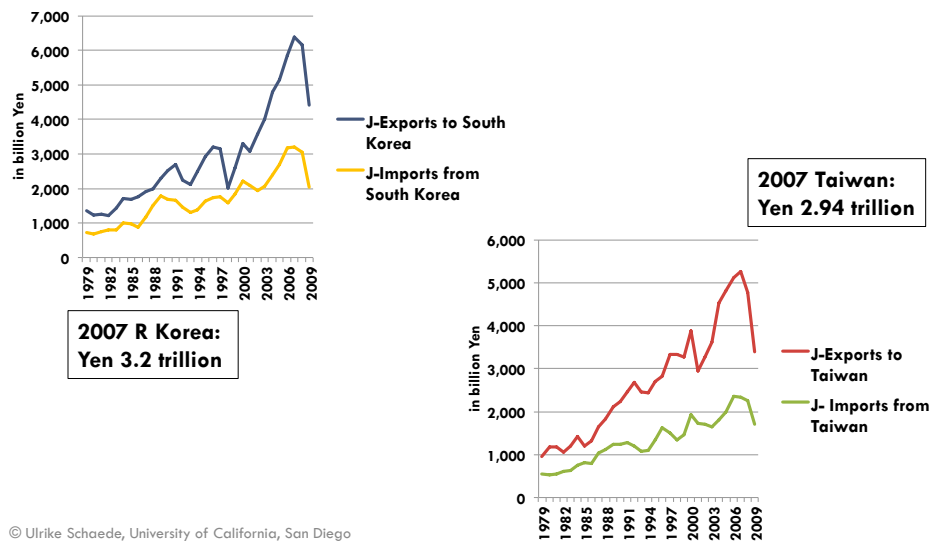
- Electronic components (highly specialized): 40%
- Fine chemicals for electronics: 70%
- NiMH Batteries: 84%+ (automotive: 90%+, Panasonic)
- Power Steering: 70% (Mitsubishi Electric)
- Brush DC Motors: 86% (Mabuchi)
- HDD Motors: 70% (Nidec)
- Camera shutters: 70% (Nikon)
- Ceramic Condensers: 75%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

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

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Source: Monitor Group 2008

South Korea and Taiwan have a growing trade deficit with Japan

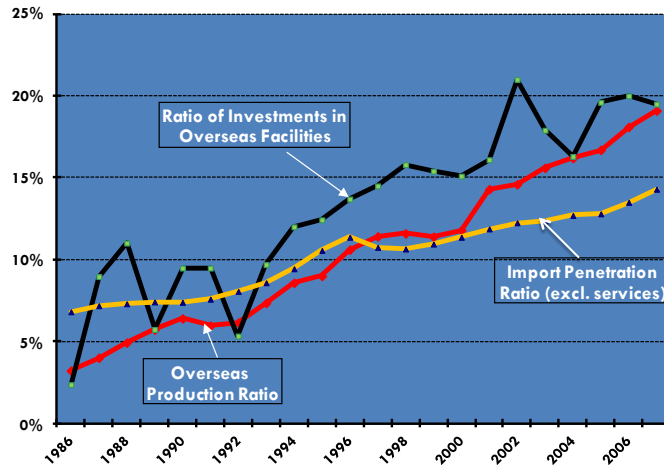


Trade Statistics: The China Fallacy

- ◆ 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

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20% of Japanese Production Already Abroad



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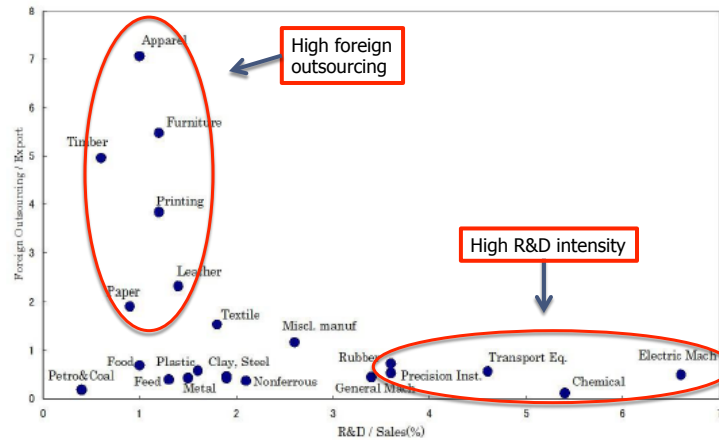
Innovation in these new industries

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

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Will these components and materials industry “hollow out”?



Source: Tomiura 2008, 2012

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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?

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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

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Thank you!

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