

From Copycats to Quality

Issues in Leveling Up Manufacturing Industries in Developing Countries



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June 18, 2005



General Questions



- Can latecomer countries with weak domestic capability industrialize under globalization?
- What is the pattern of successful industrialization in latecomer countries?
- What is the appropriate industrial strategy in the early 21st century?
- Can government and ODA really help industrialization? How?



Past Industrial Strategies

- Free trade doctrine (19th century UK, IMF&WB)
- Socialist planned economy (USSR, China, Vietnam)
- Infant industry protection (Japan, Korea)
- FDI-led growth but gradual trade and investment liberalization (Thailand, Malaysia, Indonesia)

→ But today, free trade and investment is required from the early stage of development

→ Global competition is dynamic and intense (esp. with China)

Development of Motorcycle Industry with import ban, localization requirement and tariff protection

	Vietnam	Thailand	Indonesia
1960	1964 Vietnam War ⋮	1964 Yamaha 1965 Honda 1967 Suzuki	
1970	⋮ 1975	1971 Local content restriction (over 50%); ban on construction of new assembly plants 1977 Local content restriction (more than 70%); lifting of ban on new assembly plants of 1971 1978 Ban on importing CBU Increasing tariff for parts	1971 Honda 1974 Yamaha Suzuki 1977 Local content restriction with penalty
1980	1986 Doi Moi		
1990	1996 Suzuki 1997 Honda, ban on importing CBU 1999 Yamaha	1996 Import Liberalization of 1997 Absolution of local content restriction	1993 Local content restriction with incentive 1999 Import liberalization of CBU
2000	2003 Import Liberalization of CBU		

Source:
Kohei Mishima in
VDF industry
book (2005)

Three Recent Ideas

- **Business architecture theory** (explaining Japan's manufacturing strength & weakness)
Prof. Takahiro Fujimoto (Tokyo Univ.)
- **Three-stage industrial development** (stylized fact from extensive empirical research)
Prof. Keijiro Otsuka & Prof. Tetsushi Sonobe (GRIPS)
- **FDI-led growth + promotion of domestic capability & linkage** (policy proposal to Vietnam)
Prof. Kenichi Ohno (VDF/GRIPS)

➔ **Can we combine these ideas?**

References



- Takahiro Fujimoto, *Japan's Manufacturing (monozukuri) Philosophy*, Nihon Keizai Shimbunsha, June 2004 (Japanese).
- Tetsushi Sonobe & Keijiro Otsuka, *Roots and Strategies of Industrial Development: Lessons from the East Asian Experience*, Chisen Shoin, June 2004 (Japanese).
- Kenichi Ohno & Nguyen Van Thuong, eds, *Improving Industrial Policy Formulation*, VDF/Publishing House of Political Economy, forthcoming (English & Vietnamese, preliminary printing in March 2005) (Especially Chaps.1&2).

(1) Business Architecture Theory (Fujimoto)

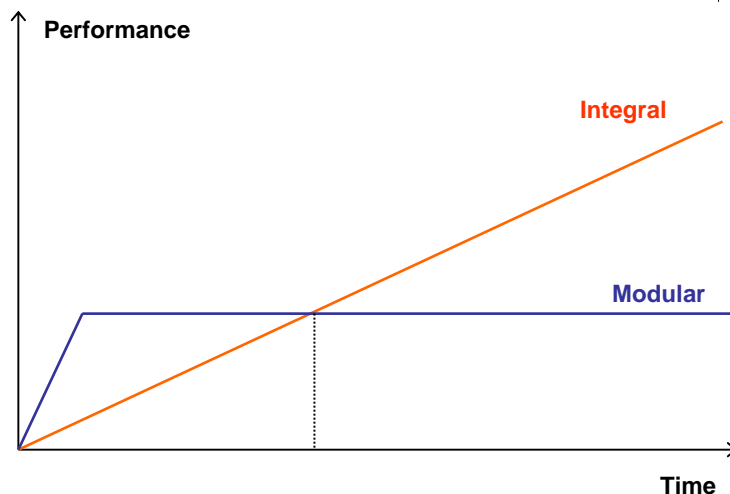
How parts are designed and connected:

Integral—designing unique parts for each product, adjusting interface carefully for high performance

Modular—combining common parts available in the market for ease, speed and flexibility

	Integral	Modular
Closed	Closed Integral Type Japanese motorbike, car, mini-size consumer electronics, game software	Closed Modular Type mainframe computer, machining tool, lego (toy blocks), etc.
Open		Open Modular Type Chinese motorbike, computer system, internet products, bicycle, etc

Performance vs. Time



Implication for Business Strategy



- Architectural design of industry & product may change over time and across countries
 - Computer: integral → modular
 - Motorbike: Japan (integral) vs. China (modular)
- For competitiveness, product architecture and organizational capability must match

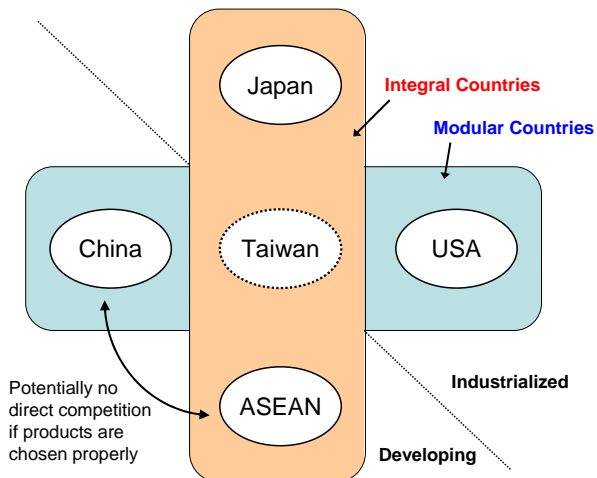
Integral product <==> **Integrated organization** long-term relation, information sharing, integrated decision

Modular product <==> **Open organization** Decentralization, outsourcing, contract based on low price

Successful Production Partnership



From the viewpoint of business architecture matching, Japan & ASEAN USA & China are potentially good partners



Based on Prof. Fujimoto's presentation modified by K. Ohno

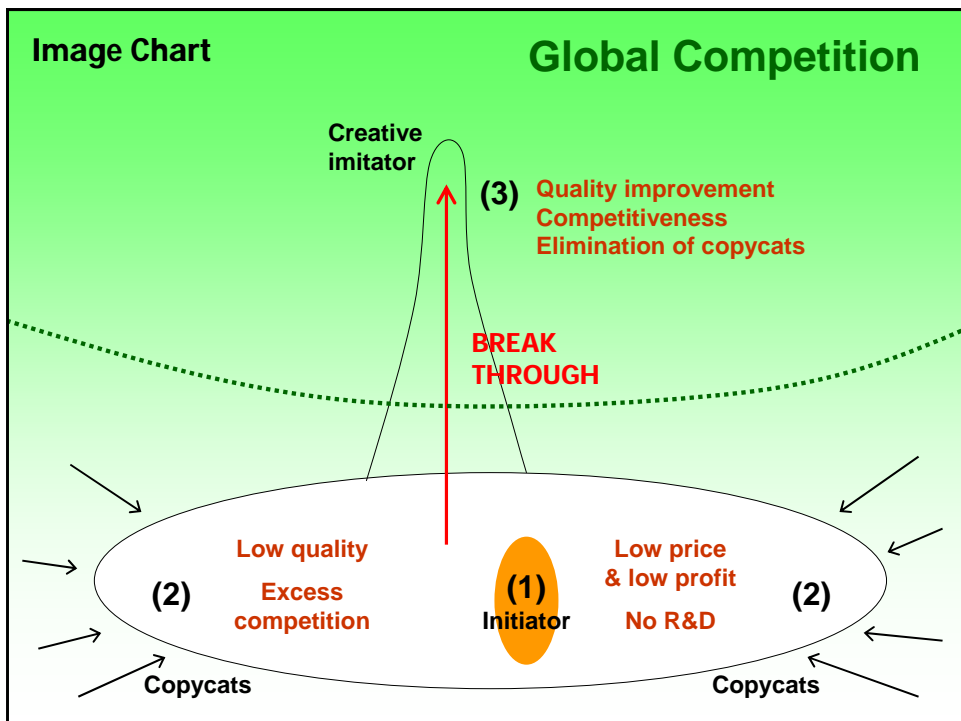
(2) Observed Pattern of Industrial Development (Otsuka & Sonobe)

- A common three-stage pattern was found from extensive empirical research
Japan, Taiwan, China, India, Philippines, Ghana, etc.

<Endogenous Industrial Development>

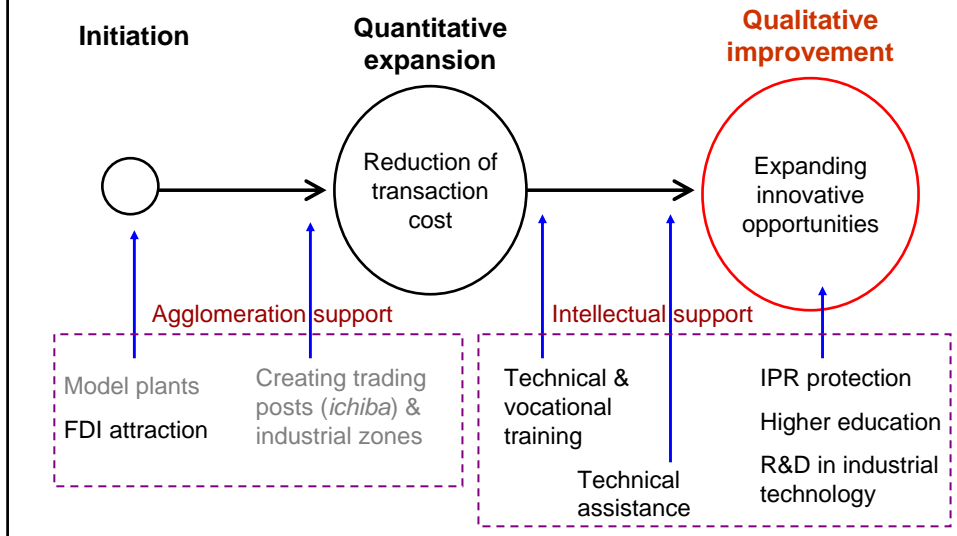
- (1) Initiation
- (2) Quantitative expansion
- (3) Quality improvement

- Each transition may be carried out by *merchant-type* entrepreneur or *engineer-type* entrepreneur



Suggested Policies

Otsuka & Sonobe propose the following:



Some Comments

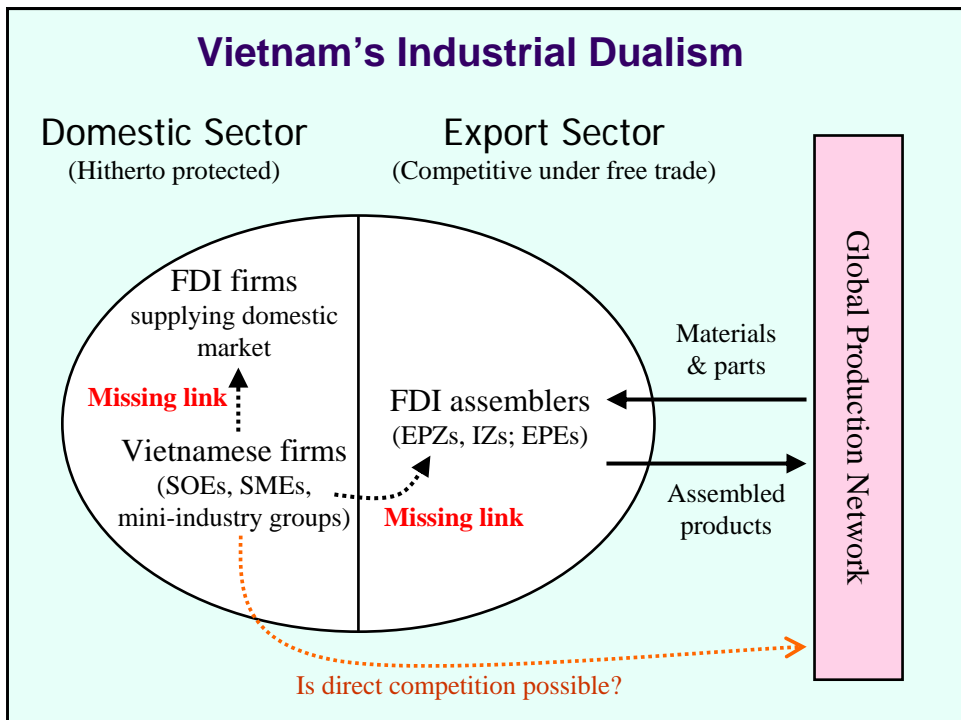


- Vietnam's problem—how to move from Stage 2 to Stage 3 (prepare for China, FTAs & WTO)
- Africa's problem—how to start Stage 1 and reach Stage 2
- Should Gov't assist in every step (VN already has too many copycats)?
- Gov't failure may be serious due to the lack of information, political pressure, etc
- Need to incorporate impacts of global integration into this framework more fully

(3) FDI-led Growth & Strengthening Domestic Capability (Ohno/VDF)

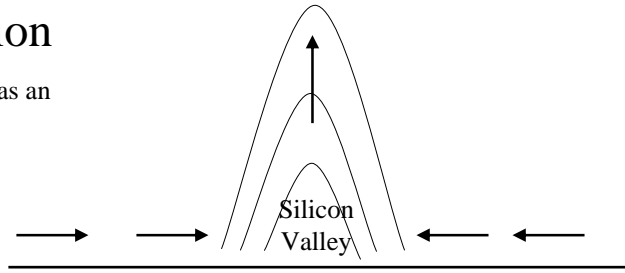
Policy advice to MOI & MPI (also by “4J”)

- **Strengthen FDI marketing**--FDI inflow is still below critical level to ignite strong industrialization
- **Indirect competition**--VN can't compete directly in global markets now; link with FDI to compete!
- **Strategic positioning**--end extensive quantitative targets & join East Asia's production network
- **Break the glass ceiling**--go beyond agglomeration to achieve production management & design skills



Agglomeration

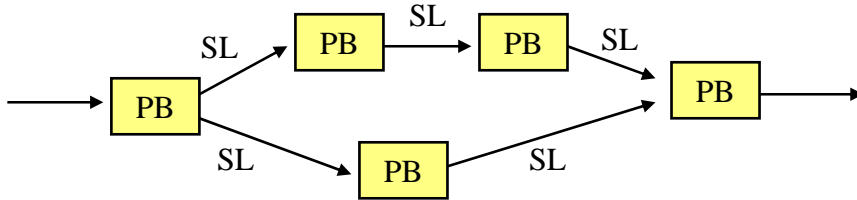
Initial concentration has an accelerating effect



Fragmentation

International division of labor in parts production & assembly

PB: production block
SL: service link

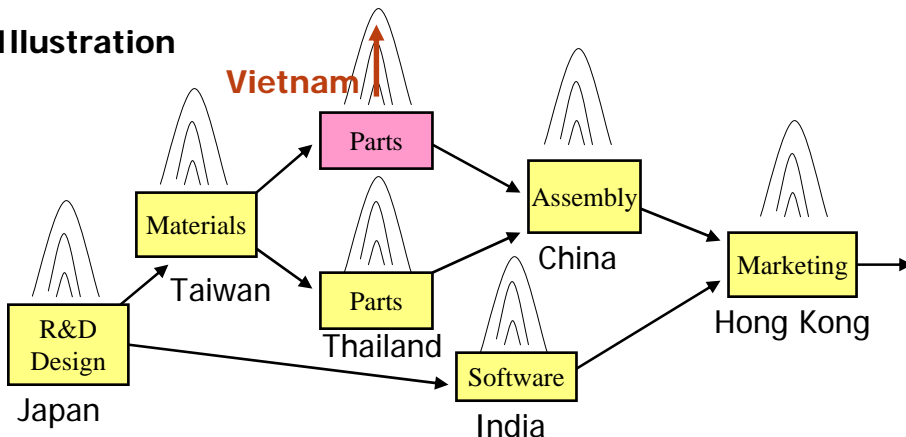


How to Participate in Asian Dynamism

Become a link in the regional production network by agglomerating a particular process in Vietnam

- New products are always emerging (esp. electronics)
- MNCs are constantly looking for alternative location

Illustration



Building Optimal Regional Links



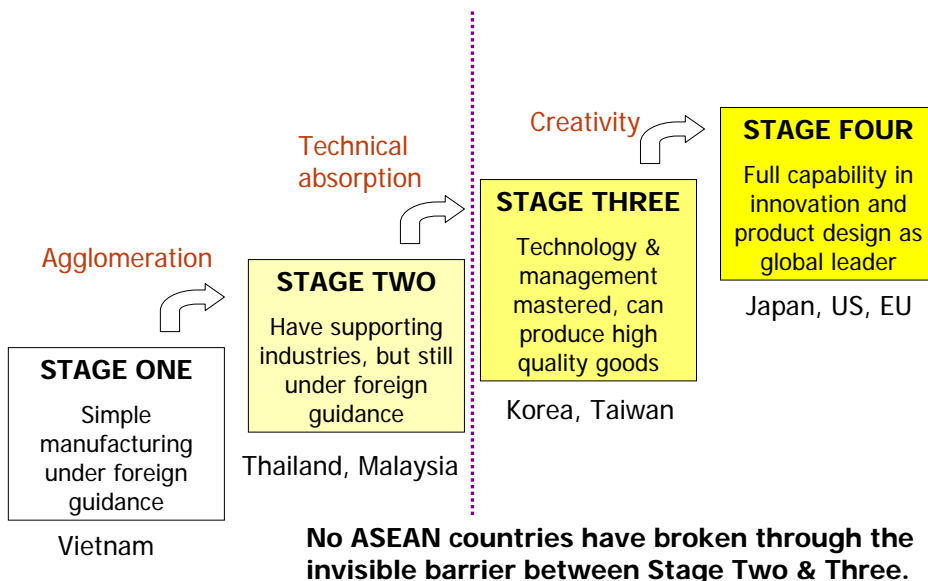
While localization (agglomeration) is important, optimal localization is not 100%:

- Internalize processes in which VN has dynamic comparative advantage
- Outsource other things from the rest of Asia

If this choice is made incorrectly, VN will lose competitiveness

VN is ideally located to become a bridge between China & ASEAN (all Japanese business men say so)

Breaking the “Glass Ceiling”



Preparing to Go Beyond



- While VN's immediate goal is *agglomeration*, it should also prepare for *technical absorption*
- VN can become the first country in ASEAN to break through the barrier if its highly skilled labor is combined with
 - Good government policy
 - Good enterprise management
- If this happens, Japan & Vietnam will become ideal production partners for integration-based products

Some Questions for Vietnam



- Continuity from Stage 2 to Stage 3?
- Survival under market segmentation?
- Can government effectively intervene?
- Do these theories say anything new?



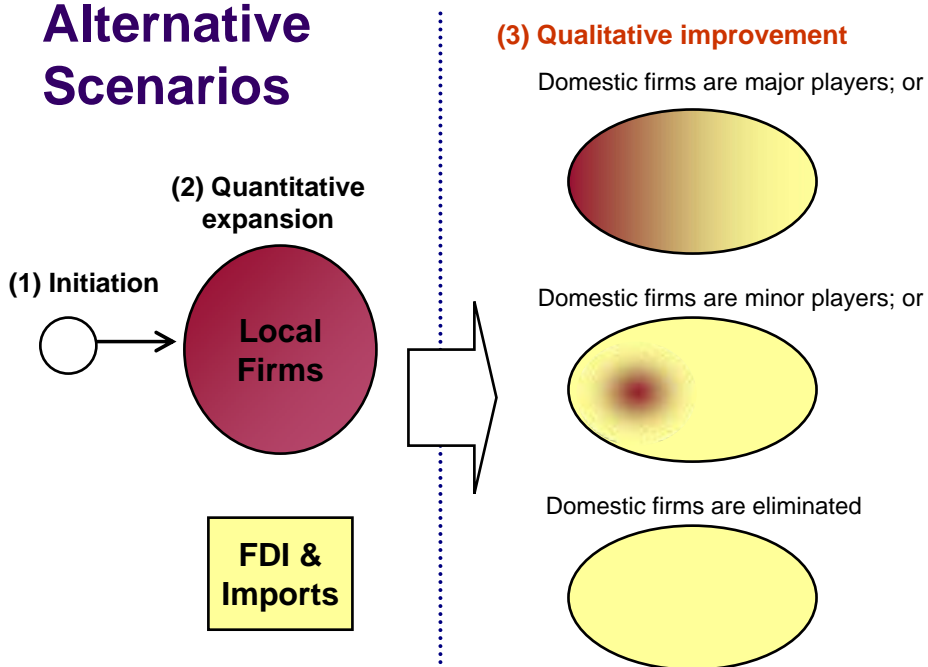
Can Locals Survive and Prosper?

- Emerging local enterprises--can they survive global integration & competition?

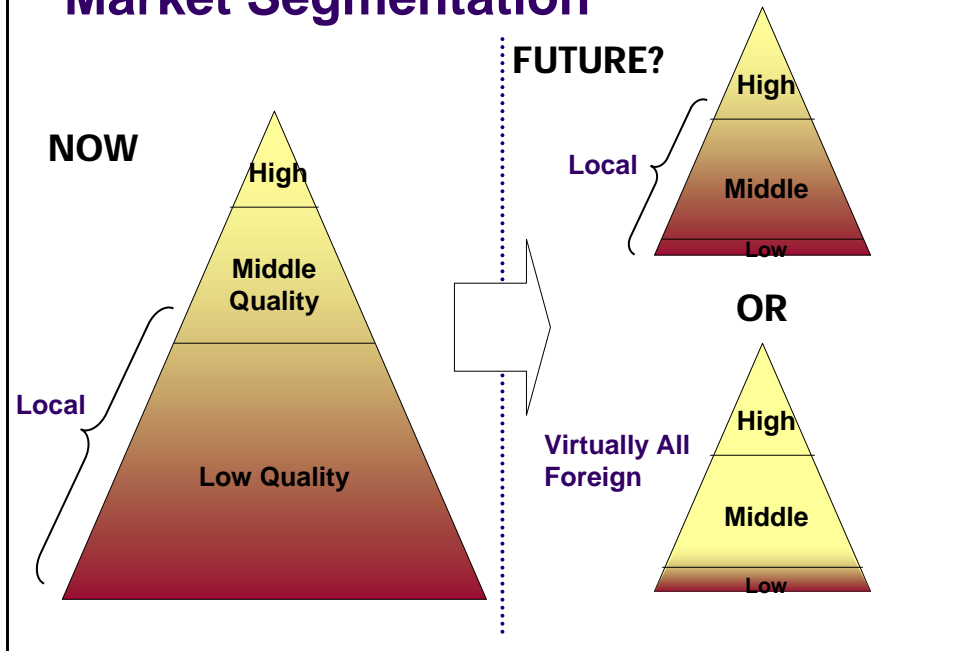
Lixohaka (motorcycle), Lotus Steel (galvanized steel), Hoa Phat (furniture etc), Sacombank/Dong A Bank (finance), Hai Au (transport), Fivimart (retail distribution), Biti's (footwear), Vinamilk (SOE: dairy products), Saigontourist (SOE: tourism), SSC (SOE: billet & cold rolled steel), etc

Can they survive by themselves or do they need foreign partnership & support?

Alternative Scenarios



Market Segmentation



Can Policy or ODA Help?



- Is it possible (for officials) to distinguish?
 - *Unproductive copycats* (who drive out quality producers and perpetuate low-quality, low-price, no-improvement trap)
 - *Innovative imitators* (who absorb new technology & management and accelerate industrialization)
- Does gov't know how to intervene effectively?
- Political pressure/connection to distort policy

What Do These Theories Say?



- Similarity & overlapping of 3 ideas (from different viewpoints of theory, empirical study and policy advice)
- Not just quantitative expansion, but leveling up of technology & operation is essential
 - This is what Japanese FDI & ODA have been saying & doing all along (finding local vendors, training programs, JICA experts, JP-VN Joint Initiative, study in Japan, VDF...)
 - But these theories put ongoing efforts into a new context and framework
 - This may help Vietnamese policy makers to think regionally/globally and improve capability

