Challenges in Enhancing Viet Nam's Labor Productivity and a Proposal for National Productivity Improvement

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Viet Nam's Economic Achievements

- During the last three decades, Viet Nam achieved high GDP growth and poverty reduction. People's life as well as urban and rural landscape have changed greatly.
- Global integration has deepened with active trade, investment and human exchange. Membership in WTO and many regional and bilateral trade arrangements has been attained.
- Structural transformation proceeded strongly from agro-based economy to the expansion of industry and services.
- Viet Nam attained the lower middle income status in 2008. It targets high income in the future.
- Fiscal crisis and the COVID pandemic have been managed by proper policy actions.

The Core Problem

Domestic value creation remains small despite fast industrialization. It is occurring, but speed is slow.

This can be confirmed by several facts:

- Overall labor productivity growth has been moderate (4.65%: 1991-2019), not spectacular (cf. 8-10% during high growth periods of Japan or China).
- Labor productivity growth of both manufacturing and FDI stagnated or even fell in recent decades, which is very strange.
- Participation in global value chains is limited.
- Entry-level workers are available, but highly skilled managers, engineers, technicians and global marketers are in short supply.
- FDI dominates key sectors such as electronics, motorcycles and automobiles, as well as their supporting industries.

Manufacturing Labor Productivity: Level & Growth

Labor productivity (million VND per worker, left)

—Growth rate of labor productivity (%, right)

Labor productivity by ownership (VND million per worker, at constant 2010 price)

Source: authors' calculation based on GSO data, with adjustment for the 2010 data gap.





Stagnant Labor Productivity in Manufacturing and FDI

Possible Causes

- 1. The content of FDI changed significantly in the early 2000s from capitaland technology-intensive (mining, energy, motorcycle, automobile, etc.) to large export-oriented labor-intensive (garment, footwear, electronic assembly, etc.) These have low domestic value-added per worker.
- 2. Government failed to implement effective policies to improve productivity and quality (cf. Malaysia's Manufacturing ++ (1990s) and Thailand's new FDI policy (2015)—see below).
- 3. Most FDI firms consider Viet Nam as a place to do simple processes, and have no incentive to revise this strategy.

These three reasons are mutually related. If wages continue to rise faster than labor productivity, FDI is likely to leave Viet Nam instead of moving to higher production processes.



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Latecomers usually start from simple cutting, sewing, component assembly, etc. From there, Malaysia once had a strategy to *go up* (improve productivity) and *go sideways* (capture upstream & downstream activities) called "Manufacturing Plus Plus".

Source: adapted from Malaysia's Second Industrial Master Plan 1996-2005, with author's additions.

Viet Nam: Export Value Structure

Domestic value creation



Total export value (FOB) = A + B + C + D

Backward participation = B / (A+B+C+D) Forward participation = C / (A+B+C+D)

Source: Nguyen Viet Khoi and Shashi Chaudhary (2019), rearranged and graphically presented by author. We assume the unknown percentage of D remained the same. **Backward participation**—supply of domestic inputs (supporting industries) has increased significantly. But much of this increase is due to FDI component suppliers.

- **Forward participation**—shows little progress at 11-12%. Vietnamese exporting firms just engage in assigned production and create little value or profit in markets abroad.
- Moreover—export value (FOB) received by Vietnamese producers is only part of final retail value abroad. Additional (but unknown) value is captured by foreign distributors and retailers.

In sum, Viet Nam mostly remains a passive manufacturer with relatively small value creation. It does not have its own brand, design, marketing strategy or customer service in the global economy.

Thailand: Dual Incentive to Attract Value Creating FDI (since 2015)



Merit-based Incentives

1. Competitiveness Enhancement

2. Decentralization

3. Industrial Area Development

Grant additional incentives to encourage more investment/expenditures that benefit the country or overall industry Before 2015, Thailand broadly favored manufacturing with several targeted subsectors, including labor-intensive ones. FDI in remote areas received additional incentive.

In 2015, FDI policy was upgraded to promote Thailand 4.0, innovation, productivity, service trade, and development of the Eastern Economic Corridor.

Source: copied from the Board of Investment (BOI) of Thailand presentation (2015).

Note: A1-A4 specify high-tech activities and B1 & B2 contribute to value chains. Each activity category define concrete eligible actions. For example, A1 includes power generation from waste, creative product design, electronics design, R&D, and so on.

Two Groups in Asia

- 1. **High performers**—growing very fast for a few decades without stopping at middle income; now high income—Singapore, Taiwan, Korea.
- 2. **Moderate performers**—many ASEAN countries managed to reach middle income but are slow to move up further. Without growth acceleration, they are trapped in middle income—Malaysia, Thailand, Indonesia, Philippines.
 - Our productivity study indicates that Viet Nam is in the second group.
 - Good news is that Viet Nam's labor productivity and TFP performance have improved in recent years. We need to know the cause(s) and whether this is permanent or temporary. Possible causes include:
 - Active trade and FDI thanks to many bilateral and regional FTAs.
 - Continued effort by the domestic private sector
 - Improved policy support

Real Per Capita GDP Relative to the United States, 1950-2018



First Group – high learning capability

- Meiji Japan (late 19c early 20c) vigorously learned Western technology by its own budget and effort; very little FDI or foreign loans were permitted.
- Korea learned electronics, shipbuilding, automobile, steel, etc. from Japan, then quickly turned to producing its own high-quality models and brands.
- Taiwan built a strong IT industry by policy guidance and incentives, and became an IT hardware hub of the world.

Second Group – learning is slower

- Malaysia is gradually reaching high income, but its move is slower than the first group. Its automobile industry did not attain competitiveness.
- Thailand has automotive and electronics industry base, but still relies heavily on FDI instead of domestic firms.
- Indonesia is de-industrializing prematurely at middle income. It exports relatively few manufactured products compared with others.

Policy Learning to Improve Policy Quality

- The best method for industrial catch-up is international case study with proper selection and adjustment. By comparing various good practices, government can learn how to design policies that fit domestic reality.
- Don't copy foreign models without adjustment, or reject them because "our country is unique." These two attitudes do not improve policy.
- Select the right benchmark countries most relevant to Viet Nam. Random selection of countries and models is not advisable.
- Three steps for adopting a foreign model:



 Foreigners (FDI & ODA) can assist the first step by offering models and/or helping with small scale pilot projects. The rest must be undertaken by the government and people of the learning society.

Five Conditions for Effective Policy Formulation



Documents are the Means, not the End

Documentation → Implementation → Economic impact

- Bureaucrats often spend too much time and energy drafting thick documents with active stakeholder consultation, but forget implementation.
- Implementation (staffing, budgeting, institution, monitoring...) is also the means, not the end. If the plan is executed but produces little result, there is something wrong. Go back and rework the plan.
- High-capacity governments prefer rough and flexible plans with adjustment as you proceed (Taiwan, Singapore; past Japan). They don't produce 5- or 10-year plans whose spans are too long for policy efficacy.
- The essence of any policy can be stated in several pages. People don't read long documents.

Learning from Japan

Part II of the book contains two chapters that provide information related to learning from Japan

Chapter 6 – General issues in learning foreign models

Chapter 7 – Ten Japanese productivity tools, and experiences of introducing them in other countries including Viet Nam

Viet Nam may learn policy from any country, but Japanese models have certain advantages.

- Close economic relationship between Viet Nam and Japan
- General popularity of Japanese productivity tools
- Willingness of Japanese FDI and government to cooperate with Viet Nam

Standard Productivity Tools from Japan

1. Mindset change	6. Kosen (creative engineer education)
2. 5S and Kaizen	7. Gino jisshusei (foreign technical interns trained in factories in Japan)
3. Handholding (comprehensive & customized SME support)	8. Kosetsushi (SME technical support centers)
4. Shindan (SME diagnostics & advice)	9. FDI-domestic firm linkage
5. TVET-local firm linkage	10. Supporting industry development

- Many nations in Asia and elsewhere have embraced these tools with varying degrees of success.
- Strong political will, proper local adjustment, and attention to technical and institutional details are key success factors.

Viet Nam Had Some Pilot Projects but No Scaling Up

YES means projects were already introduced even in a small scale. **Some** means a small number of firms or TVETs have adopted.

	Small scale pilot projects				Scaling up
	Japanese government	Japanese FDI	Vietnamese government	Vietnamese private sector	to entire nation
1. Mindset change		Some		Some	
2. 5S and Kaizen	YES	YES	YES	YES	
3. Handholding		Some			
4. Shindan			(Studying)		
5. TVET-local firm linkage	YES	YES	Some	Some	
6. Kosen	YES		YES		
7. Gino jisshusei mobilization				YES	
8. Kosetsushi			(Studying)		
9. FDI-domestic firm linkage	YES	YES			
10. Supporting industries	YES	YES	YES	YES	

Source: evaluation based on author's knowledge.

5S and Kaizen



- Kaizen is a bottom-up, low-cost way of improving efficiency at workplace, imported from USA and developed in Japan in the late 1950s. It is now spread to many countries.
- Kaizen is a philosophy with many practical tools. It pursues elimination of *muda* (any thing or action that does not add value).
- The most basic kaizen tool is 5S (Seiri, Seiton, Seiso, Seiketsu & Shitsuke; or Sort, Set in order, Shine, Standardize & Sustain). Seiri is removing unnecessary things from the workplace. Seiton is placing remaining things in clear visibility for easy pickup.

Kaizen Tools Are Many

KAIZEN



Kaizen scenes in Singapore, India and Ethiopia



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- Customer orientation
- TQC (total quality control)
- Robotics
- QC circles
- Suggestion system
- Automation
- Discipline in the workplace
- TPM (total productive maintenance)

- Kamban
- Quality improvement
- * Just-in-time
- Zero defects
- Small-group activities
- Cooperative labormanagement relations
- Productivity improvement
- New-product development

Source: M. Imai, Kaizen: The Key to Japan's Competitive Success, McGraw-Hill, 1986.

How JICA Teaches Kaizen to Other Nations

- 1. Mobilize a group of Japanese industrial experts. Select 20-30 firms through ministry database or initial classroom courses. Interview general directors for finalizing candidate firms.
- 2. Each firm forms a kaizen team and selects one production process.
- 3. A Japanese expert visits every week to make the firm team think, identify and solve problems. He gives hints and weekly homework. This process goes on for 3 to 6 months, with possible extension.

Kaizen learning has three levels

- **1. Only-once project** JICA experts teach and firms improve, but nothing remains after the project ends.
- **2. Internalization** JICA experts teach local officials so they can practice kaizen after Japanese experts leave. National agencies, standards and programs are created.
- **3. Privatization** Government withdraws and lets private consultants take over the productivity movement.

How JICA Teaches National Productivity Movement to Other Nations

 JICA's first comprehensive productivity support was for Singapore (1983-1990) at the request of Prime Minister Lee Kuan Yew. It was implemented in three phases.
Singapore learned very quickly and started to teach others.



- Awareness (Phase I) was most important and difficult. Singaporeans had to be convinced, Japanese had to adjust, and trust had to be built.
- Many countries tried institutionalization of kaizen, with or without JICA cooperation, producing varying results: Thailand, Philippines, India, Hungary, Brazil, Argentina, Paraguay, Tunisia, Egypt, Ethiopia, Tanzania, Zambia, Ghana, Botswana, Mauritius, Burkina Faso, etc.

TVET- Industry Linkage

- For Technical and Vocational Education and Training (TVET) to be effective, schools must build close linkage with industry which hires graduating students. For this, Japan can offer two mechanisms:
 - **1. Training process management** featuring the PDCA (Plan-Do-Check-Action) cycle.
 - **2. Employment support system** featuring (i) internship; (ii) company study tours; (iii) lectures by TVET graduates; (iv) job fairs; (v) collection and circulation of job opportunity information; and (vi) career counseling.
- JICA has introduced this system to Ha Noi University of Industry (HaUI, 2010-13). HaUI built active linkage with Japanese FDI, and created new courses for industry.
- To create linkage, Osaka Prefecture and the Dong Nai Industrial Zone Authority (DIZA) established a consortium of Lac Hong University, Dong Nai Vocational College of High Technology, and Japanese component suppliers. The project is supported by JICA, METI and Osaka industrial organizations (MOBIO, PREX).



Kosen (technical college)



- Kosen is a Japanese technical and vocational higher education system. It offers a five-year program to students aged 15 to 19. There are 57 kosen in Japan with 50,000 students.
- Five essential components of Kosen are: (i) technical knowledge and skill, (ii) proper attitude and mindset, (iii) creativity and problem-solving (just doing what is told is not acceptable), (iv) comprehensive assistance for job search, and (v) kosen's capacity building to offer these services.
- JICA conducted a pilot kosen project at the Industrial University of Ho Chi Minh City (IUH) from 2013 to 2018. This model was rolled out to Cao Thang Technical College (Ho Chi Minh City), Hue Industrial College, and Phuc Yen College of Industry (Vinh Phuc). These are all under the Ministry of Industry and Trade (MOIT).





Industrial University of Ho Chi Minh City



JICA-supported Kosen Pilot Schools in Vietnam

Phuc Yen College of Industry, Vinh Phuc (now renamed to College of Industry and Trade)



A Way Ahead

- If Viet Nam is willing, Japan should continue to cooperate to introduce Japanese productivity tools, and Viet Nam should build a mechanism to internalize and spread them to entire nation.
- Not all measures can be strengthened at once. We suggest that those already tried in the past (5S and Kaizen, TVET-local firm linkage, supporting industries) should be expanded first.
- We hope this productivity study will be useful in designing future policies in Viet Nam, and Viet Nam and Japan will continue to cooperate for mutual benefits.

THANK YOU