

Capacity Building of Local Firms through FDI: The East Asian Perspective

Kenichi Ohno (GRIPS/Tokyo)
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India



Thailand



Vietnam



Malaysia

The Way to True Development



- Growth based on FDI, ODA, big projects, natural resources or locational advantage will eventually end. The true source of development is value creation by humans—*knowledge, skills, technology*.
- For continuous growth into high income, policies and institutions that encourage—and even force—human capital accumulation must be installed.
- *Policy learning*—for acquiring concrete policy technique, government should compare different international best practices and build general capability to create a policy package most suitable for local context.

Cf. K. Ohno, *Learning to Industrialize: From Given Growth to Policy-aided Value Creation*, Routledge, 2013.

What is a Middle Income Trap?

(Or more generally, developmental traps?)



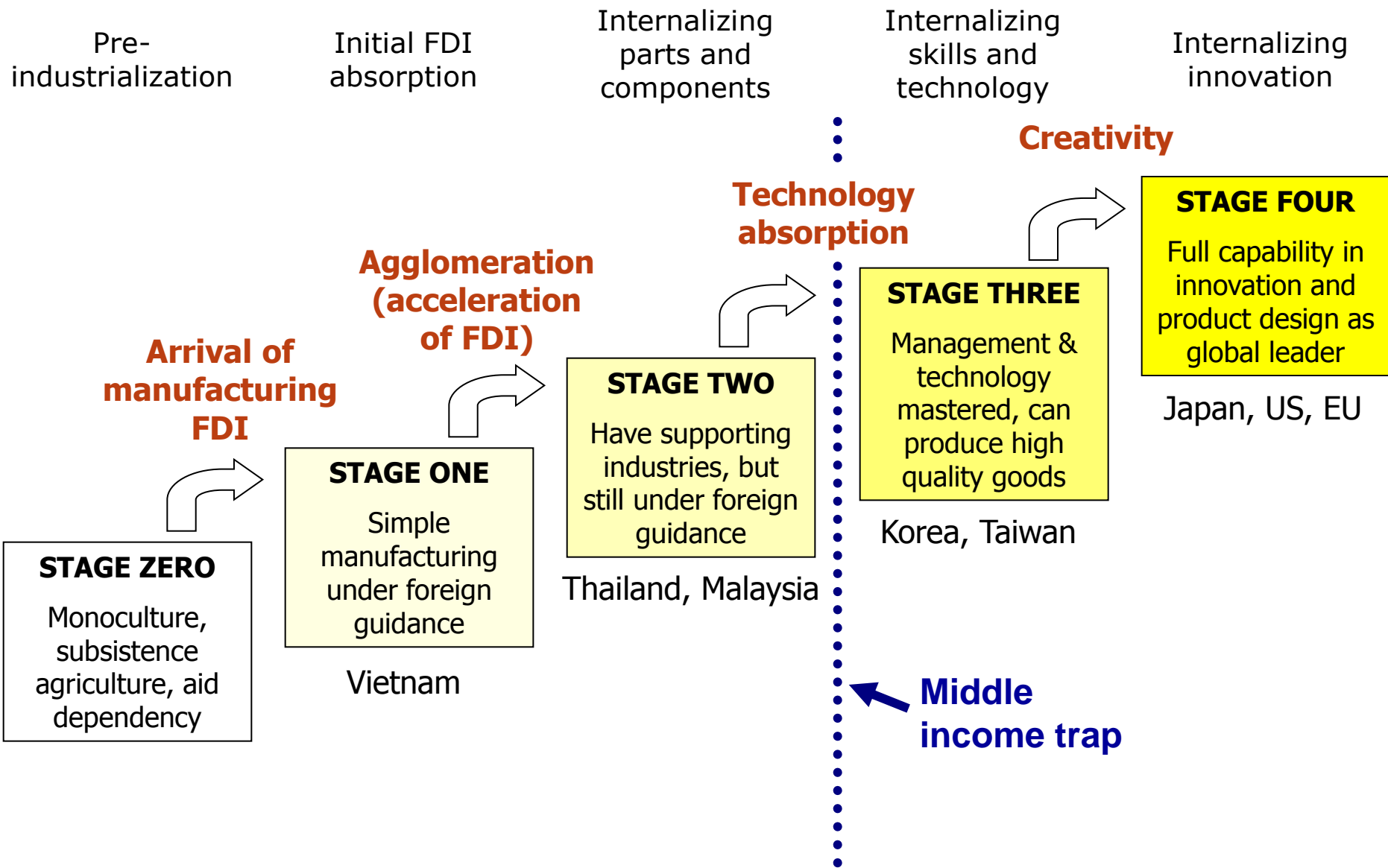
- A developmental trap occurs when a country is stuck at the income dictated by given resources and initial advantages, and cannot rise beyond that level (only luck and no effort).
- The level of income where the trap may occur depends on the size of resources and advantages relative to population.
 - Low endowment → Poverty trap
 - Moderate endowment → Middle income trap
 - Rich endowment → High income
- In East Asia, three governments are seriously worried about middle income traps: Malaysia, China and Vietnam.

Proactive Industrial Policy



- Liberalization, integration and good governance can take a country to a given income level. But reaching higher income requires different policies to guide and stimulate private dynamism.
- Laissez-faire cannot overcome a developmental trap. Free market tends toward short-terminism, speculation and lobbying instead of long-term investment in skills, technology and machinery.
- State and market must be combined in proper balance. Policy must be well informed by market, and vice versa.
- Even under globalization of the 21st century, proactive industrial policy that forces human capital accumulation is not only possible, but widely practiced by many high-performing economies in East Asia.

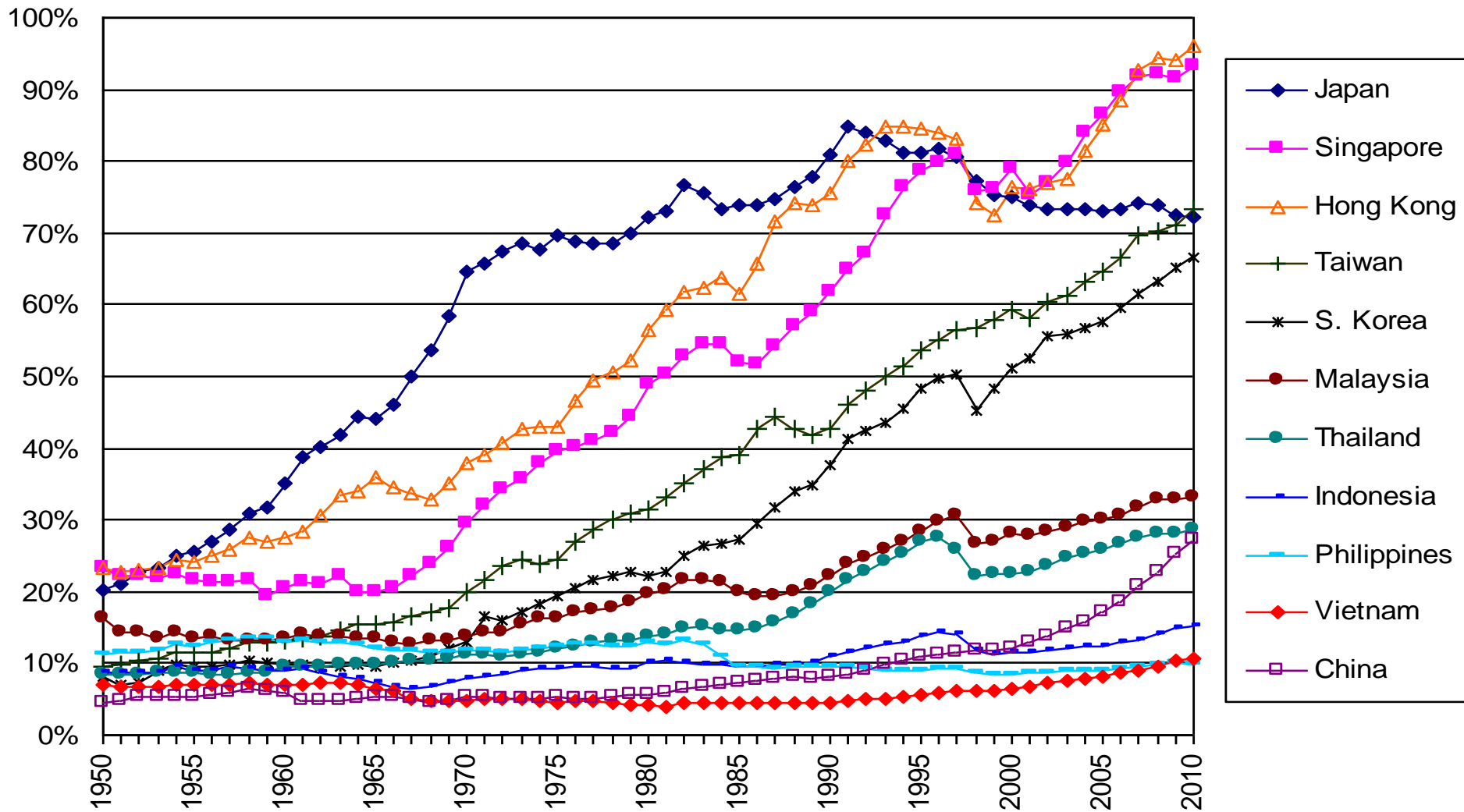
Stages of Catching-up Industrialization



Speed of Catching Up: East Asia

Per capita real income relative to US

(Measured by the 1990 international Geary-Khamis dollars)

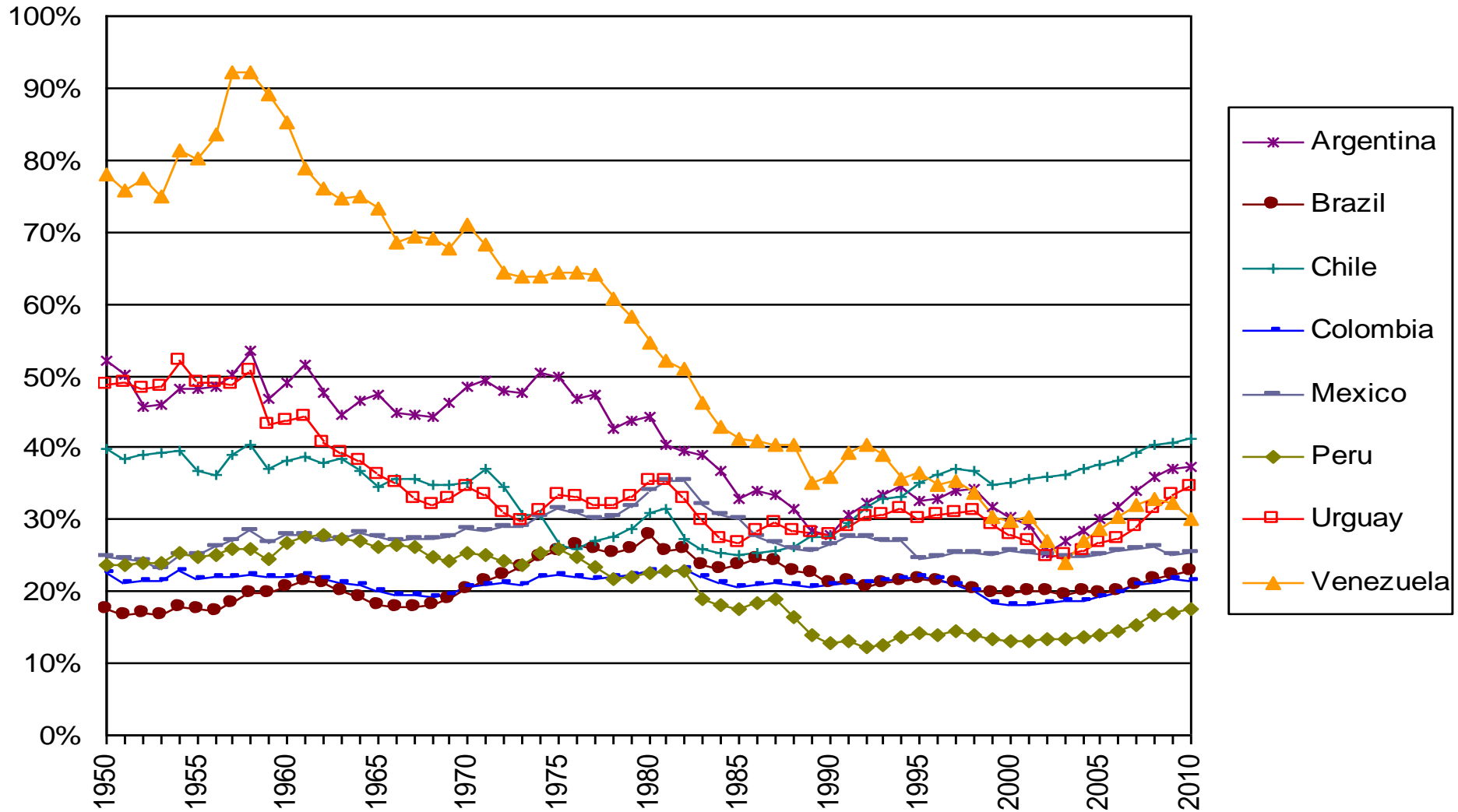


Sources: Angus Maddison, *The World Economy: Historical Statistics*, OECD Development Centre, 2003; the Central Bank of the Republic of China; and IMF, *World Economic Outlook Database*, April 2010 (for updating).

Latin America

Per capita real income relative to US

(Measured by the 1990 international Geary-Khamis dollars)

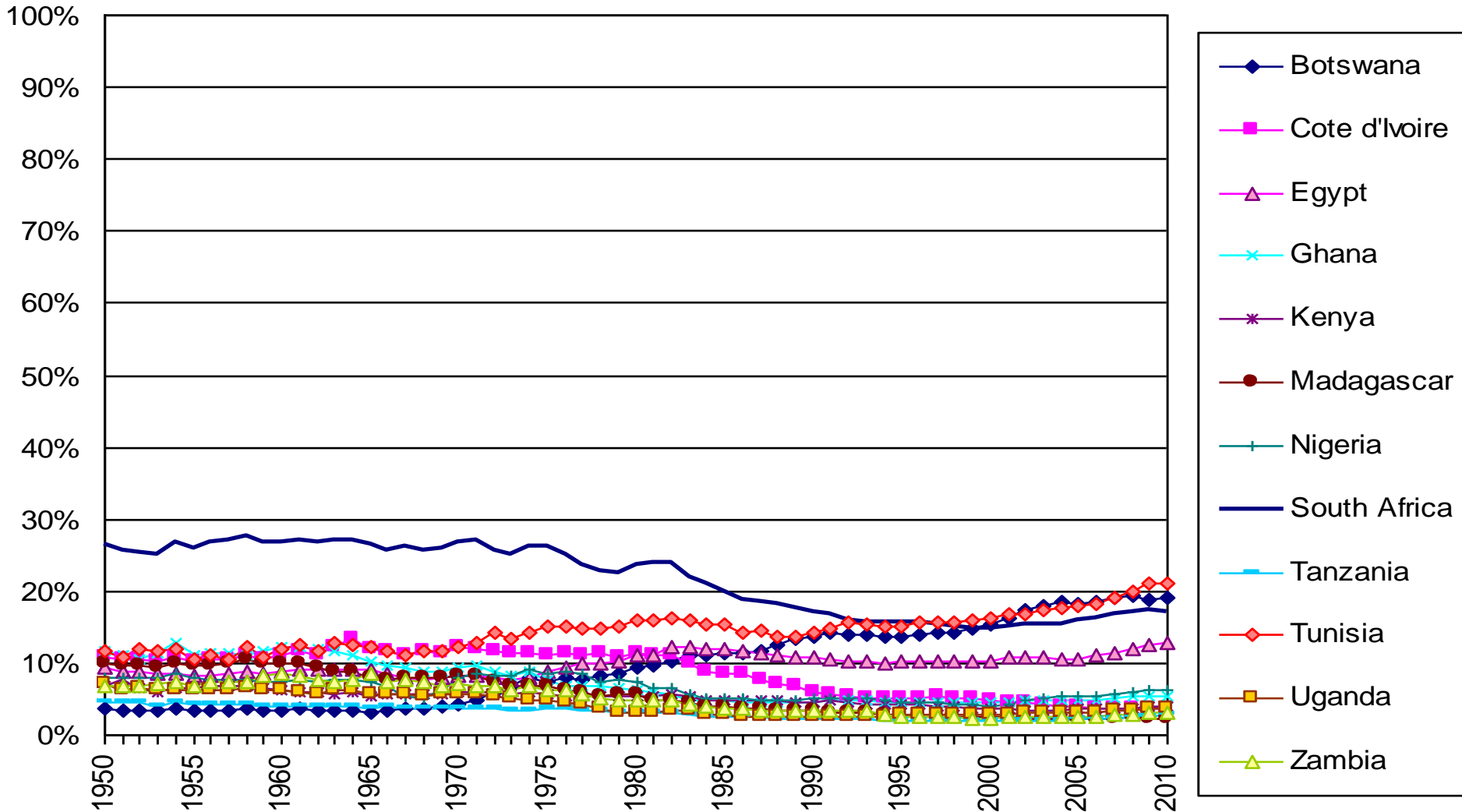


Sources: Angus Maddison, *The World Economy: Historical Statistics*, OECD Development Centre, 2003; the Central Bank of the Republic of China; and IMF, *World Economic Outlook Database*, April 2010 (for updating).

Africa

Per capita real income relative to US

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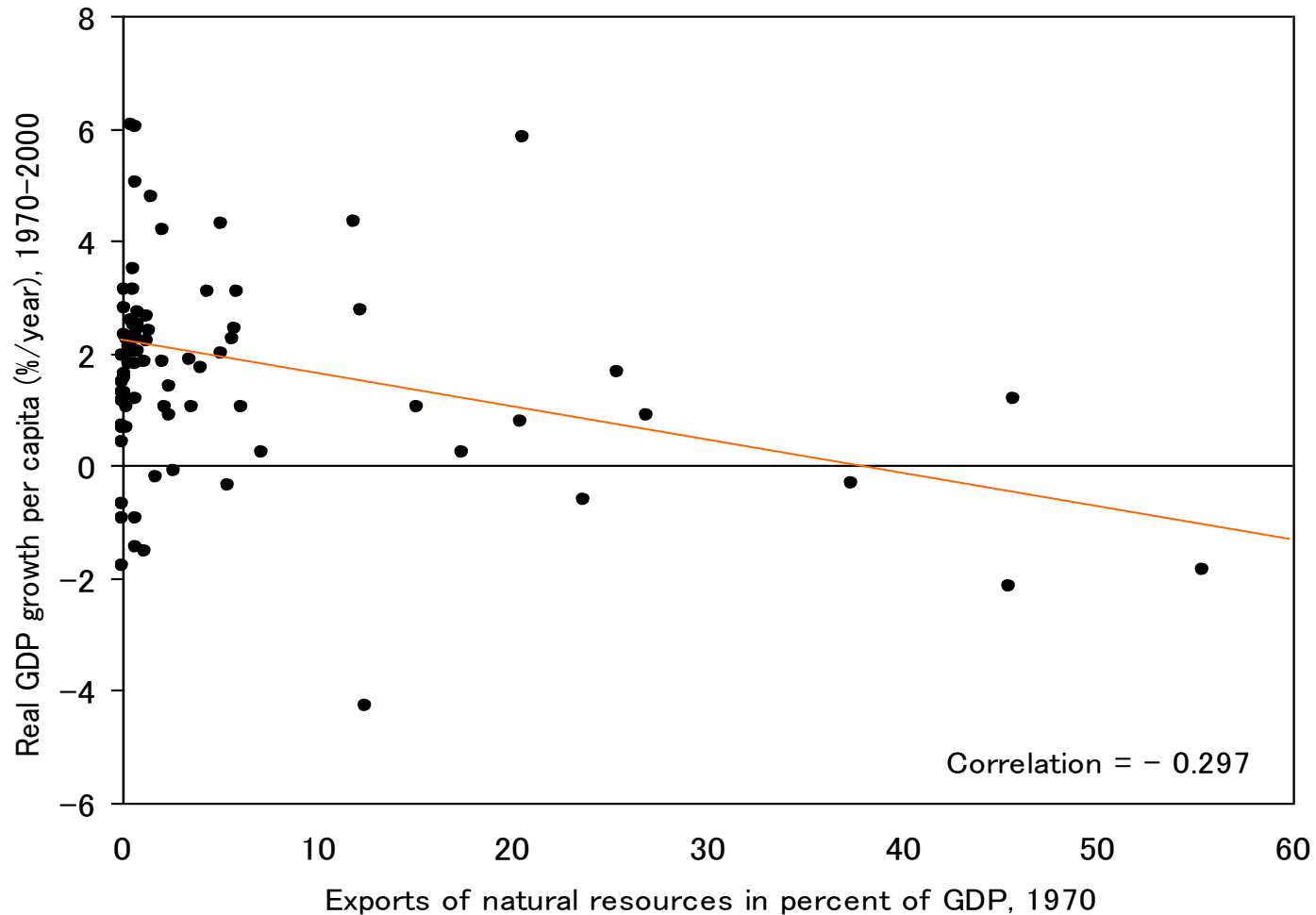
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The Curse of Natural Resources



- Natural resources seem good for growth, but history shows that this is not the case (Sachs and Warner 2001).
- Resource-rich countries are difficult to industrialize because of:
 - Resource diversion to extractive industries
 - Global commodity price instability
 - Currency overvaluation and loss of competitiveness
 - Availability of easy money that prevents technology learning
 - Enhanced rent-seeking and corruption
- To avoid the curse, additional issues must be addressed—narrowing gaps between resource barons and general population, export diversification, macroeconomic shock-response, stabilization fund, linking resource money to long-term investment, resource processing (if feasible), etc.

Rich Resource Endowment Is Actually Not Good for Growth



Source: Author's calculation using data from World Bank, *World Development Indicators & Global Development Finance*, April 2010.

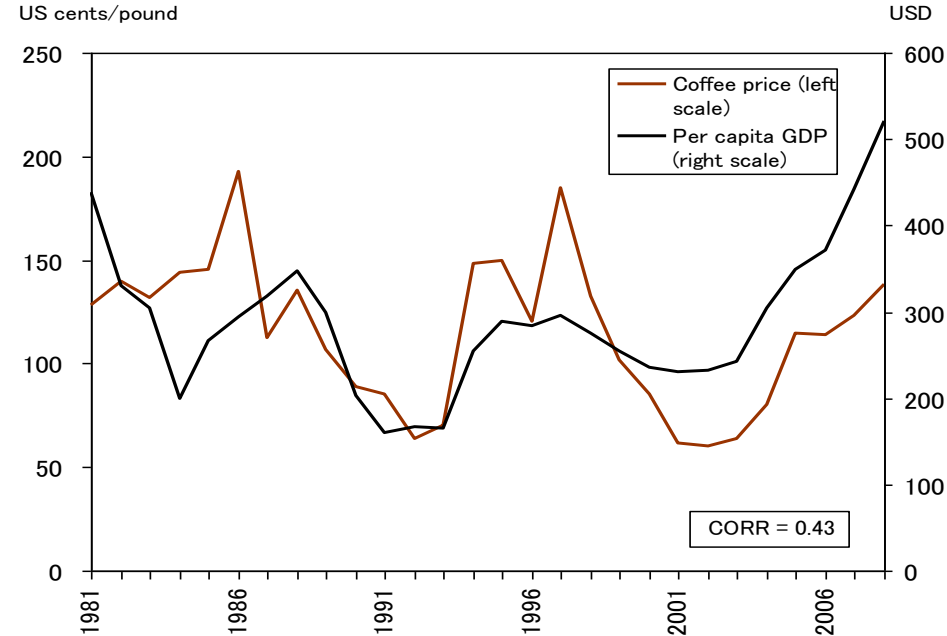
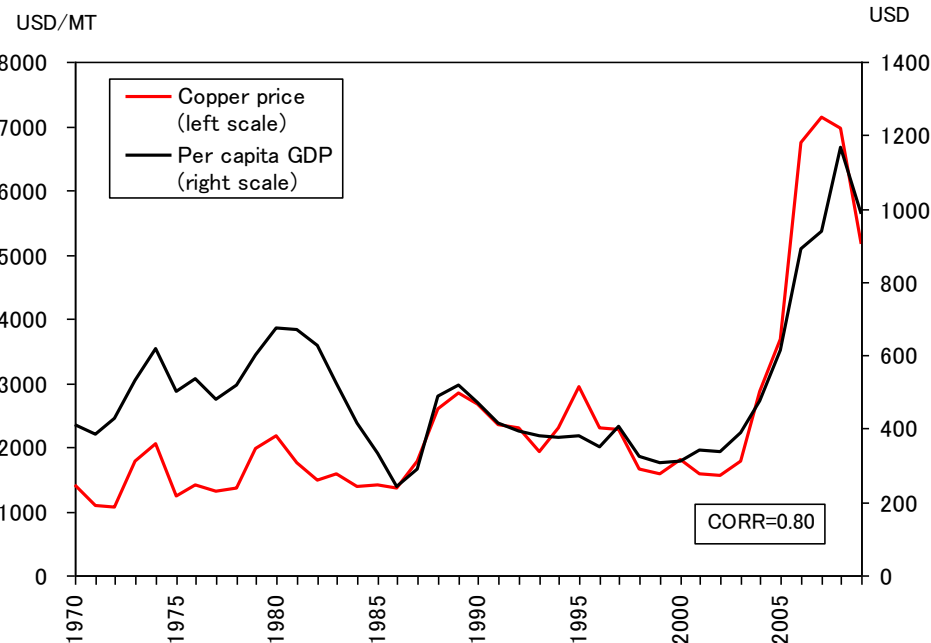
GDP Driven by Commodity Price Fluctuations



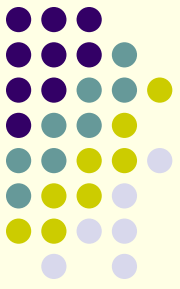
A large part of African growth spurt in recent years is attributable to commodity booms rather than a rise in productivity or innovation.

Zambia's GDP and Copper Price

Uganda's GDP and Coffee Price



Linkages between FDI/ODA Projects and Local Firms



For job & income creation:

- Construction of factories and related facilities—land, sewage, access roads—by local firms and labor (temporary).
- Employment of local (unskilled) workers at big projects.
- Local procurement of non-core services (cleaning, gardening, food catering, accommodation, transport).
- Positive effects of big infrastructure (power, roads, port, etc.) on social and economic activities in surrounding areas.

For corporate social responsibility:

- CSR activities by big firms for local communities.

For competitiveness and local capability building

- Local procurement of materials, components and services as core inputs to big projects (“industrial clusters,” “supporting industries & services”)

Forging Linkage for Competitiveness



- Forging linkage for competitiveness and local capability is a standard way to learn technology and skills. It is a good entry point which can cover many policy areas.
- In East Asia, linkage is normally defined as input-output (upstream-downstream) relationship in the manufacturing process on a commercial, competitive basis. Linkage policy mainly targets this.
- Spillover and learning from FDI do not occur spontaneously; it must be generated by serious management effort and appropriate policy.
- Two types of linkage policy: (i) linkage promotion itself; (ii) building local capability (so that local firms can participate in the linkage). These two components are often integrated.

Creating Business Linkages (UNCTAD Report 2010, p.14)



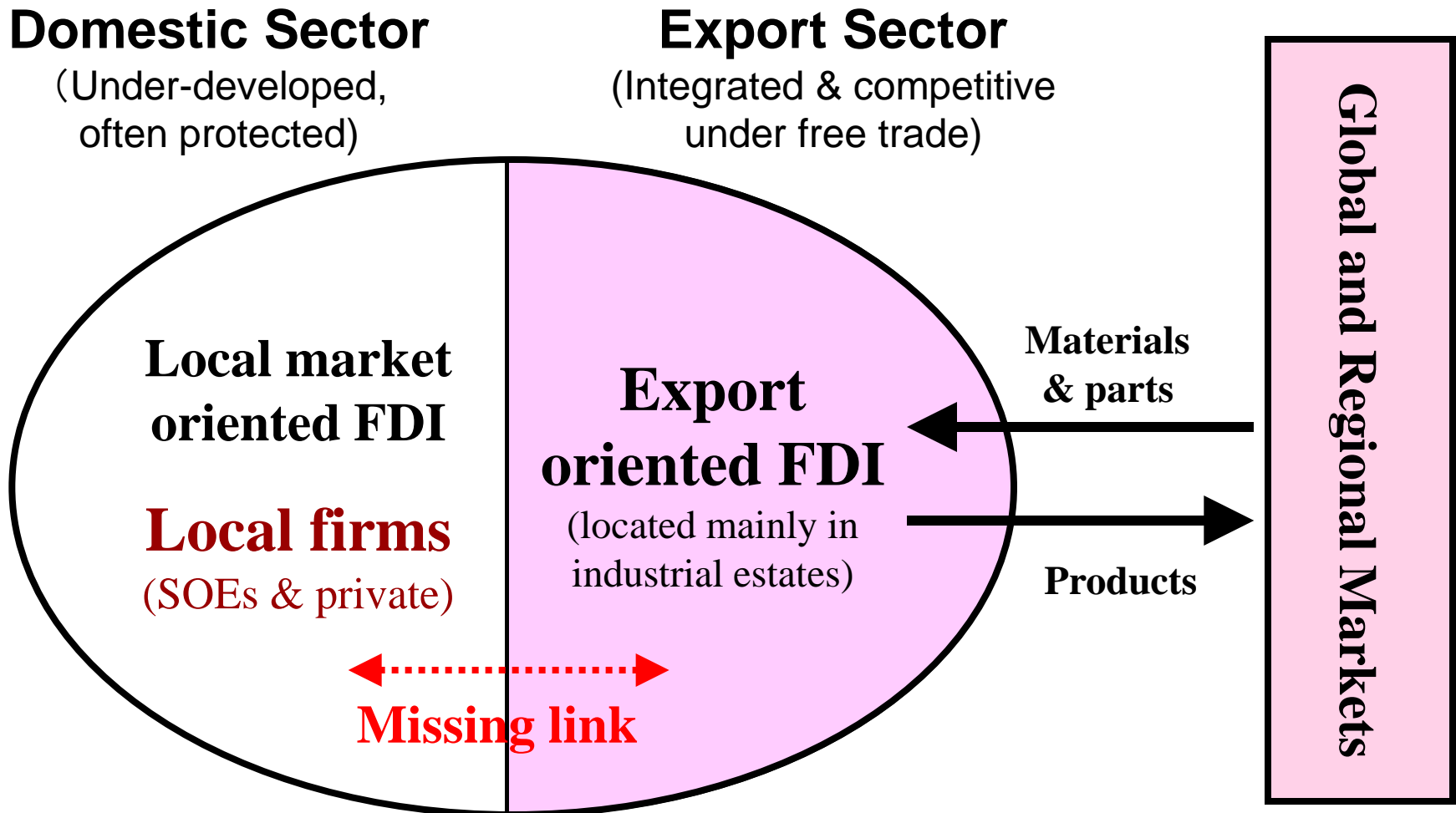
Systematic policy approach to linkage building consists of:

- Improving investment climate
- Strategic FDI attraction
- Strengthening absorptive capacity
- Specific linkage policies

Note: middle-income economies in East Asia have largely achieved the first two and now work on the latter two—Thailand, Indonesia, Vietnam, (Malaysia)... But Mozambique must work on all four.

Dual Economic Structure of Typical Latecomer Country in East Asia

The Need to Link Domestic Sector with Globally Integrated Sector



(1) Standard Policy Menu for Linkage Promotion



- Strategic FDI marketing and investor support
- Domestic and export market development
- Trade fairs and “reverse trade fairs”
- Enterprise database & matching service
- Subsidies for FDI-local linkage and technology transfer
- Official promotion and intermediation of subcontracting
- Establishment and strengthening of business/sectoral associations
- Promoting local firm networks (for information sharing, support programs, joint order taking)

(2) Standard Policy Menu for Local Capability Building



- Industrial human resource
 - Universities, colleges and technical schools
 - Transfer of specialized skills to engineers
 - Subsidies for worker training
 - Skill certification, competition, awards and prizes
- Enterprise capability
 - *Kaizen* - quality & productivity mindset and tools
 - *Shindan* - officially supported enterprise diagnostic & advisory services
 - Subsidies for upgrading management, design, marketing, accounting, etc.
 - Quality standards and certification, best practice awards
- SME finance
 - Development finance institutions and subsidized bank loans
 - Credit guarantee
 - Equipment leasing
 - Enterprise credit information database
- Start-up and innovation support



Reverse Trade Fairs

- Reverse trade fairs are trade fairs in which large firms exhibit components and materials they want to buy from local firms, instead of exhibiting what they want to sell.
- The Japan External Trade Organization (JETRO) frequently hosts such fairs in China and Southeast Asia to help Japanese manufacturing FDI to procure inputs locally.



Malaysia: Vendor Development Program



- VDP was introduced in 1988 to strengthen business linkage between Proton (national car company, as “anchor firm”) and local Malay component suppliers (“vendors”).
- The anchor firm was required to do the following:
 - Purchase as many components as possible from eligible vendors
 - Provide technical assistance to vendors
 - Intermediate government loans to vendors
- Later, more anchor firms were added, mainly from electronics. By 2002 anchor firms numbered 85 (46 Malaysian, 28 Japanese, 5 American, etc.) and qualified vendors numbered 296 (metals, plastic, auto parts, etc.)
- However, some FDI firms were reluctant to participate due to low technical capability of local firms.



Vietnam:

Hanoi University of Industry

- Established in 1898 under French rule, HaUI was a technical college, upgraded to a university in 2005. It now has 1,400 teachers and 60,000 students.
- In 2000-05, JICA supported HaUI to create metal, machining and electronics programs with equipment and training.
- In 2010-13, JICA is calibrating HaUI curriculums to meet the demands of Japanese FDI.
- Newly introduced courses: 5S, mechanical drawing, machine maintenance, quality control, pilot skills certification.
- Japanese FDI cooperating with HaUI: Toyota, Panasonic, Ebara, Toho, Takagi, Nagatsu, Showa Denko.

Vietnam: ESUHAI Company

Producing workers with mindset and skills



- ESUHAI is a private firm founded by Mr. Le Long Son, a Vietnamese engineer who studied die & mold in Japan.
- ESUHAI dispatches Vietnamese workers to Japan as technical trainees for three years (about 400 workers per year)
- Before being sent to Japan, workers are trained for one year in Japanese language, basic manufacturing mindset such as greetings and 5S, and long-term life vision as engineer.
- After returning to Vietnam, they are supported with follow-up & level-up training, and matching with Japanese firms.
- ESUHAI also assists Japanese firms to establish factories in Vietnam (worker database, rental factory, factory construction, obtaining license, etc.)



Kaizen in
Ethiopia



Kaizen

Quality and Productivity Improvement

- *Kaizen* is a set of philosophy and tools for eliminating *muda* (waste) in work places. It features (i) small and continuous improvement, (ii) company-wide participation, and (iii) no need for lay-offs or capital investment.
- Kaizen tools include: 5S, suggestion box, QCC, TQC, TQM, TPS, etc. Kaizen starts with simple actions such as: keep factory floor and toilets clean, remove all unneeded things, place remaining things in marked positions, etc.
- It originated in Japan in the 1950s by modifying American quality control method. Now it is being taught and adopted widely around the world, especially Southeast Asia and India.
- African countries practicing or learning kaizen: Botswana, Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, Tanzania, Zambia, and AU. Japanese assistance is often provided.



Kaizen in India

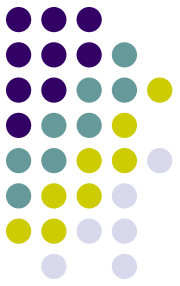


Indian auto part company practicing kaizen near Delhi; Indian engineers learned kaizen from Maruti-Suzuki, a Japanese JV.



Shindan

Enterprise Diagnosis & Advisory Service



- Shindan is a state-authorized system of enterprise diagnostics and advisory services targeted at SMEs.
- Japan's Shindan System started in 1948. Certified consultants are aided by legislation, official recognition and assistance, and supporting organizations such as SME Universities and J-SMECA (consultants association).
- Shindan experts advise SMEs in both management and technology. They also explain new policies. Shindan results are strongly linked with commercial bank loans to SMEs.
- Japan has over 20,000 Shindan experts, many of whom are JICA consultants working in developing countries.
- Shindan has been introduced to Thailand, Malaysia, Indonesia, Philippines... But institutionalization is not easy.

Shindan Experts

JICA Senior Volunteer Team in Vietnam



- Since 2010, about 20 experienced Japanese industrial experts have been assisting Vietnam's "supporting industry" (component producers) in metals, plastic, electronics, nonferrous metals and machinery. 100 firms are targeted.
- Assistance focuses on 5S and quality control. Other areas of concern are productivity and technology management.
- Shindan experts visit factories regularly and give them homework for improving production lines. Seminars, training in Japan, manuals and materials are also used.
- Improved local firms are listed in JETRO's Excellent Local Company Database. This facilitates Japanese FDI firms to find local partners.

Malaysia

Comprehensive SME Support



- Growth of autonomous and high-tech SMEs is the key to overcoming the (upper) middle income trap of Malaysia. The National SME Development Council, chaired by Prime Minister Najib, is leading this effort as top national priority.
- Under the Ministry of International Trade and Industry (MITI), several implementing agencies collectively assist SMEs.
 - SME Corporation Malaysia—one stop service for all SME policy issues; overall policy coordination
 - Malaysia Productivity Corporation—quality and productivity training, consultation, research, certification, etc.
 - SME Bank—SME finance and training
 - MATRADE—trade promotion
 - Others (MIDF, MIDA, DFIs...)

Thailand

Linking Local Auto Part Suppliers with Japanese FDI Auto Makers



- Technology Promotion Association (TPA) is a local NPO established in 1973 by Thai students who studied engineering in Japan. TPA has taught Japanese management, technology and language to Thai people for nearly 40 years. In 2007 it created the Thai-Nichi Institute of Technology.
- Thailand Automotive Institute (TAI) is a government-created, but now financially autonomous, NPO that drafts automotive master plans and implements automotive policies.
- Under Automotive Human Resource Development Program (AHRDP, 2006-10), Denso, Honda, Nissan and Toyota teach lean production, mold & die, skill certification and TPS to Thai suppliers with additional support from JICA and JETRO.

Thailand Automotive Master Plan 2007-2011



Drafting team at Thailand Automotive Institute, 2011

- Despite global economic crises, the Thai auto industry continues to grow strongly (esp. pickup trucks & part export).
- Mr. Vallop Tiasiri, President of TAI, exercised strong leadership and coordination to link FDI & local firms with policy makers.

Vision—“Asia’s auto production base with value-added and strong parts industry”

Productivity, market, technology, HRD and linkages are integrated in this master plan.



Japan & Taiwan: Most Advanced SME Promotion



- Japan and Taiwan are two economies with historically very strong SME sectors supported by effective policy measures—there is no “missing middle.”
- Both have a wide variety of programs ranging from quality, management, technology, finance, accounting and taxes, start-ups, R&D, marketing, export, and overseas expansion. These are however too difficult and too broad to emulate for latecomers.
- Due to high wages (and other reasons), manufacturing SMEs in Japan and Taiwan are no longer competitive; they are now moving abroad for survival and/or business expansion.

Ethiopia

Requiring FDI/ODA projects to enhance local capability and linkage



- PM Meles personally met individual investors and donors and requested the following.
 - Use local inputs as much as reasonably possible (build RR carriages and train stations locally, if not locomotives).
 - Teach Ethiopian engineers so they acquire skills to build and maintain the factory and equipment.
 - Train workers.
- PM Meles asked specific industrial support from each donor.
 - { Japan—kaizen, math & science education
 - { Germany—TVET, universities, business associations, etc.
 - { China—infrastructure
 - { India—textile, leather, infrastructure, etc.

Policy Suggestion 1

Bringing Manufacturing from Asia



- General improvement in business climate is not enough for strategic FDI marketing. Clear focus on target countries, sectors, and even companies should be considered.
- Labor-intensive manufacturing in East Asia needs to relocate due to rising wages (China, Malaysia, Thailand, Vietnam...) and Africa is a possible destination (World Bank, *Light Manufacturing in Africa*, 2012)
- With its ports and long coastal line, Mozambique is a potential receiver of light manufacturing from Asia—but only potential.
- To turn potential into reality, aggressive preparation and FDI marketing are required through policy learning and proper benchmarking.
(cf. creation and capacity building of the Zambia Development Authority by JICA).

Policy Suggestion 2

Concrete Manufacturing Strategy



- **Situation analysis**—domestic, regional & Asian situation, etc.
- **Vision**—e.g. “Mozambique is a preferred destination of labor-intensive manufacturing from Asia (and elsewhere)”
- **Targets**—quantitative & qualitative targets such as receiving garment & footwear from China, India, Turkey & Vietnam; electronic assembly from Thailand & Malaysia, etc.
- **Policy issues**—e.g. (i) industrial parks; (ii) one-stop service; (iii) labor supply & quality; (iv) strategic FDI marketing, etc. (3 to 5 areas to be improved for achieving the above targets)
- **Action plan**—what, who, by when, performance criteria, monitoring mechanism

Note: overvaluation, wage pressure, and Dutch disease are additional macroeconomic concerns that must be dealt with.

Policy Suggestion 3

Document, Action & Results



- Policy consists of three levels:
 - (1) *Documentation*
 - (2) *Implementation*—budgeting, staffing, monitoring, etc.
 - (3) *Performance*—growth, export, skills, technology, structural transformation, etc.
- (3) is the ultimate goal while (1)(2) are the means. When a policy is drafted, attainment of (2) & (3) must be contemplated.
- In many countries, producing documents becomes an end in itself for hardworking bureaucrats without ensuring (2) and (3). This cannot produce growth or industrialize the nation.

Policy Suggestion 4

Policy Learning



- Developing countries should learn policy making by comparing international best policy practices. Policy content, procedure and organizations are proper subjects for learning. East Asia can offer many such examples.
- However, copying others blindly will not work because all countries are different. Foreign experiences should be treated as raw materials from which to compile your own policy with selectivity, adjustment and simplification.
- What needs to be acquired is a *general capability to create a policy package most suitable for local context*.
- Japan conducts “bilateral policy dialogue” with countries with desire to learn—Argentina, Vietnam, Laos, Thailand, Indonesia, Ethiopia...

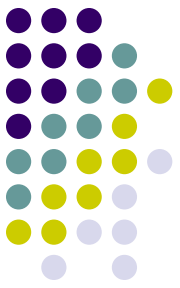
Japan's Policy Dialogue with Developing Countries (Selected List)

Country	Period	Head/key players	Purpose and content
Argentina	1985-1987 1994-1996 (follow up)	Saburo Okita (former foreign minister)	Comprehensive study on agriculture and livestock farming, industry, transport and export promotion
Thailand	1999	Shiro Mizutani (former MITI official)	Study on the master plan for SME promotion policy
Vietnam	1995-2001	Shigeru Ishikawa (professor)	Large-scale joint study on macroeconomy, industry, agriculture, enterprise reform, crisis management, etc.
Vietnam	2003-current	Japanese embassy, JICA, JETRO, JBIC	Bilateral joint initiative to improve business environment and strengthen competitiveness through 2-year monitoring cycle of action plans
Indonesia	2000	Shujiro Urata (professor)	Policy recommendation for SME promotion
Indonesia	2002-2004	Takashi Shiraishi and Shinji Asanuma (professors)	Policy support for macroeconomic management, financial sector reform, SME promotion, private investment promotion, democratization, decentralization and human resource development
Laos	2000-2005	Yonosuke Hara (professor)	Study on macroeconomy, finance, state enterprise, FDI and poverty reduction, etc.
Myanmar	1999-2002	Konosuke Odaka (professor)	Study on agriculture, rural development, industry, trade, finance, ICT, etc.
Mongolia	1998-2001	Hiroshi Ueno and Hideo Hashimoto (World Bank economists and professors)	Study on the support for economic transition and development
Ethiopia	2009-	GRIPS Development Forum and JICA	Kaizen, basic metals and engineering, productivity movement, policy procedure and organization, export promotion, technology transfer, etc.

Source: K. Ohno, *Learning to Industrialize: From Given Growth to Policy-aided Value Creation*, Routledge, 2013.

Policy Suggestion 5

Linkages for Manufacturing FDI



- Manufacturing is the most suitable base for linkage policy for competitiveness. Policy differs greatly between countries receiving large amounts of manufacturing FDI (East Asia) and countries receiving mainly extractive, construction or service FDI (Africa). The latter case is much harder.
- Mozambique should target manufacturing FDI, and combine it with linkage promotion and local capability building. Together with corridor development, this should be the heart of Mozambican manufacturing strategy.
- Policy should push and nudge FDI to produce linkage, but unrealistic demand without promoting local capability drives manufacturing FDI away. For positive results, government and businesses must work closely with full understanding of each other's needs. This requires high-level policy learning.