Asia-Pacific
Economic Cooperation

Capacity Building for Sharing Success Factors of Improvement of Investment Environment

Report

APEC Investment Expert's Group – APEC Economic Committee

July 2009

APEC Project CTI 02 / 2009T

Produced by the Ministry of Economy, Trade and Industry, Japan

Japan External Trade Organization (JETRO)

For

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SEMINAR OUTLINE

DATE

Monday, 27 July 2009: One-day Seminar
(09:00 registration, 09:30 start - 17:05 finish)

VENUE

Riverfront Ballroom on the second floor, Grand Copthorne Waterfront Hotel
Address: 392 Havelock Road, Singapore 169663
Website:
http://www.millenniumhotels.com.sg/grandcopthornewaterfront/index.html

ATTENDANTS

There were 91 attendants in total; 50 people from 17 APEC member Economies (Australia, Canada, Chile, China, Hong Kong China, Indonesia, Japan, Korea, Malaysia, Mexico, Peru, Philippines, Russia, Singapore, Chinese-Taipei, Thailand and U.S.), 9 people from ABAC & APEC Secretariat, 15 people as invited speakers / panelists and 17 people from private sector.

Questionnair:
There were 26 responses in total (about 28% replied).

JETRO

Investment Experts' Group – Economic Committee Capacity Building for Sharing Success Factors of Improvement of Investment Environment

Riverfront Ballroom on the second floor, Grand Copthorn Waterfront, Singapore

27 July, 2009

Agenda

- Session1: Introduction and Overview

09:00-09:30 Registration

09:30-09:35 Introduction by Mr. Kazufumi Tanaka, Senior Coordinator, Planning Department, JETRO Tokyo

09:35-09:45 Opening and welcome remarks by Mr. Yoshichika Terasawa, Manageing Director, JETRO Singapore

09:45-10:00 Opening remarks by Mr. Ravi Menon, Senior Officials' Meeting (SOM) Chair

- Session2: Supply Chain Connectivity Issue

10:00-10:05 Introduction
Moderator Mr. Roy Nixon, APEC IEG Convenor

10:05-10:25 ASEAN Logistics network map and keys for success in attracting investment by Mr. Takashi Tsuchiya, Director General, Trade and Economic Cooperation Department, JETRO **Japan**

10:25-10:45 Gearing up for the future by Mr. Albert Lim, Head of Logistics / Supply chain management cluster, Singapore Economic Development Board, **Singapore**

10:45-11:05 Transportation gateways and global supply chains - Canada's integrated approach by Mr. Tim Meisner, Director General of Marine Policy at Transport Canada, **Canada**

11:05-11:20 Coffee Break

11:20-12:20 Panel discussion including Q & A session

12:20-13:50 Lunch Break

- Session3: Ease of Doing Business

13:50-13:55 Introduction
Moderator Mr. Roy Nixon, APEC IEG Convenor

13:55-14:15 Keynote presentation
FDI Regimes and liberalization by Dr. Charles Adams, Visiting Professor of Economics, Lee Kuan Yew School of Public Policy, National University of Singapore, **Australia**

14:15-14:30 Implementing reform and strengthening the economic legal infrastructure to increase FDI by Mr. Chris Kanter, Vice President for Investment and Transportation. KADIN
Indonesia

14:30-14:45 Implementing domestic regulatory reform, public sector reform and strengthening the economic legal infrastructure so that investment for the public benefit increases by Mr. Virgilio C. Rivera, Jr., Group Director, Regulation and Corporate Development Group, Manila Water Company, **Philippines**

14:45-15:00 Stimulating FDI using the PFI method into the ASEAN and East Asia Region
by Mr. Neil Arora, Executive Director, Macquarie Capital Advisers, Macquarie Capital (Singapore) Pte Limited, **Australia**

15:00-15:20 Cross-border mergers and acquisitions within APEC and their implications for exports, greenfield FDI and GDP by Prof. Larry Qiu, School of Economics and Finance, the University of Hong Kong, and Ms. Elley Mao, Economic Analysis and Business Facilitation Unit, Financial Secretary's Office **Hong Kong, China**

15:20-15:35 Coffee Break

15:35-16:45 Panel discussion including Q & A session (Dr. Omori, EC Chair joins the panel)

16:45-16:55 Wrap up by Roy Nixon, APEC IEG Convenor

16:55-17:00 Closing remarks by Mr. Noriyuki Mita, Director for Economic Partnership Division, Trade and Policy Bureau, METI

Biography of Speakers

Session 2: Supply Chain Connectivity Issue

Moderator Mr. Roy Nixon

APEC Investment Experts Group Convener

Mr. Roy Nixon has worked for over 25 years in the Australian Treasury in a number of areas including banking policy, competition policy, foreign investment and trade policy. He spent 2 years in the UK working in their Monopolies and Mergers Commission. His education and training were in the UK, and he has an honours degree in Economics and Economic History from the University of Wales. His principal area of expertise covers issues in international investment agreements and FTA negotiations. Mr. Nixon has worked extensively on major multilateral agreements including the OECD MAI and the WTO GATS and many bilateral and plurilateral BITs and FTAs including Australia's agreements with the US, Singapore and Thailand. Mr. Nixon has had a long association with APEC including the original negotiation of the APEC Non-Binding Investment Principles in 1994 and has been the Chair of the APEC Investment Experts Group since February 2005.

Mr. Takashi Tsuchiya

Director General, Trade and Economic Cooperation Department, JETRO

Mr. Takashi Tsuchiya was appointed Director-General, Trade and Economic Cooperation Department, JETRO in April 2008. As Director-General, Trade and Economic Cooperation Department, he oversees JETRO's activities related to developing economies, helping them strengthen export industries, improve business-related systems and nurture human resources.

Immediately prior to his current post, Mr. Tsuchiya has served as Chief Executive Director, JETRO Chicago from 2005-2008, to oversee the Chicago office in its activities designed to facilitate business development between Japan and companies in the 12-state Midwest region in the U.S..
His other international position in the past include Director of the Public Affairs Department at JETRO New York from 1985-1989 and Vice president of JETRO Bangkok from 1997-2000. At JETRO headquarters in Tokyo, Mr. Tsuchiya was Director of the Research Planning Division, Overseas Research Department from 2003-2005.

Mr. Albert Lim

Head of Logistics/Supply Chain Management Cluster,
Singapore Economic Development Board, Singapore

Mr. Albert Lim is presently the Head of Logistics/SCM cluster of the Singapore Economic Development Board (EDB). He has responsibility for the overall strategy formulation & industry development initiatives for Singapore's US$15b transport & logistics industry. He manages a team within EDB which actively engages a global client portfolio of leading logistics companies in strategic planning and investments. He also leads EDB's efforts in the international promotion of Singapore as a global logistics hub and key supply chain node.

Prior to his current appointment, Mr. Lim was part of EDB's global operations division and was based in London from 2003-2007. He served as a Centre Director and managed all strategic business engagements between the Singapore government and companies in the Benelux region. During his four years in Europe, he had successfully attracted and jointly implemented investment projects worth more than US$800m in Singapore. Mr. Lim graduated as a valedictorian from the National University of Singapore (NUS) and has an MBA from INSEAD.

Mr. Tim S. Meisner

Director General, Marine Policy, Transport Canada

Mr. Meisner graduated from Acadia University with a Bachelor of Science degree and Dalhousie University with a Masters of Business Administration (MBA).
He also has his Certified Management Accounting (CMA) designation.

Mr. Meisner started his public service career with Transport Canada's Airports organization in 1981 and worked in both the Atlantic Regional office and in Ottawa.

In 1996 Mr. Meisner joined the Canadian Coast Guard and served as the Director of Policy and Legislation for Coast Guard Marine Programs and as acting Director General, Marine Programs. In 2004 he became the Director General Strategies and Integration for Transport Canada's Safety and Security Group.

In 2005 Mr. Meisner was appointed to the position of Executive Director for the Canadian Air Transport Security Authority (CATSA) Act Review. The review examined the CATSA Act, future aviation security requirements, and on actions taken since 1985 to address the specific aviation security breaches associated with the Air India flight 182 bombing.

In 2007 Mr. Meisner was appointed the Executive Director for the Railway Safety Act (RSA) Review. The RSA Review report, Stronger Ties: A Shared Commitment to Railway Safety presents findings and over 50 recommendations to improve rail safety in Canada. It was tabled in the House of Commons on March 7, 2008. Since April 2008, he has been the Director General Marine Policy with Transport Canada.

Session 3: Ease of Doing Business

Dr. Charles Adams

Visiting Professor of Economics, Lee Kuan Yew School of Public Policy, National University of Singapore

Dr. Charles Adams is a visiting professor at the Lee Kuan Yew School of Public Policy where he teaches courses in International Economic Policy, Central Banking and Monetary Policy, and Financial Sector Development. Prior to this appointment, he was a senior official at the International Monetary Fund where he worked for 25 years. During his time at the IMF, Dr. Adams served as Deputy Director of the IMF's Regional Office for Asia and the Pacific and represented the Fund at APEC meetings in Chile, Korea, Mexico and Thailand. He has published widely in international journals and has recently published on the Asian Currency Unit, East Asian Banking Systems and the need for rebalancing the sources of growth in Asian economies. He has served as a consultant to the ADB, ADBI, SEACEN and the MAS. Dr. Adams received his PhD from Monash University, Australia.

Mr. Chris Kanter

Vice President for Investment and Transportation, KADIN, Indonesia

Mr. Chris Kanter is an Indonesian businessman and business community leader, who is at the forefront of the national economic reform agenda in Indonesia. As a trained engineer, he is chairman and founder of Sigma Sembada Group; major player as a turn key contractor, in transportation and logistics and he is president of PT KN Sigma Trans; Indonesian arm of Kuehne+Nagel - world-leader in freight forwarding business. His commitment and devotion to nation economic development and reform is shown through his role in the Indonesian Chamber of Commerce and Industry (KADIN Indonesia), where he has been vice president continuously since 1994. He has recently been reappointed for a further five year term

to 2013 in charge of Investment and Transportation. His contributions also extend more widely to include: Chairman of Executive Board of KADIN Indonesia's Special Committee on investment and International Trade Development, Chairman of Board of Governors of the Swiss German University, President of The German Indonesian Chamber of Industry & Commerce (EKONID), Vice President of International Federation of Freight Forwarders Associations (FIATA) and Chairman of Advisory Board of Indonesian Forwarders Association (INFA/GAFEKSI).
In addition to these high volume tasks, his activities include appointments by the Indonesian Government. Mr. Kanter was a member of the Monitoring Team for Inpres (Presidential Instruction) on The Policy Package for Improving Investment Climate in Indonesia and has led the arrangements for some Indonesia's most prominent events such as Indonesia Infrastructure Conference & Exhibitions I & II, Presidential Lectures and some other international leaders forums in Indonesia. He also manages to participate in high level regional meetings in the Asia Pacific and is often invited as a guest speaker, panelist or moderator for international investment seminars. In a previously trusted assignment, Mr. Kanter also served as member of the Peoples Consultative Congress (MPR) of the Republic of Indonesia (1998 – 2002).

Mr. Virgilio C. Rivera, Jr.

Group Director, Regulation and Corporate Development Group,
Manila Water Company, Philippines

Mr. Rivera is a Managing Director of Ayala Corporation.
Prior to being seconded to Manila Water Company, Inc. (MWCI), he played a key role in the planning and development of the company's bid for the MWSS concessions in 1996 as well as the evaluation of major acquisition opportunities for Ayala in the field of natural gas, food chain and infrastructure. His other roles in Ayala include serving as a Manager for the Strategic Planning Department of Ayala Corporation and a Manager for the Corporate Planning Department of Integrated Microelectronics Inc., another Ayala subsidiary.

Mr. Neil Arora

Executive Director, Head of Infrastructure Asia,
Macquarie Capital (Singapore), Pte Limited, Australia

Mr. Arora is Head of Macquarie Singapore, Head of Infrastructure Asia and is an Executive Director of the Macquarie Group. He joined the Macquarie Group in 1998 and has extensive experience in infrastructure PPP and international project finance from around the world. Mr. Arora was head of the Social and Public Infrastructure team, the largest team in the London office which he developed from its infant stage.

Mr. Arora currently heads the Asian Infrastructure advisory team and has the responsibility of growing the Macquarie Infrastructure franchise across Asia and is also head of the Macquarie Singapore office.

His prime responsibilities include building and managing the Macquarie Infrastructure team across Asia; sourcing Infrastructure transactions both from a principal and advisory perspective, advising Macquarie funds on acquisitions, refinancing or restructurings, leading principal transactions on behalf of Macquarie and evaluating the option of setting up new funds.

Prior to joining the Macquarie Group, Mr. Arora was a consultant for an international firm of Actuaries and Management Consultants. He received his Bachelor of Science with 1st Class Honours and is a Fellow of the Institute of Actuaries UK (FIA).

Prof. Larry Qiu

Professor, School of Economics and Finance, the University of Hong Kong

Education

- Ph.D., Economics, The University of British Columbia, Canada, 1993.
- M.A., Economics, The University of British Columbia, Canada, 1989.
- B.Sc., Mathematics, Zhongshan University, China, 1983.

Professional Employment Record

• January 2008 – Present: Professor, School of Economics and Finance, The University of Hong Kong
• July 2007 – December 2007: Professor, Department of Economics, Hong Kong University of Science & Technology (HKUST)
• 2007 -- Present: Adjunct professor, School of International Business Administration, Shanghai University of Finance and Economics, China
• 2006: Visiting professor, Kobe University, Japan
• July 2001 – June 2007: Associate professor, HKUST
• 2001 – 2003: Adjunct professor, Lingnan College (University), Zhongshan University, China.
•September 1993 – June 2001: Assistant professor, Department of Economics, HKUST.
• September 1983 – July 1987: Assistant lecturer, School of Management, Zhongshan University, China.

Ms. Elley Mao

Economic Analysis and Business Facilitation Unit,
Financial Secretary's Office

Ms. Elley Mao is currently the Principal Economist of the Economic Analysis and Business Facilitation Unit of the Financial Secretary's Office of the Hong Kong China (HKC) Government. Over the years, Ms. Mao has advised the HKC government on various economic issues in the Asia-Pacific region, including specifically monitoring economic relations with the mainland of China and other major trading partners in the region. Latest focus is on strategic policy impact analyses on structural reform, cross-boundary infrastructure, trade, and environmental issues.

ASEAN Logistics Network Map and Keys for Success in Attracting Investment

for APEC Capacity Building for Sharing Success Factors of Improvement of Investment Environment (Singapore / 27 July, 2009)

Takashi Tsuchiya
Japan External Trade Organization (JETRO)

Overview of Land Transport in ASEAN

View in the past: air and sea seen as major transport modes; land used only as contingency.

Progress in regional economic integration and improvements in hard infrastructure: increasing needs for more efficient transport for small volume and frequent shipping for better SCM.

View today: land transport has become a viable and advantageous option, being seen as ~~–faster~~ than sea and cheaper than air."

However, **practical information** was lacking, and is needed by business sectors.

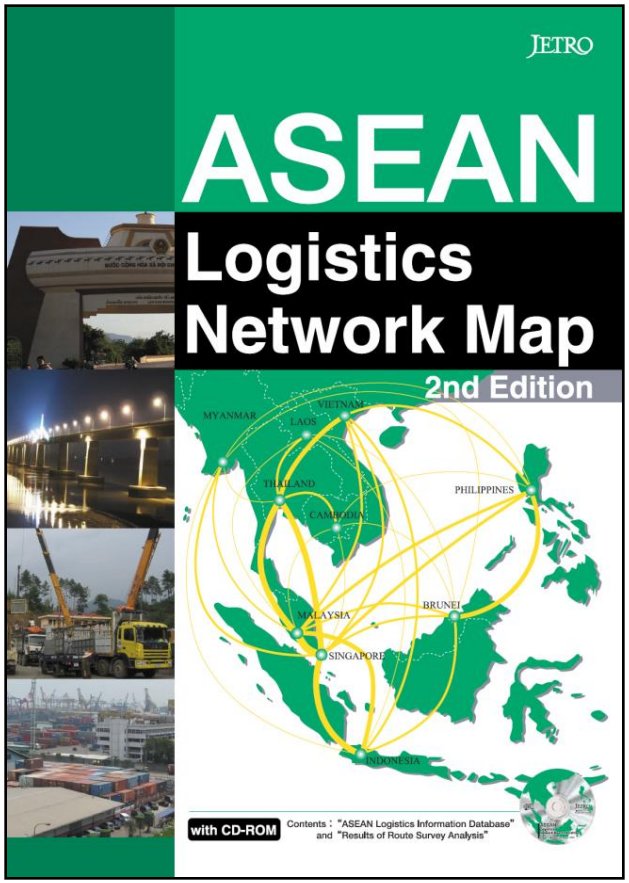
Ex.) How much can land transport shorten lead times?

How does land transport compare to sea, in terms of cost?

What are the possible issues with land transport (e.g., quality, punctuality, etc.) ?

Objectives: Clarification of the present situation of ASEAN's logistics networks

- Identify issues and propose measures for their improvement
- Pass on comments from business sector to government bodies



Structure:

Survey of 8 priority routes

- Transportation modes: land, air and sea
- Areas examined: door-to-door costs, time and quality (risks)

AND

Logistics database (CD-ROM)

- Examines both hard & soft infrastructure
- User-friendly (web browser compatible)

Please visit *JETRO Online Bookshop*

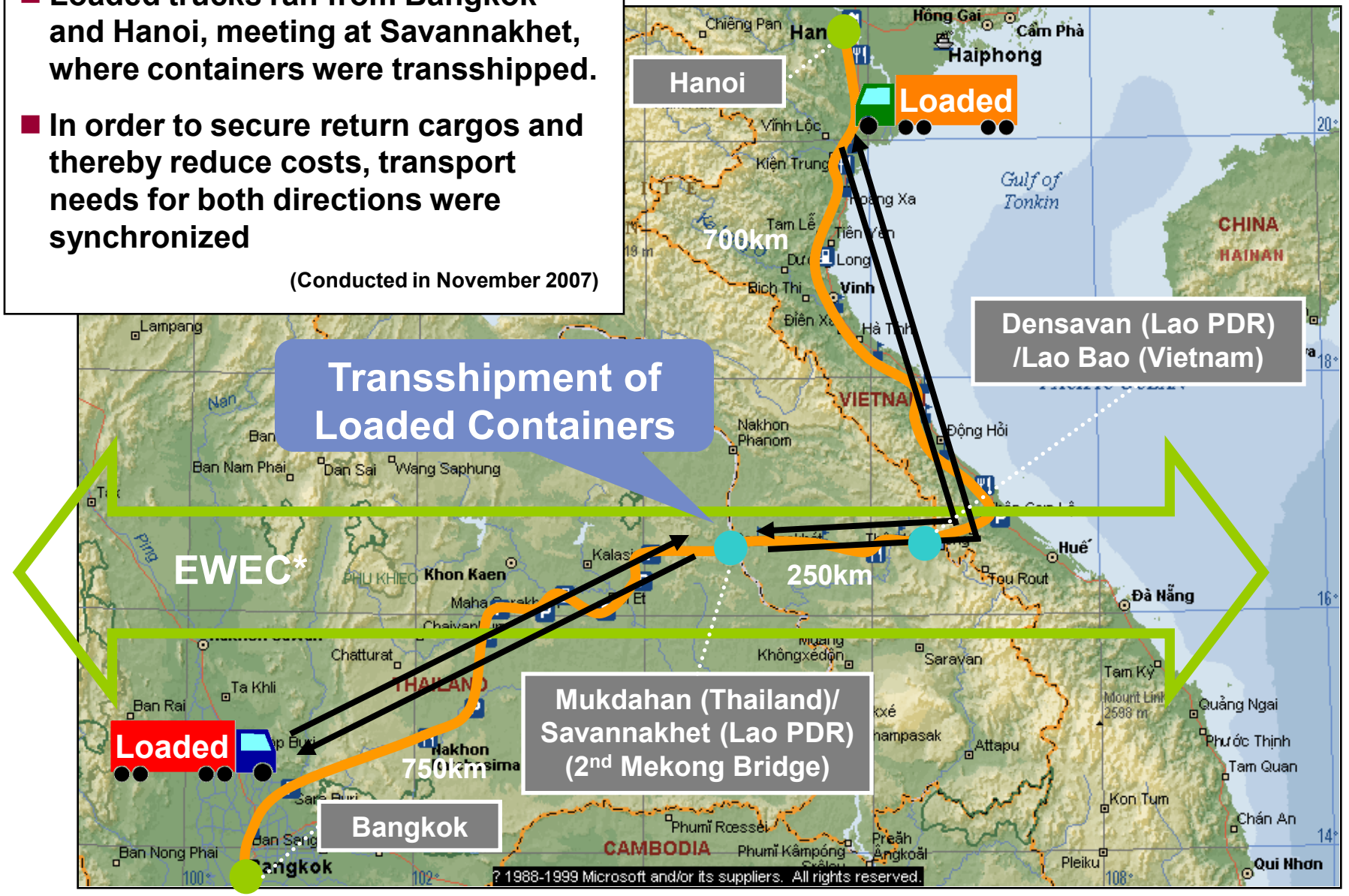
(http://books.jetro.go.jp/en/)

JETRO's Trial Transport (Bangkok – Hanoi)

- **Loaded trucks ran from Bangkok and Hanoi, meeting at Savannakhet, where containers were transshipped.**
- **In order to secure return cargos and thereby reduce costs, transport needs for both directions were synchronized**

(Conducted in November 2007)

***EWEC: East-West Economic Corridor**



Competitiveness of Land Transport (Bangkok – Hanoi)

- Compared to sea, land transport offers considerable time savings
- Main issue is cost, due to difficulty in securing return cargo

Time

Sea (213 hrs.) > Road (74 hrs.) > Air (29 hrs.)

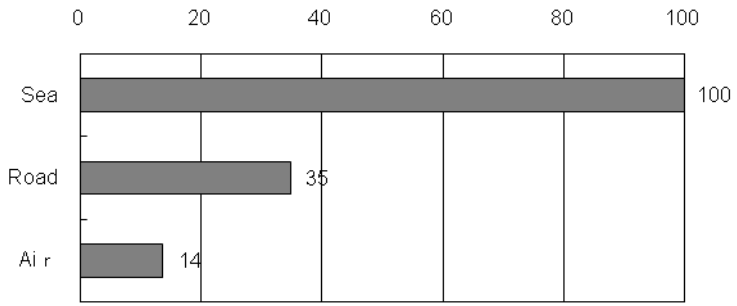
Costs*

Air (USD 69,910) > Road (USD 5,500) > Sea (USD 2,910)

(for 40-ft. container or 30 tons of cargo)

Slow

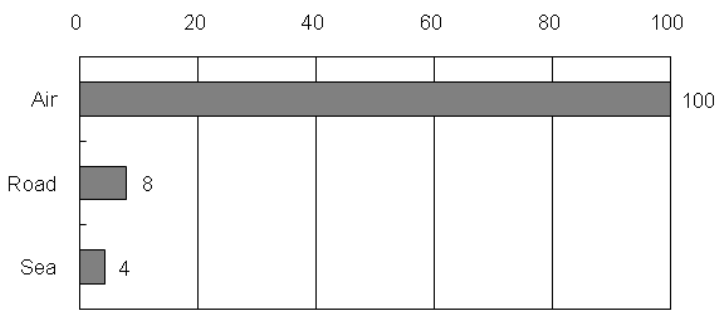
Time Comparison



Fast

High

Costs Comparison



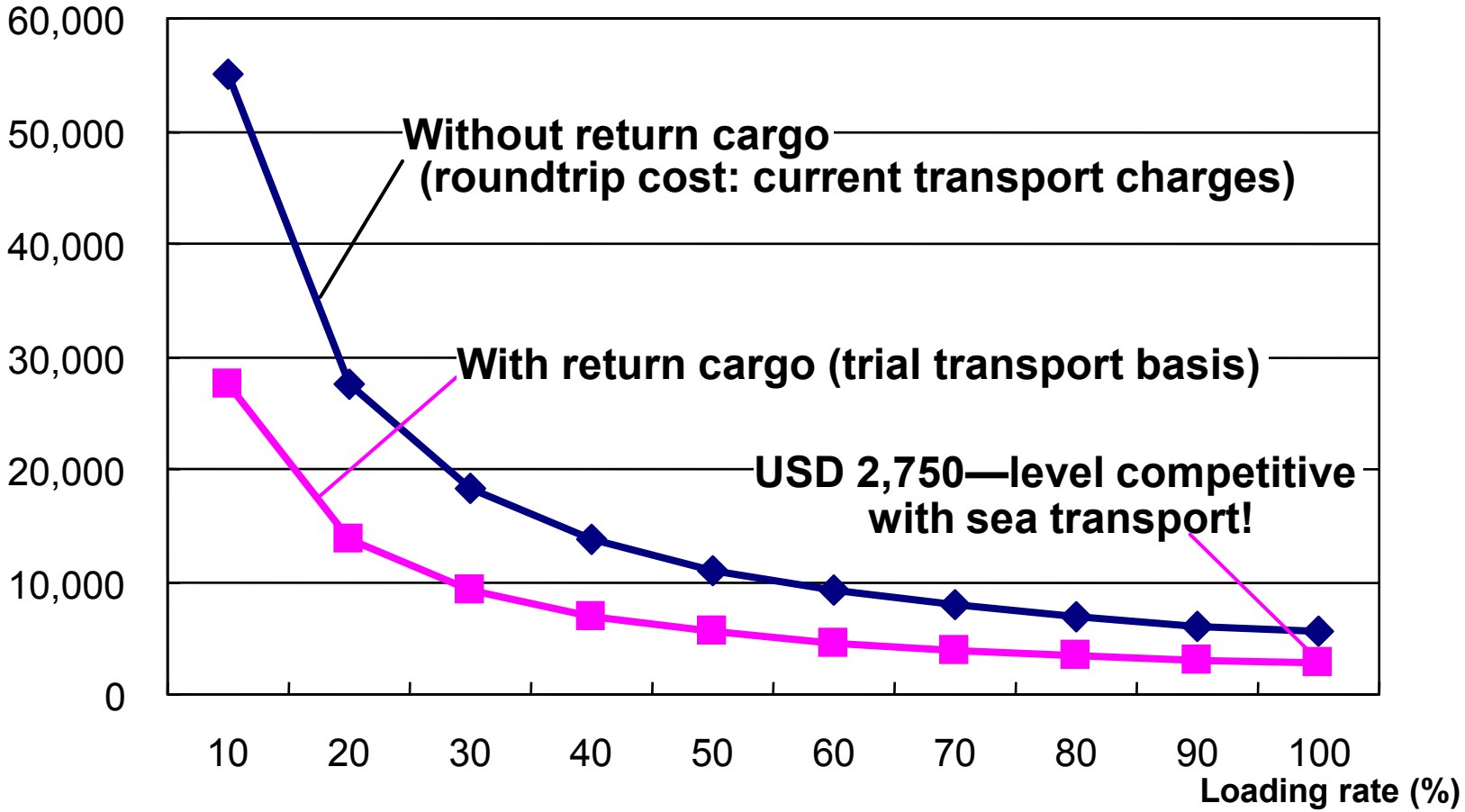
Low

In terms of time, land transport enjoys advantage over sea and is favorable in comparison with air; high cost, however, remains an issue.

*Notes: 1) it is rare to ship 30 tons of cargo by air;
2) cost of road transport estimated on "without return cargo" basis.

Estimation of Improvement: Cost

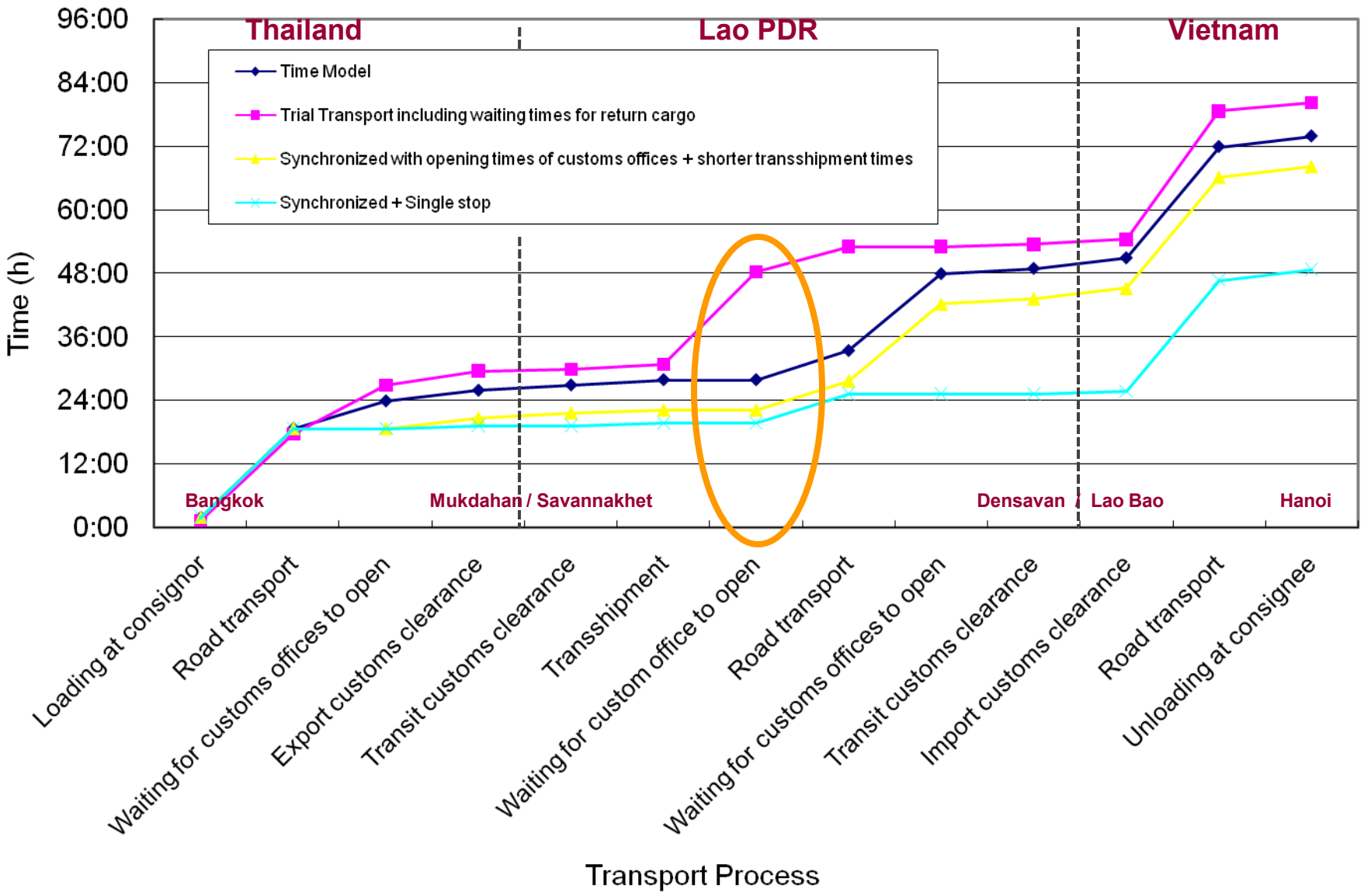
Cost (USD) per 30 tons by road transport



The most effective way to reduce costs is to secure return cargo; the second is to improve loading rates through LCL* (consolidation).

***LCL: Less-than-Container Load**

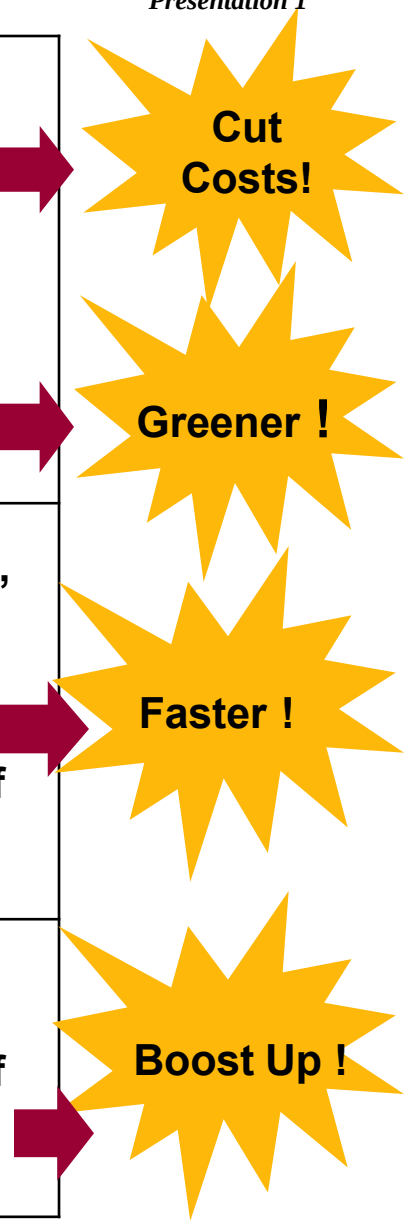
Estimation of Improvement: Time



Single Stop Service at borders is the most effective for saving time.

Keys for Success for Land Transport (Bangkok – Hanoi)

Costs	■ Boost cooperation among carriers and information sharing among shippers to promote –collaborative transport" ■ Improve institutional frameworks for LCL, support backup service operators at borders ■ Build freight distribution centers near borders to adjust cargo volumes ■ Deregulate corporate market entry restrictions ■ Promote –Green Logistics" skills
Time	■ Expedite customs clearance • Fully implement –Single Window & Single Stop Service" • Extend service hours of customs • Adoption of Authorized Economic Operator Systems ■ Mutual entry of trailer, in order to eliminate the usage of cranes for transshipment of containers ■ Introduce GPS cargo monitoring system
Quality	■ Develop human resources in logistics ■ Introduce equipment for proper handling of materials ■ Mutual entry of trailer, in order to eliminate the usage of cranes for transshipment of containers ■ Add warehouses, better roads, street lights, etc.



Actual Examples Involving the Keys for Success

- **Distribution Center for LCL**

  -A Japanese logistics service provider invested in Savannakhet.

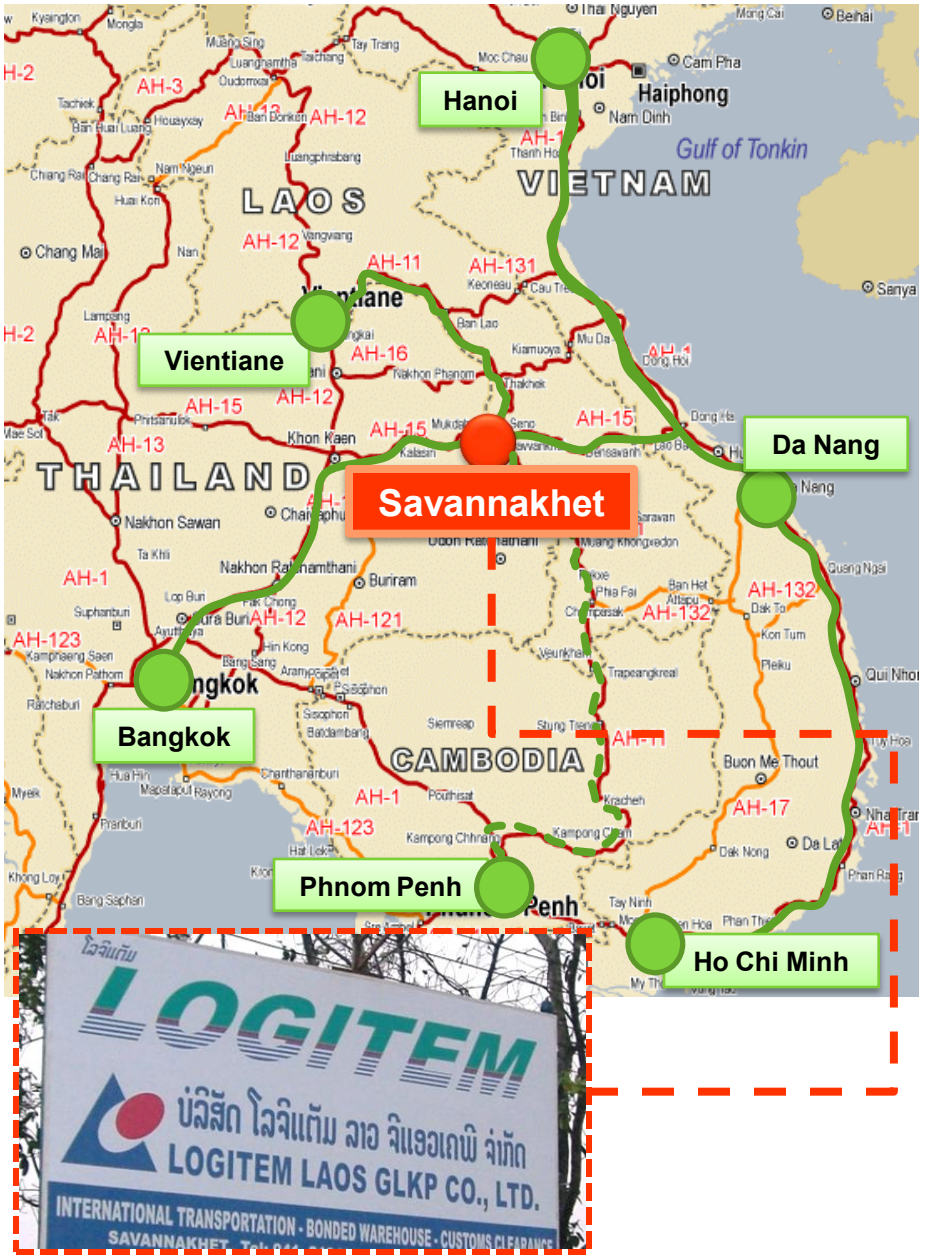
  -The company built warehouses near border, enabling them to adjust cargo volumes.

  -Because the firm could utilize LCL , it was able to keep prices down.

- **Logistics Qualification System Program (LQSP)**

  The Thai National Shipper's Council started a logistics training program, supported by JETRO and the Japan Institute of Logistics System (JILS), to develop logistics human resources.

The program provides training and certification for improving skills of logistics staff.



Thank you very much for your kind attention!

Please contact:

Tetsuo SHIBATA (Mr.), Tomofumi ABE (Mr.)

Asian Cooperation Division,

Trade and Economic Cooperation Department

Japan External Organization (JETRO) TEB@jetro.go.jp

Appendix

Reference Materials

- Introduction of JETRO
- Introduction of "ASEAN Logistics Network Map"
- Trial Transport between Bangkok and Hanoi
- Introduction of JETRO's Projects Now

Introduction of JETRO

- **JETRO (Japan External Trade Organization) is a government-related organization that works to promote mutual trade and investment between Japan and the rest of the world, originally established in 1958. (http://www.jetro.go.jp/)**

- **JETRO has been conducting studies on logistics environment in ASEAN and India since 2006 as one of the important factors of investment conditions.**

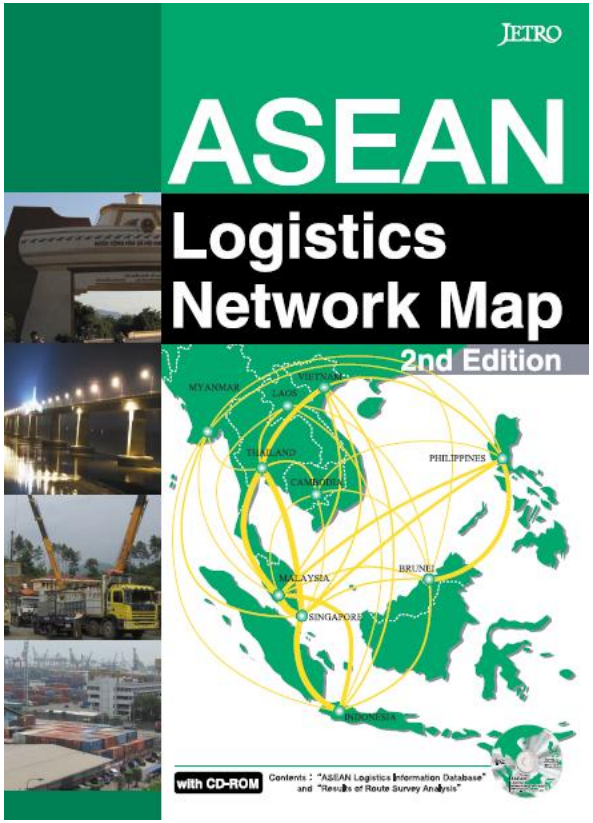
- **Not only studies, JETRO also has been conducting projects to support improvement of logistics management for business sectors in ASEAN, to support ASEAN Economic Integration through industrial competitiveness of ASEAN.**

Introduction of –ASEAN Logistics Network Map”

Presentation 1

Objectives: Clarification of the present situation of logistics network in ASEAN

- To identify bottlenecks and to propose measures for improvements
- To carry business sectors' needs to administrative bodies



Structure:

Route survey for 8 priority routes

- Transportation mode: land, sea, air
- Door-to-door cost, time and quality (risk) are analysed by each phase of transport process

AND

Logistics database (CD-ROM)

- Hard infrastructure & Soft infrastructure
- User-friendly (works on web browser)

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Selected by Business Sectors' interests in ASEAN and Japan

Route 1: Thailand - Malaysia – Singapore

Route 2: Thailand - Laos - Vietnam (Hanoi) (part of EWEC)

Route 3: Vietnam - South China

Route 4: Thailand - Myanmar (part of EWEC)

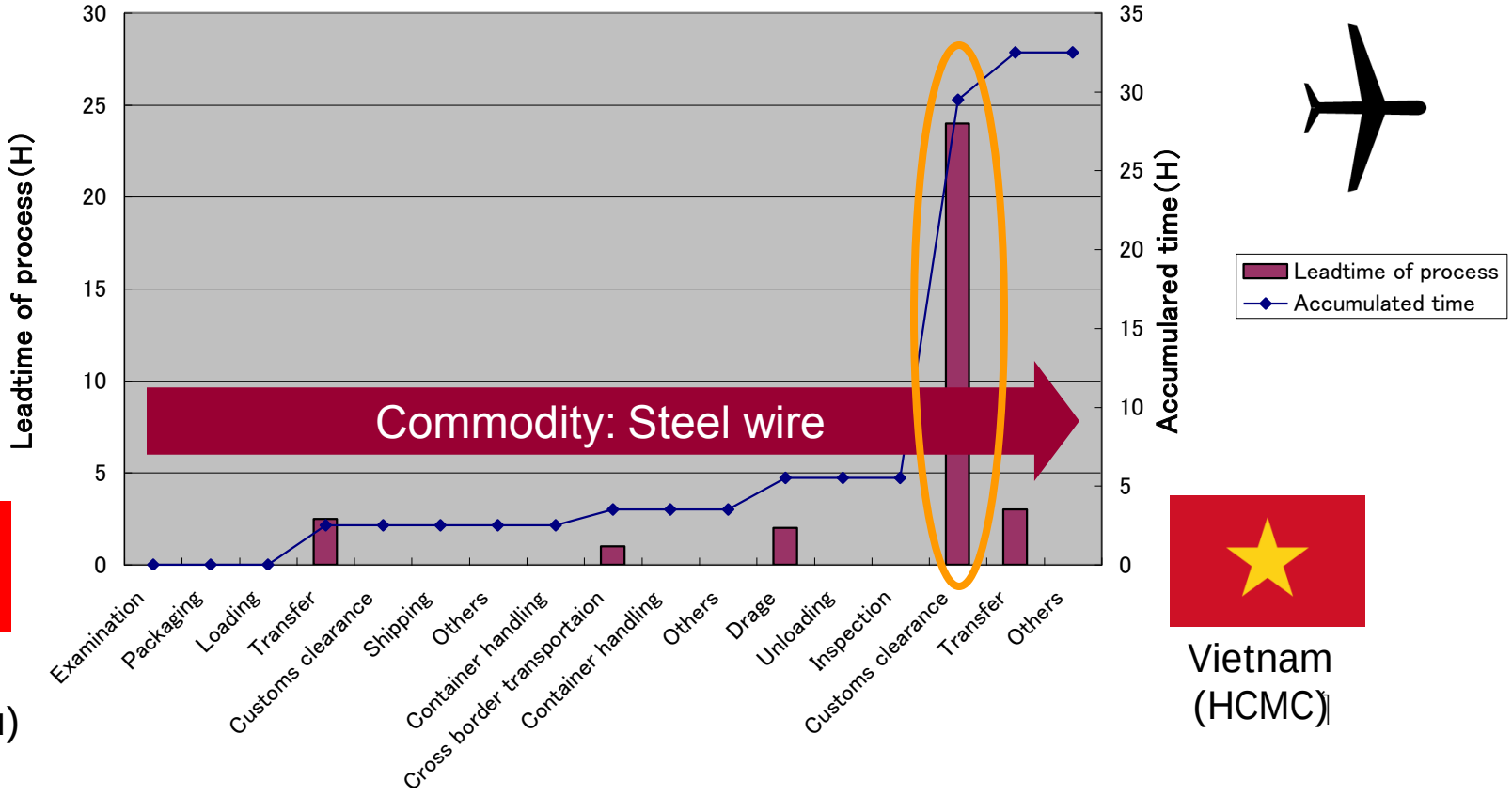
Route 5: Thailand - Cambodia - Vietnam (Ho Chi Minh City)

Route 6:Singapore - Indonesia

Route 7:Thailand - Philippines

Route8: ASEAN - India

Transportation Time of Steel Wire from China to Vietnam by Air (Data resource: Logistics service provider)

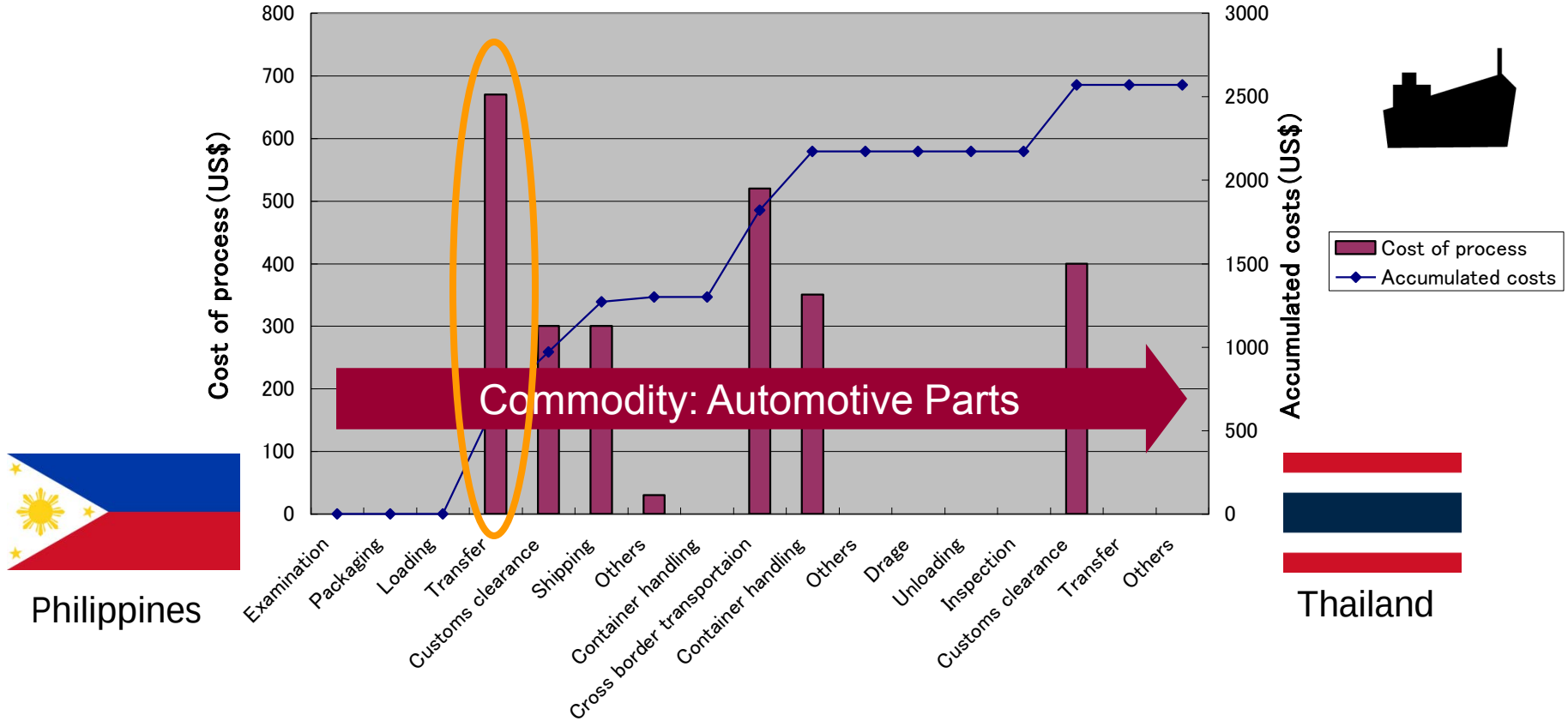


China (Guangzhou)

Vietnam (HCMC)

In this sample, the import custom clearance in Vietnam takes most of the time, and it diminishes the merit of air transport.

Transportation Cost of Automotive Parts from Philippines to Thailand by Sea (Data resource: Shipper company)

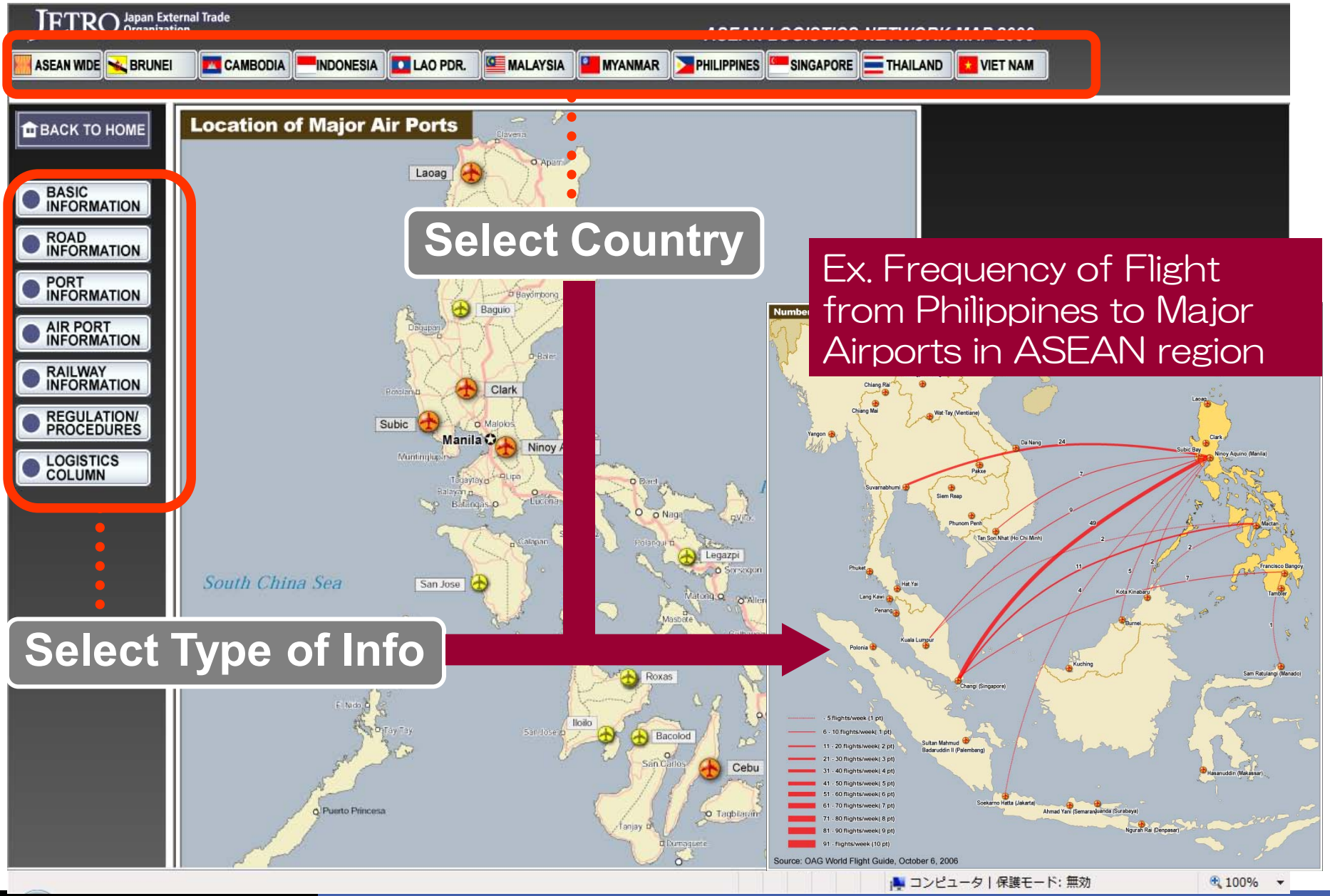


In this sample, the domestic transportation cost in Philippines holds the largest share, while customs clearance also costs much in both countries.

Database: Collected Information

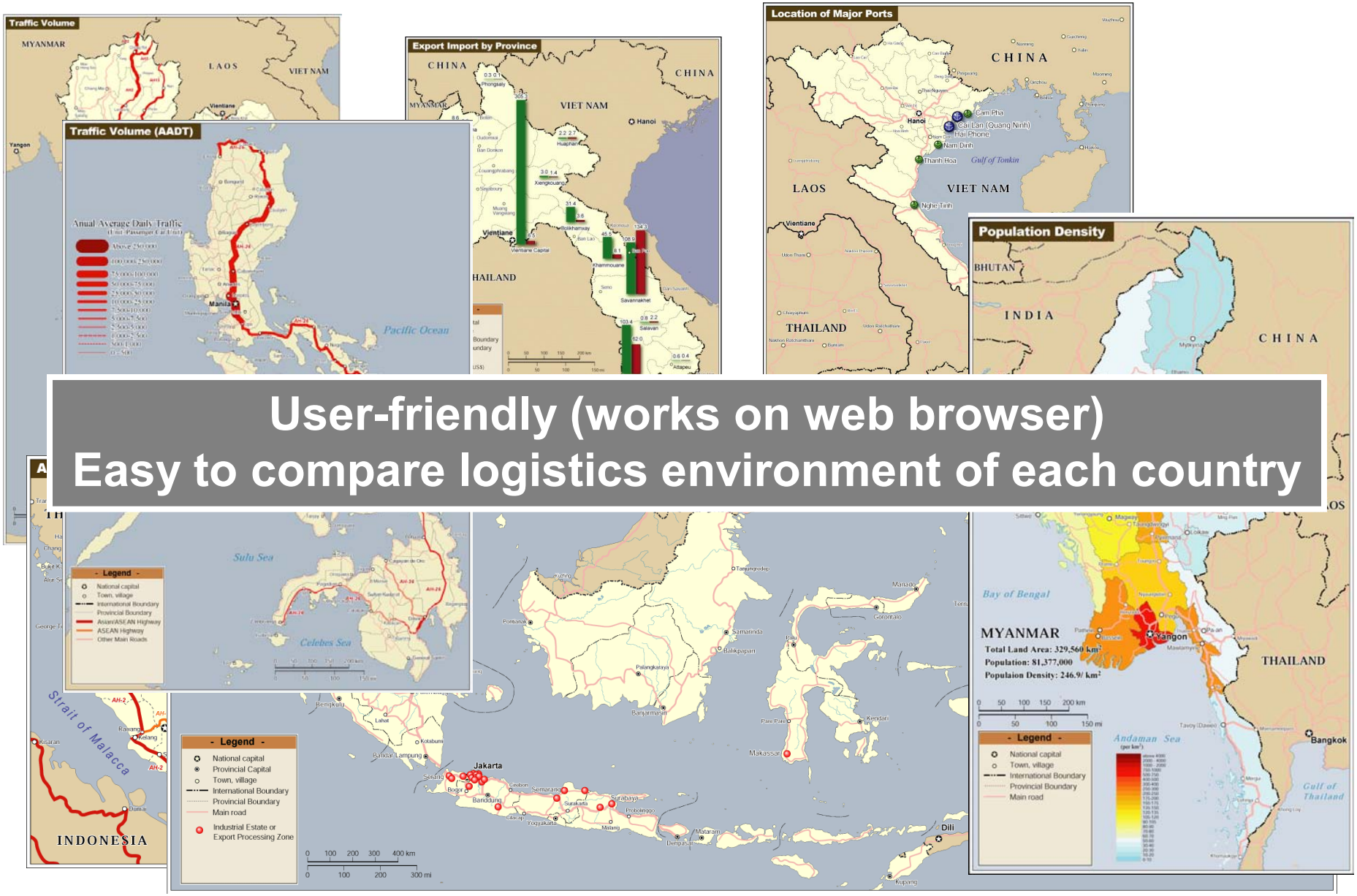
- **Basic Information**: Basic Information, Intra ASEAN Trade, Development Projects, Population Density, Dangerous Areas, etc…
- **Road Information**: Major Road Network, Basic Information, Traffic Volume, No. of Lanes, Surface Condition, Vehicle Capacity Ratio, etc…
- **Port Information**: Major Port Location, Basic Information, Lead time to Major Ports, Container Movement, Freight Rate, etc…
- **Air Port Information**: Major Air Port Location, Frequency of Flight, Lead time to Major Air Ports, etc…
- **Railway Information**: Railway Network, Basic Information
- **Regulations/Procedures**: Custom Procedures, EDI, Legal System, Logistics Education, etc…
- **Logistics Column**: Hot Issues concerning Logistics in ASEAN

Database: Screen Layout

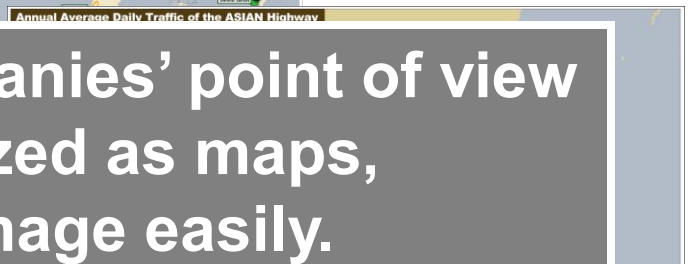


Database: Sample Maps 1 (Each Country)

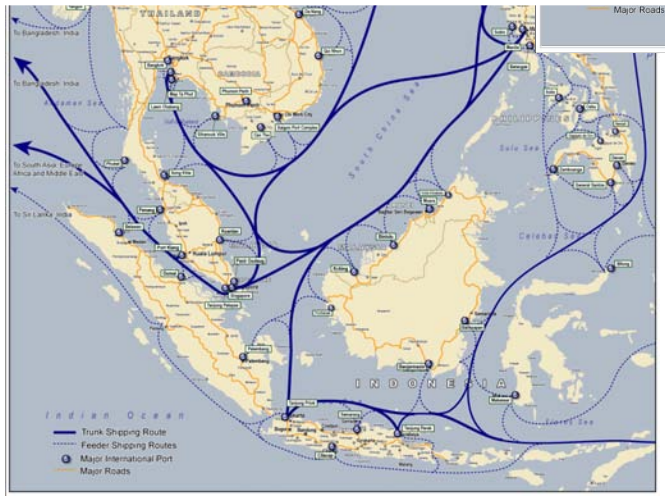
Presentation 1



Database: Sample Maps 2 (ASEAN Wide)



Data collection from private companies' point of view
Most of the data are visualized as maps,
so that users can grasp image easily.



Questionnaire to Japanese enterprises

The number of effective answers is 94.

□In this questionnaire, we asked about the following as items related to route survey of this time.

i) Countries with problems on logistics routes in ASEAN region used in daily business (top three countries chosen among ten countries)

ii) Policy problems in the countries concerned (up to three items chosen)

□ Choices of policy problems

Improvement and maintenance of soft infrastructure

①Reforms of existing laws ②Ensuring transparency of standards/regulations

③Building up fair entry opportunity ④Easing of regulations

⑤Evaluation/certification system of logistics businesses ⑥BPR, such as customs procedures

⑦Electronic customs clearances/permission ⑧Truck passport system

⑨Reviews of traffic regulations in cities ⑩Building Load Matching System

⑪Logistics staff training by public organizations

Improvement and maintenance of hard infrastructure

⑫Building roads (including maintenance) ⑬Building railroads (including maintenance)

⑭Building logistics facilities in cities

⑮Capacity growth of airports/ports, improvements of circulations

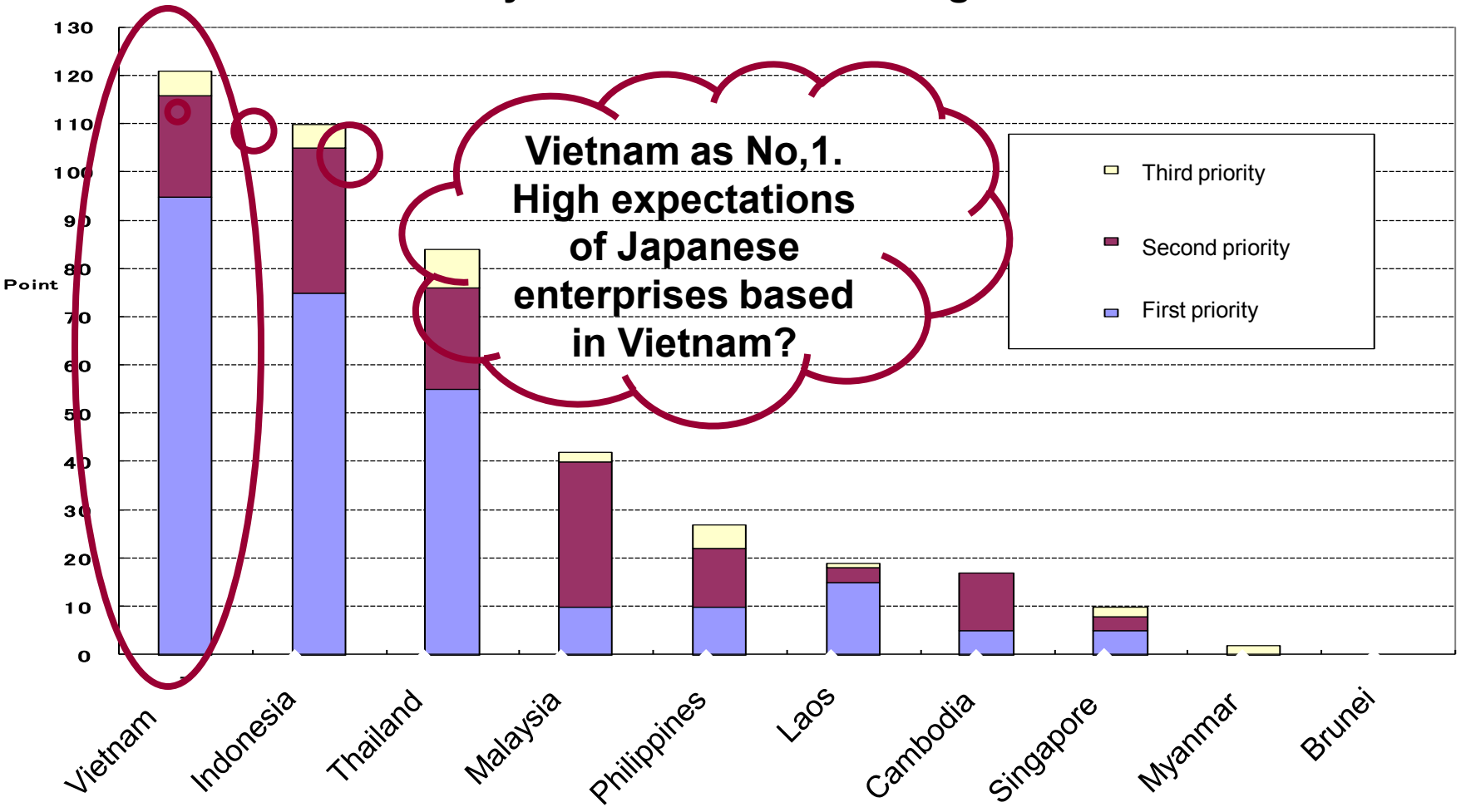
⑯Building logistics facilities for logistics

⑰Standardization (pallets, returnable box, information system, etc.)

Result of Questionnaire: 1

Countries in question on the logistics route within the ASEAN area

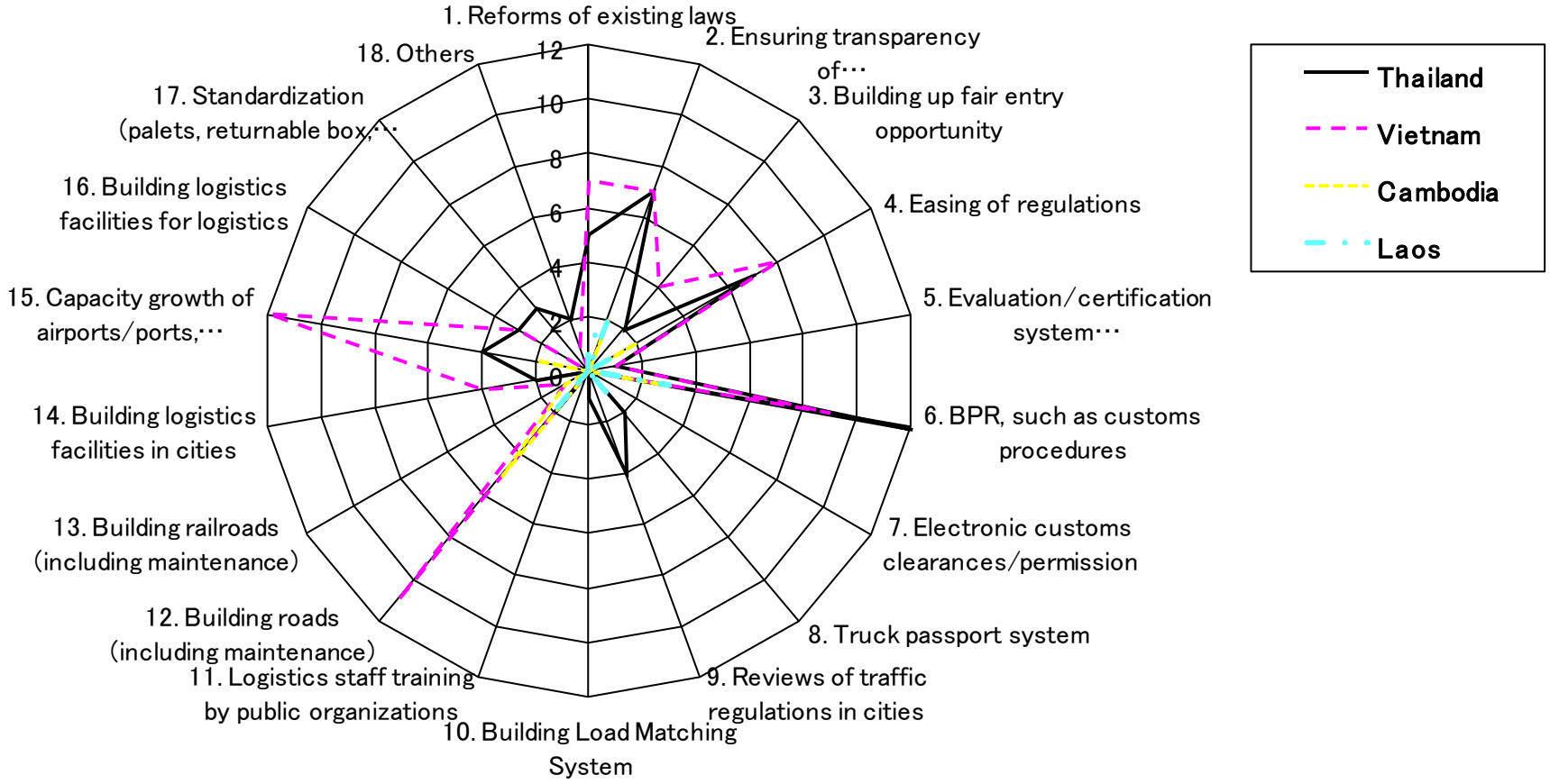
In the beginning, concerning 1), we allocate 5 points, 3 points and 1 point to the first, the second and the third county, respectively and total points calculated for each country are indicated in the Figure.



Result of Questionnaire: 2

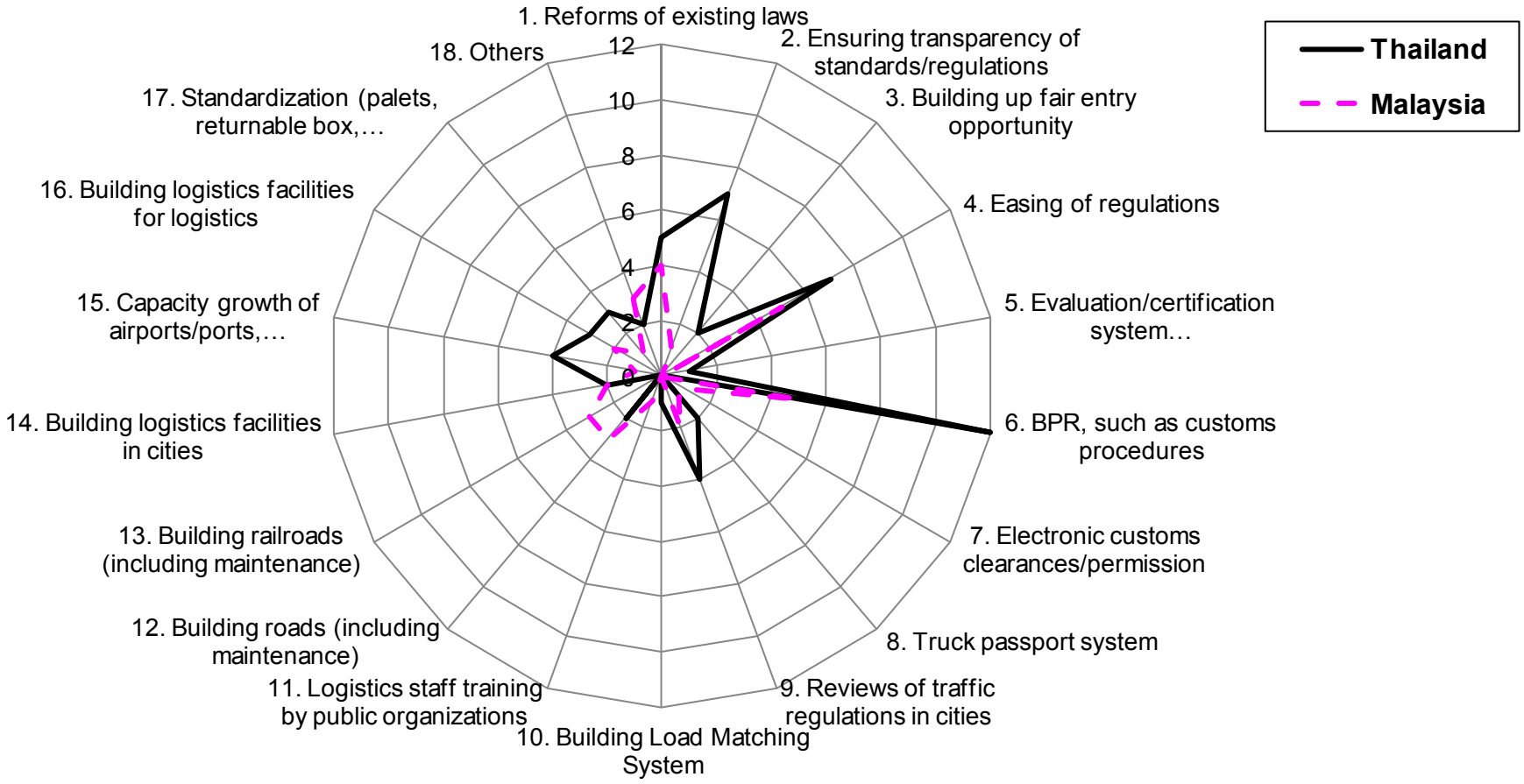
Problems in 4 countries on the East-West Corridor

☐Problems of four countries (Thailand, Vietnam, Cambodia and Laos) related to two routes (2 and 5) in the East-West Corridor, to which improvement needs for international logistics are the highest, will be shown as a radar chart.



Problems in the North-South Corridor

- Shown in a Figure below is a radar chart of problems requested for two countries (Thailand and Malaysia) related to North-South Corridor Route 1.
- As to Thailand, requests for soft infrastructure such as BPR of customs clearance, deregulation and clarification of rules and standards were evident. Though this tendency is the same for Malaysia, the absolute number is smaller than that of Thailand.



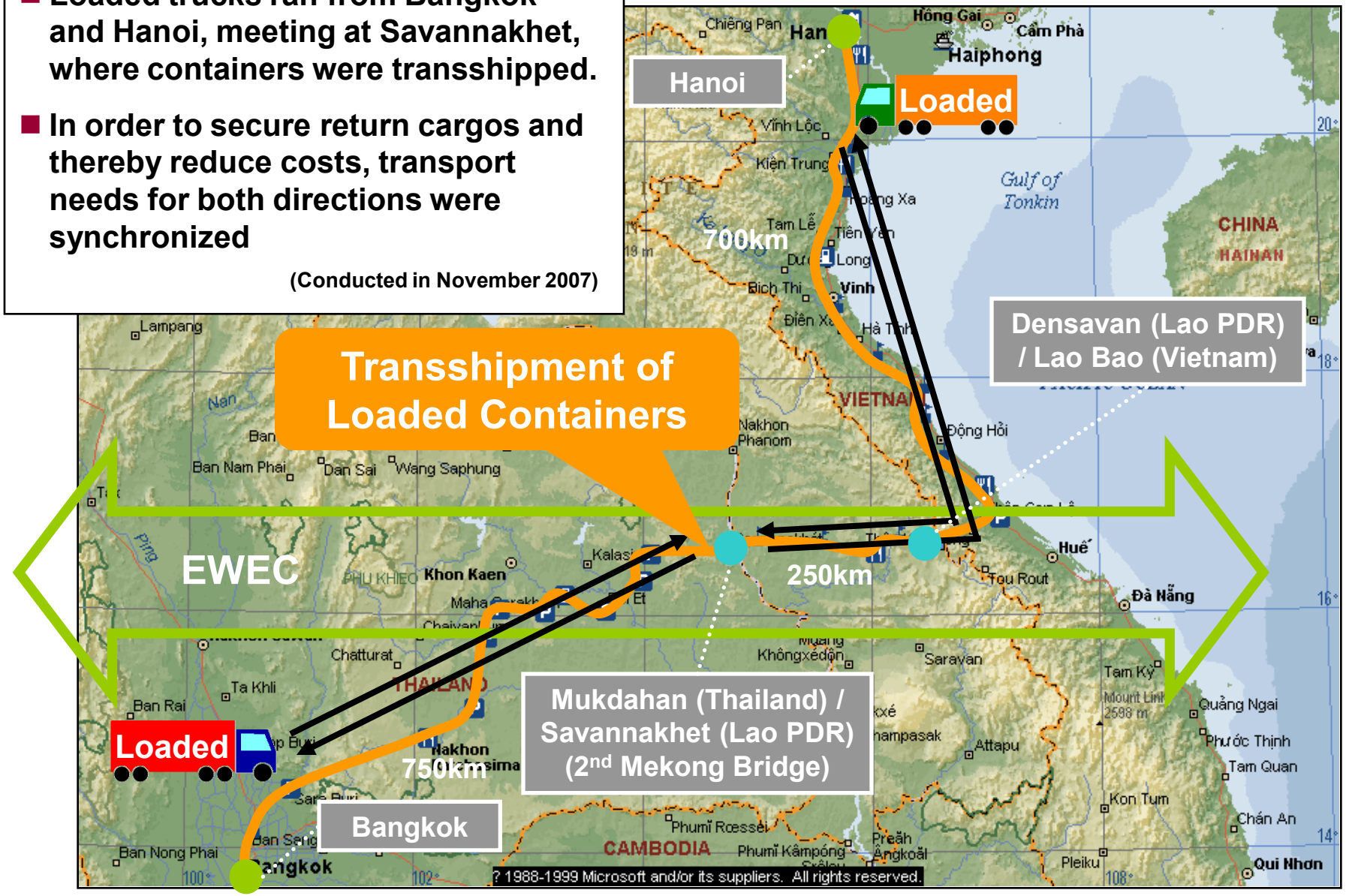
Trial Transport between Bangkok and Hanoi

Lao National Road 9 (Part of East West Economic Corridor)

JETRO's Trial Transport (Bangkok～Hanoi）

- **Loaded trucks ran from Bangkok and Hanoi, meeting at Savannakhet, where containers were transshipped.**
- **In order to secure return cargos and thereby reduce costs, transport needs for both directions were synchronized**

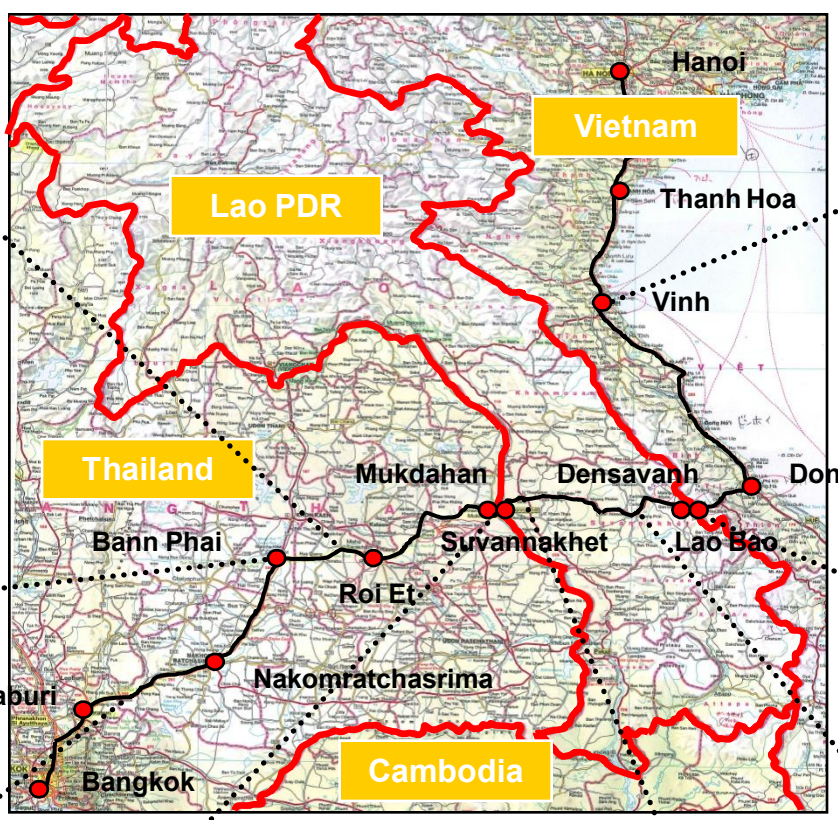
(Conducted in November 2007)

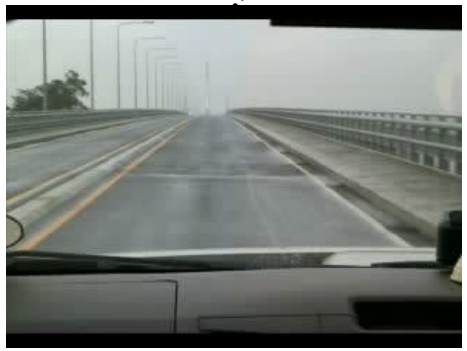


JETRO's Trial Transport (Bangkok～Hanoi）

Route 23 in Thailand

Route 2 in Thailand





2nd Mekong Bridge

Savannakhet

Route 1 in Vietnam

Border of Lao PDR and Vietnam

Route 9 in Lao PDR

Issues claimed on Land Transport (Bangkok～Hanoi)

Cost	■ Difficulties in securing Return Cargo due to imbalanced trade volume ■ Difficulties in consolidation by LCL (Less than Container Load) due to absence of Back up system in transit countries ■ Market entry restriction (Licenses, Approvals, etc) ■ Transshipment cost ■ Insurance Premium ■ Insufficient –Green Logistics" for cost reduction (Eco-Driving, Utilization of Returnable Containers, etc)
Time	■ Limited operating hour of customs ■ Insufficient implementation of SSS (Single Stop Service) and SWS (Single Window Service) on site ■ Difficulties in predicting custom clearance schedule ■ Difficulties in tracing of moving cargo (absence of sufficient system such as GPS monitoring system)
Quality	■ Damage risk in cargo handling especially in transshipment at the borders (absence of skilled worker, proper material handling equipment) ■ Surface condition of road, lack of street lights, etc

Competitiveness of Land Transport (Bangkok – Hanoi)

- Compared to sea, land transport offers considerable time savings
- Main issue is cost, due to difficulty in securing return cargo

Time

Sea (213 hrs.) > Road (74 hrs.) > Air (29 hrs.)

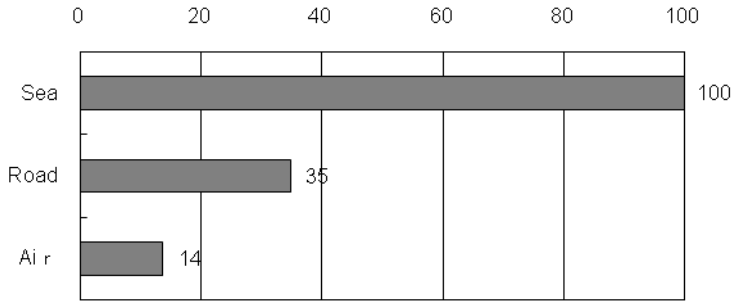
Costs*

Air (USD 69,910) > Road (USD 5,500) > Sea (USD 2,910)

(for 40-ft. container or 30 tons of cargo)

Slow

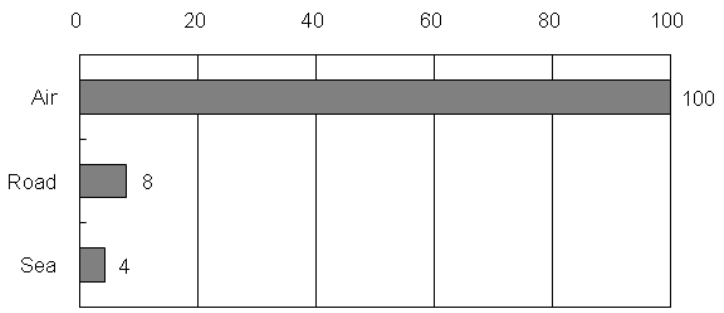
Time Comparison



Fast

High

Costs Comparison



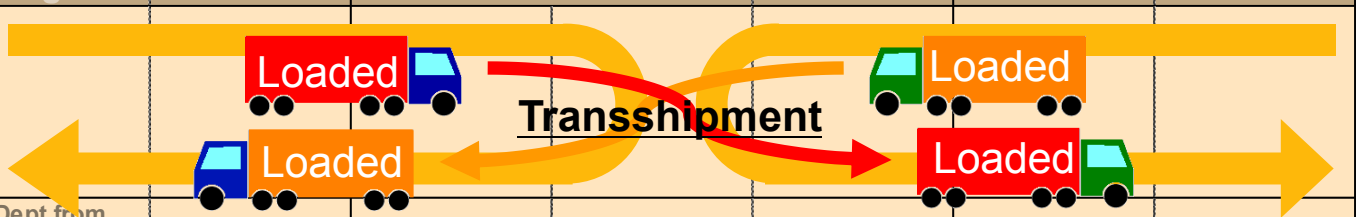
Low

In terms of time, land transport enjoys advantage over sea and is favorable in comparison with air; high cost, however, remains an issue.

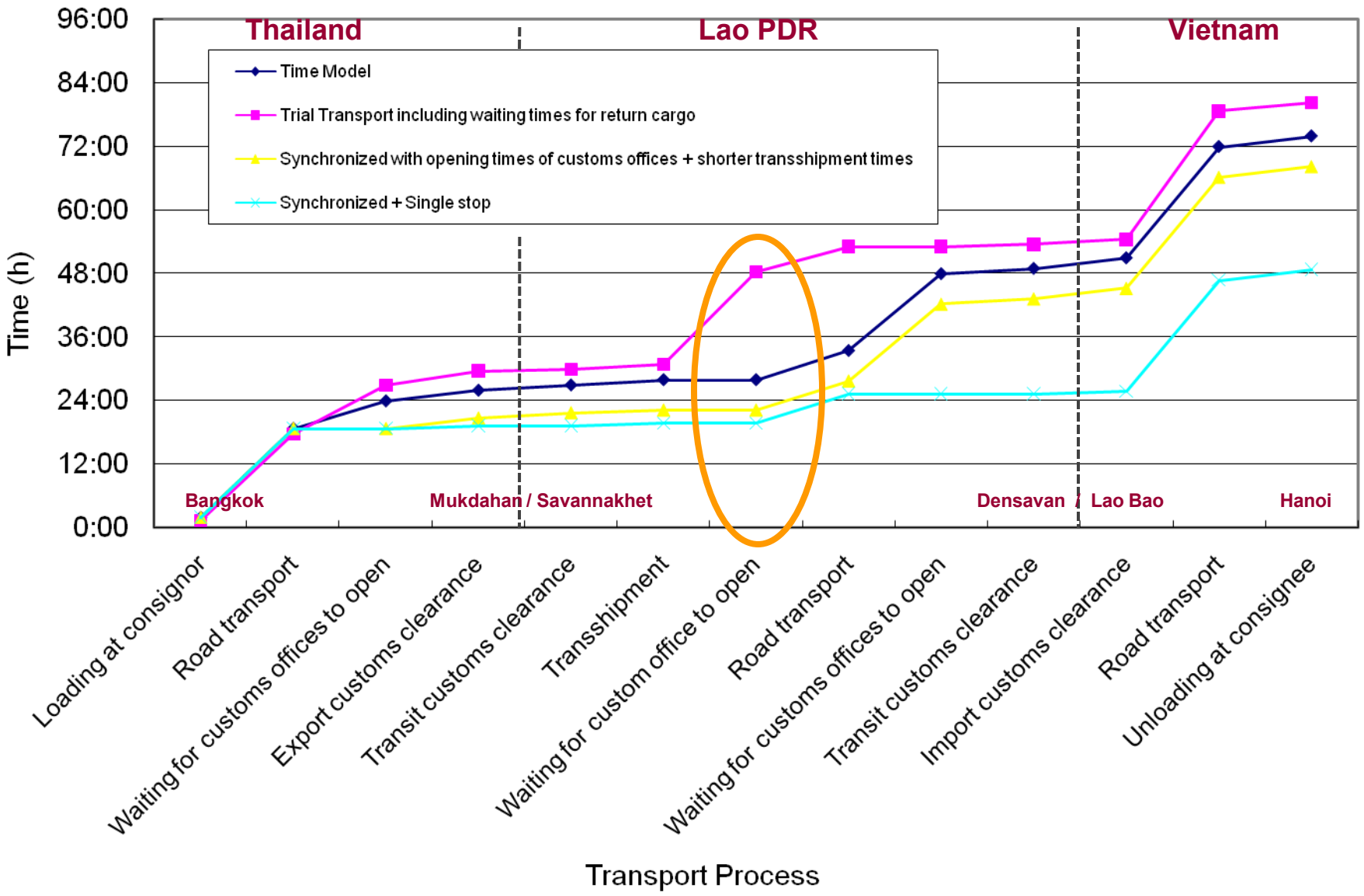
*Notes: 1) it is rare to ship 30 tons of cargo by air;
2) cost of road transport estimated on "without return cargo" basis.

Door-to-door Time estimation method

Presentation 1

Country		Thailand		Lao PDR			Vietnam	
City		Bangkok	Mukdahan	Savannakhet		Densavan	Lao Bao	Hanoi
Movement of Trucks and Containers								
		Dept from terminal (east bound) / Dept from factory (west bound)	Arrive at Customs	Arrive at Customs	Arrive at CY	Arrive at Customs	Arrive at Customs	Arr at factory (east bound) / Arr at terminal (west bound)
Bangkok to Hanoi (east bound)	Date	30-Oct-07 6:30	31-Oct-07 8:00	31-Oct-07 10:45	31-Oct-07 11:05	1-Nov-07 10:20	1-Nov-07 10:45	2-Nov-07 11:55
	Accum. Time (h)	0:00	25:30	28:15	28:35	51:50	52:15	77:25
	Accum. Distance (km)	0	744	755	760	1,004	1,005	1,719
	Remarks	Stay overnight in Mukdahan	Waiting time: 50mins (Mukdahan Customs) Customs clearance and X ray inspection: 1 hour and 15 mins (2nd Mekong Bridge)	Cutom clearance: 13mins	Stay overnight in Savannakhet	Custom clearance: 20mins	Cutom clearance: 55mins Running at night (Dong Ha to Thanh Hoa)	Arr at factory, devanning
	Date	1-Nov-07 23:00	31-Oct-07 13:30	30-Oct-07 19:00	31-Oct-07 10:00	30-Oct-07 10:15	30-Oct-07 9:30	29-Oct-07 10:40
Hanoi to Bangkok (west bound)	Accum. Time (h)	84:20	50:50	32:20	47:20	23:35	22:50	0:00
	Accum. Distance (km)	1,724	994	975	981	725	723	0
	Remarks		Custom clearance and X ray inspection: 55mins (2nd Mekong Bridge), Custom clearance: 1hour 50mins (Mukdahan) Stay overnight in Mukdahan	Stay overnight in Savannakhet	After dept from Savannakhet Customs, transshipment at CY	Custom clearance: 1hour 15mins	Cutom clearance: 45mins	

Estimation of Improvement: Time



Single Stop Service at borders is the most effective for saving time.

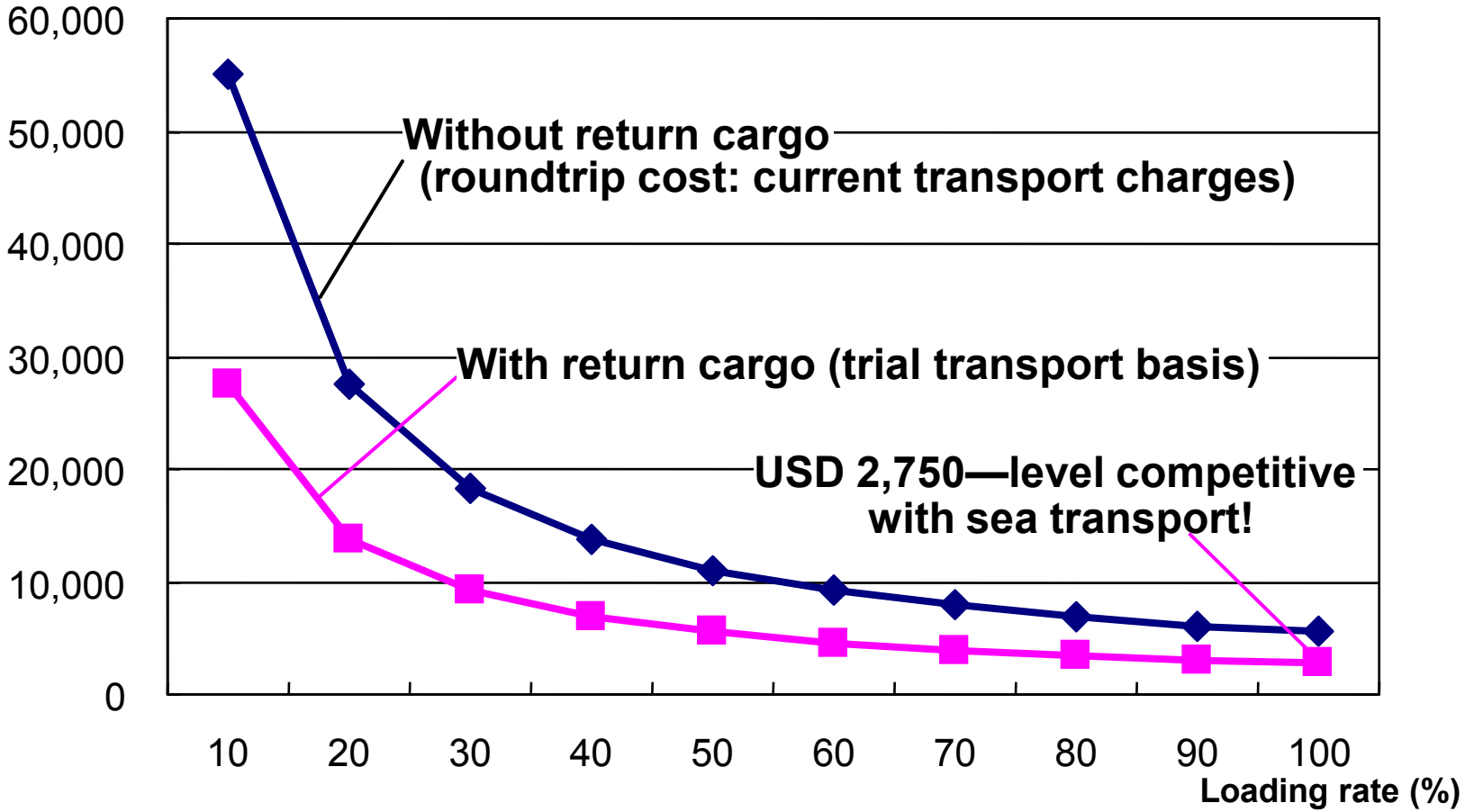
Door-to-door Cost estimation method

Country	Node/Link	Functions	Basic elements of cost	Conditions	cost(US$)
Thailand	Bangkok	Loading	(1)Road transport charge	Transport charge includes loading charge	
	Bangkok ～ Mukdahan	Road Transport		Transport charge including loading ・Distance： 700km ・Unit cost： setting 1US$/km ・Transport charge： 700US$	700
	Mukdahan	Export custom	(3)Document fee	200US$	200
Laos	Savannakhet	Transit custom	(3)Document fee	200US$	200
		Transshipment	(2)Transshipment fee	Setting 100US$（in the case using crane）	100
	Savannakhet ～ Den Savan	Road Transport	(1)Road transport charge	Transport charge including loading ・Distance： 250km ・Unit cost： setting 1US$/km ・Transport charge： 250US$	250
	Den Savan	Transit custom	(3)Document fee	200US$	200
Vietnam	Lao Bao	Import custom	(3)Document fee	200US$	200
	Lao Bao ～ Hanoi	Road Transport	(1)Road transport charge	Transport charge including loading ・Distance： 700km ・Unit cost： setting 1US$/km ・Transport charge： 700US$	700
	Hanoi	Unloading		Transport charge includes unloading charge	
Total		Document processing	(3)Document fee		200
Total			(1)Road transport		1,650
			(2)Transshipment fee		100
			(3)Document fee	Custom document processing fee	800
				Total document processing fee	200
			Total		2,750

Cost of each phase of transportation is estimated under conditions above.
Total cost will be doubled (5,500USD) if no return cargo by chartered service.

Estimation of Improvement: Cost

Cost (USD) per 30 tons by road transport

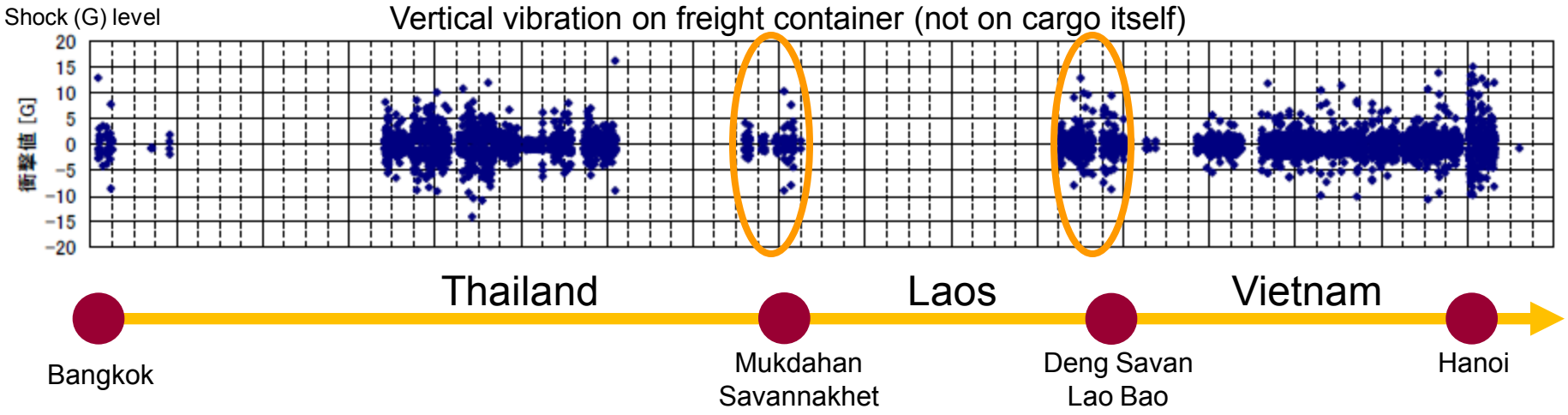


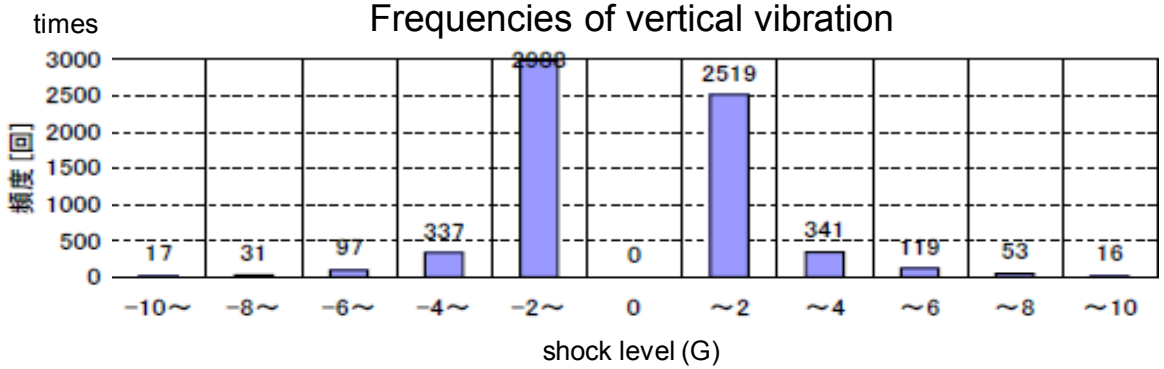
The most effective way to reduce costs is to secure return cargo; the second is to improve loading rates through LCL* (consolidation).

***LCL: Less-than-Container Load**

Example of Door-to-door Quality estimation method

In case of careful transport with container transshipment by high-level truck drivers and staffs for material handling, the shock level is the same as expressways in Japan.

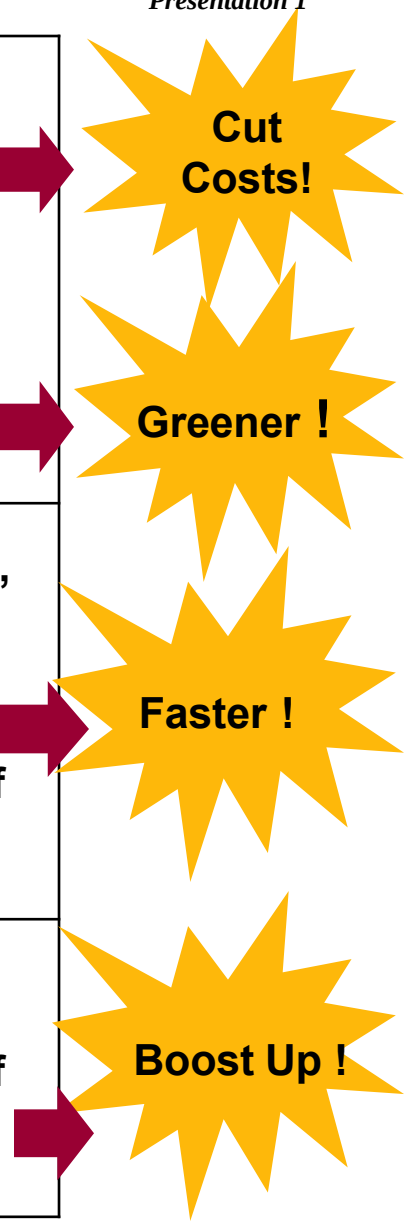




Source: JETRO's trial transport on EWEC

Keys for Success for Land Transport (Bangkok – Hanoi)

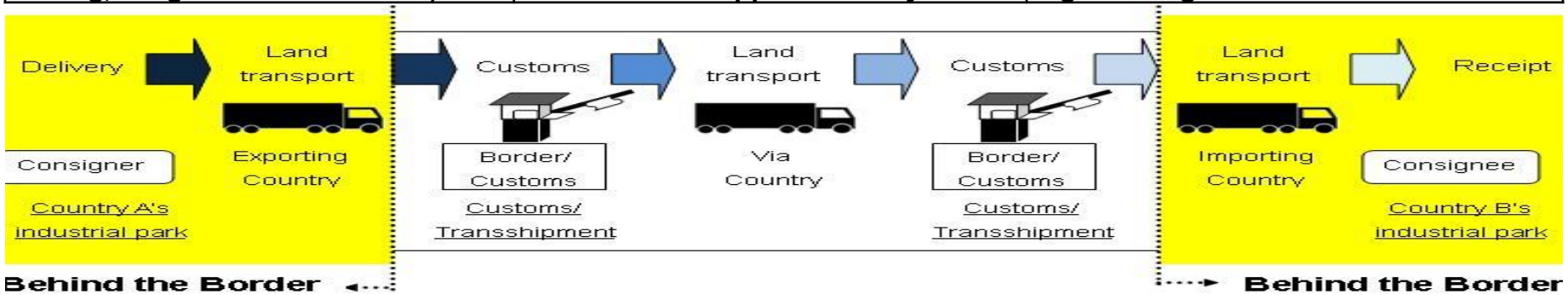
Costs	■ Boost cooperation among carriers and information sharing among shippers to promote –collaborative transport" ■ Improve institutional frameworks for LCL, support backup service operators at borders ■ Build freight distribution centers near borders to adjust cargo volumes ■ Deregulate corporate market entry restrictions ■ Promote –Green Logistics" skills
Time	■ Expedite customs clearance • Fully implement –Single Window & Single Stop Service" • Extend service hours of customs • Adoption of Authorized Economic Operator Systems ■ Mutual entry of trailer, in order to eliminate the usage of cranes for transshipment of containers ■ Introduce GPS cargo monitoring system
Quality	■ Develop human resources in logistics ■ Introduce equipment for proper handling of materials ■ Mutual entry of trailer, in order to eliminate the usage of cranes for transshipment of containers ■ Add warehouses, better roads, street lights, etc.



General Issues on Land Transport (Behind the Border)

Major issues (Above: issues of routes under developing, Below: situation of developed routes such as BGK- KL-SPR)

Cost	Time	Quality
C-1:High (sometimes double cost) due to imbalanced trade volume C-2:Packing cost & insurance premium due to risk of cargo damage C-3:High cost due to low loading rate, lack of LCL system and its back-up	T-1:Risk of Delay due to traffic condition, lack of monitoring system of cargo	Q-1:Risk of cargo damage due to manual handling by unskilled worker s without proper material handling equipment Q-2:Risk of cargo damage due to road and traffic condition
Issues above have been tackled in developed routes. —Green logistics" is new issue. (energy saving by eco-driving, usage of returnable unit)	Issue above has been tackled in developed routes. Issuing C/O is still not quick enough. There is issue on custom broker appointment system.	Issues above has been tackled in developed routes. Truck theft sometimes occur when truck is loading high-value goods.



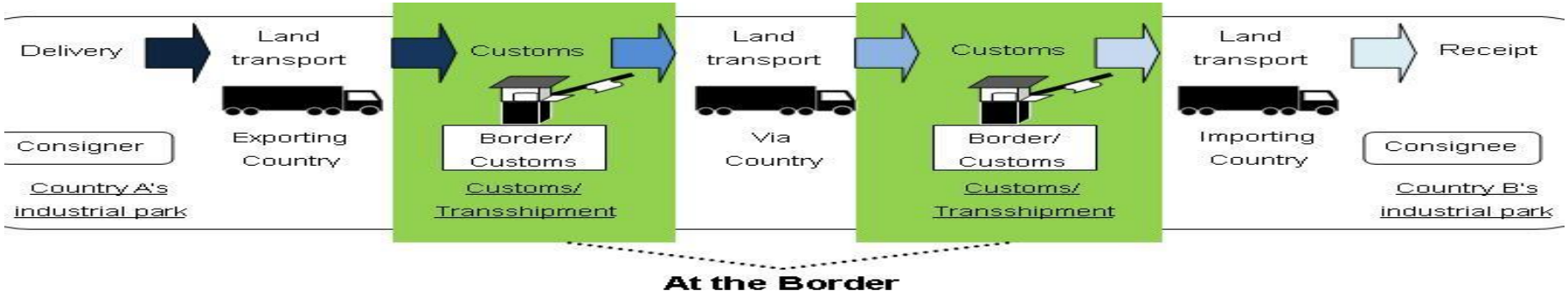
Possible measures (Above: measures can be tackled with short term, Below: measures can be tackled with long term)

	Cost	Time	Quality
Short term	C-1,C-3:Promoting —Collaborative transport" C-3:Building up Institutional framework for LCL C-3:Deregulation of market entry restriction for forwarder C-3:Promoting Green logistics	T-1:Improvement of traffic control T-1:Introduction of Monitoring system of cargo/vehicle	Q-1,Q-2:Human training on logistics professionals Q-1:Introduction of proper material handling equipment Q-2:Improvement of traffic control
Long term	C-1:Balancing trade by development of production network C-2:Road development	T-1:Road development	Q-1:Warehouse development Q-2:Traffic safety facility development (signals, guardrails…) Q-2:Road development

General Issues on Land Transport (At the Border)

Major issues (Above: issues of routes under developing, Below: situation of developed routes such as BGK- KL-SPR)

Cost	Time	Quality
C-4:Transshipment cost of cargo and vehicle	T-2:Transshipment time of cargo and vehicle T-3:Waiting time for custom opening T-4:Long custom processing time T-5:Long physical inspection time	Q-3:Risk of cargo damage due to transshipment Q-4:Risk of wet and dirt of cargo in outdoor
Transshipment is still issue even in some developed routes. There are double license plate systems.	Transshipment is still issue even in some developed routes. EDI systems have been introduced.	Risk of cargo damage in transshipment is still issue even in some developed routes.



Possible measures (Above: measures can be tackled with short term, Below: measures can be tackled with long term)

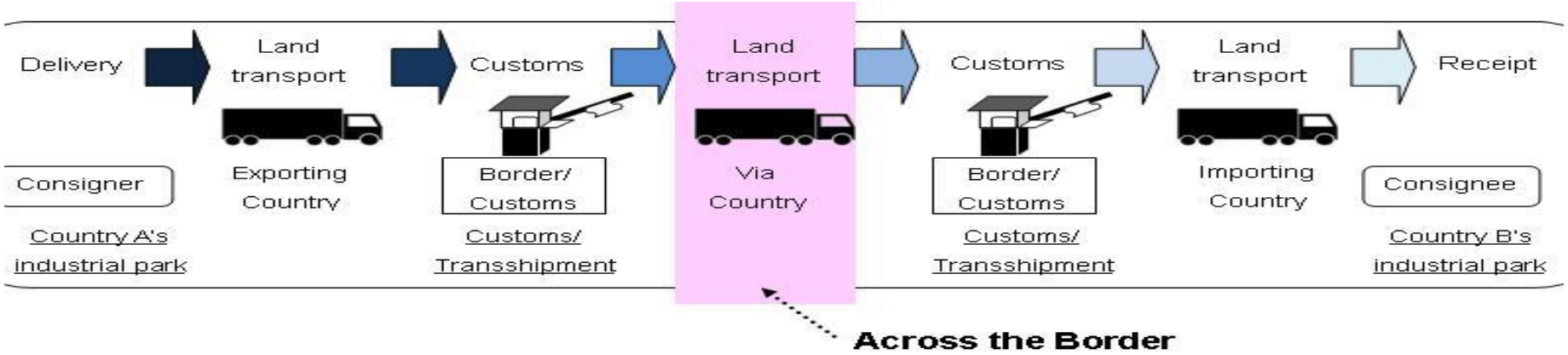
	Cost	Time	Quality
Short term	C-4:Mutual entry of trailer without crane handling or manual handling	T-2:Mutual entry of trailer without crane handling or manual handling T-3:Flexible business hour of custom T-4,T-5:usage of "advanced notice custom system" T-4,T-5:Improvement of operation of HS code	Q-3:Human training on logistics professionals Q-3:Mutual entry of trailer without crane handling or manual handling
Long term	C-4:Development of distribution center C-4:Implementation of GMS/CBTA such as exchange of traffic right	T-2,T-3,T-4,T-5:Implementation of GMS/CBTA such as single stop inspection and single window	Q-4:Development of transshipment facilities Q-3:Implementation of GMS/CBTA such as exchange of traffic right

General Issues on Land Transport (Across the Border)

Presentation 1

Major issues (Above: issues of routes under developing, Below: situation of developed routes such as BGK- KL-SPR)

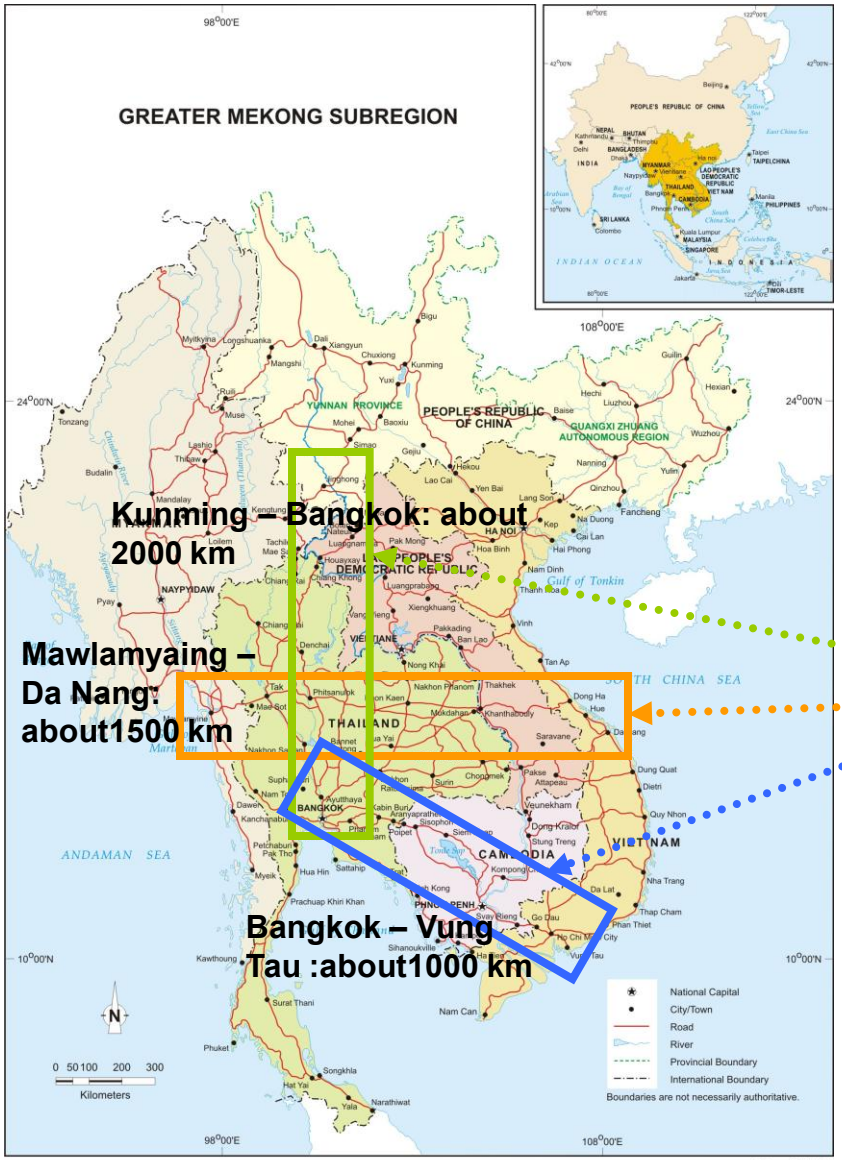
Cost	Time	Quality
	T-6:Waiting time for custom office opening T-7:Mutual entry of vehicle T-8:Using cross-river by ship, waiting time for ship schedule	Q-5:Using cross-river by ship, risk of cargo damage
	T-6,T-7 is still issue in some developed routes.	



Possible measures (Above: measures can be tackled with short term, Below: measures can be tackled with long term)

	Cost	Time	Quality
Short term		T-6:Harmonization of business hour of custom office T-8:Coordination of ship schedule	
Long term		T-7:Implementation of GMS/CBTA on exchange of traffic right, mutual recognition of transport operator, vehicle specification, road and traffic condition etc. T-8:Development of bridge	Q-5:Development of bridge

Example of Hard Infrastructure Development in GMS



Source: ADB, *GMS TRANSPORT STRATEGY 2006-2015*, 2007.

Greater Mekong Sub region Program by Asian Development Bank(ADB)

- It is a regional development supporting project which started in 1992 by ADB.
- Supporting for Thailand, Cambodia, Lao PDR, Myanmar, Vietnam, South of China.
- The role of ADB: 1Finacial aid, 2Secretariat's function, 3 Advisory function by experts
- Focus on Transportation Infrastructure
  - Economic Corridor
  - Cross Boarder Transport Agreement
- 11 Flagship Project

i.	North-South Economic Corridor	Main Issues
ii.	East-West Economic Corridor	
iii.	Southern Economic Corridor	
iv.	Telecommunications Backbone and Information and Communications Technology	
v.	Regional Power Interconnection and Trading Arrangements	
vi.	Facilitating Cross-Border Trade and Investment	
vii.	Enhancing Private Sector Participation and Competitiveness	
viii.	Developing Human Resources and Skills Competencies	
ix.	Strategic Environmental Framework	
x.	Flood Control and Water Resource Management	
xi.	GMS Tourism Development	

Example of Soft Infrastructure Development in GMS

Map 4

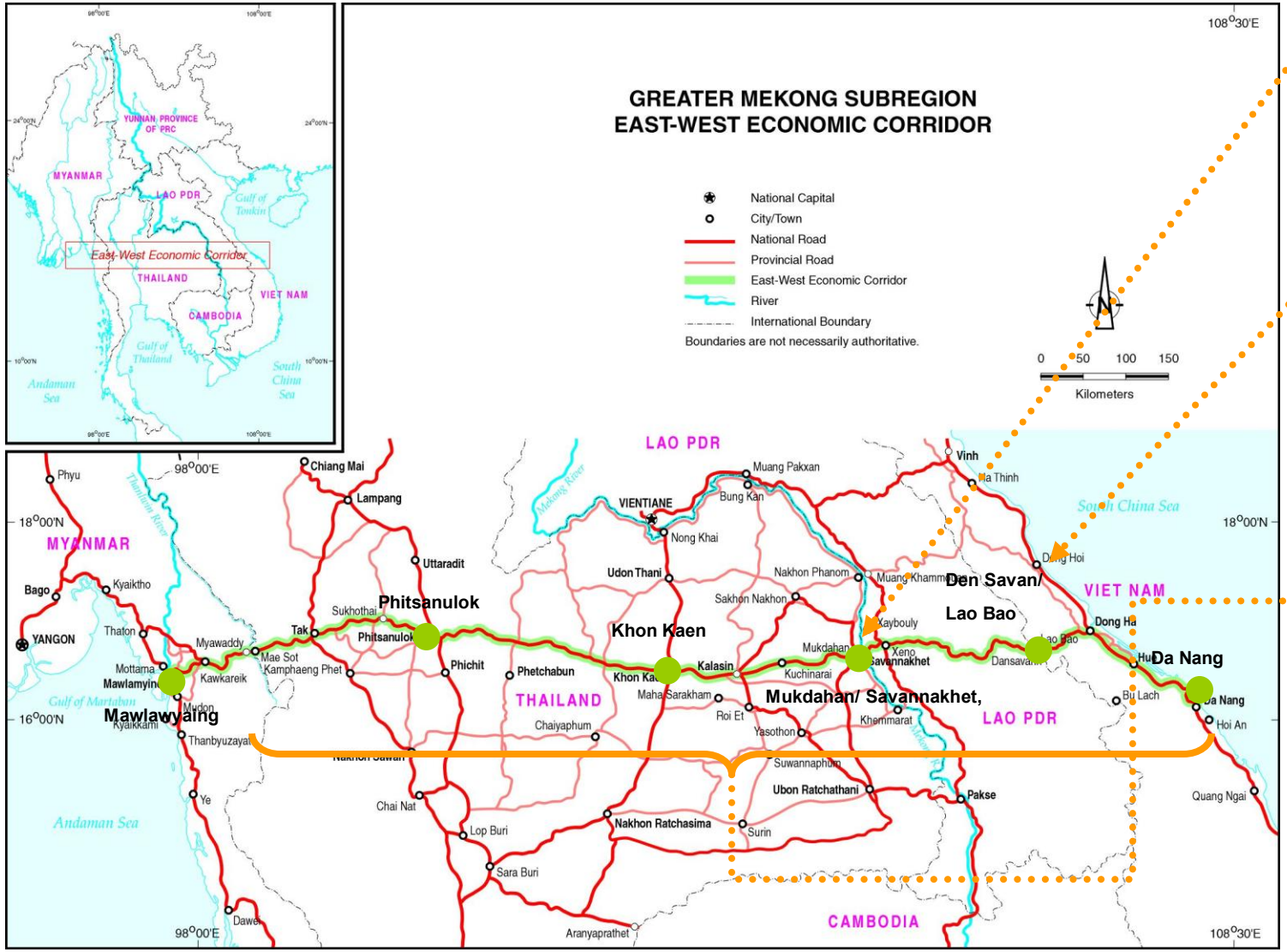
Source: ADB

- This transport agreement is prepared by ADB based on present related international institution from 1996. And ADB was negotiating with related countries. As the results, an original agreement for crossing the frontier between Laos, Thailand and Vietnam to facilitate cross border trade in goods and services was ratified at November of 1999.After that, Cambodia and Myanmar and China entered the member of this agreement and agreed and ratified until 2003.
- There are agreements between two or three countries apart from CBTA.
- CBTA includes 44 act and 20 Annex and Protocol. After 2004, the agreement of 20 Annex and Protocol was held and now is under process for ratification.
- After 2006, in order to apply the possible program in possible place, the setting of high priority 2 points (Mukdahan/Savannakhet, Den Savan/Lao Bao) including 2nd friendship bridge and 7 cross border points (both side means 14 points) was held and recently the speed up of related development is seen.
- After the ratification, each country needs to harmonize its system to domestic system.
- It relates many aspects of cross-border transport.

  - The promotion cross-boarder movement of goods
  - Single Stop, Single Window Inspection
  - Harmonization and integration of system
  - Mutual entry
  - Junction transportation
  - Cross-border movement of people

Initial Implementation of CBTA at EWEC

The MOU signed by Thai, Lao, Vietnamese Ministries of Traffic in August 23rd 2007



Single Window Inspection

Custom, Quarantine, and Immigration shall be carried out jointly and simultaneously .

Single Stop Inspection

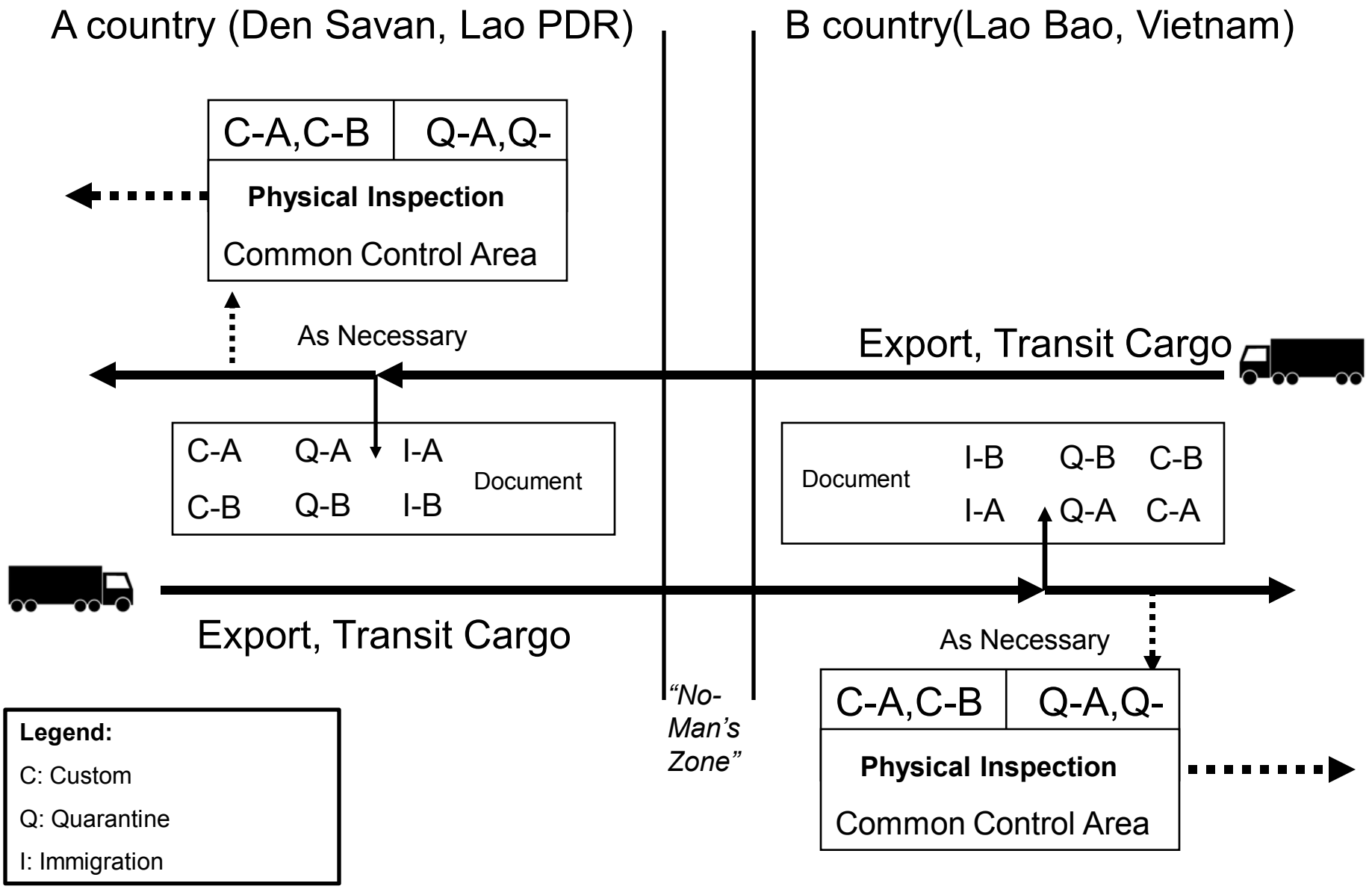
At the border facilities in Common Control Area, officials of the two countries carry out inspections jointly.

Exchange of traffic rights

Transport operators operate each other (The mutual entry of the vehicle and the mutual recognition of the driving license are provided apart from it).

Source: ADB

Single Stop, Single Window Inspection



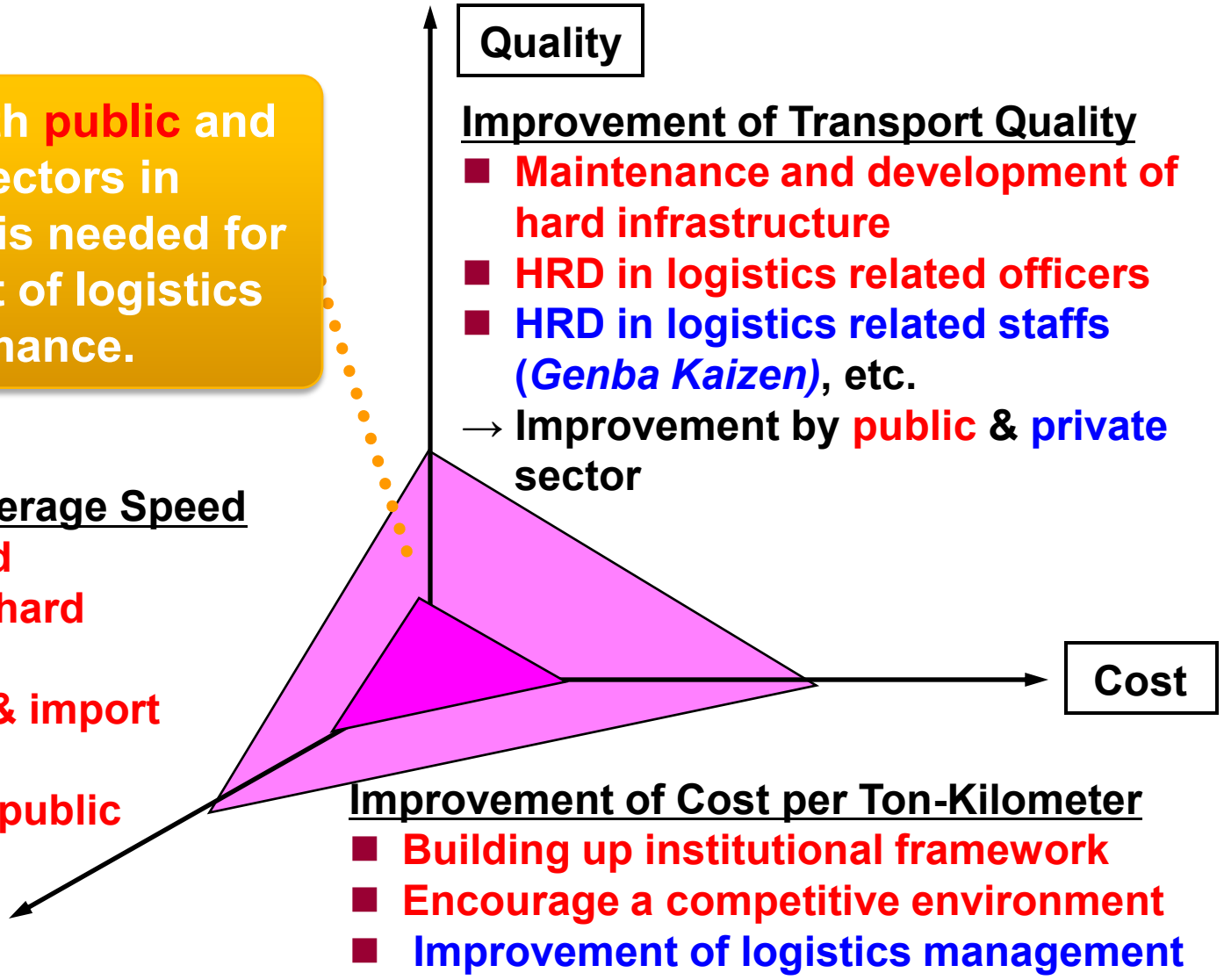
Source: ADB

Introduction of JETRO's Projects Now

Den Savan/ Lao Bao

Toward Improvement of Logistics Performance

Efforts by both public and private sectors in collaboration is needed for improvement of logistics performance.



Improvement of Transport Quality

- Maintenance and development of hard infrastructure
- HRD in logistics related officers
- HRD in logistics related staffs (*Genba Kaizen*), etc.

→ Improvement by public & private sector

Improvement of Average Speed

- Maintenance and development of hard infrastructure
- Simplify export & import procedures, etc.

→Improvement by public sector

Improvement of Cost per Ton-Kilometer

- Building up institutional framework
- Encourage a competitive environment
- Improvement of logistics management skills, etc

→ Improvement by both public & private sector

Introduction of JETRO's Current Projects

Shift from —Study Phase" to —Action Phase"

Policy Recommendations

Logistics Facilitation

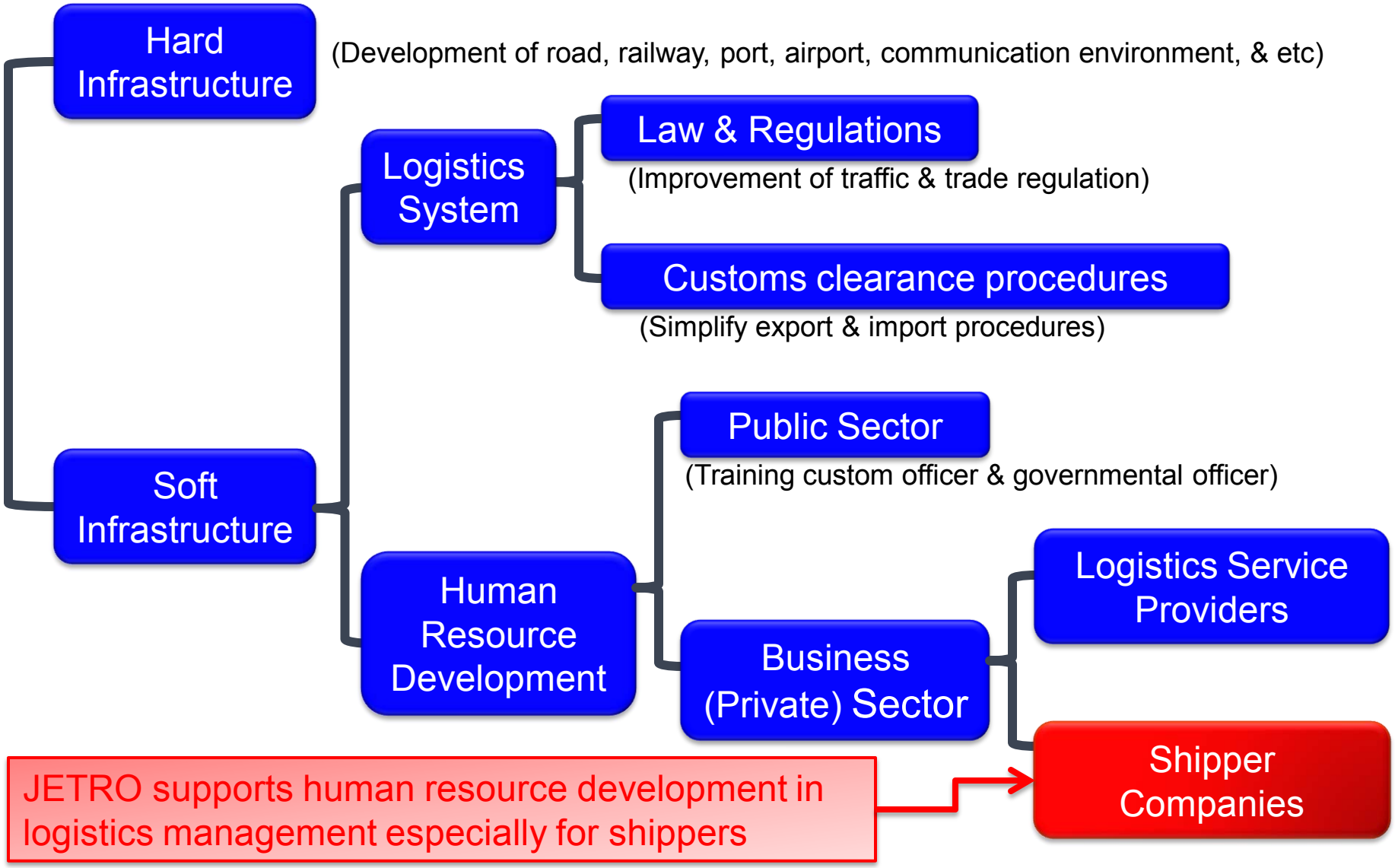
Studies are not enough to achieve goal.

Action !

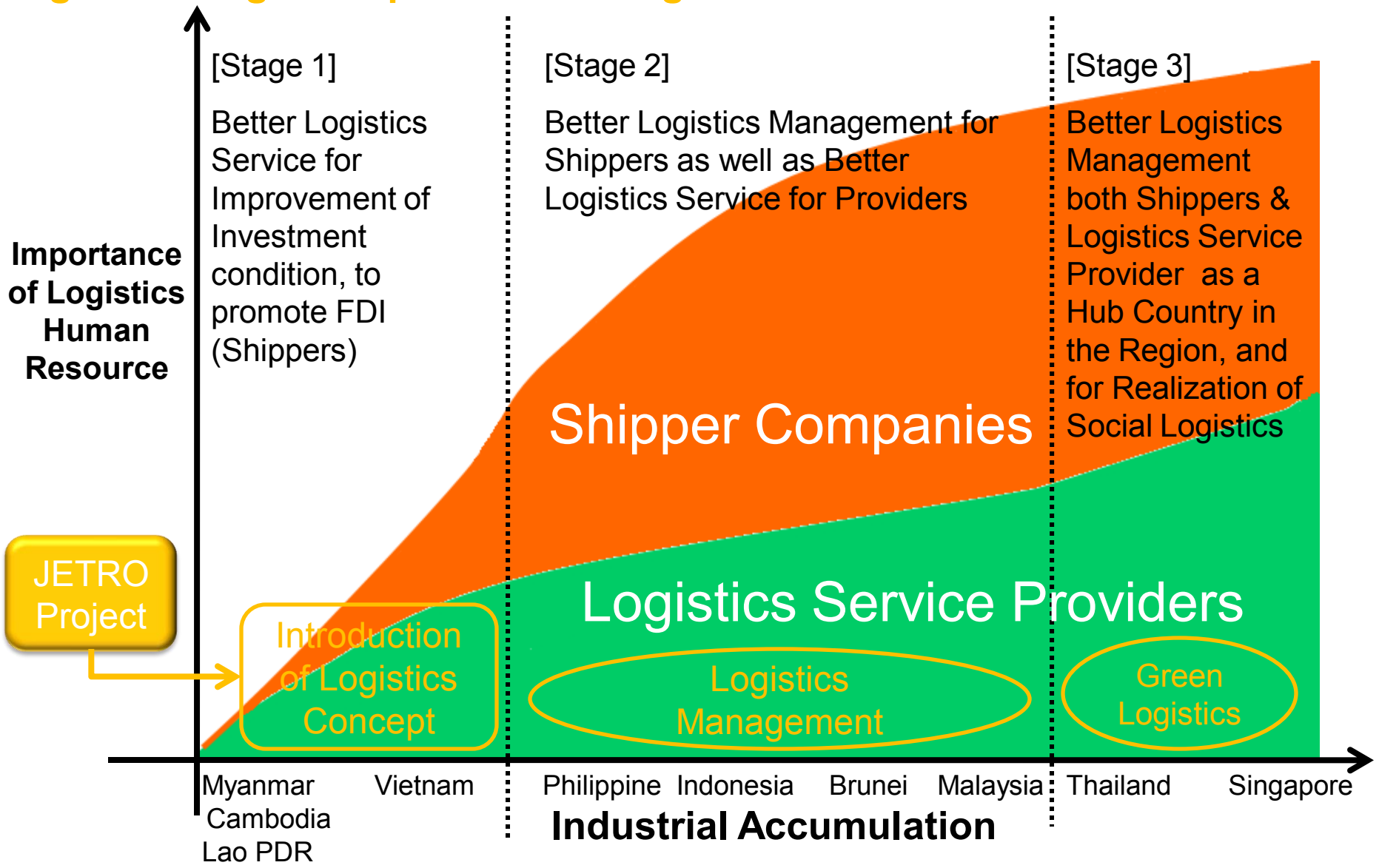
JETRO is also conducting supporting projects to make concrete improvements focusing on HRD.

- **HRD in logistics management especially for shippers**
- **—Green Logistics" to reduce energy consumption and CO2 emission**
- **Capacity building in logistics management for related agencies in CLMV to narrow gaps through enhanced industrial accumulation**

The factors for realization of seamless logistics network



Logistics Stage & Importance of Logistics Human Resource



Our Network which we're proud of

Network: –ASEAN – wide Logistics Forum" (Network by business and academic sectors between ASEAN and Japan)

Japan: Japan External Trade Organization(JETRO), Japan Institute of Logistics Systems(JILS)
Brunei: The Brunei Economic Development Board(BEDB)
Cambodia: Cambodia Freight Forwarder Association(CAMFFA)
Indonesia: Indonesia Chamber of Commerce and Industry(KADIN), Indonesia Logistics Association(ALI), Indonesia National Shippers' Council(INSC)
Lao PDR: Lao National Chamber of Commerce and Industry(LNCCI), Lao International Freight Forwarders Association(LIFFA)
Malaysia: Federation of Malaysian Manufactures, Federation of Malaysian Freight Forwarders
Myanmar: Myanmar International Freight Forwarders' Association(MIFFA), Union of Myanmar Federation of Chambers of Commerce & Industry(UMFCCI), Myanmar Custom Brokers Association (MCBA)
Philippines: Philippines Chamber of Commerce and Industry(PCCI), Supply Chain Management Association of the Philippines(SCMAP), Centre for Research and Communication(CRC), University of the Philippines School of Urban and Regional Planning(UP-SURP)
Singapore: National University of Singapore(NUS) Centre for Maritime Studies(CMS)
Thailand: Thai National Shippers' Council(TNSC), Thai Federation on Logistics(TFL)
Vietnam: Vietnam Chambers of Commerce and Industry(VCCI)

Advisors

Dr. Hirohito Kuse(Tokyo University of Marine Science & Technology)
Dr. Takao Enkawa(Tokyo Institute of Technology)
Dr. Toshinori Nemoto(Graduate School of Commerce and Management, Hitotsubashi Univ)
Dr. K. Raguraman(Centre for Maritime Studies, National University of Singapore)
Dr. Ruth Banomyong(Thammasat Business School, Thammasat University)

Supporters (data resources, data sharing …)

Government of Japan(METI,MLIT,MOF,MOFA), JICA, JBIC, Economic Research Institute for ASEAN and East Asia(ERIA),ASEAN Secretariat, Asian Development Bank(ADB),United Nations Economic and Social Commission for Asia and the Pacific(UNESCAP)

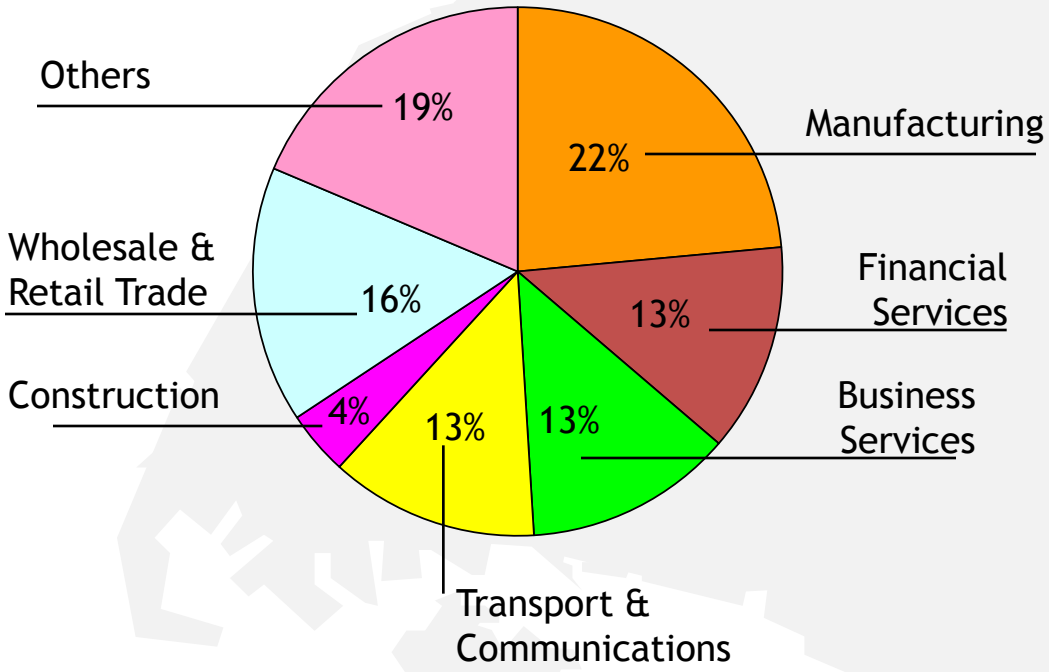
sedb.com

SINGAPORE: Gearing up for the Future

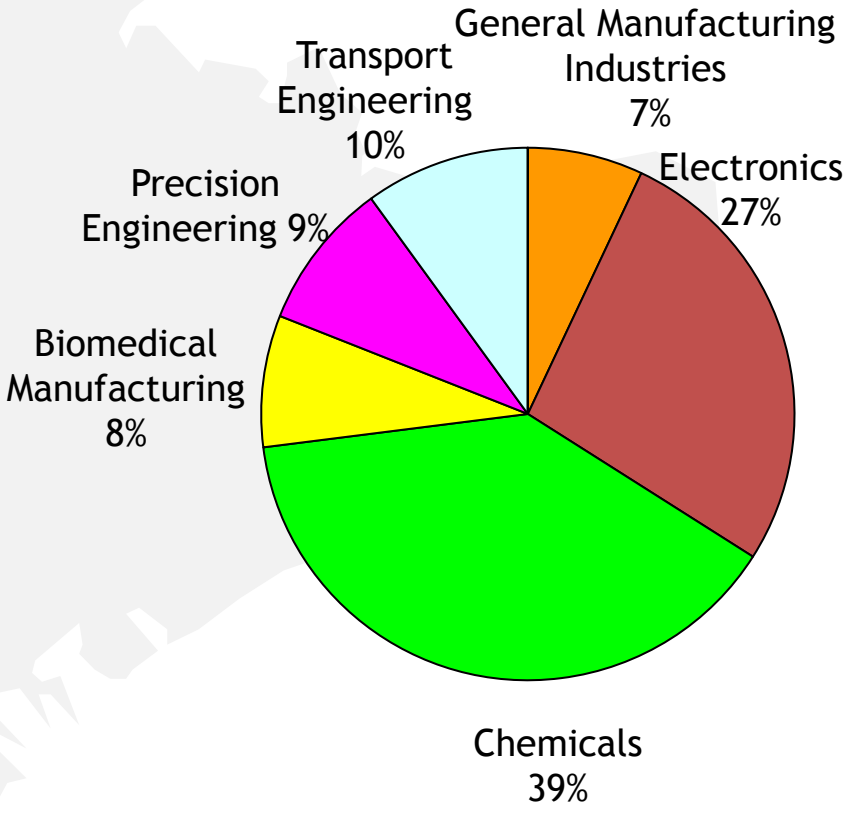
Mr. Albert Lim (Head, Logistics Cluster)
Singapore Economic Development Board

Snapshot of Singapore Economy

2008 GDP: S$257 billion (€126 billion)



2008 Manufacturing Output: S$250 billion (€122 billion)



2008 GDP growth: 1.1%
2009 GDP growth forecast: -4% to -6%

Source: Singapore Dept of Statistics 2009

US$1.00 = S$1.438

World's Best Logistics Hub by World Bank

The Straits Times, Wednesday, 7 November 2007

Singapore ranked No. 1 logistics hub by World Bank

Its edge lies in a highly efficient and reliable supply chain combined with competitive costs

The survey polled 800 operators in the international freight sector and compiled the Logistics Performance Index (LPI) to gauge each country's effectiveness.

The LPI ranked performance in seven areas, including traditional benchtion and competence of the domestic logistics industry.

Expertise in logistics, as the survey noted, indicates that a country is also likely to do well in areas such as growth and competitiveness, export diversification and trade expansion.

markets is fast becoming a key aspect of a country's capacity to compete, grow, attract investment, create jobs and reduce poverty," said World Bank's vice-president for poverty reduction and economic management, Mr Danny Leipziger.

» TOP 10

World Bank shipping survey

Rank	Economy	Score*
1	Singapore	4.19
2	The Netherlands	4.18
3	Germany	4.10
4	Sweden	4.08
5	Austria	4.06
6	Japan	4.02
7	Switzerland	4.02
8	Hong Kong, China	4.00
9	United Kingdom	3.99
10	Canada	3.92

Top 12 airports in terms of total cargo handled *(source: Airports Council Int'l)*

2007 Airport Ranking	City (Airport)	Cargo Volume (million tons)
1	Memphis, TN (MEM)	3,840,491
2	**Hong Kong, China (HKC)**	3,773,964
3	Anchorage, AK (ANC)*	2,825,511
4	**Shanghai, CN (PVG)**	2,559,310
5	**Seoul, KR (ICN) / Incheon (ICN)**	2,555,580
6	Paris, FR (CDG)	2,297,896
7	**Tokyo, JP (NRT)**	2,254,421
8	Frankfurt, DE (FRA)	2,127,646
9	Louisville, KY (SDF)	2,078,947
10	Miami, FL (MIA)	1,922,985
11	**Singapore, SG (SIN)**	1,918,159
12		1,884,317

#1 Seaport in terms of container port traffic

2008 Ports Ranking	City (Seaport)	Throughput (million TEUs)
1	**Singapore (SIN)**	29.9
2	**Shanghai (PRC)**	28.0
3	**Hong Kong (HKC)**	24.3
4	**Shenzhen (PRC)**	21.4
5	**Busan (Republic of Korea)**	13.4
6	Dubai (UAE)	12.0
7	**Ningbo (PRC)**	11.2
8	**Guangzhou (PRC)**	11.0
9	Rotterdam (NL)	10.8
10	**Qingdao (PRC)**	10.3

EDB SINGAPORE

Efficient Customs

Electronic Permit Applications

- 90% **processed within** 10 minutes

Physical Cargo Clearance

- 90% **cleared within** 8 minutes
- 100% **cleared within** 13 minutes

Special Schemes

- Zero GST Scheme
- Container Freight Warehouse Scheme
- Major Exporter Scheme
- Approved 3PL Scheme

Business Times, 18 Jan 2006

Customs streamlines trading process

It announces 2 schemes to enhance S'pore as trade hub

By MATTHEW PHAN

SINGAPORE Custom
terday announced tw
schemes to strength
country's effort to be
trading and logistics

The first is
Xchange — an online
face that simplifies t
ulatory processes of
and export, among
things, and is expec
save traders $75
over 10 years. The
improves the Zer
Warehouse Scheme
which is an expans
the Bonded Ware
Scheme that suspen
goods and service
(GST) for unsold gooc
in warehouses.

A typical trade in
"multiple parties l
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systems to exchange
mation and docum

THE STRAITS TIMES MONDAY AUGUST 1, 2005

No upfront GST payment for importers soon

BY NARENDRA AGGARWAL

IN A big boost for the logistics sector, importers will not have to pay the goods and services tax (GST) upfront on goods they bring into the country.

Under the Zero GST Warehouse Scheme, they need cough up only when the goods are released into the local market. Even goods sitting in the warehouse will not incur GST, as they do now.

The scheme, which kicks off in January next year, aims to help firms improve cash flow, cut warehouse compliance costs, reduce GST-related paperwork, and increase business opportunities through an expanded client base.

New international players may be encouraged to set up shop in Singapore as a result.

Both local and international players, including small and medium-sized enterprises (SMEs), stand to reap cost savings, said Mrs Lim Hwee Hua, Minister of State for Finance and Transport.

She announced the scheme during an industry familiarisation visit last Friday to United Parcel Service Singapore.

Speaking to the media, she said reducing business costs would further enhance Singapore's position as a global trading hub.

There would be no GST revenue loss for the Government, she added. Just like banks when they assess credit risk, the Government had taken the pro-business step to help firms cut costs and develop their businesses further by exploring new opportunities.

At a briefing, Singapore Customs said all importers with sound inventory control systems stand to benefit.

Now, only imports where at least 80 per cent are for re-export can be brought into the bonded warehouses and have GST suspended. The new scheme lifts this requirement, so all goods will be included, even those that may later go into the local market.

However, only qualifying operators, which means pre-approved companies, will enjoy the facility.

One major benefit for qualifying operators with multiple warehouses is that they will be able to store and move their goods between pre-approved warehouses without incurring tax.

The number of bonded warehouses here, currently 73, could easily double once the scheme goes into operation next year.

Finalised details will be announced on Oct 1, when firms will be invited to apply to participate.

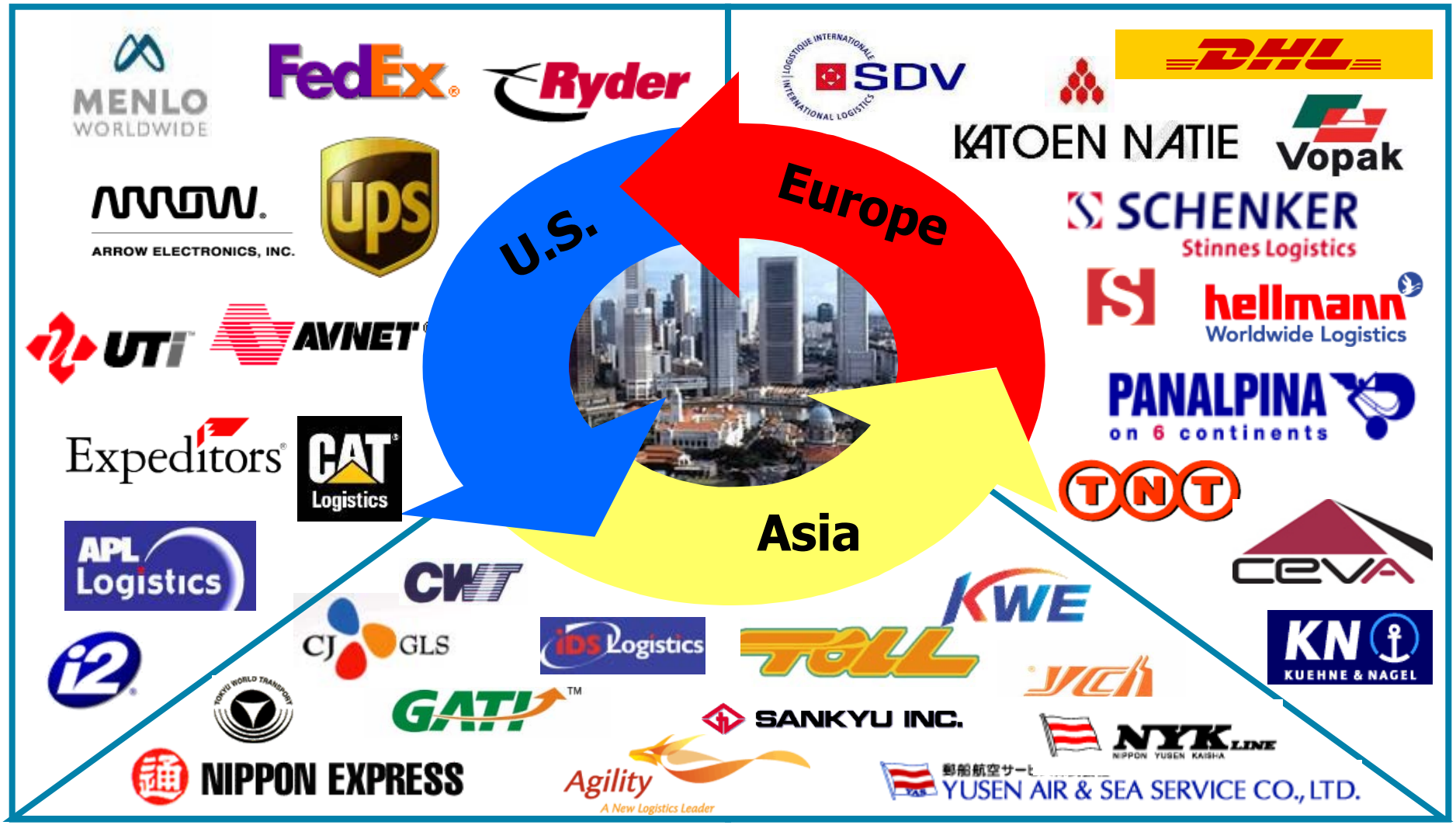
The scheme was first mooted by Prime Minister and Finance Minister Lee Hsien Loong in his Budget 2005 statement as an expansion of the existing Bonded Warehouse Scheme.

Pro-business

THE new scheme aims to:
- Improve firms' cash flow;
- Lower warehouse compliance costs;
- Cut GST-linked paperwork; and
- Enhance business opportunities with an expanded customer base.

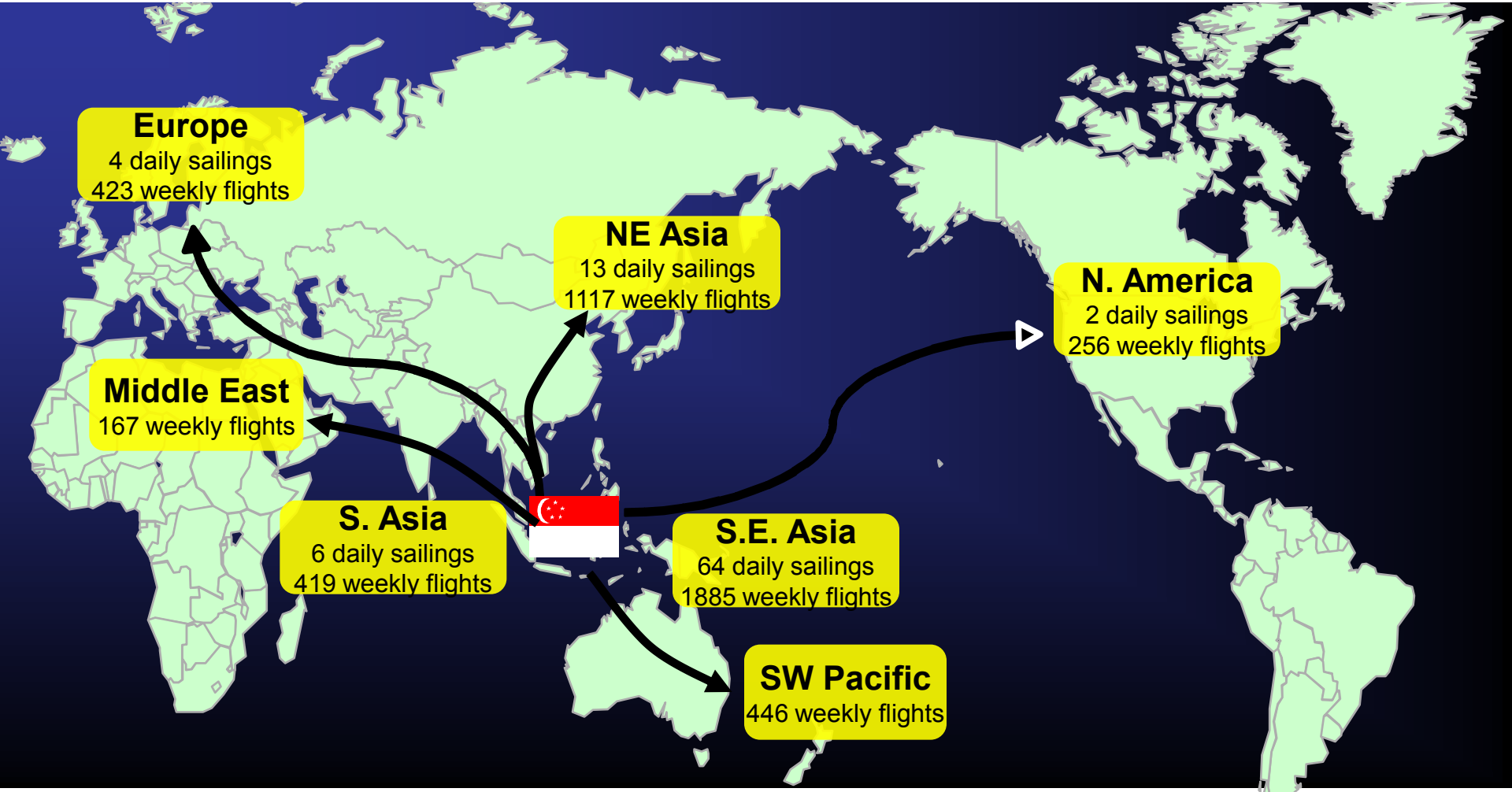
EDB SINGAPORE

World Class Logistics Players



Excellent Air and Sea Connectivity

AIR: 1.86 mil tons handled in 2008 • 83 Airlines • 190 cities



SEA: 29 mil TEUs handled in 2008 • 200 Shipping lines • 600 ports

Regional Distribution Centres

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Infocomms & Media

HP IBM Adaptec
Avocent Verifone
Kenwood Alcatel Avaya
Stratus John Wiley
Taylor & Francis

FMCG/ Consumer

Starbucks Estee Lauder
LVMH Moet Hennesy Gillette
Remy Cointreau Loreal
Coles Myers Unilever DFS

Electronics & Precision Engrg

Nat'l Semiconductors
3 Com On Semicon
Qualcomm Xilinx
Texas Instruments
NetApp Zebra
Flextronics AMD
SKF Tyco Variant
Veeco Sandvik
Numonyx

Chemicals

Jotun Chugoku
Rohm-Haas Clariant
Ciba

Singapore

Biomedical

Roche Diagnostics Siemens Medical
Schering-Plough J&J Medical
VWR Abbott Philips Medical

Transport Engrg

Daimler Toyota
Volkswagen
Rolls Royce
Embraer Boeing
Airbus R. Bosch
Caterpillar
Yamaha

Manufacturing Supply Chain Centres (MSCCs)

EDB SINGAPORE

MSCCs consist of:

- **Supply chain control tower**
  - Regional sourcing & procurement
  - Network planning and optimization
  - Other SCM functions
- **Regional distribution centre**

LVMH MOËT HENNESSY. LOUIS VUITTON Perfumes & Cosmetics

- Regional Logistics Hub
- Distributes > 50 brands to markets in Asia-Pac, USA and Canada

TEXAS INSTRUMENTS

- 130-150 man, 90,000 sq ft Asia Parts Distribution Centre
- Serves all of Asia Pac, Europe and Western US

DELL

- Global SCM/Procurement centre
- Singapore – proximity to Asia suppliers, Chinese Taipei and Korea

IBM

- Supply Chain Control Tower
- Global financial hub; 80-85% of global transactions
- Saves IBM tens of millions $/yr

Case Study: Airport Logistics Park of Singapore (ALPS)

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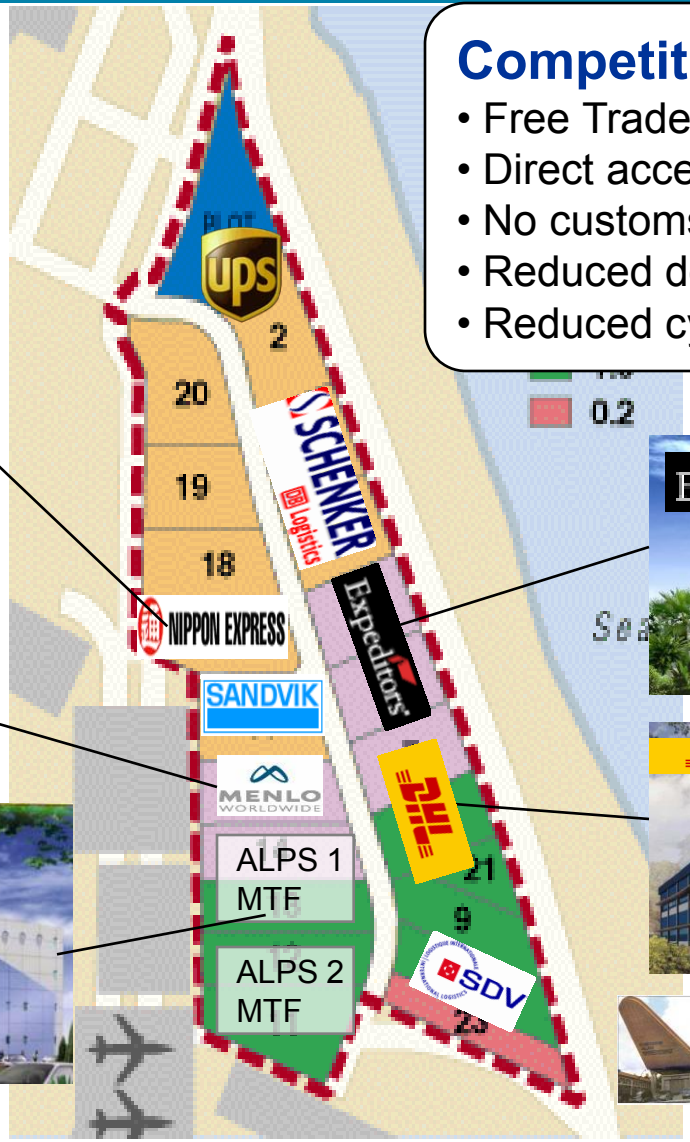
Competitive Advantages

- Free Trade Zone
- Direct access to airfreight centre
- No customs clearance necessary
- Reduced double handling
- Reduced cycle time

Multi-tenant Facility



Dedicated Customs Checkpoint

Future•Singapore – Logistics Industry

EDB SINGAPORE

SCM Technology

•Solve future problems in logistics and global supply chains

MATERIAL FLOW AND HANDLING PROCESS

\+

Technology

eSCM ● AUTOMATION ● SECURITY

Green Supply Chain / SCM

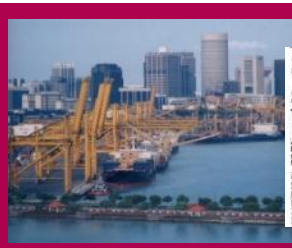
•First in Asia to develop the knowledge base in green supply chains

•Carbon foot-printing methodology

•Develop alternative low emission transportation Fleet

Secured SCM

•Develop trustworthiness & reliability as key differentiators (response to wildcards)




Singapore to screen cargo bound for US

Specialized Logistics

•Develop specialized logistics capabilities
•Entrench highly defined market segments

IFAS SOLUTIONS

Helu-Trans
Relocation & Artmove

•Cold Chain Logistics
•Wine Logistics
•Art Logistics
•Project Logistics
• Heavy Haulage Logistics
•Clinical Trials Logistics

sedb.com

Thank you

.

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Transportation Gateways and Global Supply Chains – Canada's Integrated Approach

Presentation at
Asia-Pacific Economic Cooperation
Singapore

July 27, 2009

Tim Meisner
Director General, Marine Policy
Transport Canada

Canada

Context

The Evolving Global Picture

The Integrated Global Economy

- Global marketplace integration has driven the distribution of economic activity, as well as the expansion of world trade. Global Value Chains have emerged as a preeminent business model.
  - Trade logistics and value chain management now established as CEO-level strategic issues.
- Global influence of Japan, China, India and other Asian economies is rising dramatically.
  - In 2008, APEC countries accounted for roughly 40% of the world's population, approximately 54% of world GDP and about 44% of world trade.

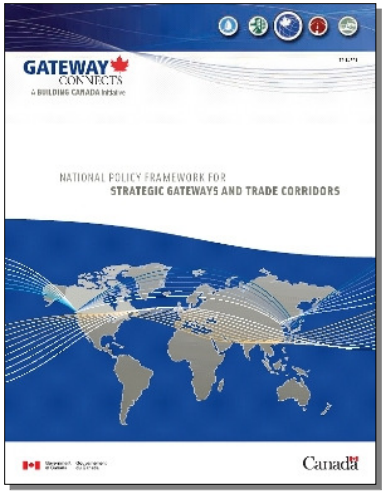
Current Economic Slowdown

- In the global economic downturn, competitiveness strategies are now more important than ever.
  - Falling demand, fluctuating energy prices and currency volatility are driving companies to re-evaluate their strategic supply chain decisions, including facilities location.
  - Fluid, reliable and efficient transportation systems remain key factors.
- In this context, achieving greater competitiveness will require deeper integration across the elements of Canada's transportation system, to support trade within North America and other regions.

The Gateway concept responds by taking a system based—rather than modal—approach to transportation, infrastructure, policy, investment and marketing.

Policy Framework

National Policy Framework for Strategic Gateways and Trade Corridors



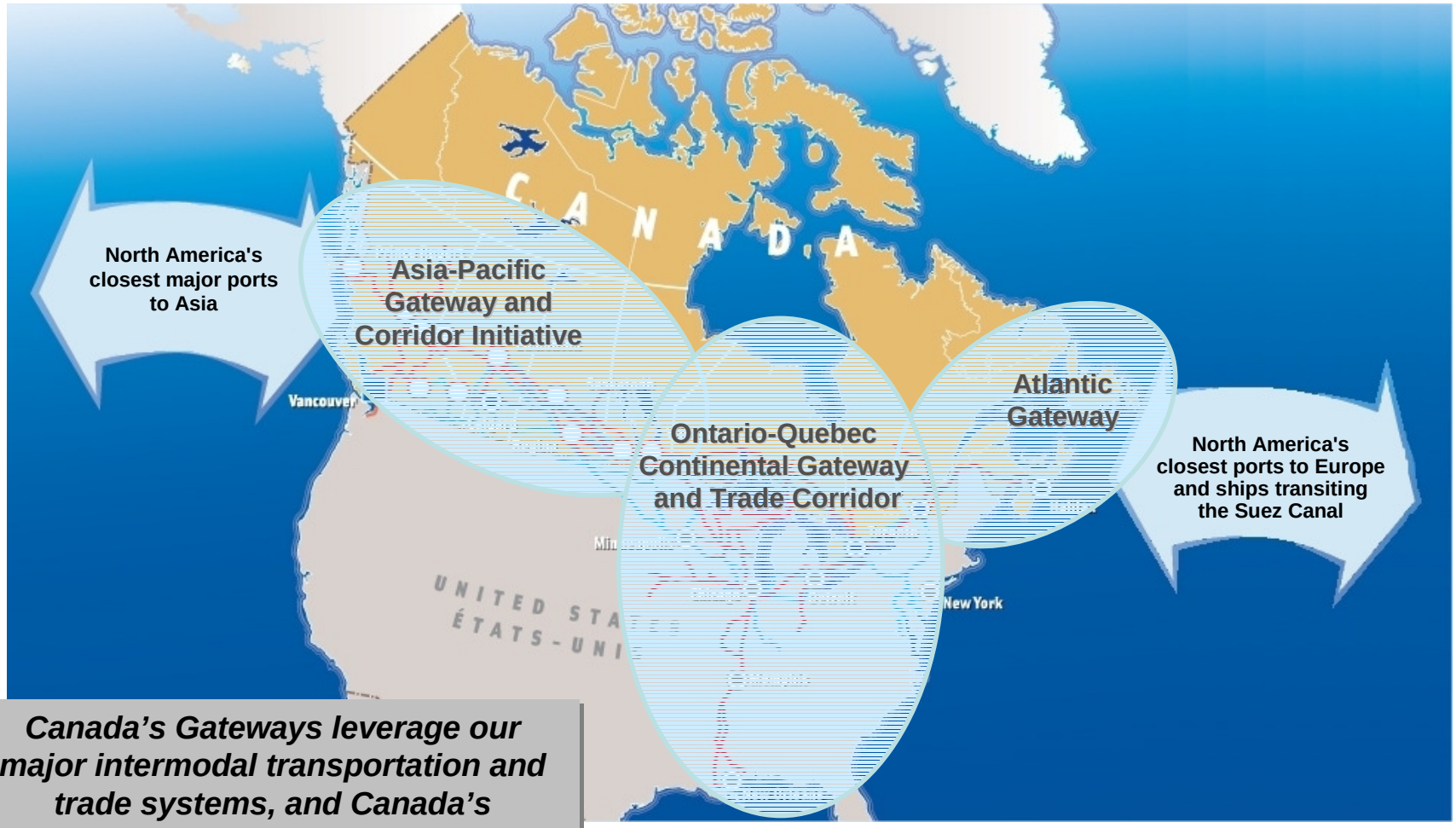
The National Policy Framework for Strategic Gateways and Trade Corridors (July 2007) was developed to advance the competitiveness of the Canadian economy on the rapidly changing playing field of global commerce.

- Emphasizes Canada's geographic advantages, long-term planning, public-private collaboration, and integrated approaches to infrastructure as well as policy, regulatory and operational measures.
- The Framework will help guide key investment decisions.

Provides the platform to implement the Asia-Pacific Gateway and Corridor Initiative and the development of our two emerging gateway strategies.

Canada's Gateways

Trade, Transportation, & Geographic Advantage



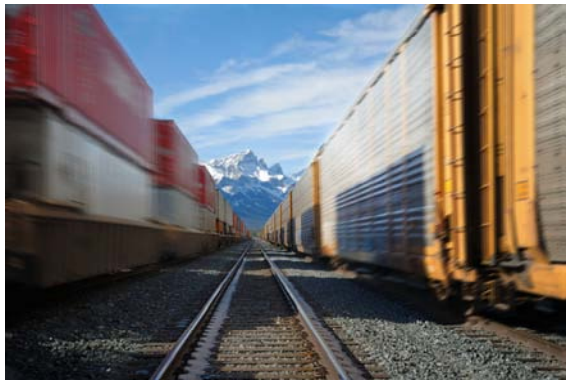
Canada's Gateways leverage our major intermodal transportation and trade systems, and Canada's geographic advantages to connect North America with the world.

APGCI

Asia-Pacific Gateway and Corridor

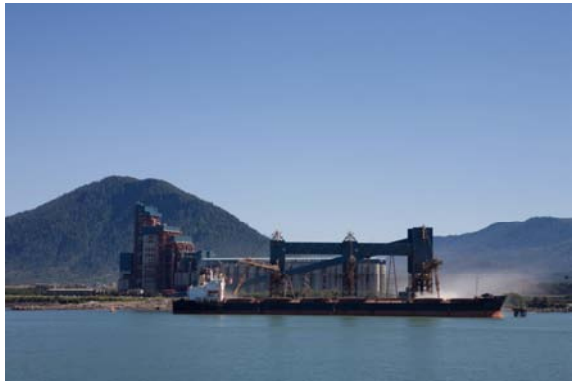
World-class transportation network that connects North America and the Asia-Pacific

- Includes roads, transcontinental rail systems, modern international airports, and two deep-water entry and exit points for marine cargo, along with powerful transportation and logistics systems.



Canada's Asia-Pacific Gateway and Corridor Initiative (APGCI) combines infrastructure, policy, governance and operational measures into an integrated, multi-modal, public-private strategy.

- Infrastructure investments to support multimodal efficiency and connectivity, and enhance safety, security and quality of life.
- Competitiveness investments to address interrelated issues around gateway and corridor development.



Secure, fast, reliable, and direct transit to markets.

APGCI

Asia-Pacific Gateway and Corridor Initiative

APGCI has achieved real progress.

- Unprecedented public-private sector financial support for APGCI-related investments.
- Amalgamation of Vancouver's ports and amendments to federal legislation to encourage private sector investment and enhance competitiveness.

And through the APGCI, we are expanding its outreach and deepening partnerships.

- ***Memorandum of Understanding*** supporting both Gateway and Trade Logistics Cooperation with China, with implementation activities currently underway.
- Outreach to APEC member economies including Japan, Korea, Singapore, and Hong Kong, along with international marketing led by Foreign Affairs and International Trade Canada.
- Promotion of the APGCI in the United States, noting corridor security, container screening and border crossing investments.

APGCI

Asia-Pacific Gateway and Corridor Initiative

APGCI

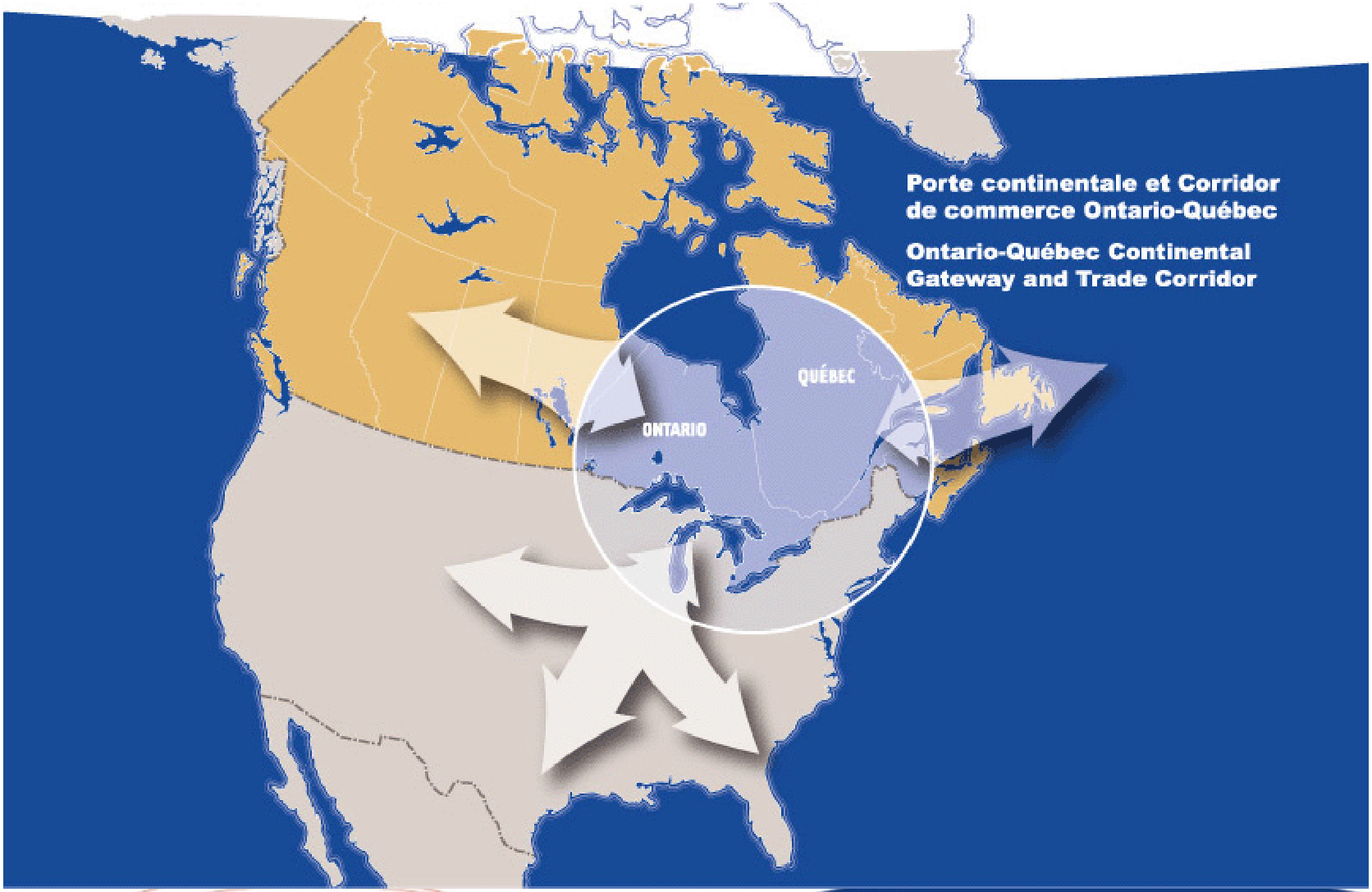
Moving Beyond Bricks and Mortar

Building upon infrastructure, outreach and partnership activities, the following measures will support improved competitiveness and engagement by addressing the inter-connected issues around gateway and corridor development.

1. **Adding Value to the Gateway Initiative**
2. **A Gateway Performance Table**
3. **System-based measures of gateway performance**
4. **An Asia-Pacific Gateway and Corridor Skills Table**
5. **Expanding the knowledge foundation**
6. **Pro-Active Public Engagement Strategy**

Continental Gateway

Canada's Continental Gateway



Continental Gateway

Continental Gateway Strategy

Located in Canada`s economic heartland, Ontario and Quebec have a fully integrated transportation system, providing a **net competitive advantage** for Canada-U.S. and international trade.

- Within a 1000 km radius a direct access to a concentration of over 135 million consumers, less than a one-day trip.
- The Port of Montréal is Canada's second busiest container port open year long.
- Well-developed and integrated highway and class 1 rail network to the rest of North-America.
- Two of Canada's busiest airports are in Ontario and Québec.

The Continental Gateway Strategy will focus on **maintaining and building upon central Canada's world-class transportation system** so that it remains a key driver of international trade and economic growth for the future.

- A public-private partnership that will address immediate and longer-term supply chain issues raised by the private sector, who have stressed the need for transformative initiatives.

Atlantic Gateway

Canada's Atlantic Gateway

Atlantic Gateway

Atlantic Gateway Strategy

Atlantic Canada has world class transportation infrastructure with untapped capacity, and is well positioned to capture a greater share of global trade flows to and from existing and emerging markets.

- Closest North American ports for ships passing through the Suez canal.
- A day's drive to major North American markets (e.g. Boston, New York, Toronto).
- Gateway established and continues to grow with significant public and private sector investment.

Strategy to be a balance of immediate measures and longer term directions to focus ongoing efforts by all partners, in the public and private sectors to:

- Strengthen region's competitiveness in attracting a larger share of global commerce from traditional markets and emerging international economies; and,
- Promote the Atlantic Gateway's transportation system assets, specialized services and niche opportunities to importers and exporters, internationally.

Canada-U.S.

Secure and Efficient Cross-border Trade

All three Gateway strategies recognize that North-South trade is a significant part of Canada's economy.

- The Canada-U.S. border is one of the longest borders (8,891 km in length) in the world, with 119 land border Ports-of-Entry including 24 international bridges and tunnels.
- Canada and U.S. has the world's largest bilateral trading relationship at $576 billion in 2007 ($1.5 billion / day).

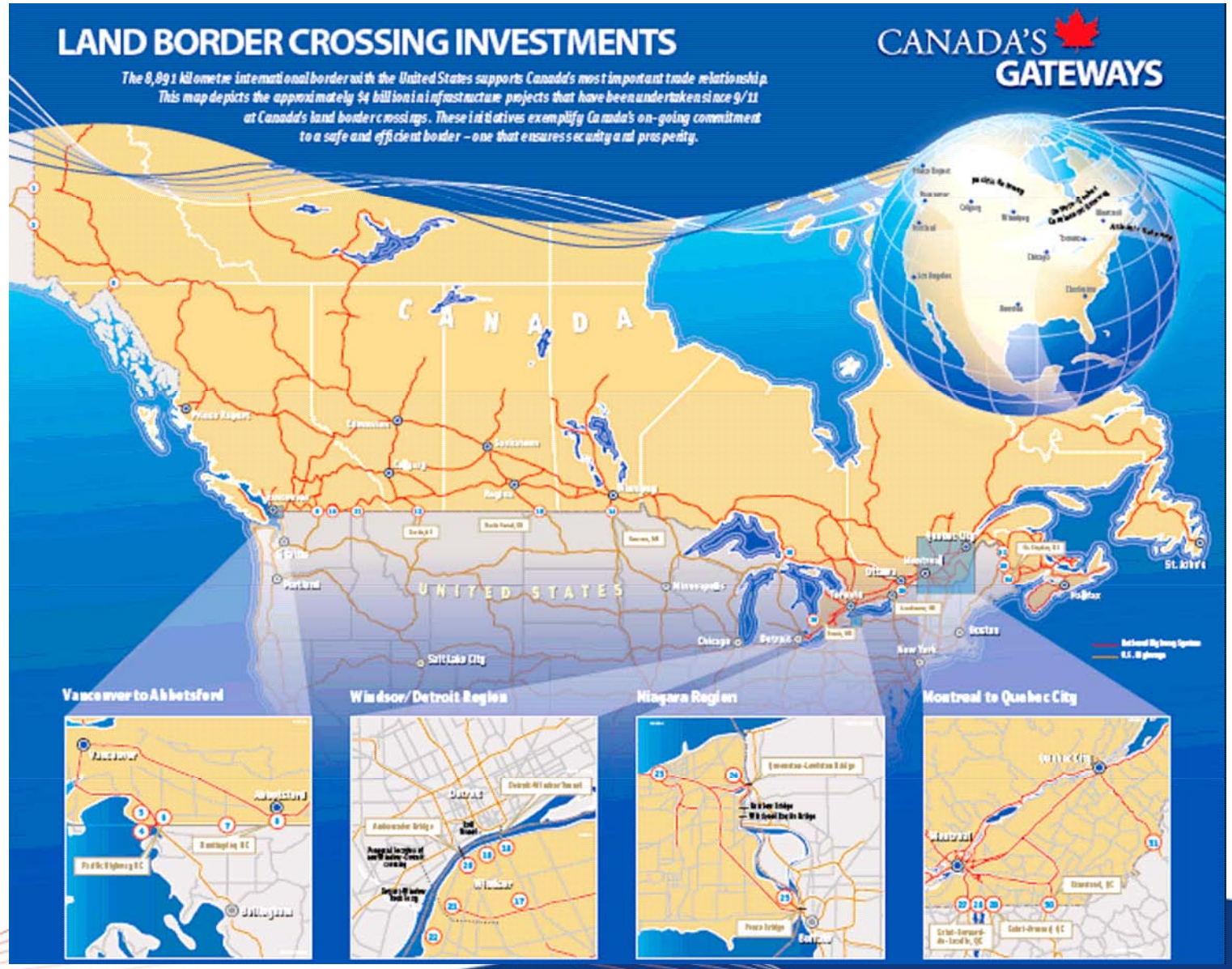
Canada's relatively uncongested East-West corridors support fluid, reliable and secure movement of goods; reliable connections into the United States and Mexico support seamless cross-border trade and travel.

Joint Canada-U.S. work on border issues build on a long history of cooperation and coordination in cross-border trade, transportation and security.

Since September 11, 2001, Canada has invested $4.5 billion in border infrastructure to increase trade efficiency and security between Canada, the United States and Mexico.

Canada-U.S.

Land Border Crossing Investments



Visit: http://www.thetbwg.org

Lessons Learned

Unique Challenges – A Common Framework

In advancing Canadian competitiveness, gateway strategies respond to unique opportunities and challenges in transportation.

Common, cross-cutting issues are emerging that require a collective approach from governments and private sector, such as:

- Border facilitation
- Regulatory streamlining
- Need for outreach and marketing

Close collaboration between public and private sectors were pivotal in making strategic investments and decisions to improve the transportation system to handle international trade.

Gateway and Corridor strategies must go beyond infrastructure improvements to address interconnected issues that impact how well the transportation system functions as a whole, such as:

- Operational reliability
- Regulations
- Governance
- Technology
- Labour supply and skills training

Aligning regulatory approaches is key to increasing efficiency and strengthening competitiveness in movement of cross-border and international trade.

Conclusion

Preparing for the Future

With strong national policy direction, **Canada continues to leverage strong partnerships with other levels of government and the private sector to optimize the transportation system**.

- Pivotal to streamlining regulations and instituting policy measures to enhance reliability, efficiency, competitiveness, safety and security of Canada's gateways and trade corridors.

While the global economic downturn has necessitated immediate actions, long-term competitiveness strategies are now more important than ever. **Canada's gateway and corridor strategies are forward-looking and are based on empirical analysis**.

- Working with industry, organized labour and governments to identify best-practices in operations and respond to international concerns about reliability and performance issues.

Deepening international partnerships and marketing continues to be keystone of engaging Canada's trading partners in North America, Europe and the Asia-Pacific.

- Increase trade by deepening trade logistics cooperation and business exchanges.

FDI Regimes and Liberalization

Charles Adams

Introduction

- How important is the liberalization of the FDI regime in attracting foreign direct investment?
- Question is a complex one and it is useful to consider it a number of steps.

Introduction

- (1) Why is FDI important vis-à-vis other cross border capital flows?
- (2) What have been the main drivers of FDI?
- (3) What are the key lessons on FDI liberalization?
- (4) Looking forward, what are some the ongoing changes in the sources and types of FDI and what are the implications?

Importance of FDI

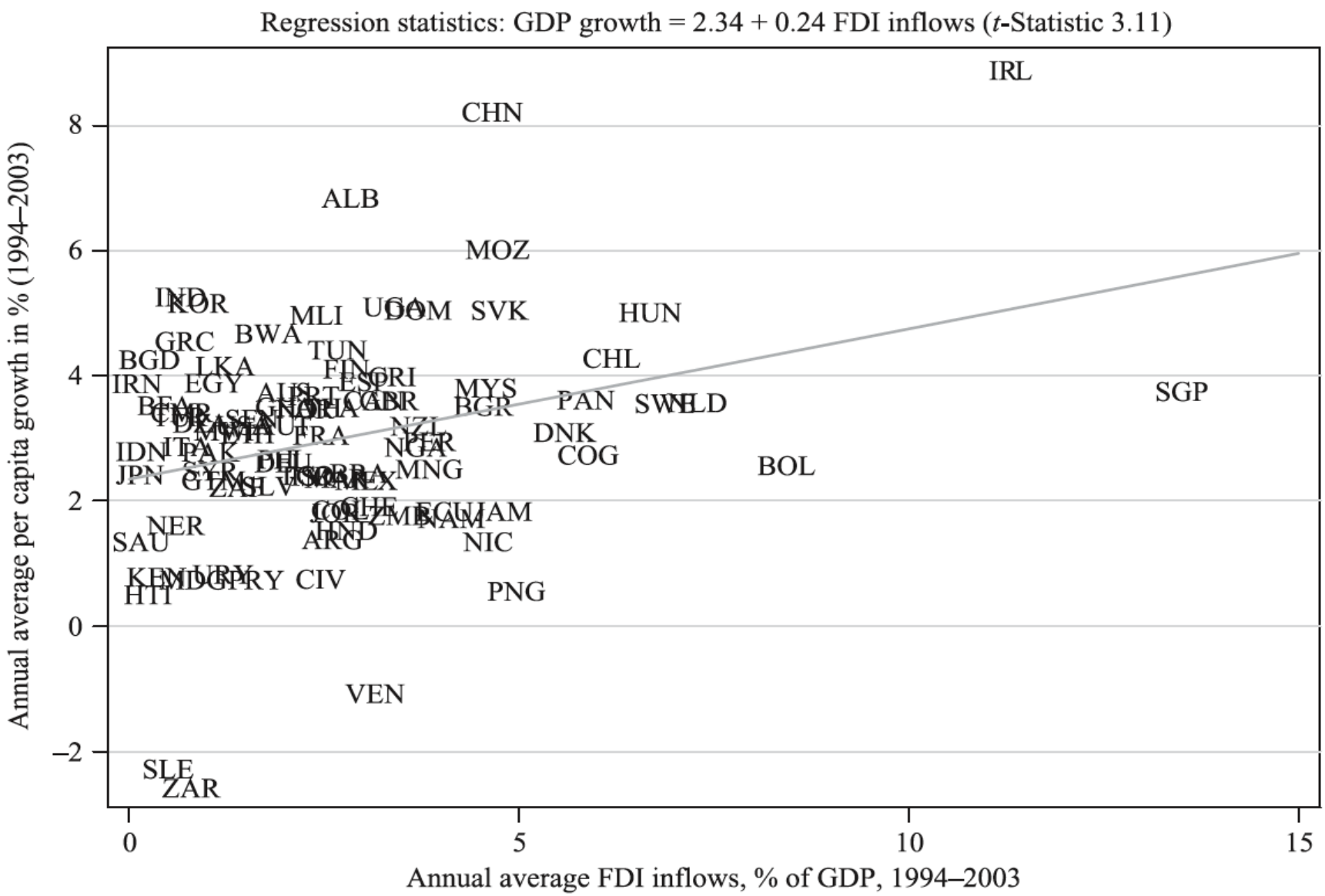
- The impact of (inward) FDI will depend on many factors such as: its sectoral allocation, whether it is directed towards exports or the home market, how it is financed, whether it is greenfield or M&A, and the source country and investors.

- As result, care is needed in generalizing about the benefits (and costs) of FDI.

Importance of FDI

- Traditionally, inward FDI is seeing as producing benefits that go beyond the provision of new capital.
- Key direct and indirect benefits include: Access to technological and managerial resources; Positive spillovers to local firms and markets; Possible improved access to foreign markets; and increased government revenue.
- From an economic stability perspective, FDI is also seen as desirable because it can be longer-term in nature and more stable than other capital flows

FIGURE 1
FDI Inflows and GDP Growth Rates, 1994–2003



Source: Busse and Groizard (2008)

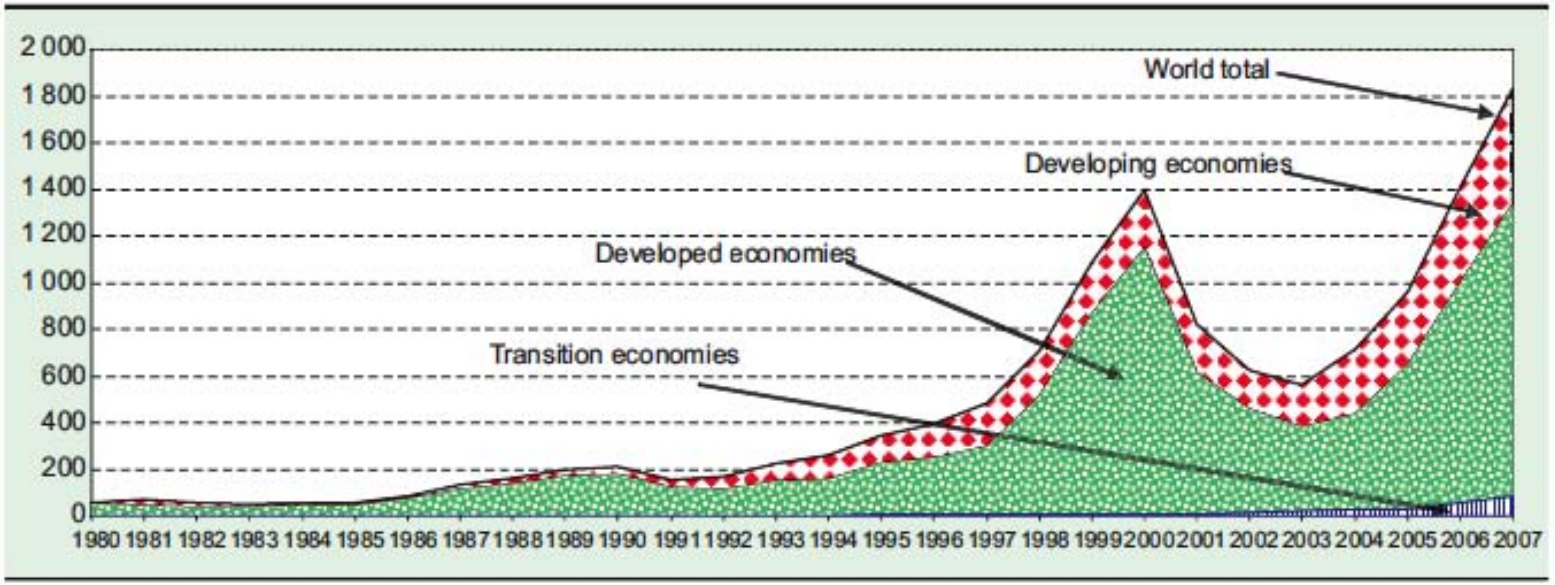
Importance of FDI

- Not the intention to quibble with these points but should be noted that even though FDI brings positive benefits to recipient countries:

- (a) Middle-income countries appear better able to reap those benefits than lower income countries (UNCTAD)
- (b) Benefits appear to differ across different types of FDI and across different sectoral allocations (Wong and Adams).
- (c) FDI tends to be relatively unevenly distributed across recipient countries (UNCTAD)

FDI Inflows

Figure I.1. FDI inflows: global and by groups of economies, 1980–2007
(Billions of dollars)



Source: UNCTAD FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.

BREAKDOWN BY DESTINATION WORLD REGION, 2008

DESTINATION REGION	TOTAL PROJECTS	CAPEX ($BN)	NEW JOBS CREATED
Asia-Pacific	5066	473	1,494,798
Western Europe	3921	215	464,893
Rest of Europe	2525	215	923,334
North America	1144	108	152,557
Latin America & Caribbean	1106	124	416,606
Middle East	969	154	237,068
Africa	820	220	303,215
Total	**15551**	**1509**	**3,992,471**

Source: fDi Markets

TOP FIVE GLOBAL DESTINATION COUNTRIES, 2008

DESTINATION COUNTRY	TOTAL PROJECTS	DESTINATION COUNTRY	CAPEX ($BN)	DESTINATION COUNTRY	NEW JOBS CREATED
China	1483	China	124	China	483,241
India	958	US	90	India	345,073
US	931	India	78	Russia	255,619
UK	845	Russia	62	Romania	213,690
France	668	Vietnam	60	Vietnam	171,410

Source: fDi Markets

TOP FIVE GLOBAL DESTINATION CITIES, 2008

DESTINATION CITY	TOTAL PROJECTS	DESTINATION CITY	CAPEX ($BN)	DESTINATION CITY	NEW JOBS CREATED
Dubai	342	Dubai	21	Bucharest	86,173
London	287	London	17	Dubai	58,161
Shanghai	264	Shanghai	16	Shanghai	48,605
Beijing	206	Tunis	15	Moscow	44,985
Paris	190	Bucharest	13	St Petersburg	44,558

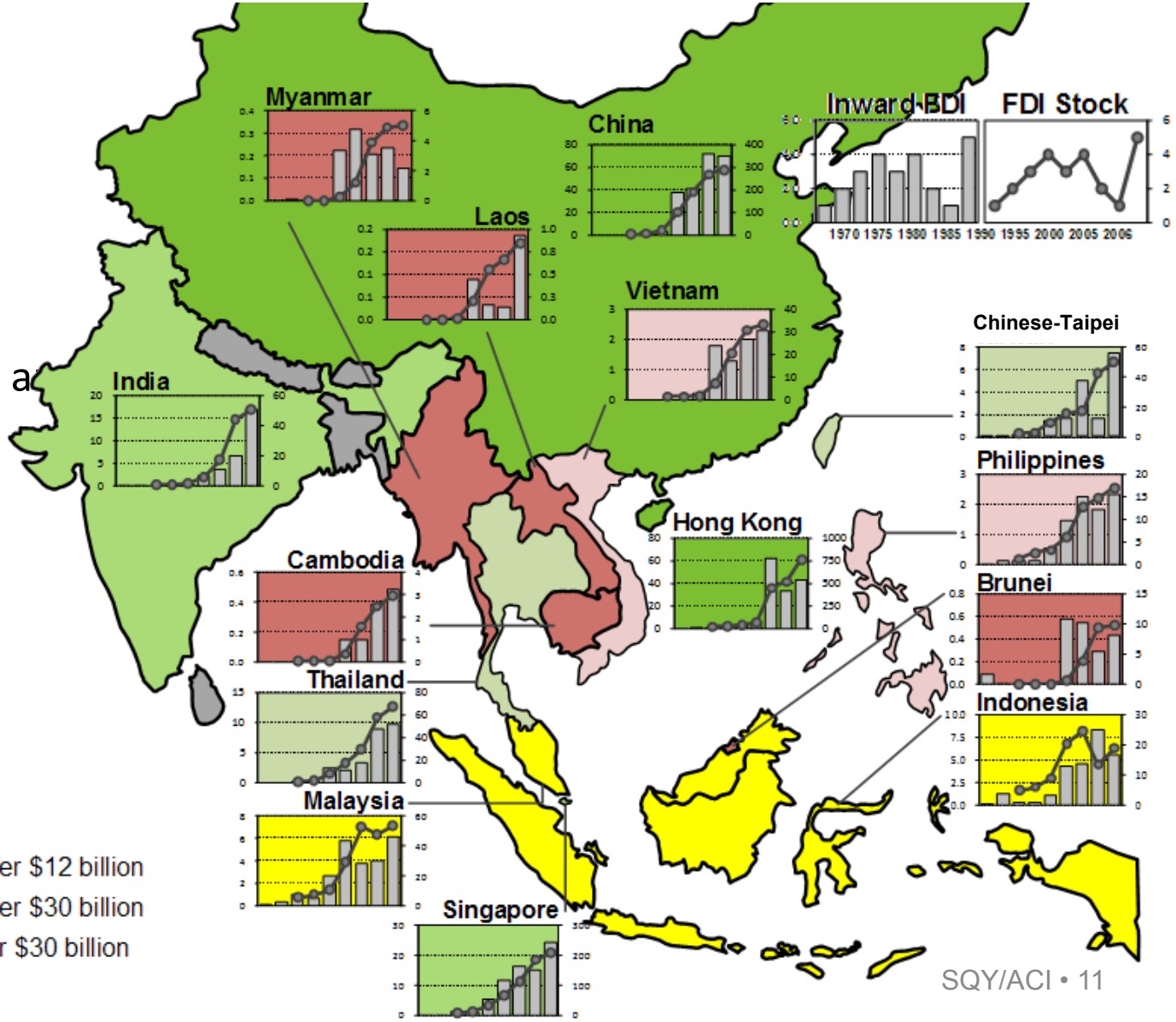
Source: fDi Markets

Drivers of Inward FDI

- (1) Compelling Economic Motivators (Low labor costs based on comparative advantage; good infrastructure; location; ability to link in with global production networks; local market size)
- (2) Economic and Political Stability/Predictability
- (3) Tax and other incentives
- (4)Sectoral “needs” in areas such as financial services, infrastructure
- (5) FDI friendly investment regimes (Rule of law, contracts, dispute settlement mechanisms; labor laws, transparency)

Asia - Foreign Direct Investment Comparisons

- China, Hong Kong a major Asian FDI destinations.



Source: World Investment Report 2007

FDI Liberalization Experience

- A key lesson from experience is the importance of countries integrating their policies to attract FDI into their broader development strategies if they are to maximize the benefits of FDI.

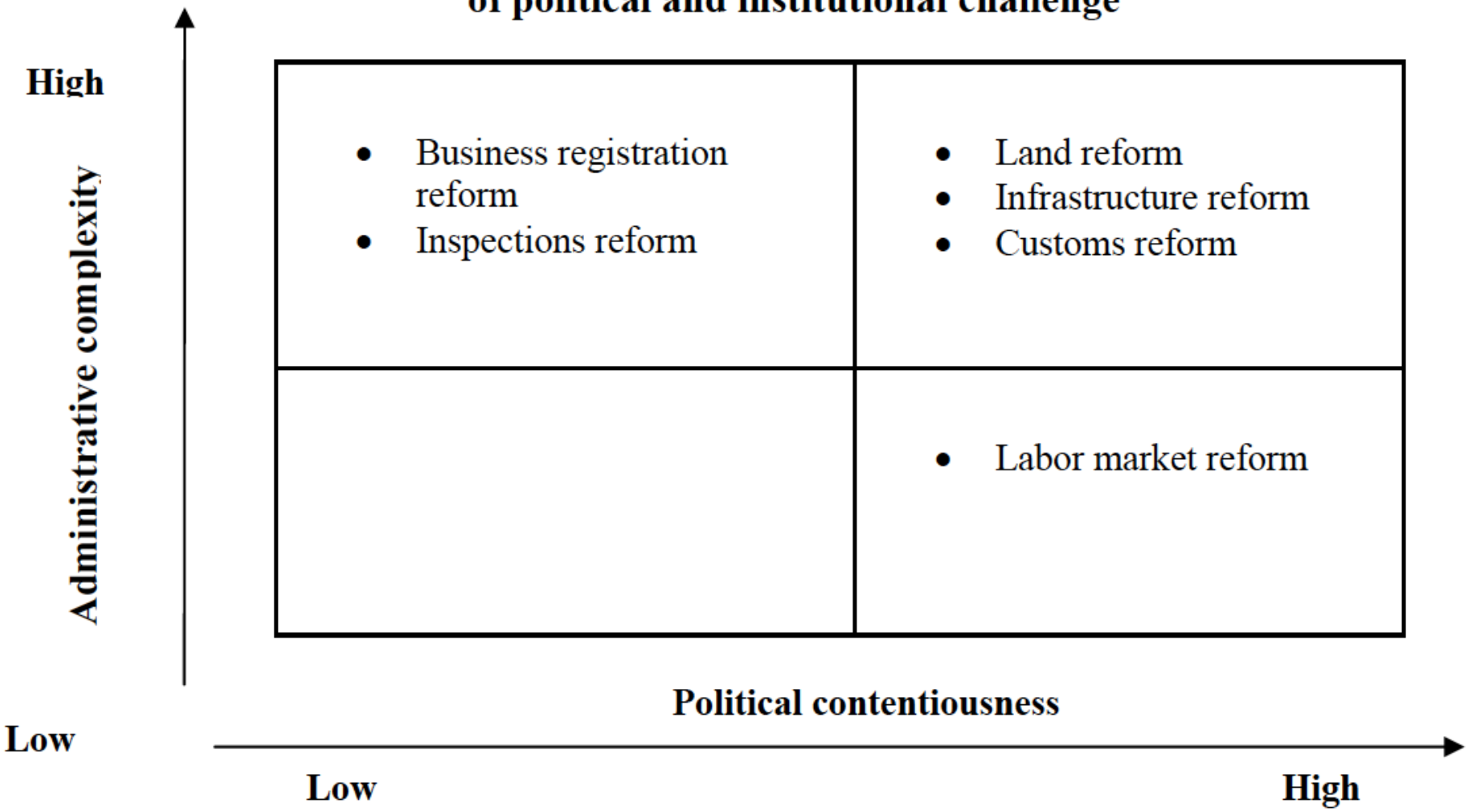
- Factors to consider include: seeking to strengthen backward linkages; encouraging development of subsidiaries of foreign firms; facilitating natural clusters; development of local human capital; links between local universities and foreign firms

FDI Liberalization Experience

- Not all reforms have the same payoffs and can imply different degrees of institutional and political challenges.

- Reforms can also differ in their administrative complexity.

Figure 1. Different reforms, different levels of political and institutional challenge



Source: World Bank

FDI Liberalization Lessons

- Key lessons from the reform experience (IMF, World Bank, UNCTAD)

- Lesson I. Open, stable and transparent FDI regimes can both encourage FDI and help maximize the spillovers and benefits to the broader economy.

FDI Liberalization Lessons

- Lesson II. Impact of FDI liberalization policies depends importantly on their being integrated with a coherent overall national development strategy.

- Lesson III. FDI liberalization polices should be seen as only one component of a liberalization strategy and will need to be supported by reforms to liberalize local markets in order to help maximize the benefits of FDI.

FDI Liberalization Lessons

- Lesson IV. Foreign Investment friendly regimes include many elements (Ease of Doing Business Considerations) with approaches varying across countries as regards facilitators and incentives including the use of generous tax incentives, special economic zones etc. What ever their potential to attract FDI, special economic zones may lessen positive spillovers to the local economy.

FDI Liberalization Lessons

- Lesson V. Importance of the (stable) rule of law and contracts to encourage FDI and deal with a range of potential disputes with local suppliers, labor groups and government. Protection of Intellectual property rights.

Forward Looking FDI Issues

- Behavior of FDI during the global crisis has been a little mixed. Traditionally, FDI is based on longer-term considerations and tends to hold up relatively well during temporary slowdowns.

- On balance, FDI seems likely to pick up after the crisis but uncertainty remains high.

Forward Looking FDI Issues

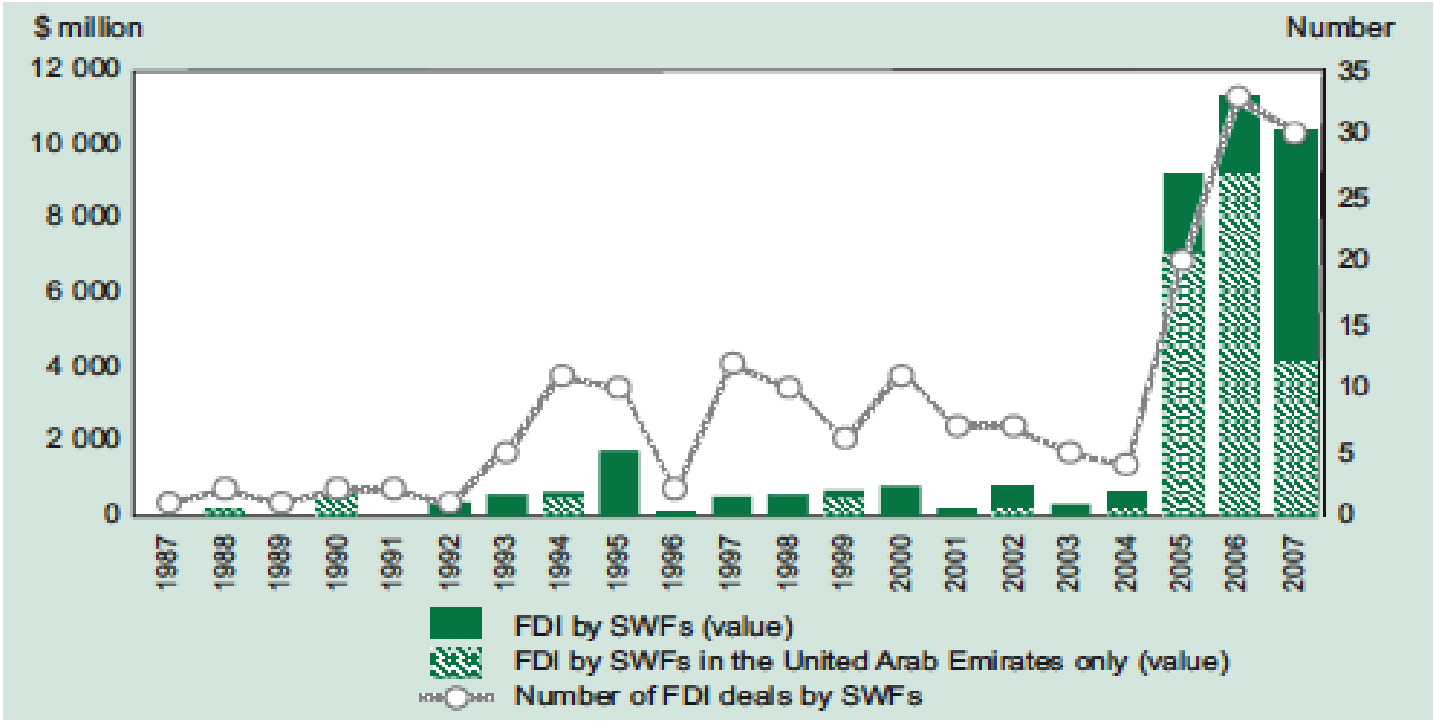
- Will depend on the success of governments in forestalling protectionist pressures and avoiding pressures to investment at home.

- Assuming that government are successful, FDI should continue to be a major driver of trade and growth.

- Looking forward, however, the sources and structure of FDI may evolve as Asian countries seek to rebalance their economies and reduce their current high net savings rates.

FDI and SWFs

Figure 2. FDI flows[a] by sovereign wealth funds, 1987–2007



Source: UNCTAD, *World Investment Report 2008: Transnational Corporations and the Infrastructure Challenge*.

[a] Cross-border M&As only; greenfield investments by SWFs are assumed to be extremely limited.

Forward Looking FDI Issues

- SWFs may become a more important source of FDI (thus far mainly M & A). China may also become a larger FDI source.

- FDI in construction and services may become more important, along with FDI in commodities and FDI serving the local market.

FDI Sectors

03

Table II.9. FDI inflows by sector/industry in ASEAN, 2003–2007[a]
(Millions of dollars)

Sector/industry	2003	2004	2005	2006	2007
Primary	4 700	780	2 453	1 717	4 988
Agriculture, fisheries and forestry	185	223	187	341	2 672
Mining	4 514	558	2 266	1 376	2 316
Manufacturing	6 782	14 138	17 137	16 147	20 116
Services	10 613	17 507	15 966	28 913	32 175
Construction	91	- 55	21	523	466
Trade and commerce	3 239	3 995	4 770	6 836	10 043
Financial intermediation and services	5 407	10 039	4 606	12 361	9 366
Real estate	812	1 106	2 432	4 154	6 094
Not elsewhere classified	1 899	2 754	3 602	4 544	2 018
Total	23 993	35 179	39 158	51 322	59 296

Source: Based on ASEAN Secretariat, *Statistics of Foreign Direct Investment in ASEAN, 2008* (forthcoming).

[a] Data are preliminary.

Note: Data do not include the sectoral distribution of reinvested earnings and intra-company loans of the Philippines. The data reported by the Philippines were on an aggregate basis.

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17:00 hrs GMT on 24 September 2008

Country fact sheet: China

Foreign direct investment (FDI) overview, selected years

(Millions of dollars and percentages)

FDI flows	1990-2000 (Annual average)	2004	2005	2006	2007	as a percentage of gross fixed capital formation: 1990-2000 (Annual average)	2005	2006	2007
China									
Inward	**30 104**	**60 630**	**72 406**	**72 715**	**83 521**	**11.0**	**7.7**	**6.4**	**5.8**
Outward	***2 195***	***5 498***	***12 261***	***21 160***	***22 469***	***1.0***	***1.3***	***1.9***	***1.6***
Memorandum									
Singapore									
Inward	9 204	19 828	13 930	24 743	24 137	36.2	53.7	79.9	60.0
Outward	*4 757*	*10 603*	*6 943*	*12 241*	*12 300*	*17.3*	*26.6*	*39.6*	*30.6*
United States									
Inward	109 513	135 826	104 773	236 701	232 839	7.0	4.3	9.1	9.0
Outward	*92 010*	*294 906*	*16 369*	*221 664*	*313 767*	*6.3*	*0.6*	*8.6*	*12.1*
East Asia									
Inward	48 834	106 331	116 177	131 879	156 706	8.8	9.0	8.7	8.6
Outward	*29 472*	*62 924*	*49 636*	*82 301*	*102 866*	*6.6*	*3.9*	*5.4*	*5.7*
Asia and Oceania									
Inward	76 754	171 178	210 572	274 291	320 498	7.9	10.0	11.0	10.6
Outward	*37 626*	*69 931*	*79 631*	*141 147*	*194 764*	*3.9*	*3.6*	*5.7*	*6.5*
Developing economies									
Inward	130 755	283 641	316 444	412 990	499 747	9.2	11.4	12.5	12.6
Outward	*62 926*	*120 006*	*117 679*	*212 268*	*263 146*	*3.6*	*4.3*	*6.6*	*6.4*
World									
Inward	492 605	717 695	958 697	1 411 018	1 833 324	7.7	9.7	12.9	14.8
Outward	*492 636*	*920 161*	*660 808*	*1 323 160*	*1 996 514*	*7.9*	*9.0*	*12.2*	*16.2*

FDI stocks	1990	1995	2000	2006	2007	as a percentage of gross domestic product: 1990	2000	2006	2007
China									
Inward	**20 691**	**101 088**	**193 348**	**282 568**	**327 087**	**5.1**	**16.2**	**10.5**	**10.1**
Outward	***4 455***	***17 768***	***27 768***	***73 330***	***95 799***	***1.1***	***2.3***	***2.6***	***3.0***
Memorandum									
Singapore									
Inward	30 468	65 644	112 633	225 530	249 667	82.6	121.5	165.1	154.7
Outward	*7 606*	*36 060*	*66 766*	*137 226*	*149 626*	*21.2*	*61.2*	*100.6*	*92.7*
United States									
Inward	394 911	535 553	1 256 867	1 843 885	2 093 049	6.8	12.8	14.0	15.1
Outward	*430 521*	*699 015*	*1 316 247*	*2 464 574*	*2 791 269*	*7.4*	*13.4*	*18.6*	*20.2*
East Asia									
Inward	240 645	357 419	710 475	1 213 092	1 691 138	25.9	32.1	28.6	35.0
Outward	*49 032*	*149 444*	*609 637*	*927 668*	*1 346 660*	*6.4*	*23.2*	*21.9*	*28.0*
Asia and Oceania									
Inward	359 088	578 774	1 082 741	2 022 704	2 713 303	16.0	25.5	24.8	28.6
Outward	*66 904*	*209 727*	*613 016*	*1 206 621*	*1 722 106*	*3.2*	*14.6*	*16.1*	*18.5*
Developing economies									
Inward	528 638	851 534	1 738 255	3 303 169	4 246 739	13.6	25.2	26.7	29.8
Outward	*144 662*	*329 400*	*661 642*	*1 702 304*	*2 266 073*	*4.0*	*12.9*	*14.2*	*16.5*
World									
Inward	1 941 252	2 914 356	5 786 700	12 470 085	15 210 560	9.1	18.1	25.5	27.9
Outward	*1 785 267*	*2 941 196*	*6 146 211*	*12 766 149*	*15 602 339*	*8.6*	*19.4*	*26.3*	*28.9*

Source: UNCTAD, *World Investment Report 2008*; www.unctad.org/wir or www.unctad.org/fdistatistics
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17:00 hrs GMT on 24 September 2008

Country fact sheet: Viet Nam

Foreign direct investment (FDI) overview, selected years

(Millions of dollars and percentages)

FDI flows	1990-2000 (Annual average)	2004	2005	2006	2007	as a percentage of gross fixed capital formation: 1990-2000 (Annual average)	2005	2006	2007
Viet Nam									
Inward	**1 322**	**1 610**	**2 021**	**2 360**	**6 739**	**29.4**	**11.6**	**11.6**	**25.4**
Outward	..	-	*65*	*85*	*150*	..	*0.4*	*0.4*	*0.6*
Memorandum									
Cambodia									
Inward	155	131	381	483	867	36.0	32.1	34.3	52.3
Outward	*12*	*10*	*6*	*8*	*1*	..	*0.5*	*0.6*	*0.1*
China									
Inward	30 104	60 630	72 406	72 715	83 521	11.0	7.7	6.4	5.9
Outward	*2 195*	*5 498*	*12 261*	*21 160*	*22 469*	*1.0*	*1.3*	*1.9*	*1.6*
South-East Asia									
Inward	22 198	35 245	39 091	51 243	60 514	14.0	18.7	20.2	19.6
Outward	*7 497*	*16 978*	*13 790*	*22 232*	*33 456*	*4.5*	*6.7*	*8.9*	*11.0*
Asia and Oceania									
Inward	76 754	171 178	210 572	274 291	320 498	7.9	10.0	11.0	10.6
Outward	*37 528*	*80 931*	*79 531*	*141 147*	*194 754*	*3.9*	*3.8*	*5.7*	*6.5*
Developing economies									
Inward	130 755	283 641	316 444	412 990	499 747	9.2	11.4	12.5	12.6
Outward	*52 928*	*120 008*	*117 579*	*212 258*	*253 145*	*3.8*	*4.3*	*6.5*	*6.4*
World									
Inward	492 605	717 695	958 697	1 411 018	1 833 324	7.7	9.7	12.9	14.8
Outward	*492 535*	*920 151*	*880 808*	*1 323 150*	*1 996 514*	*7.9*	*9.0*	*12.2*	*16.2*

FDI stocks	1990	1996	2000	2006	2007	as a percentage of gross domestic product: 1990	2000	2006	2007
Viet Nam									
Inward	**1 650**	**7 150**	**20 596**	**33 496**	**40 235**	**25.5**	**66.1**	**55.0**	**56.3**
Outward	..	..	..	..	..	..	..	..	..
Memorandum									
Cambodia									
Inward	38	356	1 580	2 954	3 821	2.2	43.1	40.6	44.3
Outward	..	*139*	*193*	*271*	*284*	..	*5.3*	*3.7*	*3.3*
China									
Inward	20 691	101 098	193 348	292 559	327 087	5.1	16.2	10.5	10.1
Outward	*4 455*	*17 768*	*27 768*	*73 330*	*95 799*	*1.1*	*2.3*	*2.6*	*3.0*
South-East Asia									
Inward	64 303	152 475	269 048	475 930	550 952	18.2	44.9	44.1	43.0
Outward	*9 471*	*50 127*	*84 492*	*198 266*	*242 727*	*2.8*	*15.1*	*19.8*	*20.3*
Asia and Oceania									
Inward	359 088	578 774	1 082 741	2 022 704	2 713 303	16.0	25.5	24.8	28.6
Outward	*66 904*	*209 727*	*613 018*	*1 205 521*	*1 722 108*	*3.2*	*14.8*	*15.1*	*18.5*
Developing economies									
Inward	528 638	851 534	1 738 255	3 303 169	4 246 739	13.6	25.2	26.7	29.8
Outward	*144 862*	*329 400*	*861 842*	*1 702 304*	*2 288 073*	*4.0*	*12.9*	*14.2*	*16.5*
World									
Inward	1 941 252	2 914 356	5 786 700	12 470 085	15 210 560	9.1	18.1	25.5	27.9
Outward	*1 785 267*	*2 941 198*	*6 148 211*	*12 756 140*	*15 602 339*	*8.5*	*19.4*	*26.3*	*28.9*

Source: UNCTAD, *World Investment Report 2008*; **www.unctad.org/wir** or **www.unctad.org/fdistatistics**
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Country fact sheet: Thailand

Foreign direct investment (FDI) overview, selected years

(Millions of dollars and percentages)

FDI flows	1990-2000 (Annual average)	2004	2005	2006	2007	as a percentage of gross fixed capital formation: 1990-2000 (Annual average)	2005	2006	2007
Thailand									
Inward	**3 188**	**6 882**	**8 048**	**9 010**	**9 675**	**9.4**	**15.7**	**15.3**	**14.8**
Outward	*370*	*76*	*503*	*1 032*	*1 756*	*0.7*	*1.0*	*1.8*	*2.7*
Memorandum									
China									
Inward	30 104	60 630	72 406	72 715	83 521	11.0	7.7	6.4	5.9
Outward	*2 195*	*5 498*	*12 261*	*21 160*	*22 469*	*1.0*	*1.3*	*1.9*	*1.6*
Indonesia									
Inward	1 584	1 896	8 337	4 914	6 928	2.3	12.3	5.6	6.4
Outward	*622*	*3 408*	*3 065*	*2 703*	*4 790*	*1.6*	*4.6*	*3.1*	*4.6*
South-East Asia									
Inward	22 198	35 245	39 091	51 243	60 514	14.0	18.7	20.2	19.6
Outward	*7 497*	*16 976*	*13 790*	*22 232*	*33 456*	*4.6*	*6.7*	*8.9*	*11.0*
Asia and Oceania									
Inward	76 754	171 178	210 572	274 291	320 498	7.9	10.0	11.0	10.6
Outward	*37 626*	*69 931*	*79 631*	*141 147*	*194 764*	*3.9*	*3.6*	*5.7*	*6.6*
Developing economies									
Inward	130 755	283 641	316 444	412 990	499 747	9.2	11.4	12.5	12.6
Outward	*52 926*	*120 006*	*117 679*	*212 268*	*263 146*	*3.8*	*4.3*	*6.6*	*6.4*
World									
Inward	492 605	717 695	958 697	1 411 018	1 833 324	7.7	9.7	12.9	14.8
Outward	*492 535*	*920 151*	*660 606*	*1 323 150*	*1 996 514*	*7.9*	*9.0*	*12.2*	*16.2*

FDI stocks	1990	1995	2000	2006	2007	as a percentage of gross domestic product: 1990	2000	2006	2007
Thailand									
Inward	**8 242**	**17 884**	**29 915**	**78 174**	**85 749**	**9.7**	**24.4**	**36.9**	**34.9**
Outward	*418*	*2 276*	*2 203*	*5 269*	*7 025*	*0.5*	*1.8*	*2.6*	*2.9*
Memorandum									
China									
Inward	20 691	101 098	193 348	292 559	327 087	5.1	16.2	10.5	10.1
Outward	*4 455*	*17 768*	*27 768*	*73 330*	*95 799*	*1.1*	*2.3*	*2.6*	*3.0*
Indonesia									
Inward	8 732	20 626	25 060	52 027	58 955	6.9	15.2	14.3	13.6
Outward	*86*	*5 696*	*5 940*	*16 636*	*21 426*	*0.1*	*4.2*	*4.6*	*5.0*
South-East Asia									
Inward	64 303	152 475	269 048	475 930	550 952	18.2	44.9	44.1	43.0
Outward	*9 471*	*50 127*	*54 492*	*195 266*	*242 727*	*2.6*	*16.1*	*19.6*	*20.3*
Asia and Oceania									
Inward	359 088	578 774	1 082 741	2 022 704	2 713 303	16.0	25.5	24.8	28.6
Outward	*66 904*	*209 727*	*613 016*	*1 206 621*	*1 722 106*	*3.2*	*14.6*	*16.1*	*16.6*
Developing economies									
Inward	528 638	851 534	1 738 255	3 303 169	4 246 739	13.6	25.2	26.7	29.8
Outward	*144 662*	*329 400*	*661 642*	*1 702 304*	*2 266 073*	*4.0*	*12.9*	*14.2*	*16.6*
World									
Inward	1 941 252	2 914 356	5 786 700	12 470 085	15 210 560	9.1	18.1	25.5	27.9
Outward	*1 766 267*	*2 941 196*	*6 146 211*	*12 766 149*	*16 602 339*	*8.6*	*19.4*	*26.3*	*26.9*

Source: UNCTAD, *World Investment Report 2008*; www.unctad.org/wir or www.unctad.org/fdistatistics

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Country fact sheet: Indonesia

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(Millions of dollars and percentages)

FDI flows	1990-2000 (Annual average)	2004	2005	2006	2007	as a percentage of gross fixed capital formation: 1990-2000 (Annual average)	2005	2006	2007
Indonesia									
Inward	**1 684**	**1 896**	**8 337**	**4 914**	**6 928**	**2.3**	**12.3**	**5.8**	**6.4**
Outward	***622***	***3 408***	***3 065***	***2 703***	***4 790***	***1.6***	***4.5***	***3.1***	***4.5***
Memorandum									
China									
Inward	30 104	60 630	72 406	72 715	83 521	11.0	7.7	6.4	5.9
Outward	*2 196*	*6 496*	*12 261*	*21 160*	*22 469*	*1.0*	*1.3*	*1.9*	*1.6*
Malaysia									
Inward	4 722	4 624	3 967	6 048	8 403	18.3	14.0	18.5	20.6
Outward	*1 660*	*2 061*	*2 971*	*6 041*	*10 959*	*6.2*	*10.6*	*16.6*	*27.0*
South-East Asia									
Inward	22 198	35 245	39 091	51 243	60 514	14.0	18.7	20.2	19.6
Outward	*7 497*	*16 976*	*13 790*	*22 232*	*33 466*	*4.6*	*6.7*	*8.9*	*11.0*
Asia and Oceania									
Inward	76 754	171 178	210 572	274 291	320 498	7.9	10.0	11.0	10.6
Outward	*37 626*	*69 931*	*79 631*	*141 147*	*194 764*	*3.9*	*3.8*	*5.7*	*6.5*
Developing economies									
Inward	130 755	283 641	316 444	412 990	499 747	9.2	11.4	12.5	12.6
Outward	*62 926*	*120 006*	*117 679*	*212 268*	*263 145*	*3.8*	*4.3*	*6.6*	*6.4*
World									
Inward	492 605	717 695	958 697	1 411 018	1 833 324	7.7	9.7	12.9	14.8
Outward	*492 636*	*920 151*	*880 806*	*1 323 150*	*1 996 614*	*7.9*	*9.0*	*12.2*	*16.2*

FDI stocks	1990	1995	2000	2006	2007	as a percentage of gross domestic product: 1990	2000	2006	2007
Indonesia									
Inward	**8 732**	**20 628**	**25 060**	**62 027**	**68 865**	**8.9**	**16.2**	**14.3**	**13.8**
Outward	***86***	***5 896***	***6 940***	***16 635***	***21 425***	***0.1***	***4.2***	***4.6***	***5.0***
Memorandum									
China									
Inward	20 691	101 098	193 348	292 559	327 087	5.1	16.2	10.5	10.1
Outward	*4 455*	*17 768*	*27 768*	*73 330*	*95 799*	*1.1*	*2.3*	*2.6*	*3.0*
Malaysia									
Inward	10 318	28 731	52 747	53 836	76 748	23.4	56.2	34.5	41.1
Outward	*763*	*5 123*	*16 676*	*36 073*	*68 176*	*1.7*	*16.9*	*23.1*	*31.2*
South-East Asia									
Inward	64 303	152 475	269 048	475 930	550 952	18.2	44.9	44.1	43.0
Outward	*9 471*	*50 127*	*64 492*	*196 266*	*242 727*	*2.6*	*15.1*	*19.6*	*20.3*
Asia and Oceania									
Inward	359 088	578 774	1 082 741	2 022 704	2 713 303	16.0	25.5	24.8	28.6
Outward	*66 904*	*209 727*	*613 016*	*1 206 621*	*1 722 106*	*3.2*	*14.6*	*16.1*	*18.6*
Developing economies									
Inward	528 638	851 534	1 738 255	3 303 169	4 246 739	13.6	25.2	26.7	29.8
Outward	*144 662*	*329 400*	*661 642*	*1 702 304*	*2 266 073*	*4.0*	*12.9*	*14.2*	*16.6*
World									
Inward	1 941 252	2 914 356	5 786 700	12 470 085	15 210 560	9.1	18.1	25.5	27.9
Outward	*1 766 267*	*2 941 196*	*6 148 211*	*12 766 149*	*15 602 339*	*8.6*	*19.4*	*26.3*	*28.9*

Source: UNCTAD, *World Investment Report 2008*; www.unctad.org/wir or www.unctad.org/fdistatistics
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Foreign direct investment (FDI) overview, selected years

(Millions of dollars and percentages)

FDI flows	1990-2000 (Annual average)	2004	2005	2006	2007	as a percentage of gross fixed capital formation: 1990-2000 (Annual average)	2005	2006	2007
Malaysia									
Inward	**4 722**	**4 624**	**3 967**	**6 048**	**8 403**	**18.3**	**14.0**	**18.5**	**20.8**
Outward	***1 550***	***2 061***	***2 971***	***6 041***	***10 989***	***5.2***	***10.5***	***18.5***	***27.0***
Memorandum									
China									
Inward	30 104	60 630	72 406	72 715	83 521	11.0	7.7	6.4	5.9
Outward	*2 196*	*5 498*	*12 261*	*21 160*	*22 469*	*1.0*	*1.3*	*1.9*	*1.6*
Indonesia									
Inward	1 584	1 896	8 337	4 914	6 928	2.3	12.3	5.6	6.4
Outward	*622*	*3 405*	*3 065*	*2 703*	*4 790*	*1.6*	*4.6*	*3.1*	*4.6*
South-East Asia									
Inward	22 198	35 245	39 091	51 243	60 514	14.0	18.7	20.2	19.6
Outward	*7 497*	*16 976*	*13 790*	*22 232*	*33 466*	*4.6*	*6.7*	*8.9*	*11.0*
Asia and Oceania									
Inward	76 754	171 178	210 572	274 291	320 498	7.9	10.0	11.0	10.6
Outward	*37 626*	*69 931*	*79 631*	*141 147*	*194 764*	*3.9*	*3.6*	*5.7*	*6.5*
Developing economies									
Inward	130 755	283 641	316 444	412 990	499 747	9.2	11.4	12.5	12.6
Outward	*62 926*	*120 006*	*117 679*	*212 266*	*263 146*	*3.6*	*4.3*	*6.6*	*6.4*
World									
Inward	492 605	717 695	958 697	1 411 018	1 833 324	7.7	9.7	12.9	14.8
Outward	*492 536*	*920 151*	*660 606*	*1 323 150*	*1 995 514*	*7.9*	*9.0*	*12.2*	*16.2*

FDI stocks	1990	1995	2000	2006	2007	as a percentage of gross domestic product: 1990	2000	2006	2007
Malaysia									
Inward	**10 318**	**28 731**	**52 747**	**63 838**	**78 748**	**23.4**	**58.2**	**34.5**	**41.1**
Outward	***753***	***5 123***	***15 878***	***36 073***	***58 175***	***1.7***	***16.9***	***23.1***	***31.2***
Memorandum									
China									
Inward	20 691	101 098	193 348	292 559	327 087	5.1	16.2	10.5	10.1
Outward	*4 455*	*17 765*	*27 766*	*73 330*	*95 799*	*1.1*	*2.3*	*2.6*	*3.0*
Indonesia									
Inward	8 732	20 626	25 060	52 027	58 955	6.9	15.2	14.3	13.6
Outward	*66*	*5 696*	*6 940*	*16 635*	*21 426*	*0.1*	*4.2*	*4.6*	*5.0*
South-East Asia									
Inward	64 303	152 475	269 048	475 930	550 952	18.2	44.9	44.1	43.0
Outward	*9 471*	*50 127*	*84 492*	*196 266*	*242 727*	*2.6*	*16.1*	*19.6*	*20.3*
Asia and Oceania									
Inward	359 088	578 774	1 082 741	2 022 704	2 713 303	16.0	25.5	24.8	28.6
Outward	*66 904*	*209 727*	*613 016*	*1 206 621*	*1 722 106*	*3.2*	*14.6*	*15.1*	*18.6*
Developing economies									
Inward	528 638	851 534	1 738 255	3 303 169	4 246 739	13.6	25.2	26.7	29.8
Outward	*144 662*	*329 400*	*661 842*	*1 702 304*	*2 266 073*	*4.0*	*12.9*	*14.2*	*16.6*
World									
Inward	1 941 252	2 914 356	5 786 700	12 470 085	15 210 560	9.1	18.1	25.5	27.9
Outward	*1 786 267*	*2 941 196*	*6 146 211*	*12 766 149*	*16 602 339*	*8.6*	*19.4*	*26.3*	*28.9*

Source: UNCTAD, *World Investment Report 2008*; www.unctad.org/wir or www.unctad.org/fdistatistics
For details, see "definitions and sources" in annex B and annex tables B. 1-B.3 in *WIR08*.

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Implementing Reform and Strengthening The Economic Legal Infrastructure to Increase FDI

JETRO, METI Japan, APEC Seminar - Singapore, 27th July 2009

CHRIS KANTER
Vice President
Indonesian Chamber of Commerce and Industry

APEC Record on Investment

Started in Indonesia in 1994, APEC has long and constructive record on Investment for non-Binding Investment Principles and commitment to free and open investment.

Outline of Remarks

Three important principles for business perspective on challenges and development of foreign investment relevant to APEC:

1. Engage and consult investors at the earliest stages of reform
2. Aim for integrity on laws for the legal framework for investment
3. Continually review weak points in implementation

1. Consulting with Investors

- Demanding investors never satisfied and always ask for more
- Government sensitivity to work and cynicism towards investors intentions (refer above)
- Indonesia's treatments towards businesses as genuine partners in reform with timely and constructive consultation has big benefits

Indonesian Experience

- Five years ago, Indonesian and foreign chambers developed a Roadmap for Economic Reform fully adopted by Yudhoyono Government
- In cooperation with Government, mapped reforms, built consensus, provided goals and solutions on policy to set common path
- Indonesian Chamber (KADIN) and foreign chambers now developing new Roadmap for incoming Government

Lessons on Consultation

- Quality of consultation has important impact on reform outcomes

- Clear difference between consultation for policy development and socialization of new policies

Managing Domestic Investors

- Consultation process identifies that domestic and foreign investors are commonly:
  - consider balance of risk and return
  - have more choice to invest

- Effective consultation through National Chamber:
  - responsibles for national business interest
  - helps managing special interests
  - looks at alternatives for struggling sectors

2. Aiming for Integrity in Laws

Indonesia has a robust Presidential democracy and includes:

- very assertive Parliament
  - Jealously guarding its role
- many interests in Parliament
  - No guarantee that draft legislation from Government will be passed without amendment

Indonesian Experience

- Compromise as little as possible on the laws that lay foundations for investment
  - good laws attract foreign investment and keep domestic investment

- Indonesian Chamber worked long and hard with both Government and Parliament for:
  - New Investment and new Tax Laws and others
  - Clear protection for investors, national treatment and competitive laws

Lessons on Making Laws

- Indonesian Chamber will take same approach with incoming Government and Parliament on:
  - legal reform, new labor laws and laws affecting regional autonomy
  - works required on specific sectors
- Recurring theme of consultation
  - Governments and Parliaments will achieve better outcomes in the legal framework by working closely with investment community

3. Review and Address Weak Points

- Implementation challenge in Indonesia is vast
  - Scale of reform agenda
  - greater movement for regional autonomy
  - coordination of policies
  - capacities of various arms of government
- Develop an ongoing review to identify and address weak points involving domestic and foreign investors in the process

A word on Implementation Matrices

- APEC and many governments use the "matrix approach" to determine the level implementation of an investment package

9 boxes out of 10 boxes checked = 90 % implementation

- But….
  - More often than not, the remaining box is the most difficult and most critical in determining the success of the whole investment package
  - We need more qualitative approaches to examine progress and effectiveness in implementation

Indonesia Experience

- Indonesian President chairs a National Team for acceleration of investment and exports
  - Multi-departmental institutional process
  - Trouble shorter and facilitator

- Indonesian Chamber has been asked by government to establish a counter-part process involving domestic and foreign businesses developing more effective dialogue on implementation

Lessons learned on Review Process

- Indonesia review process is a good approach
- Indonesian Chamber is looking ways to ensure its better resourced and improved
- Our goal:
  - Together, Government and Business can move from being reactive to proactive addressing implementation of investment reforms

Conclusions

- Investment reform is one of the most important areas of cooperation for APEC as the world becomes more integrated and competitive

- Despite our recent setback, Indonesia is absolutely determined to build on the improvements to the investment climate
  - Indonesia continues to make systematic reforms on many fronts and has opened new opportunities
  - We are confident of further major improvements under the incoming government

Thank You

Implementing Domestic Regulatory Reform, Public Sector Reform and Strengthening the Economic Legal Infrastructure so that Investment for the Public Benefit Increases

The MANILA WATER EXPERIENCE

Mr. VIRGILIO C. RIVERA, JR.
Group Director, Regulation and Corporate Development
Manila Water Company

1

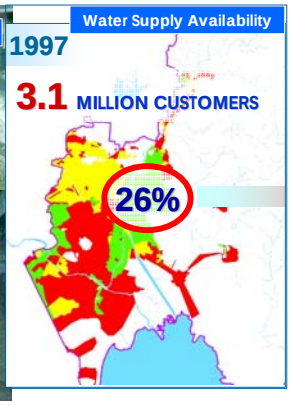
Outline

- **Public – Private Partnership**
- **Business Results and Benefits to the Public**
- **Gearing Up for Growth: Improving the Investment Environment**
- **Summary**

2

Privatization Challenges

Why Private Sector Investment was Needed



Manila Water

3

Manila vs Asian Cities

City	Population (million)	Water Availability (hrs/day)	Water Coverage (% of pop)	Non-Revenue Water (% of prod)	Staff/1000 Connections
Manila East (1996)	3.1	16	58	63	9.8
Manila East (2008)	5.6	24	99	20	1.6
Singapore	3.0	24	100	7	2.0
Hong Kong	6.3	24	100	36	2.8
Seoul	10.6	24	100	35	2.3
K. Lumpur	1.4	24	100	36	1.4
Bangkok	7.3	24	82	38	4.6

Source : *Asian Development Bank 1996 Data*

Manila Water

4

Public – Private Partnership

1997 Privatization

Key Features

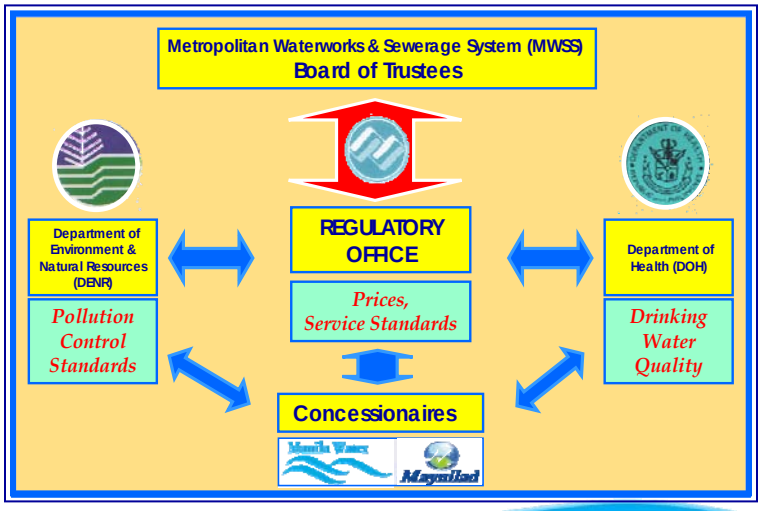
- Two 25-year concessions
- Operators responsible for O&M and investment
- Service coverage targets
- Regulation by contract

Manila Water

5

Public – Private Partnership

The Regulatory Environment

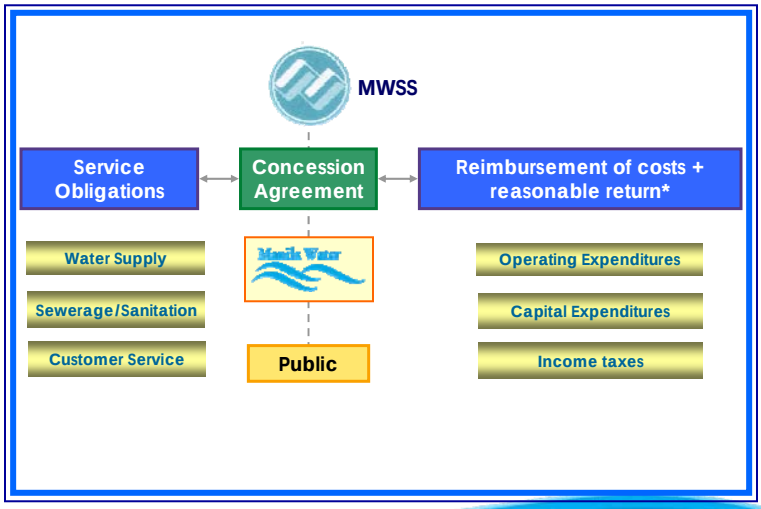


Manila Water

6

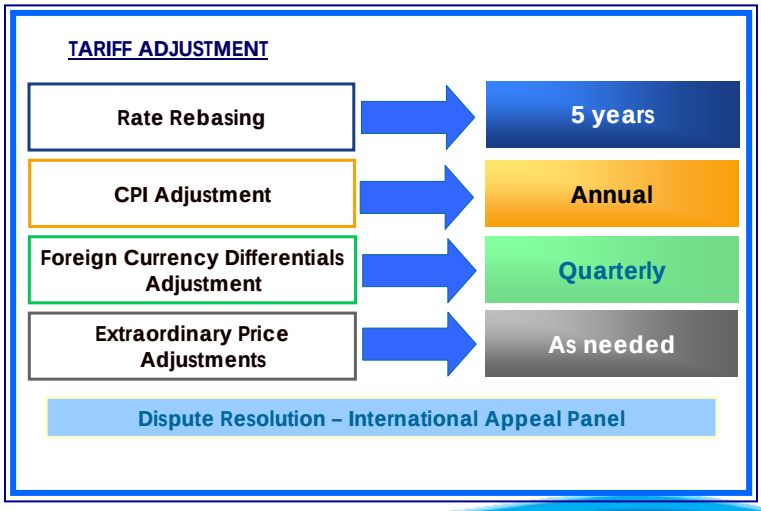
Progressive Regulatory Framework

Concession Framework



Progressive Regulatory Framework

Formula-driven Adjustments



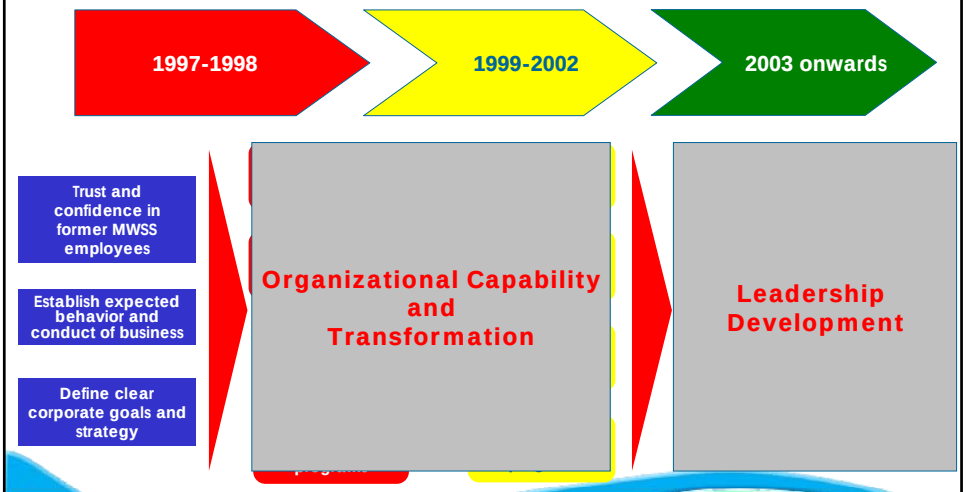
Business Results and Benefits to the Public

The Manila Water Business Model

Credible Shareholder Base

Company Best Practices

Investing in Our People



Company Best Practices

Decentralization and Empowerment for Stability and Efficiency

8 Business Areas

Business Zones

Territory Managers

99.99% Reliability

100% Water Quality

Business Continuity Team

Manila Water

Company Best Practices

Pro-active Stakeholder Management

Customer Service

Cooperation with the Regulators

LGU Engagement

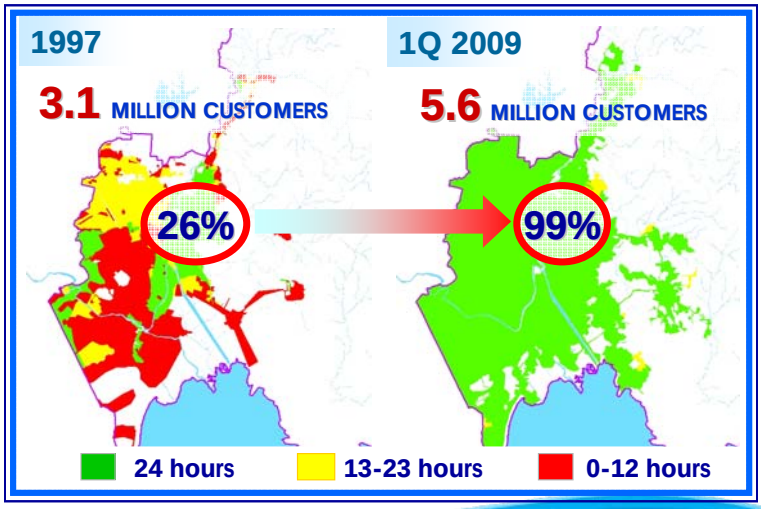
Corporate Governance

Vendor Development

Manila Water

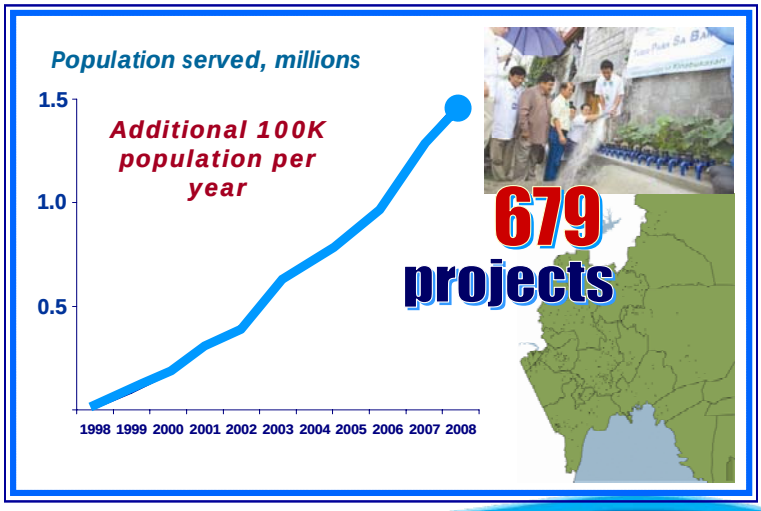
Benefits to the Public

Impact on Quality of Life



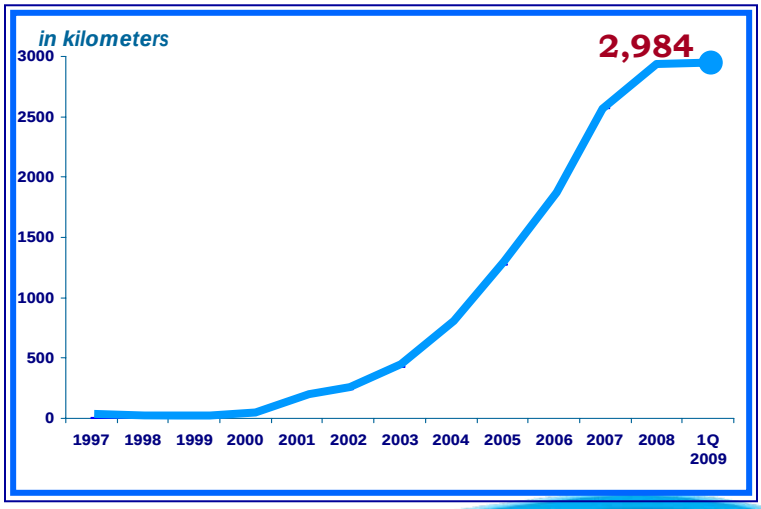
Benefits to the Public

Water for the Poor Program



Business Results

Laying of Mains and Distribution Lines



Manila Water

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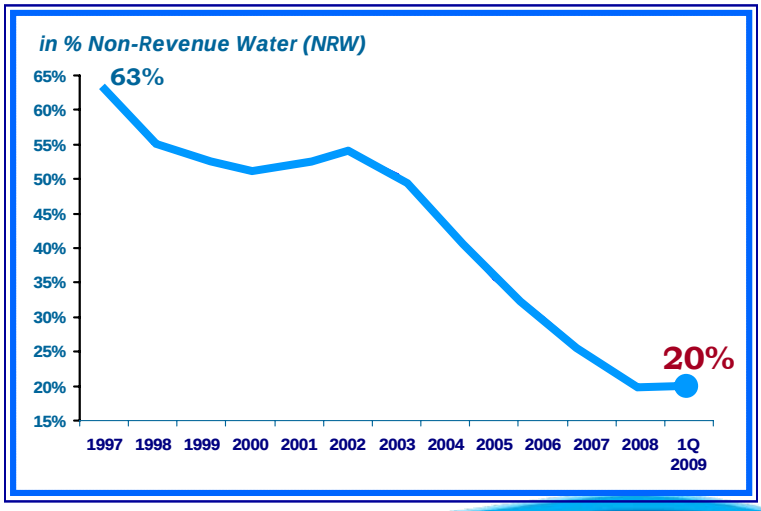
Business Results

Reduction of Water Losses



Manila Water

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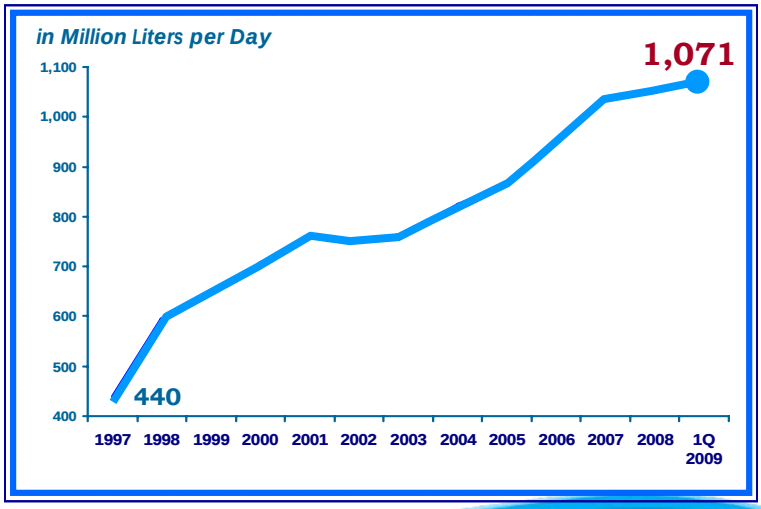
Business Results

More Water Delivered to Customers



Manila Water

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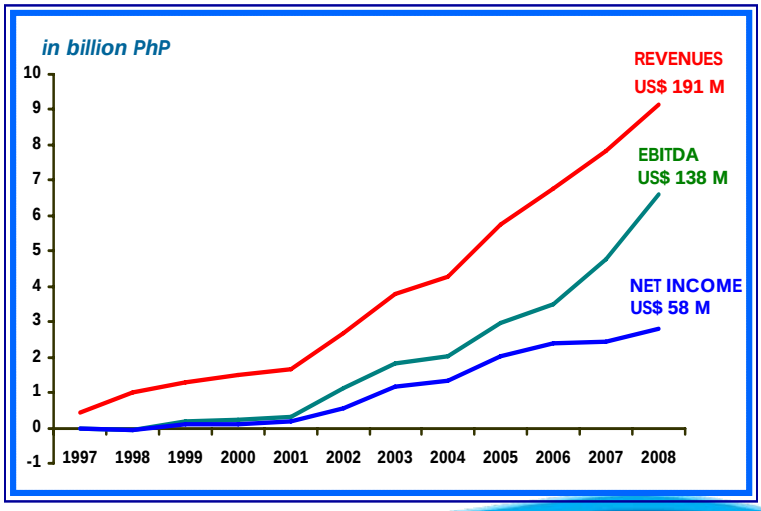
Business Results

Solid Financial Performance

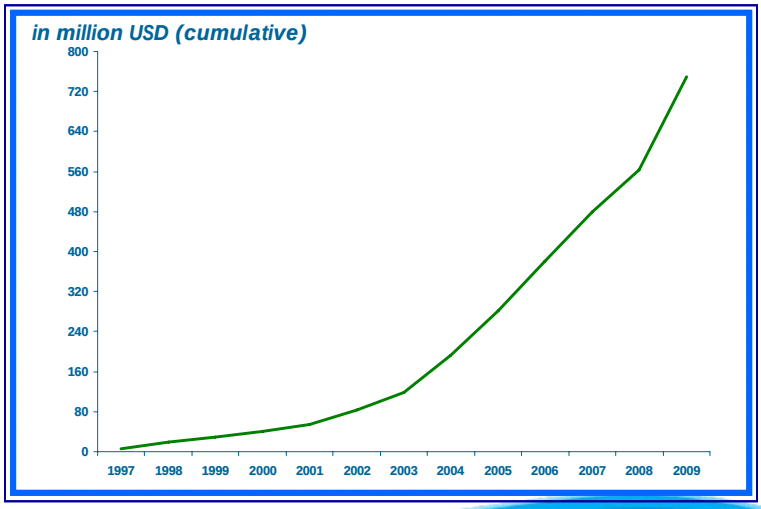


Manila Water

21

Business Results

Increasing CAPEX for Better Service

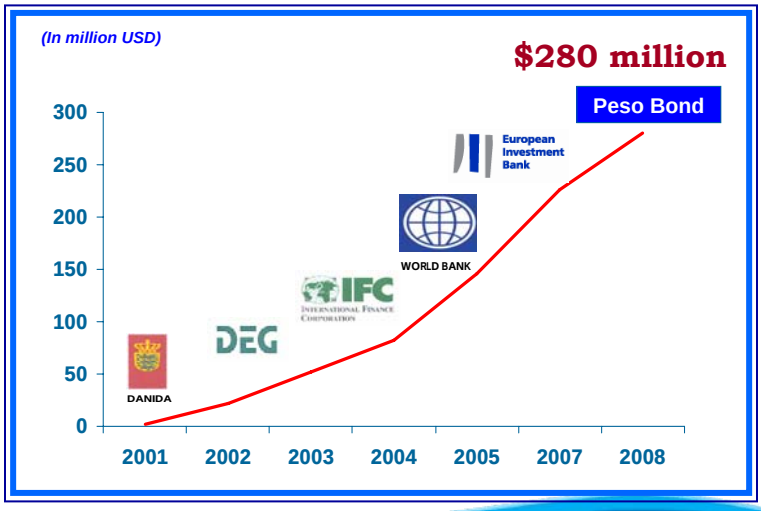


Manila Water

22

Business Results

Access to Low Cost Funding

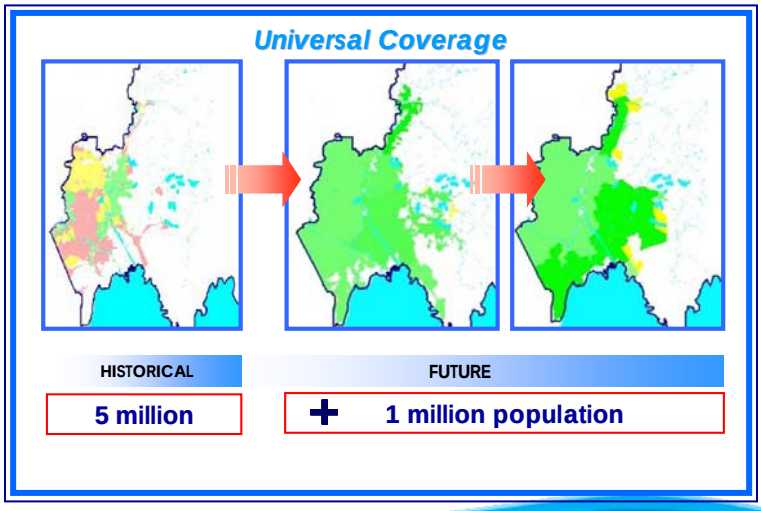


Manila Water

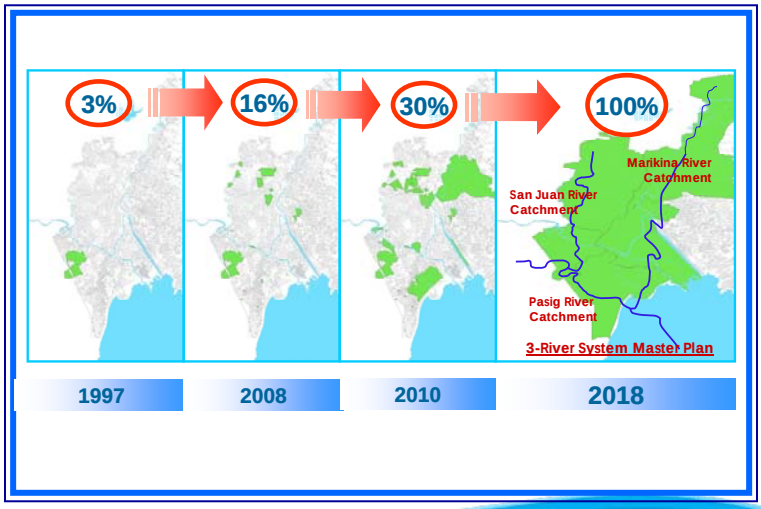
23

Gearing Up for Growth: Improving the Investment Environment

Water Supply Expansion



Expand Wastewater - Environmental Services



Expansion Beyond the East Zone

Summary

- The Government's political will in inviting private sector investments in the water industry is an essential first step to the provision of better services
- A progressive regulatory framework is a good foundation for a successful private-public partnership
- Perfect alignment of business and social objectives provides maximum value to both shareholders and the public
- Solid financial support and a credible shareholder base are important factors to improve the investment environment

Manila Water

APEC Asia-Pacific Economic Cooperation

Manila Water

Implementing Domestic Regulatory Reform, Public Sector Reform and Strengthening the Economic Legal Infrastructure so that Investment for the Public Benefit Increases

The MANILA WATER EXPERIENCE

Mr. VIRGILIO C. RIVERA, JR.
Group Director, Regulation and Corporate Development
Manila Water Company

Manila Water

MACQUARIE CAPITAL

Stimulating FDI using the PFI method into the ASEAN and East Asia Region

Presentation by Neil Arora – Head of Infrastructure Asia

27 July 2009

MACQUARIE

Agenda

1. Macquarie's infrastructure business
2. What is PFI?
3. Attributes required in PPP projects to attract FDI
4. Conclusion

Macquarie's infrastructure business

1

Macquarie's Infrastructure Business Model

A complete financial service provider…

Broker	Financial Adviser	Underwriter	Fund & Asset Manager	Principal

Governance Separation

- A dedicated **Infrastructure Advisory Team** comprised of over 500 infrastructure specialist around the world;
- A **Debt Advisory Team** with extensive experience on debt syndication, debt restructure, project finance and convertible bonds
- An **Equity Capital Market** team with track record in initial public offering, rights issue and placement
- A **Private Placement Group** with established relationship with over 380 institutional investors
- Listed and unlisted **infrastructure funds** pursuing acquisitions and deeply involved in asset management

…covering all classes of infrastructure






Toll road | Airport | Rail | Port | Telecom | Power

Macquarie Capital Infrastructure Funds

Macquarie manages 29 listed and unlisted infrastructure funds across geographies

Macquarie listed funds

Fund	Location	Description
Asia		
Macquarie International Infrastructure Fund (MIIF)		Invests in infrastructure assets around the world, with a focus on Asia
Macquarie Korea Infrastructure Fund (MKIF)		Invests in Korean infrastructure businesses
Non-Asia		
Macquarie Infrastructure Group (MIG)		Invests in toll roads globally
Macquarie Airports (MAP)		Invests in airports globally
DUET Group (DUET)		Invests in energy utility infrastructure
Macquarie Power & Infrastructure Income Fund (MPT)		Invests in North American infrastructure businesses, with an emphasis on power infrastructure and Canadian businesses

Major Macquarie unlisted funds

Fund	Location	Description
Asia		
Macquarie SBI Infrastructure Fund (MSIF)		US$1.037 billion to invest directly into Indian infrastructure assets
Macquarie Korea Opportunities Fund (MKOF)		Invests in infrastructure assets
Non-Asia		
Macquarie European Infrastructure Fund II (MEIF II)		Invests in high-quality infrastructure businesses in developed European countries
Macquarie Infrastructure Partners (MIP)		Invests in North American infrastructure businesses

Macquarie's 110 Infrastructure Assets

Macquarie manages 110 assets in 27 countries, servicing more than 100 million people every day

UK
- M6 Toll
- Bristol Airport
- Wales & West Utilities
- Thames Water
- Combined Landfill Projects Envirogas
- Energy Power Resources
- Arqiva
- Airwave
- Red Bee Media
- Condor Group (ferry services)
- Moto (motorway services)
- National Car Parks
- East London Bus Group
- Steam Packet (ferry services)
- Wightlink (ferry services)

Finland
- Fonecta (directories)

Czech Republic
- Mediatel (directories)

Slovakia
- Mediatel (directories)

Netherlands
- De Telefoonggids (directories)
- Gouden Gids (directories)

Poland
- DCT Gdansk (container terminal)
- Macquarie CountryWide Trust
- pkt.pl (directories)

Spain
- Itevelesa (vehicle inspection)
- Asset Energia Solar
- Solpex Energia Solar

Sweden
- EPR Sweden (wind farm)
- Arlanda Express
- Lokaldelen (directories)

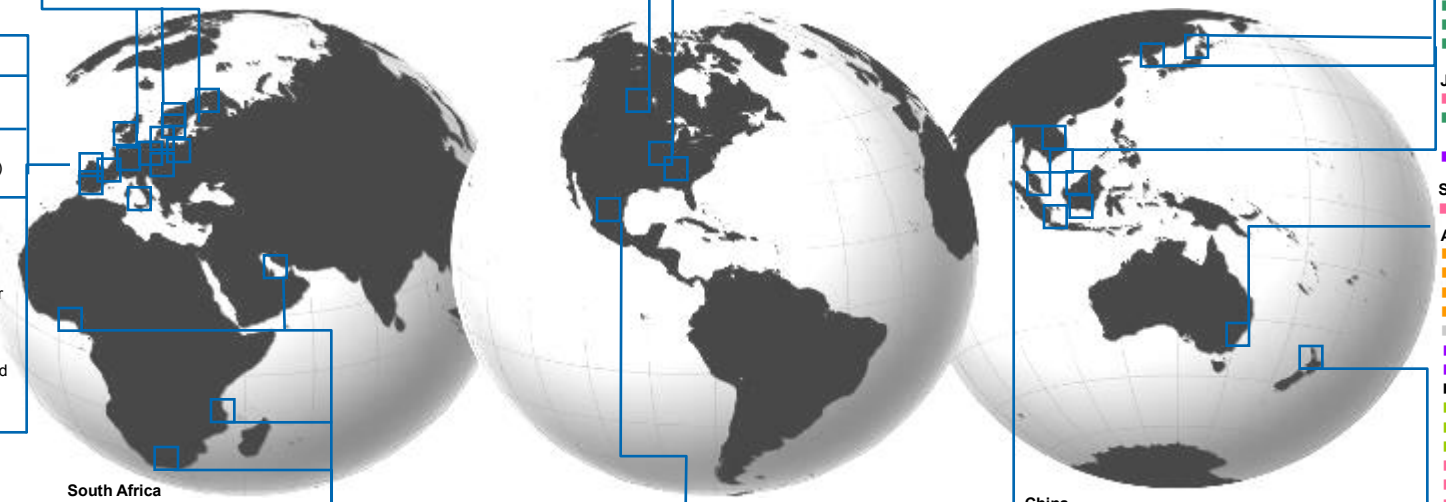
Austria
- Herold (directories)

Belgium
- Brussels Airport

Denmark
- Copenhagen Airports
- De Gule Sider (directories)

France
- Autoroutes Paris-Rhin-Rhône
- Trois Sources & Lomont Windfarms
- Compteurs Farnier (water metering)
- EPR France (wind farm)
- RES (wind farm)
- Pisto SAS (oil storage and distribution)

Germany
- Warnow Tunnel
- Macquarie CountryWide Trust
- GWE (heat & power)
- Techem A.G (submetering)
- TanQuid (tank storage business)



South Africa
- N3 Toll Concessions
- Bakwena Platinum Corridor
- Trans African Concessions
- Neotel
- Kelvin Power Station

Nigeria
- Lekki Concession Company

Tanzania
- Kilimanjaro Airport Development Company

United Arab Emirates
- Al Ain Industrial City
- Industrial City of Abu Dhabi
- ICAD Effluent Treatment Plant

Canada
- Edmonton Ring Road
- Highway 407 ETR
- A-25
- Sea to Sky
- AltaLink
- Cardinal (power station)
- Whitecourt (biomass facility)
- Chapais (biomass facility)
- Erie Shores Wind Farm
- Hydro Power Business
- Halterm Limited (port)
- Fraser Surrey Docks
- Leisureworld
- New World Gaming

USA
- Dulles Greenway
- Indiana Toll Road
- Skyway
- South Bay Expressway
- AIR-serv (tyre inflation)
- Icon Parking
- Hanjin Container Terminals
- Harley Marine Services
- Petermann (school buses)
- Smarte Carte
- Penn Terminals
- Sentient (private aviation)
- Airport Parking Business
- Airport Services (fixed base operations)
- Waste Industries
- American Consolidated Media
- Bulk Liquid Storage Terminal Business
- Express Energy
- Global Tower Partners
- Macquarie DDR Trust
- Macquarie CountryWide Trust
- Macquarie Leisure Trust Group
- Aquarion Company
- Puget Energy
- District Energy
- Duquesne Light
- Gas Production and Distribution Business

Mexico
- Grupo Aeroportuario del Sureste de Mexico S.A. de C.V

China
- Changshu Xinghua Port
- MWREF
- Hua Nan Expressway

Chinese Taipei
- Taiwan Broadband Communications
- Miaoli Windpower
- Hanjin Pacific Corporation (Kaohsiung)

Korea
- Baekyang Tunnel
- Cheonan-Nonsan Expressway
- Incheon International Airport Expressway
- Gwangju 2nd Beltway Section 1
- Gwangju 2nd Beltway Section 3-1
- Machang Bridge
- Soojungsan Tunnel
- Daegu 4th Beltway East
- Incheon Grand Bridge
- Seoul Chuncheon Expressway
- Woomyunsan Tunnel
- Yongin-Seoul Expressway
- Seosuwon-Osan-Pyungtaek Expressway
- SK E&S Gas Distribution
- West Sea Power/West Sea Water
- C&M (cable tv)
- Hanjin Pacific Corporation (ports)
- Busan New Port Phase 2-3
- Seoul Subway Line 9, Section 1

Japan
- Macquarie Direct Property Fund
- Hanjin Pacific Corporation (Tokyo, Osaka)
- Japan Airport Terminals

Singapore
- Macquarie Direct Property Fund

Australia
- Dampier to Bunbury Natural Gas Pipeline
- Multinet Gas Holdings
- United Energy Distribution
- AlintaGas Networks
- Broadcast Australia
- Sydney Airport
- Hobart International Airport
- Westlink M7
- Retirement Villages Group
- Macquarie Southern Cross Media
- Regis Group (aged care)
- Macquarie CountryWide Trust
- Macquarie Leisure Trust Group
- MREEF
- Macquarie Direct Property Fund

New Zealand
- Metlifecare
- Private Lifecare
- Retirement Care New Zealand
- Macquarie CountryWide Trust
- Macquarie Leisure Trust Group

Real Estate | Airports | Communications | Utilities | Roads | Transport & Related Services | Other

As at 31 March 2009. Represents businesses and assets which Macquarie Capital Funds manages on behalf of investors with various direct percentage stakes held in each.

Some of Macquarie's Infrastructure Clients

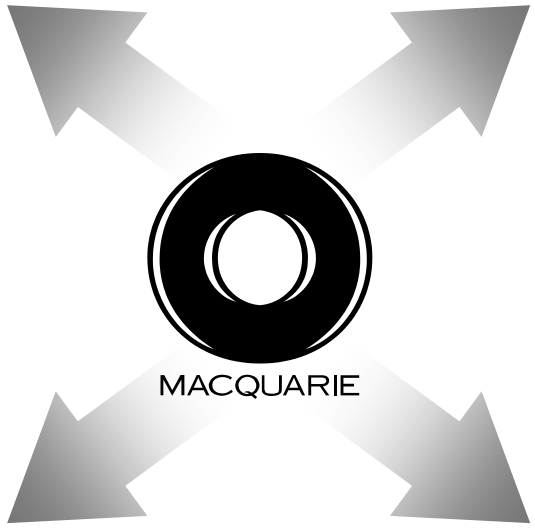
Beyond its fund business, Macquarie Capital advises Government and private third party clients on infrastructure financial advisory, M&A, project finance, and ECM transactions

Key Utilities Clients

- Sydney Water
- APA Group
- GDF Suez
- Marubeni
- Origin Energy
- AGL

Key PFI / PPP Clients

- Balfour Beatty
- Ecovert FM
- Mill Group
- John Laing
- Bouygues Construction



Key Other Infrastructure Clients

- Transfield Services
- Ferrovial
- Leighton Contractors
- Tata Group
- Thiess

Key Financial Infrastructure Clients

- Spark Infrastructure
- CPP Investment Board
- JPMorgan Chase
- Challenger

What is PFI?

2

PFI is a Specific Type of PPP

- The **Private Finance Initiative (PFI)** was implemented in the UK by the Conservative Government in 1987, then continued with modifications by the New Labour Governments in the 1990s – showing political consensus for the scheme
- Under PFI, the private sector is invited to build and operate an infrastructure asset (hospital, school, road, etc.) for a given time period in exchange of Government payments based on performance. Total value of PFI (£60bn) now represents 11% of UK net debt
- PFI is one type of **Public-Private-Partnership (PPP)** which is a broader concept:
  - PPPs started as early as the 19th century with utilities "concessions of public service" in Europe
  - PPPs have been successfully developed across geographies, in both developed and developing markets
  - PPPs have taken many forms: BOT, Government off-take, Government guarantees, Government availability payments, etc.
- In general, **PPP is an interaction between the Government and the private sector in which risks are borne by the party best placed to manage them**

Simple PFI Project: Birmingham Schools…

Balfour Beatty Infrastructure Investments Ltd

Innisfree

50%

50%

SPC Holdings Limited

Sub Debt

Sub Debt

Birmingham City Council

Project Agreement

SPC Limited

Financing Agreement

Lenders

D&B Contract

FM Contract

BBCL / BKL JV

SPC Advisers

Haden Building Management Ltd

D&B Consultants

…And More Complex: London Underground

PPPs Deliver

Key Benefits

- **Cheaper Projects:** UK National Audit Office Study of Highway PPP found savings of 19% on capital costs, 34% on operating costs, and 17% on lifecycle costs despite higher cost of funding
- **Less Delay**: A 2006 UK Treasury study showed that 76% PFI came in on time or early as opposed to only 30% of non-PFI projects
- **No Cost Overrun**: UK Treasury study found no cost overruns for PFI projects as opposed to 73% of non-PFI that ran over budget
- **User Satisfaction**: UK Treasury study showed 80% users of PFI projects are always or almost always satisfied with the service being provided

Key Reasons for Benefits

- **Risk transfer:** transfer of "whole life" responsibility to private sector
- **Broader competition:** not just contractors, but also operators, suppliers
- **Economies of scale** in project management, design, construction, operation
- **Less litigation**: due to reduction in scope for claims against governments

Attributes required in PPP projects to attract FDI

3

Investment Grade Attributes

1. Identified pipeline of projects
2. Fair equity return for risks taken
3. Developed debt capital markets
4. Parties able to manage construction and O&M risks
5. Central body with applicable skills
6. Good regulatory framework (MCA, enforceable dispute resolution)

Meeting Attributes Helps Attracting FDI

Countries	Identified pipeline of projects	Fair equity return for risk taken	Developed debt capital markets	Parties managing construction and O&M	Central body with applicable skills	FDI raised as % of all PPP (Macquarie estimates)
UK 	+++	++	+++	+++	+++	40 - 50%
Australia 	++	++	+++	+++	++	30 - 40%
Singapore 	+	++	++	++	+	20 - 30%*
Korea 	+	+	++	+++	+	10 - 20%
India 	+	+	+	++	-	<10%

* After factoring Temasek's ownership in power, port, and rail infrastructure

Successful Case: UK PFI

Attributes	UK PFI Performance
Identified pipeline of projects	An average of 45 projects tendered every year since 1987, with more than 1,000 projects till date
Fair equity return for risk taken	Attractive returns have triggered active participation by both financial and strategic investors (construction co)
Developed debt capital markets	Matured debt capital markets with possibility to consider both bank or bond options
Parties managing construction and O&M risks	Positive reports from UK Treasury on construction and O&M performance
Central body with applicable skills	PFI taskforce created since 1997 within the Treasury to provide central co-ordination
Regulatory framework	Established framework, which has been refined over 20 years

Success in attracting FDI (>50% today)

Macquarie has advised foreign sponsors and helped secure debt from foreign lenders, as well as construction and O&M capabilities from foreign players

Limited Success: Indian Road PPPs

Attributes	NHAI Performance
Identified pipeline of projects	Good pipeline, but most projects are too small to attract interest (<US$500m project cost)
Fair equity return for risk taken	Foreign bidders most of the time not able to match return at which Indian companies are bidding
Developed debt capital markets	Local lenders not comfortable with fully non-recourse financing, hence loans include corporate guarantees
Parties managing construction and O&M risks	Only Indian developers can "manage" some aspects of construction, e.g. physically securing right of way
Central body with applicable skills	NHAI bureaucrats not empowered to asses substance over form, frequent delays in bid process, etc.
Regulatory framework	Issue with termination payments as payments are not always computed based actual project cost

Limited success in attracting FDI so far (<10%)

Macquarie experience has been that we could not qualify on good roads or could not get comfortable with other roads

Conclusion

4

Conclusion

- Infrastructure is predominantly a domestic business
  - Local players can price in domestic risks more efficiently
  - No FX risk
  - Equity returns linked to pension fund liabilities
- Pension funds look for diversity across their portfolios
  - Look to emerging economies for growth, higher returns and FX exposure
  - Emerging economies need this investment for infrastructure plans to succeed
- PPP can be an effective method to increase private sector participation and attracts FDI provided key attributes are in place
  - UK PFI has been a great success
  - For some countries, e.g. India, experience has been disappointing with most equity coming from local players

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Cross-border Mergers and Acquisitions within APEC and Their Implications for Exports, Greenfield FDI, and GDP

by

Zhigang Li and Larry D. Qiu[#]

July 15, 2009

Executive Summary

1 Cross-border mergers and acquisitions (M&As) are an important global economic activity. As a form of capital flows, cross-border M&As are also an effective way to transfer technologies and managerial expertise between economies. They are also likely to reduce production costs, improving firm's efficiency by integrating complementary tasks etc. In particular, the 2001 OECD (Organisation for Economic Co-operation and Development) Report has identified cross-border M&As as one of the two most important features of the present industrial globalization. This is not only the case among the OECD countries, but also the case within the APEC economies. Cross-border M&As within the APEC region have been increasing rapidly.

2. The main focus of this study is on intra-APEC cross-border mergers and acquisitions (M&As) from 1980 to 2007, i.e. cross-border M&As with both the acquiring firms and target firms in the APEC (Asia-Pacific Economic Cooperation) economies. It aims at (i) examining the pattern of intra-APEC cross-border M&As; (ii) exploring the determinants of cross-border M&As; (iii) analyzing the impacts of cross-border M&As on international trade, greenfield FDI, and GDP; and (iv) discussing policies on promoting cross-border M&As and the consequences on economic performance .

3. This study is among the first to take an econometric approach on intra-APEC cross-border M&As and their economic impacts at the macroeconomic level. Building on other related studies, this study has lengthened the time coverage that helps, uncovered more details of cross-border M&As in APEC, and examined more issues related to cross-border M&As.

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4. Our results characterize the various patterns of intra-APEC cross-border M&As and their relationship with other economic variables. We conclude that cross-border M&As should be encouraged. Our empirical models suggest that intra-APEC cross-border M&As help raise GDP levels directly and indirectly, with the latter primarily via trade. Our trade model indicates that cross-border M&As promote international trade. Hence, this report identifies another important factor of promoting economic development, namely cross-border M&As.

5. More specifically, we summarise the seven key findings in the following.

(1). (***General trend of cross-border M&As in APEC***): Cross-border M&As within APEC have expanded rapidly, but with large fluctuations. During the sample period (1980-2007), annual growth rates are 21.5% in value and 25.3% in number. The growth exhibits three waves or cycles: 1980-1990, 1990-2000, and 2000-2007. The time trend of cross-border M&As is closely related to domestic M&As of the APEC economies. However, cross-border M&As have increased more rapidly than domestic M&As over time.

(2). (***Individual economies' cross-border M&As***): Industrialized economies (especially the United States, Canada, and Australia) and emerging economies in the East Asia have been the key driving forces for cross-border M&As within APEC. The United States has transformed from a popular target economy to both active acquirer and target economy. Canada has been active in cross-border M&As throughout the sample period. The importance of China in cross-border M&As has increased rapidly, especially in the past decade. Hong Kong, China has shown intensified participation both as acquirer and target economy. Singapore started to take off in the 1990s. The time trends of different APEC economies are generally highly correlated, with intra-APEC M&As showing largely synchronised cycles. However, the scale, income and asset of firms participating in cross-border M&As vary widely across APEC economies.

(3). (***Sectoral cross-border M&As***): On the acquiring side, the share of mining and construction and that of light manufacturing have declined since mid-1980. In contrast, the share of utility and transportation and that of finance and insurance industry has increased over time. The shares of other industries have been quite stable over time. On the target side, similar pattern appears to a lesser extent. In addition, most industries heavily target the same industries for cross-border M&As, suggesting high degree of vertical supply chain and horizontal scale economies integration within APEC.

(4). (***Individual firms' cross-border M&As***): Over time, the scale of acquiring firms has decreased and there were more and more firms participate in acquisitions. More M&As may be induced by the increasing market size as a result of deeper market integration across the APEC economies. This

observation may also reflect certain degree of increasingly liberalized markets across the board. We also find that acquiring firms are generally larger and more profitable than target firms, indicating that advanced technologies and management skills brought about by M&As are likely to be transferred from more efficient firms to less efficient firms. As a result, it also improves average industry productivity.

(5). (Cross-border M&As and trade): Exports are conducive to overseas acquisitions. We find that if an economy exports more to another economy, the former will also acquire more assets in the latter. Moreover, if an economy acquires more assets in another economy, the former will trade more (both imports and exports) with the latter.

Specifically, we have found intra-industry cross-border M&As more prevalent in APEC than inter-industry cross-border M&As. For intra-industry cross-border M&As, they can take the form of either vertical supply chain integration or horizontal scale economies integration at the regional level. Both forms are conducive to driving productive efficiency and cost-effectiveness across-border, either through the sharing of comparative advantages between participating economies or through enlarging economies of scale in production and distribution of output.

Like trade, cross-border M&As promote GDP and enhance economic development. Like trade, cross-border M&As help drive regional economic integration through capital/technology and skill/people transfers. Moreover, there are more economies participating as both acquirer and target economies in APEC over time. The reducing size of participating firms also indicates a more open regime in APEC that facilitates transfers among APEC economies.

Thus, trade and cross-border M&As are largely complementary in this region. Trade flows and capital flows (as a result of cross-border M&As) in this region reinforce each other.

(6). (***Cross-border M&As and greenfield FDI***): Generally speaking, we do not find significant effects between cross-border M&As and greenfield FDI in all directions. However, it is found that if there are more M&As between two economies, the acquiring economy's greenfield FDI outflows to the target economy would decrease. This finding indicates some degree of substitution between cross-border M&As and greenfield FDI to the acquirer.

(7). (***Cross-border M&As and GDP***): Cross-border M&A activities and the size of GDP (i.e. economic size of the economy) are positively related. Understandably, larger economies in terms of GDP level tend to acquire more foreign assets. On the other hand, larger economies also attract more foreign acquisitions as they represent better market potential.

More importantly, cross-border M&As raise GDP. We find that after acquiring more foreign assets, an economy's GDP will also increase. This finding provides support to the possibility that cross-border M&As promotes economic development via channels such as trade and efficiency improvement in the supply chain.

Our empirical findings also help draw the following potential policy implications.

(1). Intra-APEC cross-border M&As are conducive to GDP and trade flows. The empirical results suggest removing barriers to cross-border M&As is beneficial from an economic development perspective. This can be one of the driving forces to greater regional economic integration, especially in respect of technology and skills transfers. Nevertheless, while policies promoting cross-border M&As are recommended, there may be concern about the need to balance market concentration with market competition.

(2). Trade liberalization not only promotes trade flows, but also induces more cross-border M&As. Although barriers to trade have been lowered through continuous efforts jointly by all economies, various kinds of trade barriers still have significant impacts on trade flows, albeit to various extents in different economies. While the traditional trade barriers such as tariffs and quotas have already be reduced to a lower level, especially in developed economies, other forms of barriers such as anti-dumping and technical barriers are on the rising trend. There is no doubt that governments have been putting in effort to further remove those barriers. Our study makes us to stress one point, which is, removing barriers to trade not only promotes trade flows but also cross-border M&As.

(3). The exisiting regional trade agreements (RTA), with an exception of the North American Free Trade Agreement (NAFTA), are not effective in promoting cross-border M&As directly as they are not originally motivated to increase cross-border M&As. Moreover, we do not find evidence that an economy's WTO membership helps promote the economy's cross-border M&As directly. These two findings imply that the existing regional integration in APEC has not given sufficient support to cross-border M&As. Thus, while we are arguing for further regional integration, we should pay more attention to removing barriers to cross-border M&As.

I. Introduction

1.1. Objective of This Study

Cross-border mergers and acquisitions (M&As) have become an important global economic activity. There is an increasing trend of cross-border M&A activities, but the fluctuations of such activities are also large. The 2001 OECD (Organisation for Economic Co-operation and Development) Report has identified cross-border M&As as one of the two most important features of the present industrial globalization. This is not only the case among the OECD countries, but it is also the case within the APEC (Asia-Pacific Economic Cooperation) economies. Cross-border M&As in the APEC region have been increasing rapidly. Based on the cross-border M&A data in APEC, this project aims to achieve FOUR objectives:

(i) Examine the patterns of cross-border M&As within APEC;
(ii) Explore the determinants of cross-border M&As;
(iii) Analyze the impacts of cross-border M&As on international trade, greenfield FDI, and GDP; and
(iv) Discuss the possible policy implications based on these observations and empirical analysis.

First, in order to examine how cross-border M&As influence other economic activities, we must study the stylized facts and patterns of M&A activities. While cross-border M&As have become very popular among the OECD countries (see 2001 OECD Report), the situations in APEC vary a great deal between economies. Evidence (see 2001 OECD Report) has shown that cross-border M&As are the major form of FDI flows in developed economies, but greenfield FDI (e.g., building new plants in foreign countries for production) is more common for developing economies. It would be of great interest to understand whether this general pattern prevails in APEC. As cross-border M&As and greenfield FDI may have very different implications for regional trade, competition, and economic growth, it is important to examine the cross-border M&A activities within APEC.

We are particularly interested in understanding the following questions: which economies have more cross-border M&As? which industries have more cross-border M&As? what types of firms are more likely to engage in cross-border M&As? how do trade and therefore trade liberalization affect cross-border M&As? how do cross-border M&As affect GDP? Answers to these questions will form an important basis for the subsequent empirical and theoretical investigations on cross-border M&As, and help inform how regulatory policies would influence cross-border M&As.

Second, cross-border M&As is another form of FDI. Traditionally, multinationals gain access to foreign markets through exports and greenfield FDI. With enhanced possibilities of cross-border

M&As, multinationals can gain access to foreign markets by purchasing local firms. While there are numerous studies of how FDI (mainly greenfield FDI) would affect trade, it is not so clear whether cross-border M&As would substitute for the traditional forms of market entry by reducing trade and greenfield FDI. However, it is not impossible that cross-border M&As, by merging two firms, may encourage more intra-firm transactions and increase international trade. To enhance understanding, we have made the investigation of the impact of cross-border M&As on trade in APEC as one of the key tasks of this paper.

Third, economic development could be affected by international trade and FDI. There is a fair amount of literature on how trade and FDI (mainly greenfield FDI) generally affect economic growth. With cross-border M&As being another form of FDI, it is important to examine whether its direct impacts on economic development differ from those of trade and greenfield FDI. Moreover, cross-border M&As may also affect economic development indirectly through their influence on trade flows. As cross-border M&As rise over time, a better understanding about their impacts on economic development is important in helping economies in shaping a policy framework to attract cross-border M&As.

Finally, as the study of the above issues will provide us insights on the possible impacts of intra-APEC cross-border M&As on trade, greenfield FDI, and GDP, it also helps us understand how various policies (e.g., trade liberalization, capital movement liberalization, and anti-trust regulation) would have direct and indirect impacts on cross-border M&As, which in return affects trade, greenfield FDI and GDP. For instance, the following questions are particularly pertinent: Would trade liberalization stimulate more cross-border M&As? How would competition policies affect cross-border M&As and therefore affect trade, greenfield FDI, and economic development? We hope that some lessons can be learned and some policy implications can be drawn from the results of the present study.

This study is among the first to take an econometric analysis on intra-APEC cross-border M&As and their economic impacts.

1.2. Distinction Amongst International Trade, Greenfield FDI and Merger and Acquisition

The classical theory of trade emphasizes that trade can promote growth by taking advantage of each economy's comparative advantage. The new trade theory points out that free trade could also generate agglomerates, thus increasing economic productivity due to increasing-returns to scale. International trade also results in more varieties of goods for consumers. Furthermore, trade could increase the level of competition and thus increase market efficiency. Trade could also increase the exposure of the trading economy to a larger set of ideas or technologies, thus increasing the rate of

technical progress. The trade of intermediate goods could be an alternative way to increase the aggregate productivity of domestic economy.[1]

The ways that greenfield FDI affects economic development are different. Foreign investments could enhance productivity in the form of technology and, business know-how being directly transferred and their spillovers (Romer, 1993). FDI could directly reduce the cost of accessing foreign markets, thus improving trade and growth indirectly. FDI would also intensify market competition, thereby making the economy more efficient.

The channel through which cross-border M&As promote productivity and GDP might be similar to that of greenfield FDI. However, there are at least two important differences. First, cross-border M&As could be more cost effective as firms do not need to make a large fixed investment to setup the plants when entering the foreign markets. Second, both greenfield FDI and cross-border M&As are effective channels to effect capital and technology transfers. While the former is likely to be more direct through its fixed investment in the host (target) economies, the latter tends to have more influence on management skills and corporate culture. The initial round of employment effect of greenfield FDI is likely to be more notable, especially at the manual or production end as a new plant is set up, usually with only the managerial and supervisory staff seconded from the home economy by the acquiring firm. For merger and acquisitions, very often the initial employment effect is less prominent as the acquirer buys up an existing entity, though there may be secondment of managerial staff at the upper end.

1.3. Relations to Previous Studies

The phenomenon of cross-border M&As has attracted increasing attention from both the policymakers and the academia. Chen and Findley (2002) provide a general overview of cross-border M&As in the APEC. Based on the two UNCTAD (United Nations Conference on Trade and Development) reports (2000, 2001), they show that cross-border M&As in the APEC have grown rapidly during the period of 1991-2000; the transactions have been dominated by industrialized economies; the tertiary sector has been the most important sector in cross-border M&A transactions; and there has appeared an increasing imbalance between purchases and sales across different economies.

Our study differs much from Chen and Findley (2002) in many ways. First, they characterize cross-border M&As in APEC based on the findings of the two UNCTAD reports, but we conduct our analysis based on the original data, the SDC data (Thomson Financial's Securities Data Company). Second, their report only provides a picture about some aspects of cross-border M&As in APEC, but

1 See Winters (2004) for a discussion on how international trade could affect productivity and hence GDP.

we provide more pictures and more details (e.g., we also examine the pattern and compare the average size of the acquirers and that of the targets, which has implications on the changes in the barriers to cross-border M&As). Third, their report covers cross-border M&As from 1991 to 2000, while our study covers a much longer time span, from 1980 to 2007. Finally, the main objective of their report is to examine a series of questions (e.g., what is the motivation for cross-border M&As) by reviewing the existing literature, while, in contrast, the aim of our report is to conduct an original research on the implications of cross-border M&As on trade, greenfield FDI, and GDP, in addition to providing a detailed description of cross-border M&As in the APEC economies.

In another related paper, Moon et al. (2003) study the impacts of cross-border M&As on the competitiveness in three APEC members: South Korea, China, and Hong Kong, China. They collect information based on 15 cross-border M&A cases and demonstrate how the target firms respond to the deals. Four dimensions of competitiveness are examined: (1) factor conditions, (2) demand conditions, (3) related and supporting sectors, and (4) strategy, structure and rivalry. The evidence suggests that the benefits of cross-border M&As are larger than the costs.

While the study of Chen and Findley (2002) is based on basic data analysis and Moon et al (2003) rely on case study, some researchers have gone a step further to empirically examine the economic driving forces of cross-border M&As (but not for APEC). Particularly related to our study is the paper by Andersson and Svensson (1994), who examine the relationship between firm-specific skills and the entry modes of FDI. The data in their study cover all Swedish multinationals from 1965 to 1990. They use a logit model in which the dependent variable is zero if a firm makes greenfield investment and takes the value of one otherwise (i.e., cross-border M&As). Several alterative proxies are used to approximate firm size and R&D intensity to reflect on the size and skill level of firms. They find that firm-level skills affect the entry mode of the multinational firms. Relatively more organizational skill favors takeover, while relatively more technological skill favors greenfield operations. Moreover, it is found that firms established longer in the host economy are more likely to be taken over.

Head and Ries (2008) propose an innovative approach to examine empirically the incentive of corporate control (as opposed to capital injection, technology transfer, etc) in explaining cross-border M&As. Specifically, they use a two-step approach to estimate a structural model that determines cross-border M&A flows. In the first step they estimate acquirer-specific and acquiree-specific fixed effects, which contain important components (e.g. corporate control, which is proxied using variables including population and per capita GDP of the origin country)) predicted by theory. In the second step those fixed effects are regressed on proxies for corporate controls. The methodology is applied to bilateral FDI data for 30 OECD countries and 32 non-OECD partners (in a cross section model). It is also applied to 1990-1999 M&A data for 101 source countries and 198 destination countries (in a

panel data model). Their study finds that the structural model fits the data, providing support for the relevance of corporate control to acquire firms overseas.

Several other studies have explored the economic outcomes of cross-border M&As. Wang and Wong (2004) decompose FDI into greenfield FDI and cross-border M&As and examine their effects on economic growth using country level panel data (a panel of 84 economies, both APEC and non APEC from 1987 to 2001). Interestingly, they find that greenfield FDI has an unambiguous positive association with economic development, while cross-border M&As are effective only when host countries have sufficient human capital.

There is a small, but growing literature on modeling and analyzing the rationales for cross-border M&As and their impacts. We can classify those studies in three categories. Some are concerned about the implications of trade liberalization for the profitability of cross-border mergers (e.g., Long and Vousden (1995)), some focus on the rationales for the emergence of cross-border mergers (e.g., Horn and Persson (2001) on trade costs; Lommerud et al. (2006) on the presence of plant specific unions in oligopolistic competition; Neary (2007) on international differences in technology; Qiu and Zhou (2006) on the benefit of information sharing), and others are related to the various effects of cross-border mergers (e.g., Head and Ries (1997), Chen (2004), and Qiu and Zhou (2006) on competition and welfare; Neary (2004) on trade pattern and income distribution).

In particular, Long and Vousden (1995) investigate the profitability of cross-border mergers in the presence of trade liberalization. The results depend on whether trade liberalization is unilateral or bilateral and on how large the cost savings generated from the mergers can be. Horn and Persson (2001) use the coalition formation approach to analyze international mergers. They show that international mergers may arise due to lower trade costs, contrary to the "tariff jumping" argument. International merger leads to a trade-off between duplicating fixed cost and saving trade cost. Neary (2007) uses a general equilibrium model to show that international differences in technology generate incentives for cross-border mergers in which low-cost firms from one country take over high-cost firms from another country. Such mergers serve as instruments of comparative advantage. Lommerud et al (2006) explain international mergers as a result of oligopolistic competition in the presence of plant specific unions. They argue that unions are plant specific in the international setting and, hence, international mergers are profitable because wages decrease after the mergers.

Qiu and Zhou (2006) give a different explanation for cross-border merger incentives. They show that firms from different countries face different information sets with regard to the market's situation such as demand. When there is no market for information sharing, firms would merge in order to benefit from information sharing. Qiu and Zhou (2007) construct a dynamic model to analyze endogenous mergers and explain merger waves. Qiu (2009) examines and compares the incentives

for domestic mergers and cross-border mergers, and the relationship between cross-border mergers and firms' international market entry modes, i.e., export and FDI.

1.4. Contributions of This Study

The present study is empirical in nature. In this regard, several studies reviewed above are relevant, including Andersson and Svensson (1994), Burns and Moya (2006), Chen and Findley (2002), Moon et al. (2003) and Wang and Wong (2004). The main contributions of our study are the following.

First, this study intends to investigate a range of issues as described in subsection 1.1. These issues include the pattern of cross-border M&As, the determinants of cross-border M&As, the impacts of cross-border M&As on trade, greenfield FDI, and GDP, and a discussion on policy implications.

Second, this study aims at deploying the most up-to-date data with a special focus on the APEC economies. Currently, most existing studies on APEC cross-border M&As are based on data up to 2000 only. In this study, we intend to extend our observations to year 2007 (the latest data available). As we will see in the next section (Figure 2.1-1), a new wave of cross-border M&As is observed after 2001.

Third, we will attempt to adopt an econometric approach to study intra-APEC M&As from a quantitative perspective.

Unlike many earlier studies, this study will focus specifically on the APEC economies. While other studies like Andersson and Svensson (1994); Head and Ries (2008), and Chen and Findley (2002) are concerned about the possible forces driving cross-border M&As, we are concerned about the scale of the M&As. Our model is different from Andersson and Svensson (1994)'s firm-level analysis in that they are concerned just whether or not a firm makes cross-border M&As. While we also consider firm-level information, but we will provide richer information by discussing the impact of M&As at macro level. Our study is also based on empirical evidence of a longer time series and larger data set (using the SDC database) to enable quantitative measurement of relations.

As mentioned earlier, Chen and Findley (2002) also summarize the patterns of cross-border M&As during 1991-2000 using economy and industry level data. Since our data are at the firm level and cover a longer time period (1980-2007), we are able to provide a comprehensive and up-to-date picture on the evolution path of the cross-border M&As between the APEC members. For example, while Chen and Findley (2002) find the value of cross-border M&As in APEC rising monotonically during the sample period, we by looking at a longer time span (1980-2007) observe several cycles in cross-border M&As (as indicated in Figure 2.1-1 in section 2)

Lately, there is growing interest in cross-border M&As. Although the existing literature of international trade and (greenfield) FDI is large, the literature of cross-border M&As, unfortunately, is still small. Researchers have started to investigate why multinationals engage in cross-border M&As; whether the more or the less productive multinationals are more likely to take on cross-border M&As; which sectors are more attractive to cross-border M&As; how trade liberalization affects such activities; and what is the development implications of these activities. While these studies have helped improve the understanding of the academia, business people and policymakers on the recent trends of cross-border M&As, more in-depth research is needed to gain a better understanding of those issues and their related policy implications.

1.5. Organization of This Study

In Section II, we first present the patterns of intra-APEC cross-border M&As with regard to their time trend, correlation and variations across the APEC economies, similarities and differences across industries, and characteristics of acquiring firms and target firms. In Section III, we conduct econometric analysis to investigate the relationship and causality amongst cross-border M&As, international trade, greenfield FDI, and GDP. In Section IV, we explore policy implications based on the findings in Sections II and III. Section V presents the concluding remarks.

II. Patterns of Cross-Border Mergers and Acquisitions within APEC

Cross-border M&As have become an important feature of the recent industrial globalization. The OECD Report (2001) has unveiled the pattern of cross-border M&As among OECD countries. Based on UNCTAD (2000, 2001), Chen and Findley (2002) have also provided a summary of the patterns of cross-border M&As among APEC economies during 1990-2000. In this section, we will try to revisit the subject and extend the coverage of the study by lengthening the data series to 1980-2007.

The main bulk of the data, i.e., cross-border M&As, used in this study are extracted from the Thomson Financial's Securities Data Company (SDC) database. SDC is intended to include all M&A deals (both private and public transactions) around the world. We use information on cross-border M&A transactions of APEC members that are both the targets and acquirers during the period 1980 to 2007. In total we have information on 34,578 cross-border M&A transactions between the APEC economies.

Before we present the findings, let us first discuss the data and their definitions. Based on the SDC data, we consider a deal as cross-border M&A if the acquirer and target are from different economies. If they are from the same economy, then these are domestic M&As. Cross-border M&As of APEC economies, or intra-APEC cross-border M&As, are those in which all parties of a merger, or both the acquiring and target firms in the case of acquisition, are from economies in APEC.

Tables 2.1 through 2.3 provide summary figures on intra-APEC cross-border M&As during 1980-2007. The number and value of transactions are summarized by year in Table 2.1. It is observed that cross-border M&As in this region has been growing very rapidly, in terms of the number of transactions, the total value of transactions, and the maximum value of individual transactions. While not all APEC economies participated in cross-border M&As in the 1980s, all of them have started to engage in cross-border M&As by 1992.

In Table 2.2, we break down all intra-APEC cross-border M&A transactions by economy. There is apparently very large variations across APEC economies in all aspects. The United States dominates all other economies, in terms of total number and total value of cross-border M&As, and both as the target and as the acquiring economy. It is followed by Canada in all aspects. Hong Kong, China is the third largest acquirer, Japan comes fourth and Singapore fifth. China, on the other hand, is the third largest target economy, Australia the fourth and Hong Kong, China the fifth. Most economies exhibit acquirer and target asymmetry. The not very active ones are Chile, Papua New Guinea, Russia and Viet Nam, although their firms are relatively more popular targets.

In Table 2.3, we further break down the cross-border M&As by individual APEC economies. For each APEC economy, we list the number of other APEC economies from where firms choose to target. We also give the top three target economies and the corresponding shares. Two patterns emerge. First, most of the economies in APEC are outward looking and active in intra-APEC cross-border M&As, as demonstrated by the number of target economies of each APEC economy. Second, the United States is among the most favoured targets by most other APEC economies, followed by Australia. Third, rather than focusing on a few economies as the targets, most economies acquire firms from a large number of economies.

The rest of this section is organized as follows. We begin with a description of the general trend of cross-border M&As within APEC in subsection 2.1. In subsection 2.2, we compare the cross-border M&As across APEC economies and use alternative measures to demonstrate the relationship between the cross-border M&As of different economies. We then turn to industry-specific patterns in subsection 2.3. In subsection 2.4, we present the characteristics of firms participating in cross-border M&As and examine how they evolve over time. In subsection 2.5, we summarize the major stylized patterns found.

2.1. General Trends

2.1.1. Time Trend of Cross-border M&As

As shown in Table 2.1 and Figure 2.1-1, cross-border M&As within APEC have increased rapidly since early 1980s, in both transaction value and transaction number. In 1980, the total value of transactions amounted to US$1.75 billion, and the number of transactions was only 8. By 2007, the corresponding figures were US$ 335.64 billion and 3493. The average annual growth rates in transaction value were 21.5% and 25.3% in transaction number as shown in Fugure 2.1-2. There were three waves of cross-border M&As within APEC during this period. The first wave ended in 1990. The second wave started from mid-1990s and ended in 2000. The total value of cross-border M&As was quite low in 2002. It then started to increase, forming the third wave which continued until 2007. While UNTACD (2000, 2001) and Chen and Findley (2002) covered up to the second wave, this study aims at revealing the third wave with extended data coverage to 2007.

Table 2.1: Cross-border M&As by all APEC economies

Year	Number of cross-border M&A transactions	Total value of cross-border M&A transactions (Billion, US$)	Maximum value of cross-border M&A transactions (Billion, US$)	Number of APEC economies as acquiring economy	Number of APEC economies as target economy
1980	8	1.75	0.6	2	1
1981	37	10.2	6.19	6	2
1982	50	1.31	0.26	7	2
1983	128	6.07	2.4	7	4
1984	116	6.15	0.9	8	6
1985	141	8.21	2.31	11	14
1986	221	18.42	3.58	9	13
1987	283	31.13	9.8	11	12
1988	431	42.75	6.51	11	15
1989	650	41.68	2.61	15	17
1990	806	58.02	7.41	17	17
1991	818	18.9	2.36	17	19
1992	695	15.08	1.1	18	21
1993	964	20.83	1.19	18	20
1994	1278	24.53	0.98	19	20
1995	1347	50.07	5.7	18	20
1996	1557	54.05	3.95	20	20
1997	1705	72.92	3.77	19	21
1998	2014	90.38	9.27	18	21
1999	1970	130.77	6.57	18	21
2000	2587	172.93	34.16	20	20
2001	1896	120.36	12.82	16	21
2002	1667	52.49	3.69	19	20
2003	1895	78.69	11.06	19	21
2004	2364	101.58	4.21	19	20
2005	2471	117.36	18.47	19	21
2006	2985	240.77	16.14	20	21
2007	3493	335.64	26.92	20	21

Source of data: Authors' calculation based on SDC data.

Table 2.2: Cross-border M&As by APEC economies (1980-2007)

Economy	As acquiring economy		As target economy	
	Number of cross border M&A transactions	Value of transactions (Billion, US$)	Number of cross border M&A transactions	Value of transactions (Billion, US$)
Australia	2440	178.43	2967	195.97
Brunei Darussalam	18	0.85	22	0.02
Canada	6972	406.35	5301	337.56
Chile	49	2.75	446	22.52
P.R.China	892	59.17	4254	142.71
Hong Kong, China	3535	139.63	2263	77.73
Indonesia	153	4.95	930	27.92
Japan	3078	172.64	1004	69.48
Malaysia	1357	29.65	966	17.46
Mexico	194	37.42	1143	60.95
New Zealand	555	24.37	1201	50.68
Papua New Guinea	9	0.02	117	3.59
Peru	12	0.33	310	8.11
Philippines	112	4.55	606	20.53
Russia	65	12.92	342	11.29
Singapore	2704	121.72	1300	40.48
Republic of Korea	477	25.12	734	61.81
Chinese Taipei	454	14.06	537	28.84
Thailand	210	2.96	815	20.04
United States	11278	684.87	9130	723.55
Viet Nam	14	0.28	190	1.78

Source of data: Authors' calculation based on SDC data.

Table 2.3: Concentration of target economies in intra-APEC cross-border M&As

Acquiring economies	Number of target economies	Top 3 target economies	Percentage share	Acquiring economies	Number of target economies	Top 3 target economies	Percentage share
Australia	20	United States	65.18	Mexico	11	United States	51.43
		New Zealand	14.62			Australia	38.11
		Canada	5.19			Peru	2.71
Brunei Darussalam	10	United States	47.46	New Zealand	17	Australia	60.50
		Indonesia	15.35			United States	27.74
		Australia	14.65			Hong Kong, China	5.08
Canada	19	United States	90.02	Papua New Guinea	5	Philippines	82.20
		Australia	3.03			United States	17.80
		New Zealand	1.65			Indonesia	0.00
Chile	5	Peru	51.76	Peru	3	Chile	71.17
		United States	19.45			Canada	27.03
		Canada	18.29			Mexico	1.79
P.R. China	19	United States	48.66	Philippines	14	Australia	36.41
		Hong Kong, China	17.13			Singapore	28.94
		Australia	10.36			United States	10.17
Chinese Taipei	15	United States	52.63	Russia	12	Canada	62.63
		Hong Kong, China	15.63			United States	31.02
		Singapore	7.11			Australia	3.57
Hong Kong, China	19	P.R. China	57.39	Singapore	19	Australia	22.07
		United States	11.28			Hong Kong, China	19.51
		Singapore	6.01			United States	18.22
Indonesia	11	United States	35.83	Viet Nam	6	Canada	90.86
		Australia	27.52			Australia	7.72
		Singapore	15.64			United States	1.42
Japan	20	United States	67.08	Thailand	17	Indonesia	30.45
		Korea	5.16			United States	23.65
		Australia	4.64			Philippines	8.72
Republic of Korea	18	United States	60.24	United States	20	Canada	44.77
		Hong Kong, China	11.44			Australia	14.30
		P.R. China	10.68			Japan	8.42
Malaysia	19	Singapore	31.23				
		Indonesia	13.77				
		Australia	11.97				

Source of data: Authors' calculation based on SDC data.

In order to check whether the cyclical pattern was driven by APEC economies that are also OECD members, we exclude cross-border M&As from the OECD economies and re-plot the figure (Figure 2.1-3). Since the non-OECD economies in APEC had not been actively involved in cross-border M&As till late 1980s, we therefore exclude the first wave. Although the transition from the second to the third wave in terms of transaction number is not clear, the two waves in terms of transaction value are more vivid. Hence, the cyclical pattern is not merely due to the OECD economies in APEC.

2.1.2. Comparison of Cross-border and Domestic M&As

In this subsection we compare cross-border M&As to domestic M&As in APEC. The domestic M&A dataset is also constructed from the SDC database. Data on 300,194 domestic M&As in APEC economies are obtained for comparison purpose. Domestic M&As are those M&As in which both the targets and acquiring firms belong to the same economy in APEC. Table 2.1-1 shows that both the total number of domestic M&As in APEC economies and their values increased steadily over time. In Figure 2.1-4, we plot the value of cross-border M&As with that of domestic M&As. Generally, domestic M&As and cross-border M&As all rise over time, and show largely similar cycles.

We also observe that cross-border M&As have generally grown at a more rapid pace than domestic M&As. As a result, even though the gap in absolute value between domestic M&As and cross-border M&As are getting wider, the share of cross-border M&As is still rising over time. Figure 2.1-5 shows the dynamics of the ratio of cross-border M&As to domestic M&As, which is rising in overall terms. In particular, the value of cross-border M&As as a percentage of domestic M&As has increased from 5 percent in 1980 to 15 percent in 2007. More or less similar pattern is found for the number of transactions. This is another evidence of cross-border M&As becoming increasingly an important channel for regional flows of capital.

Figure 2.1-1: Trend of cross-border M&As in APEC

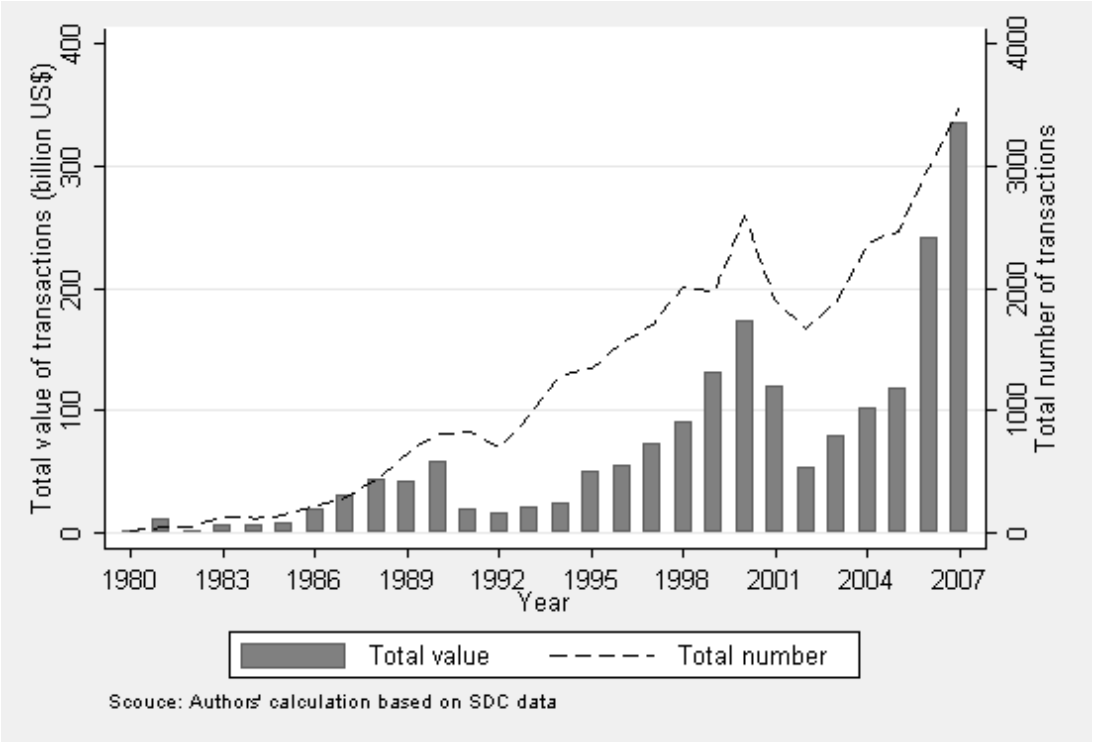


Figure 2.1-2: Growth rate of cross-border M&As in APEC (in value)

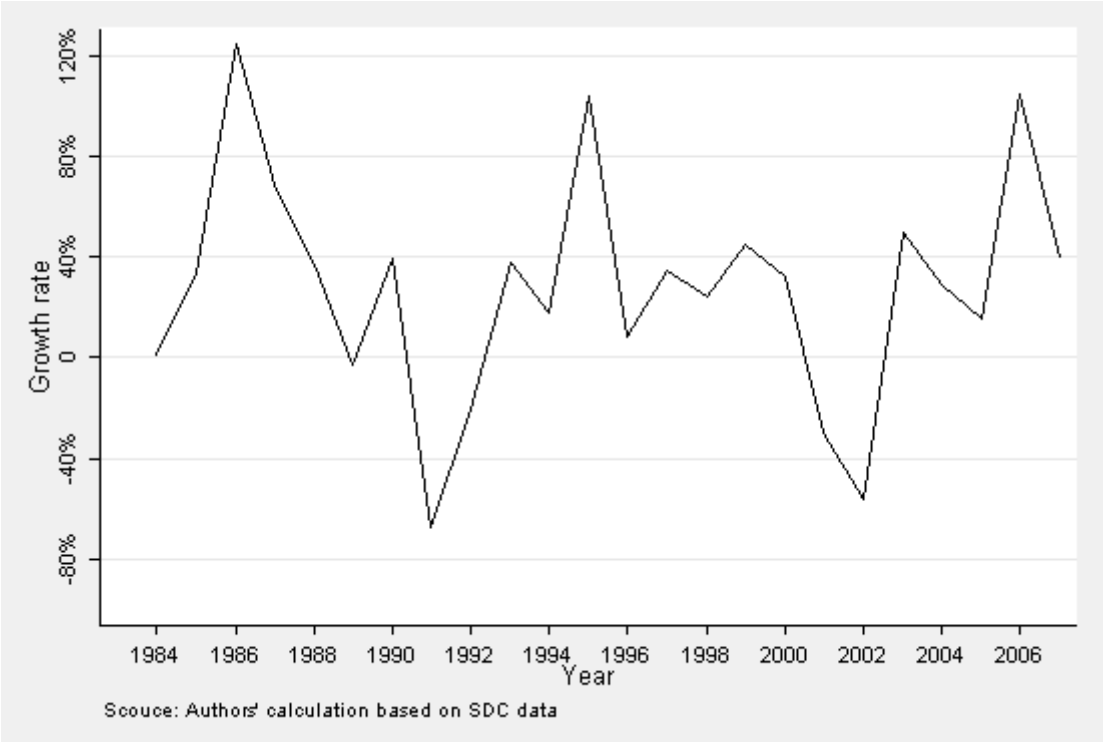


Figure 2.1-3: Cross-border M&As in APEC (excluding the OECD economies)

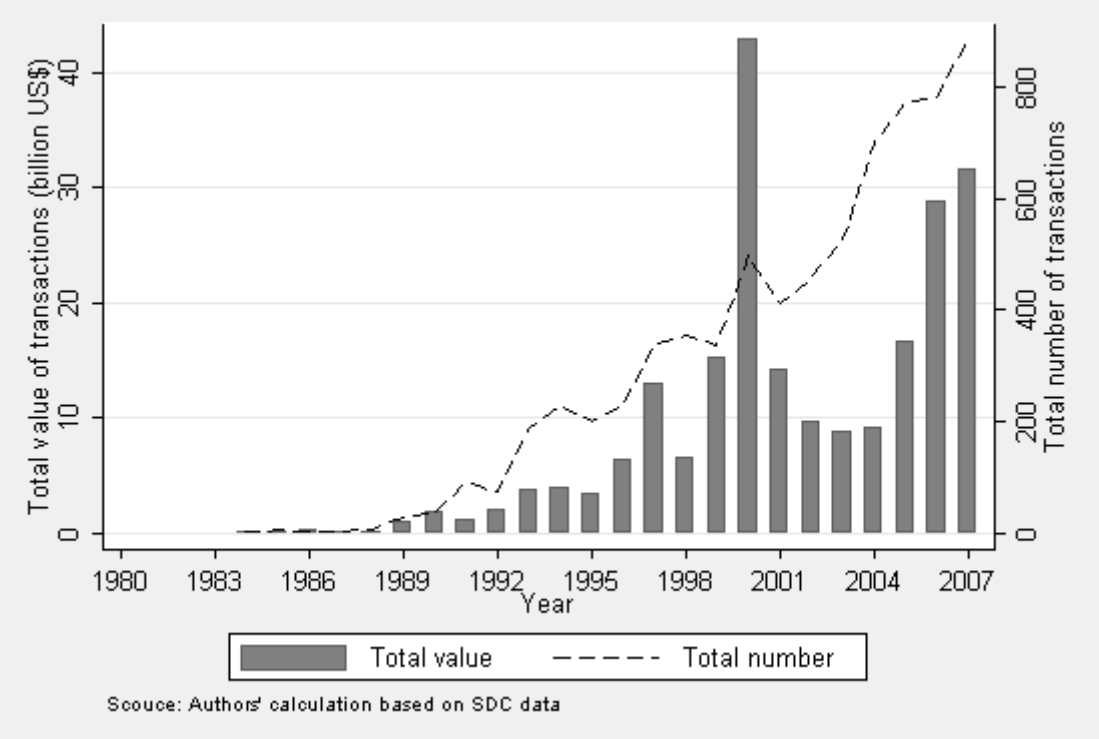


Table 2.1-1: Domestic M&As in APEC

Year	Number of domestic M&As	Total value of domestic M&As (Billion US$)	Year	Number of domestic M&As	Total value of domestic M&As (Billion US$)
1980	95	20.05	1994	10756	502.80
1981	1184	124.87	1995	13262	762.51
1982	2003	77.90	1996	15344	905.48
1983	3283	119.56	1997	16133	1259.02
1984	3850	246.04	1998	18315	1821.81
1985	2705	330.89	1999	17666	2123.57
1986	3663	357.67	2000	17703	2064.67
1987	4567	400.24	2001	14312	1112.27
1988	4778	604.43	2002	14691	732.72
1989	6875	556.80	2003	16621	900.48
1990	7258	275.57	2004	18106	1368.56
1991	7497	215.51	2005	18932	1815.91
1992	7595	239.79	2006	20670	2273.07
1993	9131	380.53	2007	23158	2580.32

Source of data: Authors' calculation based on SDC data.

Figure 2.1-4: Total value of cross-border and domestic M&As in APEC

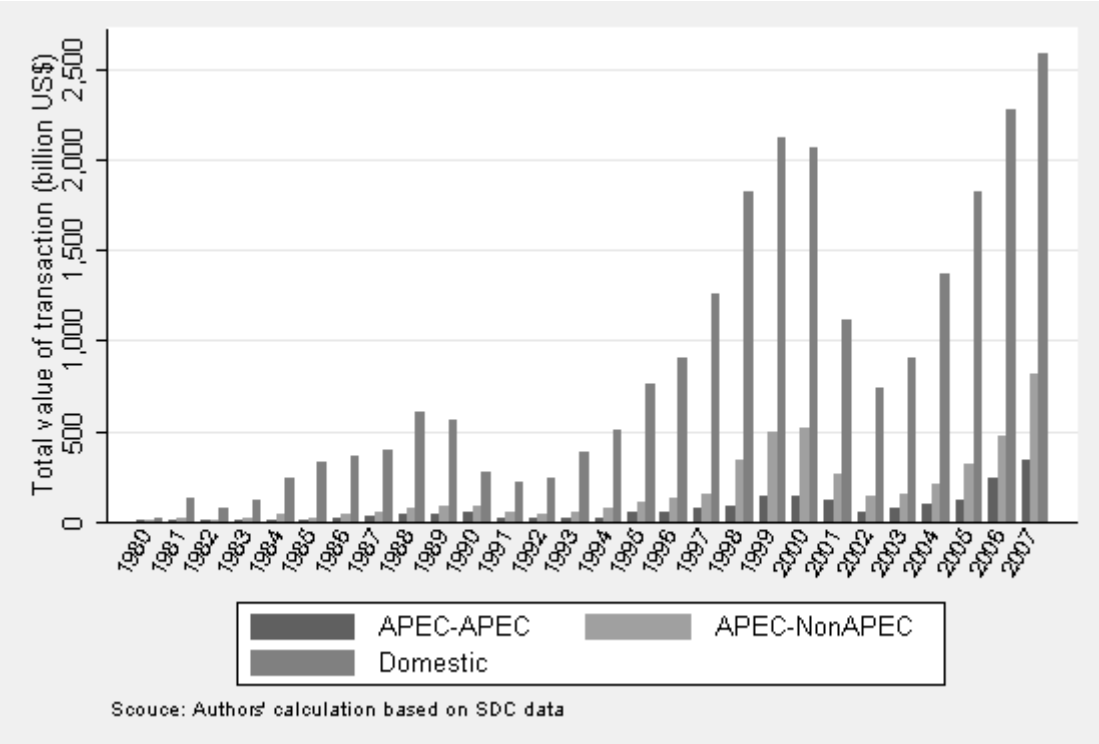
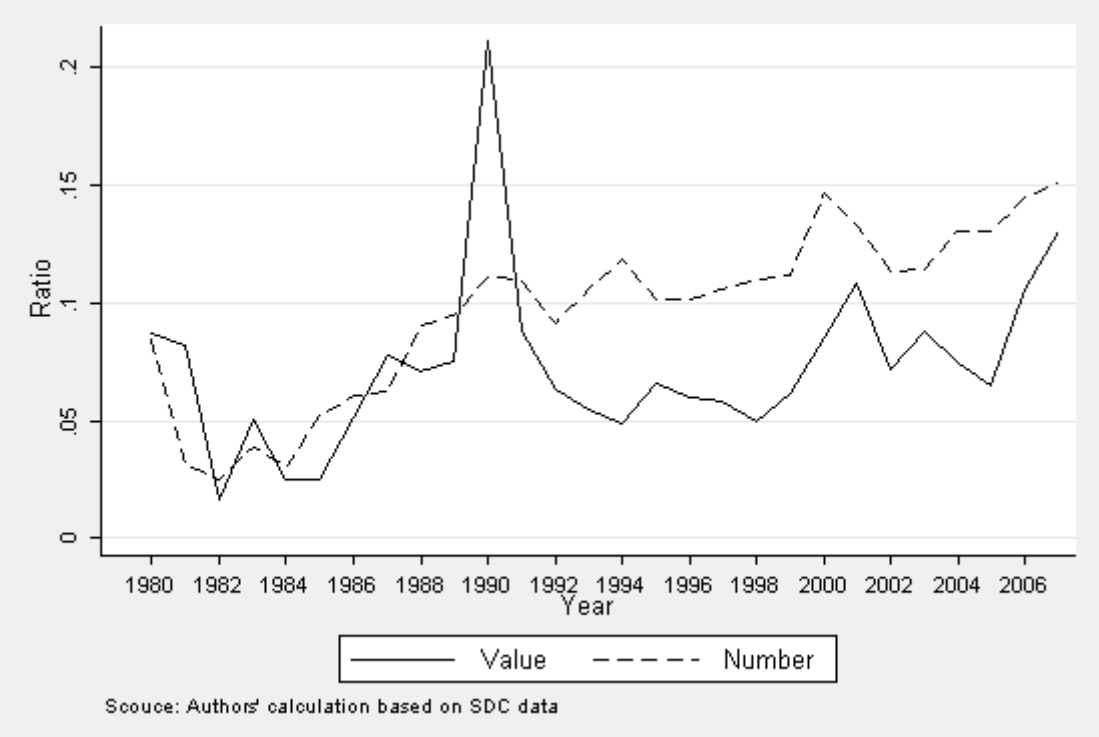


Figure 2.1-5: Ratio of cross-border to domestic M&As in APEC (in value and number)



2.2. Individual Economies and Regional Linkage

2.2.1. Cross-border M&As by Key APEC Economies

In this section we compare the cross-border M&A activities across APEC economies. Besides quantifying the importance of cross-border M&As in different economies, we also examine their correlations.

In Tables 2.2-1 and 2.2-2, the shares of each APEC economy in the total value and total number of transactions of intra-APEC cross-border M&As in the three waves of cycles are shown separately.

In the 1980s, the key acquirer economies were normally also the key target economies, with the United States, Canada, Japan and Australia largely dominating the scene. Among these four, Japan was far more significant as an acquirer in the region, taking up nearly 27% in terms of transaction value or 28% in terms of transaction number, than as a target taking up only around 2% of the total. The United States, on the other hand, was the key target attracting substantial capital inflow through M&As (over 60% in total transaction value and transaction number). The rest of the APEC economies were relatively small in terms of both cross-border M&A value and number.

However, by the turn of the 21st century, the acquiring and targeting economies in APEC have become more dispersed. In particular, China[(2)]. has picked up substantially as a target economy, accounting for nearly 8% in share of transaction value and close to 20% in share of transaction number in 2001-2007, compared to 0.01% and 0.31% in 1980-1990. As an acquirer, China has also seen rising shares, albeit less rapidly than as a target economy. Meanwhile, Hong Kong, China[(3)] has shown rising shares on both the acquiring and target fronts, and with those in transaction number more than doubled. Singapore started to take off in the 1990s. The Republic of Korea[(4)], Russia and Vietnam have also seen rising participation.

All in all, the United States, Canada and Australia remain the top three most prominent acquiring and target economies in APEC. Japan, on the other hand, is overtaken by China and Hong Kong China in terms of both acquirer and target economies, and Singapore in terms of acquirer economy. With

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2 Moon, Kim and Lee (2003) examine five cases of foreign M&As in China. They conclude that foreign companies' motivations include factor conditions and demand conditions. Foreign firms can provide better technologies and they also aim at entering the Chinese market.

3 Moon, Kim and Lee (2003) also examine five cases of foreign M&As in Hong Kong, China. They find that Hong Kong may already have a long history of cross-border M&As and therefore fewer areas to improve in terms of variety of impacts. However, economies of scale are an important factor behind some mergers.

4 Moon, Kim and Lee (2003) have examined five cases of foreign M&As in the Republic of Korea. It shows a concentration of impacts on the factor conditions. Those Korean firms in the cases are either having high debt-to-equity ratio or are under restructuring. They are for sales on the market (i.e., pending for being acquired).

cross-border M&As in APEC showing substantial increases both in transaction value and number, the observed change across economies reflect more a relative than absolute change in relative significance by economy.

Table 2.2-1: Shares of cross-border M&As in transaction value (%)

	1980~1990		1991~2000		2001~2007		1980~2007	
Economies	target	acquiring	target	acquiring	target	acquiring	target	acquiring
Australia	6.55	12.65	8.57	7.87	11.98	9.43	10.19	9.28
Brunei Darussalam	0.00	0.15	0.00	0.08	0.00	0.00	0.00	0.04
Canada	11.94	28.50	16.47	20.87	19.44	19.71	17.55	21.13
Chile	0.04	N.A.	1.83	0.33	1.01	0.06	1.17	0.14
P.R.China	0.01	0.24	9.12	0.87	7.97	5.06	7.42	3.08
Chinese Taipei	0.05	1.42	0.81	1.04	2.24	0.39	1.50	0.73
Hong Kong, China	2.87	4.60	4.15	11.47	4.23	5.22	4.04	7.26
Indonesia	1.06	0.31	1.68	0.37	1.40	0.17	1.45	0.26
Japan	2.01	26.79	4.68	9.00	3.29	5.12	3.61	8.98
Republic of Korea	0.10	0.12	4.34	0.97	3.19	1.77	3.21	1.31
Malaysia	0.39	0.25	1.01	2.63	0.96	1.14	0.91	1.54
Mexico	6.85	0.51	2.66	1.85	2.69	2.32	3.17	1.95
New Zealand	3.34	2.07	2.78	1.48	2.39	0.96	2.64	1.27
Papua New Guinea	0.00	0.00	0.29	0.00	0.16	0.00	0.19	0.00
Peru	N.A.	N.A.	0.79	0.01	0.29	0.03	0.42	0.02
Philippines	0.46	0.00	1.66	0.14	0.83	0.35	1.07	0.24
Russia	0.00	N.A.	0.23	0.05	0.94	1.20	0.59	0.67
Singapore	0.78	1.60	2.71	3.86	2.01	8.88	2.10	6.33
Thailand	0.03	0.14	1.52	0.26	0.96	0.09	1.04	0.15
United States	63.51	20.67	34.66	36.85	33.89	38.07	37.63	35.61
Viet Nam	N.A.	N.A.	0.04	0.00	0.15	0.03	0.09	0.01

Source of data: Authors' calculation based on SDC data.

Table 2.2-2: Shares of cross-border M&As in transaction number (%)

	1980~1990		1991~2000		2001~2007		1980~2007	
Economies	target	acquiring	target	acquiring	target	acquiring	target	acquiring
Australia	6.62	8.12	9.71	5.46	7.91	8.29	7.06	8.58
Brunei Darussalam	0.03	0.07	0.06	0.08	0.07	0.02	0.05	0.06
Canada	15.05	26.40	18.37	19.37	12.68	19.80	20.16	15.33
Chile	0.70	N.A.	1.67	0.20	1.05	0.11	0.14	1.29
P.R. China	0.31	1.01	7.15	2.13	18.94	3.25	2.58	12.30
Chinese Taipei	0.77	1.11	1.31	1.38	1.90	1.29	1.31	1.55
Hong Kong, China	3.69	5.47	6.41	8.52	7.15	12.55	10.22	6.54
Indonesia	0.59	0.52	2.79	0.58	2.96	0.30	0.44	2.69
Japan	2.33	27.97	3.14	8.83	2.79	5.70	8.90	2.90
Republic of Korea	0.38	0.49	2.38	1.01	2.19	1.86	1.38	2.12
Malaysia	0.63	0.56	2.87	3.81	3.10	4.60	3.92	2.79
Mexico	1.60	0.38	3.90	0.74	3.07	0.44	0.56	3.31
New Zealand	2.86	2.02	3.50	1.60	3.56	1.54	1.61	3.47
Papua New Guinea	0.10	0.07	0.34	0.04	0.38	0.01	0.03	0.34
Peru	N.A.	N.A.	0.94	0.03	1.01	0.05	0.03	0.90
Philippines	0.84	0.14	2.37	0.40	1.36	0.29	0.32	1.75
Russia	0.03	N.A.	1.13	0.11	1.03	0.29	0.19	0.99
Singapore	1.46	1.71	3.69	6.75	4.22	9.81	7.82	3.76
Thailand	0.70	0.17	2.82	0.58	2.23	0.70	0.61	2.36
United States	61.30	23.79	25.04	38.36	21.65	29.01	32.62	26.40
Viet Nam	N.A.	N.A.	0.42	0.02	0.76	0.07	0.04	0.55

Source of data: Authors' calculation based on SDC data.

Figure 2.2-1: Cross-border M&As of the United States

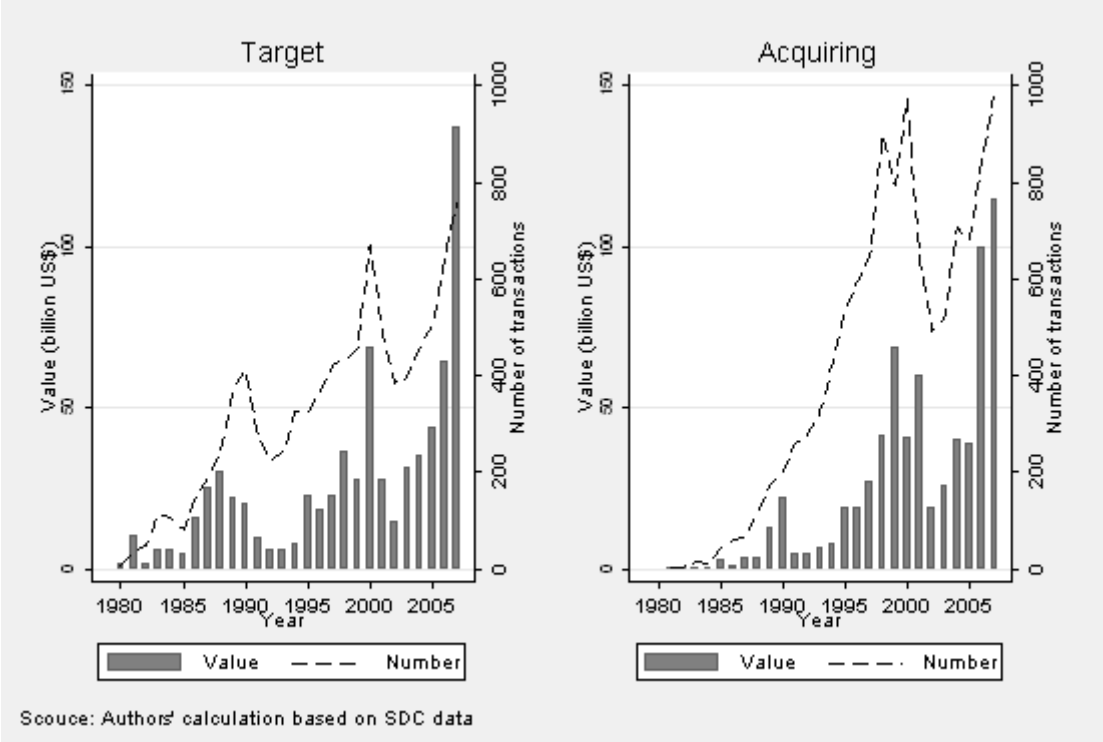


Figure 2.2-2: Cross-border M&As of Canada

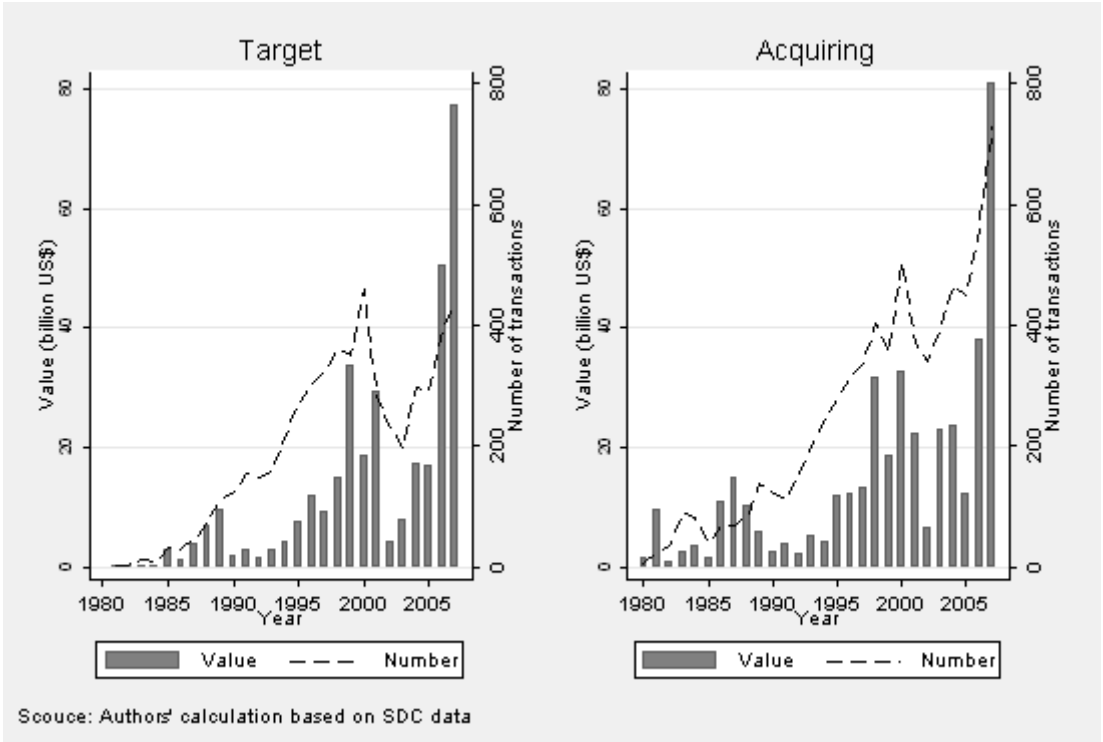


Figure 2.2-3: Cross-border M&As of Australia

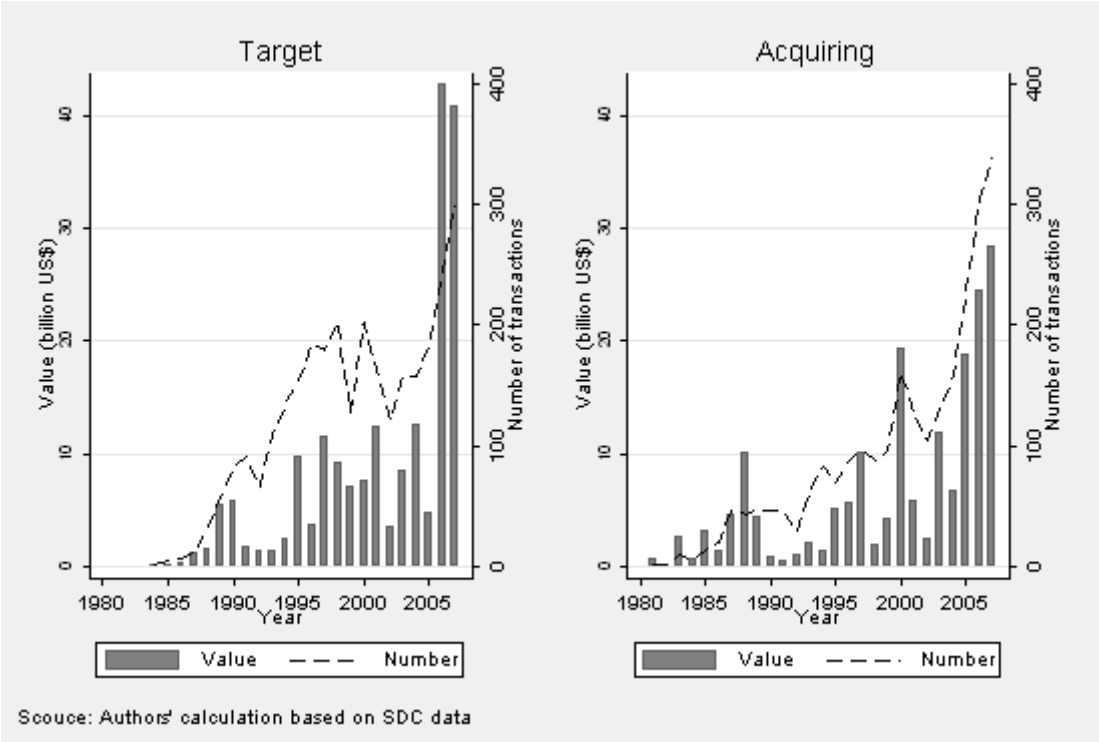


Figure 2.2-4. Cross-border M&As of P.R. China

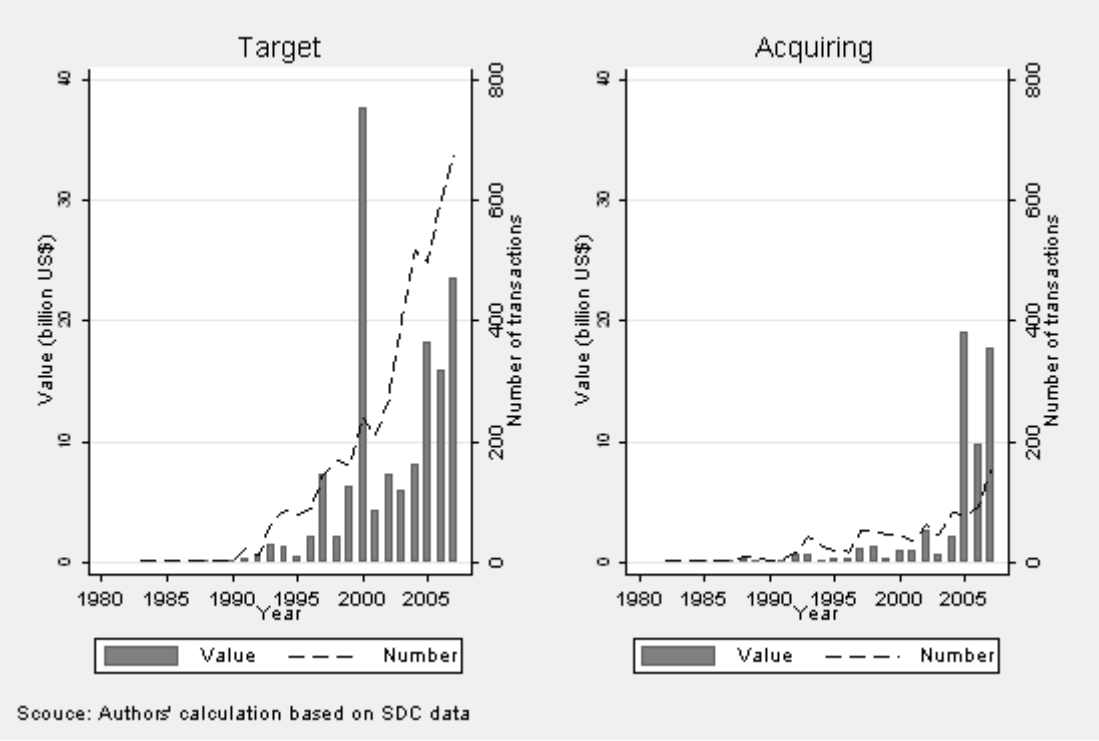


Figure 2.2-5: Cross-border M&As of Hong Kong, China

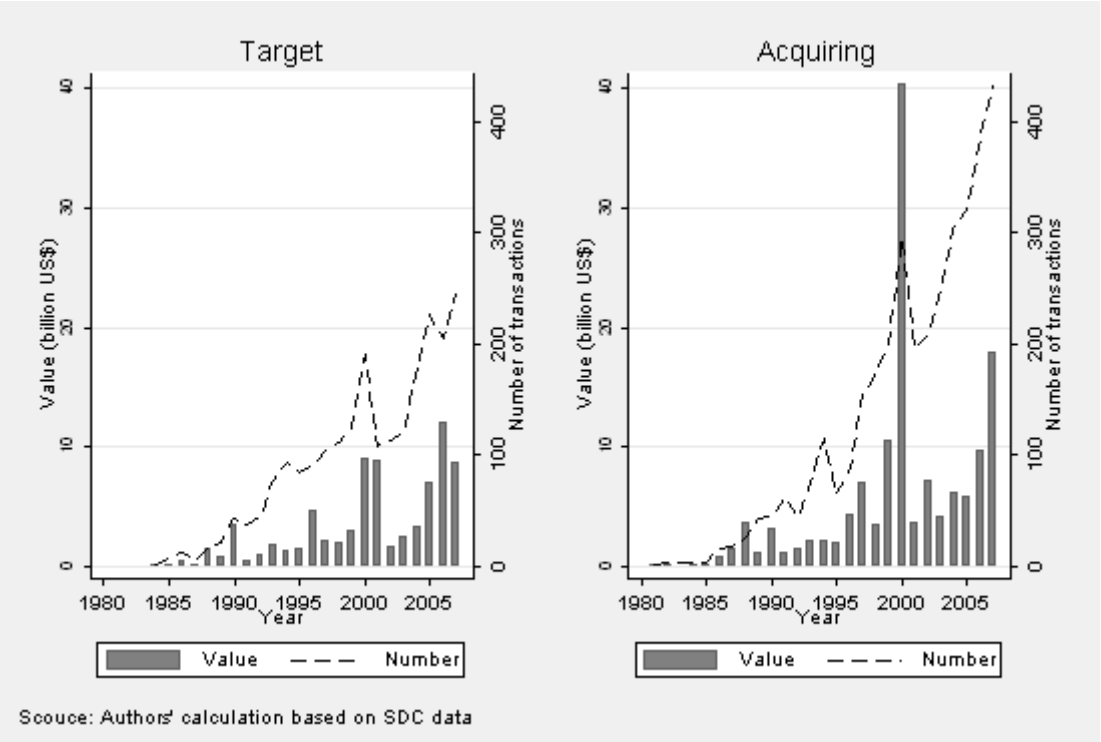


Figure2.2-6. Cross-border M&As of Japan

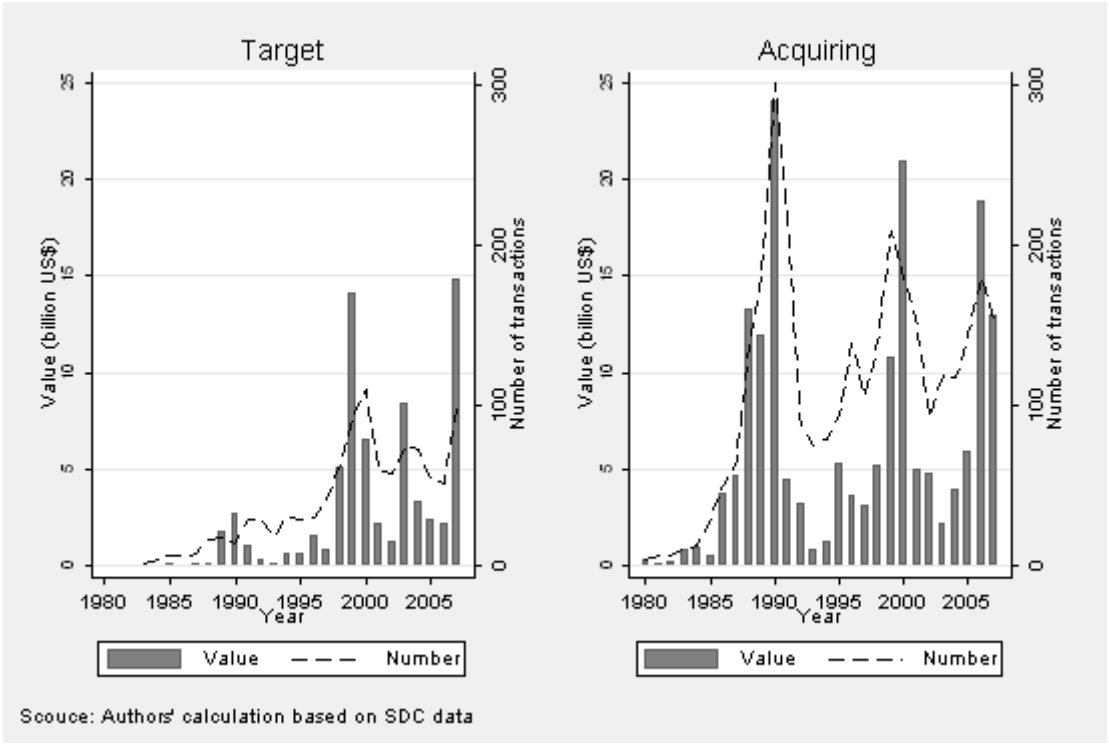


Figure 2.2-7. Cross-border M&As of Republic of Korea

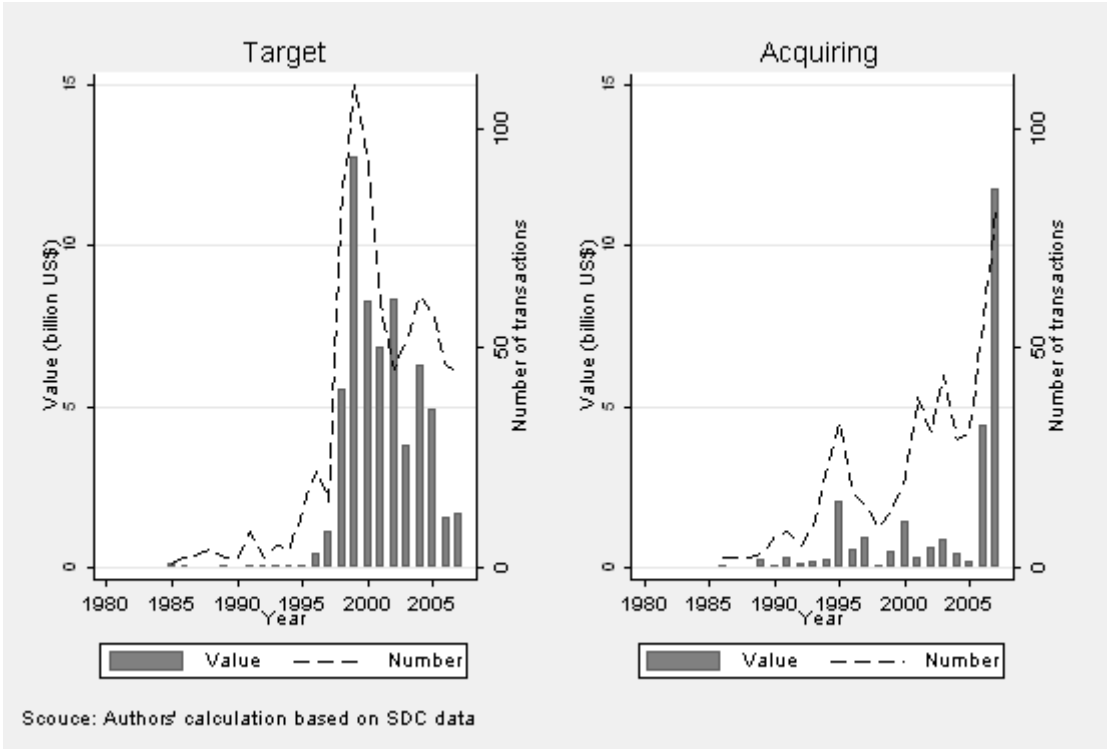
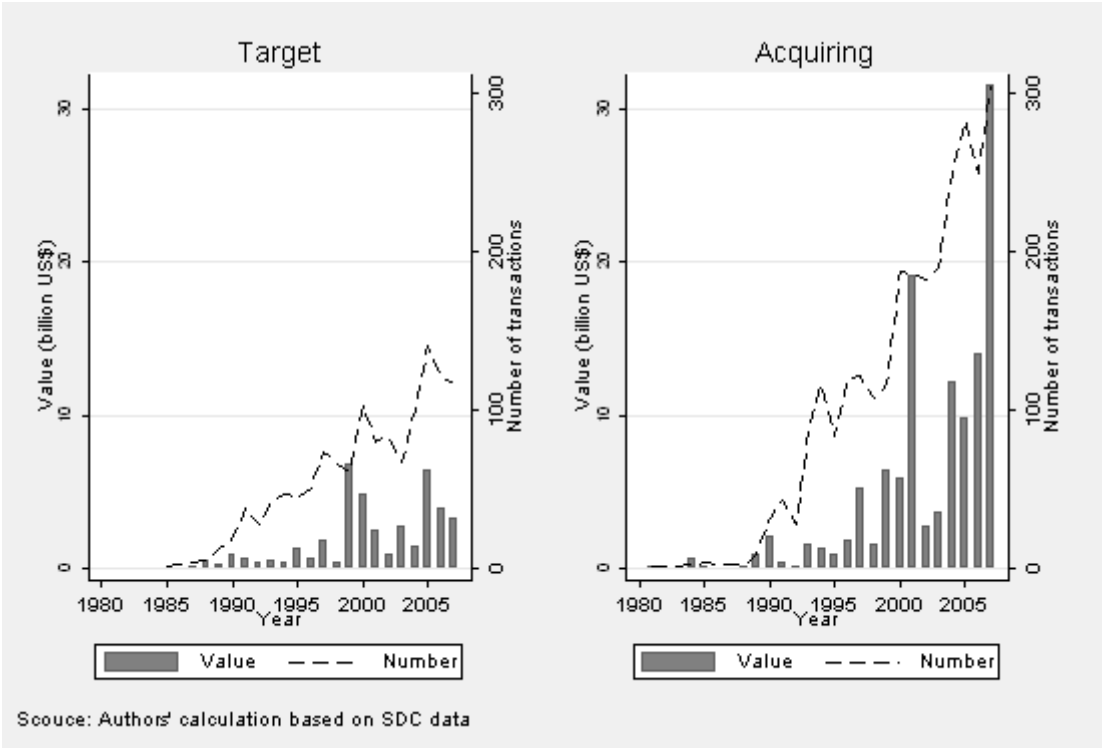


Figure 2.2-8. Cross-border M&As of Singapore



2.2.2. Correlation between the Cross-Border M&As of APEC economies

Although the scale of cross-border M&As varies significantly across APEC economies, their time trends appear to be quite similar. This may imply that the cross-border M&As in different APEC economies have been driven by some common factors. To gauge this linkage between different APEC economies, we calculate the correlation between the time series of an APEC economy as a target and the time series of another APEC economy as a target, for both transaction value (Table 2.2-3) and transaction number (Table 2.2-4). We also calculate the correlation between the time series of an APEC economy as an acquirer and the time series of another APEC economy as an acquirer, for both transaction value (Table 2.2-5) and transaction number (Table 2.2-6). The correlation analysis below is restricted to the selected APEC economies that account for the largest share of cross-border M&As in the APEC region.[(5)]

Based on Tables 2.2-3 to 2.2-6, it is observed that most of the cross-border M&A activities among the APEC economies are positively correlated. That is to say they tend to increase (or reduce) their overseas acquisitions at the same time, and their firms' are targeted by foreign acquisitions also at the same time.

Australia, Canada and the United States are highly correlated with one another both as target and as acquirer in both transaction value and transaction numbers. Multinationals from these three economies tend to increase or decrease their cross-border M&As together and other APEC economies also tend to increase or decrease their acquisitions of firms in these three economies at the same time. But these three economies correlate among themselves more strongly than with other APEC economies.

In contrast, the intra-APEC cross-border M&A activities of some economies are negatively correlated with others, in transaction value or in transaction number. For example, Table 2.3-3, indicates that as targets, Mexico has negative correlation with Japan, Singapore, China, and Malaysia. That is to say when multinationals increase (reduce) their acquisition (value) in Japan, Singapore, China, or Malaysia, they may reduce (increase) their acquisition in Mexico. This may imply certain degree of substitution between Mexico and some Asian economies. Also as demonstrated by Table 2.2-6 on the acquiring economies, Japan has negative correlation with many economies including the United States, Canada, Singapore, China, Mexico, Malaysia, Korea, and New Zealand. It shows that when those economies increase (reduce) their overseas acquisitions, Japan may actually do the opposite.

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5 By total transaction value of target economies during 1980-2007, the top ten economies are: The United States, Canada, Australia, P.R.China, Hong Kong, China, Japan, Republic of Korea, Mexico, New Zealand, and Singapore; by total transaction value of acquiring economies during 1980-2007, the top ten economies are: The United States, Canada, Australia, Japan, Hong Kong, P.R.China, Singapore, China, Mexico, Malaysia, and Republic of Korea.

Table 2.2-3. Correlation of transaction value (target economy, 1980-2007)

	United States	Canada	Australia	Japan	Hong Kong, China	Singapore	P.R.China	Mexico	Malaysia	Republic of Korea	New Zealand
United States	1.00										
Canada	0.89	1.00									
Australia	0.81	0.89	1.00								
Japan	0.68	0.68	0.43	1.00							
Hong Kong, China	0.70	0.73	0.71	0.30	1.00						
Singapore	0.48	0.52	0.31	0.59	0.60	1.00					
P.R. China	0.76	0.55	0.46	0.45	0.73	0.67	1.00				
Mexico	-0.06	0.02	0.07	-0.10	0.24	-0.09	-0.17	1.00			
Malaysia	0.67	0.75	0.86	0.29	0.77	0.40	0.59	-0.11	1.00		
Republic of Korea	0.16	0.22	-0.03	0.51	0.23	0.62	0.39	0.05	0.05	1.00	
New Zealand	0.32	0.48	0.55	0.19	0.68	0.52	0.24	0.29	0.60	0.10	1.00

Source of data: Authors' calculation based on SDC data.

Table 2.2-4. Correlation of transaction number (target economy, 1980-2007)

	United States	Canada	Australia	Japan	Hong Kong, China	Singapore	P.R. China	Mexico	Malaysia	Republic of Korea	New Zealand
United States	1.00										
Canada	0.81	1.00									
Australia	0.81	0.88	1.00								
Japan	0.75	0.78	0.63	1.00							
Hong Kong, China	0.84	0.80	0.85	0.75	1.00						
Singapore	0.76	0.75	0.79	0.68	0.96	1.00					
P.R.China	0.76	0.61	0.77	0.64	0.92	0.89	1.00				
Mexico	0.64	0.72	0.88	0.56	0.68	0.56	0.67	1.00			
Malaysia	0.81	0.83	0.89	0.72	0.93	0.91	0.91	0.75	1.00		
Republic of Korea	0.58	0.71	0.47	0.87	0.61	0.60	0.47	0.31	0.60	1.00	
New Zealand	0.85	0.79	0.91	0.65	0.91	0.85	0.88	0.76	0.93	0.49	1.00

Source of data: Authors' calculation based on SDC data.

Table 2.2-5. Correlation of transaction value (acquiring economy, 1980-2007)

	United States	Canada	Australia	Japan	Hong Kong, China	Singapore	P.R. China	Mexico	Malaysia	Republic of Korea	New Zealand
United States	1.00										
Canada	0.87	1.00									
Australia	0.77	0.79	1.00								
Japan	0.45	0.32	0.42	1.00							
Hong Kong, China	0.43	0.53	0.61	0.55	1.00						
Singapore	0.87	0.84	0.73	0.24	0.35	1.00					
P.R. China	0.63	0.60	0.78	0.19	0.22	0.69	1.00				
Mexico	0.46	0.20	0.45	0.42	0.27	0.19	0.24	1.00			
Malaysia	0.24	0.22	0.30	-0.14	0.15	0.12	0.15	-0.09	1.00		
Republic of Korea	0.76	0.88	0.74	0.31	0.38	0.79	0.65	0.18	0.18	1.00	
New Zealand	0.72	0.90	0.69	0.33	0.49	0.67	0.51	0.13	0.16	0.85	1.00

Source of data: Authors' calculation based on SDC data.

Table 2.2-6. Correlation of transaction number (acquiring economy, 1980-2007)

	United States	Canada	Australia	Japan	Hong Kong, China	Singapore	P.R. China	Mexico	Malaysia	Republic of Korea	New Zealand
United States	1.00										
Canada	0.91	1.00									
Australia	0.72	0.91	1.00								
Japan	-0.05	-0.09	0.04	1.00							
Hong Kong, China	0.81	0.95	0.94	0.00	1.00						
Singapore	0.74	0.91	0.90	-0.16	0.95	1.00					
P.R. China	0.72	0.91	0.90	-0.15	0.90	0.87	1.00				
Mexico	0.64	0.50	0.35	-0.13	0.48	0.36	0.33	1.00			
Malaysia	0.62	0.78	0.82	-0.28	0.78	0.88	0.74	0.20	1.00		
Republic of Korea	0.57	0.82	0.87	-0.12	0.80	0.82	0.81	0.13	0.74	1.00	
New Zealand	0.83	0.88	0.79	0.10	0.83	0.77	0.71	0.56	0.54	0.76	1.00

Source of data: Authors' calculation based on SDC data.

2.2.3 Cross-Economy Firm Size Distribution

Three different measures of firm size, viz. income, asset and sales (of output), are used to reflect the cross-economy firm size distribution. The median firm (in terms of income, asset, or sales, depending on the measure) involved in cross-border M&As in each economy is chosen to represent that economy's firm size. Based on Figures 2.2-9, 2.2-10 and 2.2-11, we observe that acquiring firms are generally larger than target firms. Russia has the highest firm income, asset and sales on the acquiring side, and also has the highest income and the second largest sales on the target side. Firms in Viet Nam and those in Canada are the smallest both as acquirer and as target. As to asset and sales, firms in Brunei Darussalam are the smallest both as acquirer and as target.

Figure 2.2-9. Median firm income (by economy)

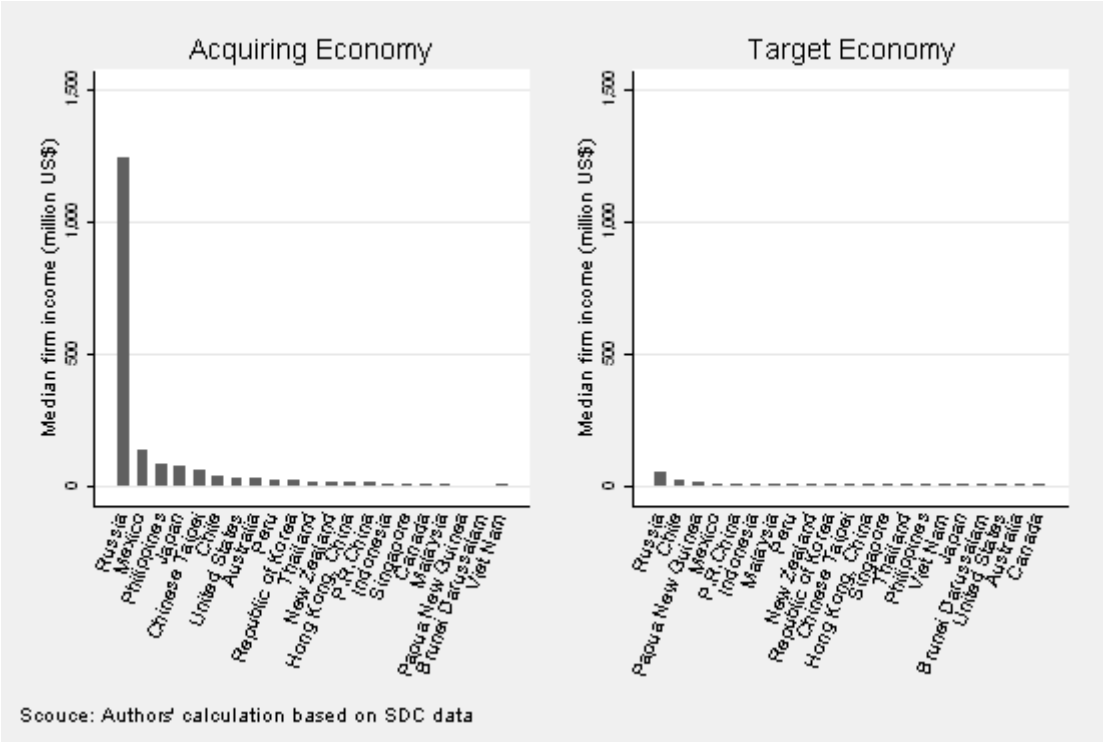
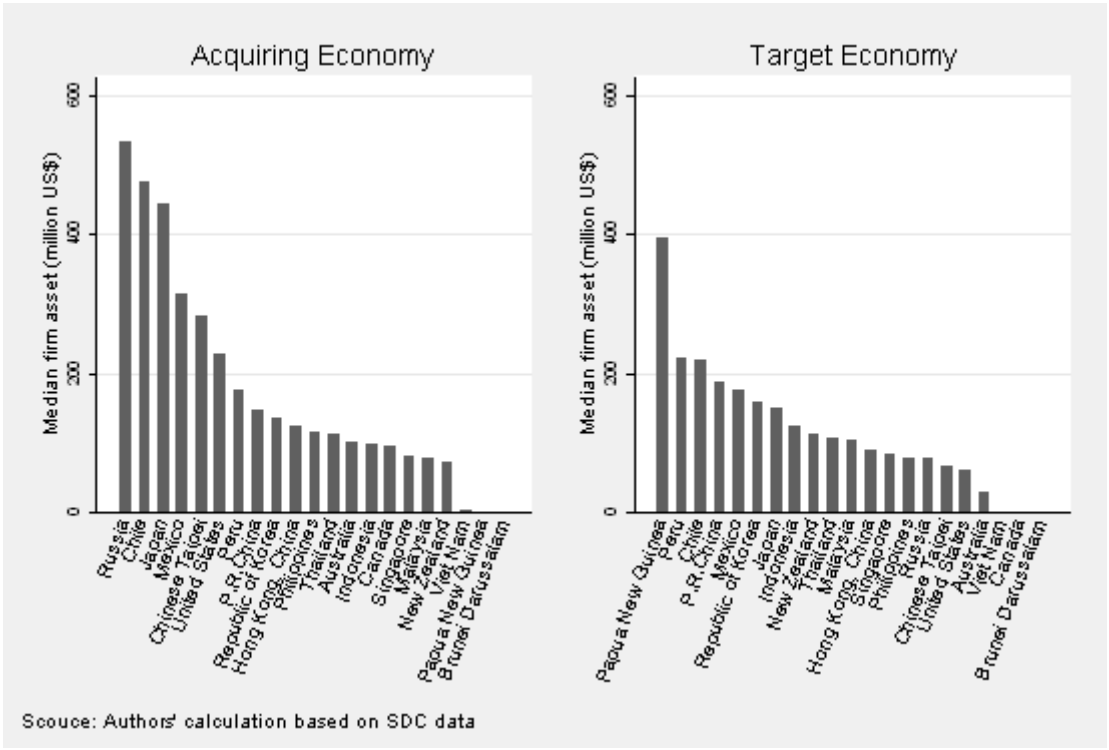
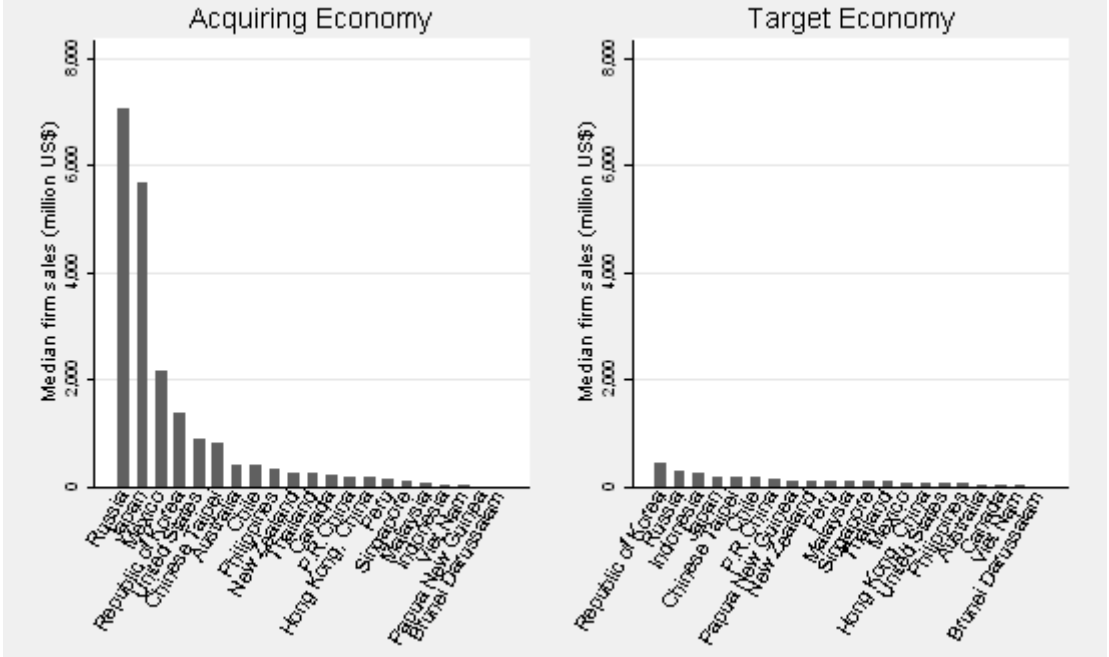


Figure 2.2-10. Median firm asset (by economy)



Scouce: Authors' calculation based on SDC data

Figure 2.2-11. Median firm sales (by economy)



Scouce: Authors' calculation based on SDC data

2.3. Cross-Sector (Industry) Patterns

In this subsection we compare the patterns of intra-APEC cross-border M&As across sectors (or industries). The objective is to discern common trends and specific features of different sectors (industries). This might help inference of the driving forces of cross-border M&As.

2.3.1. Comparison between Secondary and Tertiary Sectors

The cross-border M&As of the secondary and the tertiary sectors were comparable in terms of transaction number. However, the transaction value of the secondary sector was significantly smaller than that of the tertiary sector, especially after 1990 (Table 2.3-1 and Figure 2.3-1). During the entire sample period (1980-2007), the value of cross-border M&As of the secondary sector was 79.5% of the tertiary sector on the target side and 68.8% on the acquiring side. By 2007, the transaction value of the secondary sector was about 89.6% of the tertiary sector on the target side and 46.2% on the acquiring side.

Interestingly, the cross-border M&As of the secondary and tertiary sectors have demonstrated different growth patterns during 1990-2000. In the 1990s, the growth rate of cross-border M&As in the tertiary sector was much higher than that in the secondary sector, echoing the rapid development of the services industries in the same period. As a result, the transaction value of the tertiary sector was about 20% higher than that of the secondary sector. This is consistent with the finding of Chen and Findley (2002), which suggests that liberalization and deregulation may have affected the tertiary sector the most.

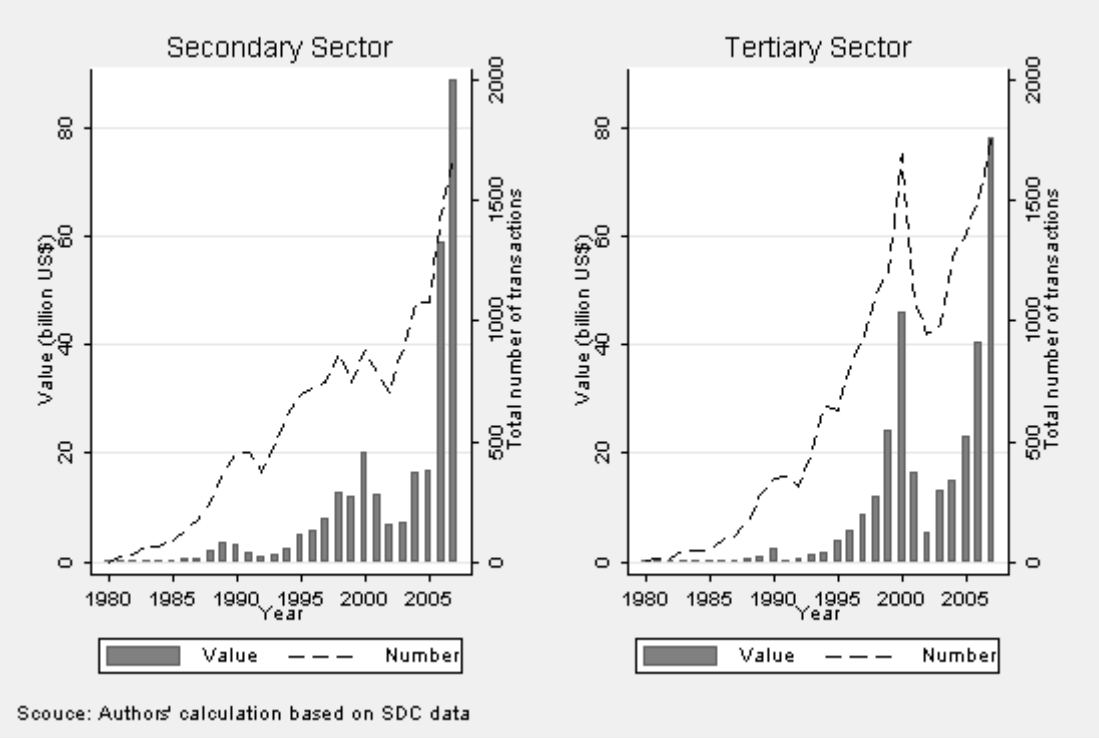
Table 2.3-1: Comparison of secondary and tertiary sector

	Target						Acquiring					
	Secondary			Tertiary			Secondary			Tertiary		
year	Value (Billion, US$)	Number	Value/ Number (Billion, US$)	Value (Billion, US$)	Number.	Value/ Number. (Billion, US$)	Value (Billion, US$)	Numbe r.	Value/ Number. (Billion, US$)	Value (Billion, US$)	Number.	Value/ Number. (Billion, US$)
1980	0.73	2	0.37	1.01	6	0.17	0.98	3	0.33	0.76	5	0.15
1981	9.53	20	0.48	0.64	16	0.04	9.64	18	0.54	0.56	18	0.03
1982	0.83	31	0.03	0.48	19	0.03	0.84	30	0.03	0.47	20	0.02
1983	3.31	72	0.05	2.73	53	0.05	3.32	78	0.04	2.72	47	0.06
1984	5.02	63	0.08	1.12	51	0.02	5.28	68	0.08	0.87	48	0.02
1985	4.58	89	0.05	3.50	50	0.07	6.56	90	0.07	1.65	51	0.03
1986	9.26	132	0.07	9.17	89	0.10	8.21	123	0.07	10.22	98	0.10
1987	11.07	175	0.06	20.06	108	0.19	18.93	142	0.13	11.63	138	0.08
1988	24.88	255	0.10	17.56	169	0.10	25.04	246	0.10	17.71	184	0.10
1989	27.25	367	0.07	14.39	279	0.05	25.44	336	0.08	16.22	309	0.05
1990	20.47	450	0.05	37.24	344	0.11	23.99	396	0.06	33.80	403	0.08
1991	11.70	458	0.03	7.18	353	0.02	9.67	404	0.02	9.15	406	0.02
1992	8.13	375	0.02	6.74	315	0.02	7.45	352	0.02	7.50	334	0.02
1993	8.69	496	0.02	11.88	460	0.03	9.98	427	0.02	10.77	523	0.02
1994	12.61	606	0.02	11.36	649	0.02	10.44	556	0.02	13.99	701	0.02
1995	23.07	695	0.03	26.87	633	0.04	23.55	597	0.04	26.44	728	0.04
1996	24.39	720	0.03	29.44	814	0.04	22.05	664	0.03	31.75	872	0.04
1997	32.04	750	0.04	40.42	939	0.04	33.99	728	0.05	37.92	963	0.04
1998	41.47	867	0.05	45.92	1111	0.04	40.69	829	0.05	49.01	1162	0.04
1999	43.26	749	0.06	87.09	1209	0.07	42.40	707	0.06	87.84	1248	0.07
2000	53.31	881	0.06	119.04	1691	0.07	62.40	882	0.07	109.69	1684	0.07
2001	50.23	786	0.06	69.38	1094	0.06	44.16	742	0.06	76.01	1136	0.07
2002	27.13	708	0.04	24.87	943	0.03	25.78	651	0.04	26.64	1006	0.03
2003	24.93	897	0.03	52.60	986	0.05	27.74	754	0.04	50.78	1129	0.04
2004	45.96	1081	0.04	52.54	1260	0.04	38.87	929	0.04	62.57	1414	0.04
2005	47.58	1079	0.04	69.42	1363	0.05	41.08	990	0.04	75.87	1456	0.05
2006	115.95	1457	0.08	124.62	1506	0.08	106.20	1261	0.08	133.33	1702	0.08
2007	156.63	1698	0.09	174.88	1761	0.10	105.97	1376	0.08	229.28	2089	0.11

Source of data: Authors' calculation based on SDC data.

Note: The secondary sector includes mining, construction, light manufacturing and heavy manufacturing. The tertiary sector includes utilities transportation, wholesale and retail, finance and insurance services, services, other services and public administration.

Figure 2.3-1. M&As in the secondary and tertiary sectors



2.3.2. Comparison between Labor-intensive and Capital-intensive Industries

We plot the transaction value and numbers of light manufacturing (labor-intensive) and those of heavy manufacturing (capital-intensive) industries in Figure 2.3-2.[6] From 1980 to 2007, the heavy manufacturing industry had about the same number of transactions as the light manufacturing industry. As the value per transaction was higher for the heavy manufacturing than the light manufacturing industry, the total transaction value of the heavy manufacturing industry was 42.7% higher than that of the light manufacturing industry over the entire sample period.

The heavy and light manufacturing industries have demonstrated similar cyclical patterns in cross-border M&As during the period 1980-2007. This might suggest that the growth of cross-border M&As in the manufacturing industries has not been driven either by labor related or capital related factors alone. It is interesting to note that the heavy manufacturing industry boomed in late 1990s, while the light manufacturing industry showed no such pattern.

6 Light manufacturing includes dairy products, fats and oils, broad woven fabric mills etc.; heavy manufacturing includes engines and turbines, metal forgings and stampings, sheet metal work etc.

One might wonder whether the difference (or similarity) between the two industries is mainly driven by the cross-border M&A activities taken by the U.S. firms, because they have the largest share of cross-border M&As. To verify this, we plot the same figure without the U.S. data on both the acquiring and target sides. The same cyclical pattern is shown (Figure 2.3-3), suggesting that the difference (or similarity) between heavy and light industries is not completely driven by US firms.

Figure 2.3-2. M&As in the light and heavy manufacturing industries

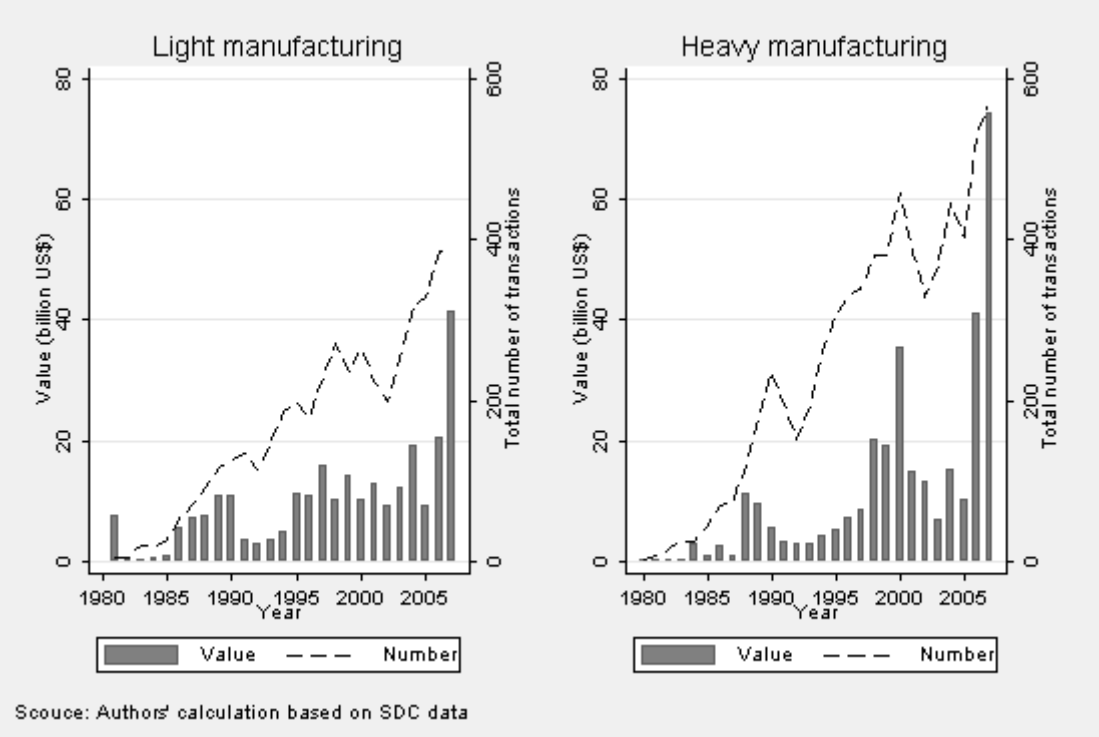
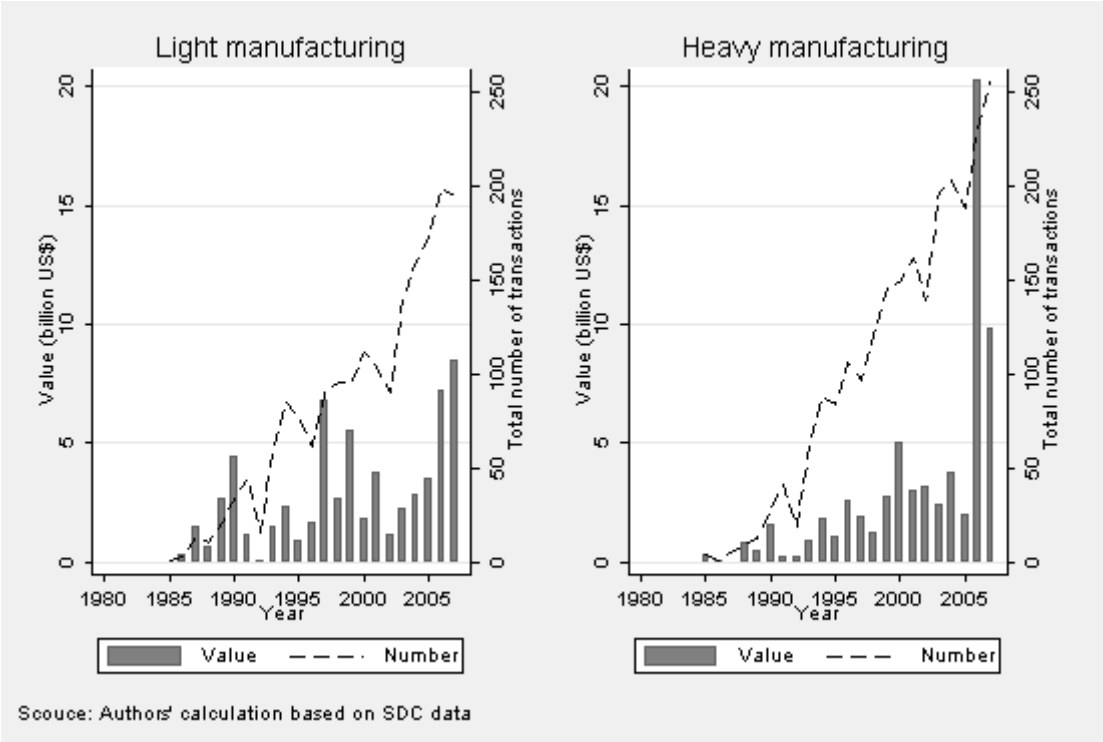


Figure 2.3-3. M&As in the light and heavy manufacturing industries (without U.S. data)



2.3.3. Industrial Composition of Cross-border M&As

In this subsection we further decompose cross-border M&As into ten industries and compare their relative growth (in transaction value). In particular, we have decomposed the secondary sector into mining and construction, light manufacturing, heavy manufacturing, and utilities and transportation. For the tertiary sector we have wholesale and retail, finance and insurance, service, public administration, and others. For the service industry, it includes financial service, entertainment service, and health service. The public administration industry includes education, transportation, and environmental service. Table 2.3-2 presents the shares of each industry as acquirer and as target in the ten-industry group. Generally, the relative importance of the primary, the secondary, and the tertiary sectors as acquirer and target has been quite stable during the sample period. In these sectors, some industries like mining & construction (industry 1) and light manufacturing (industry 2) have seen declining shares as acquirer and target over time, while others like, utilities & transportation (industry 4), finance & insurance (industry 6) and services (industry 7) have been rising rapidly.

To better illustrate the time trend of some specific industries, we regroup them into four: the manufacturing, the finance and insurance, other services, and all others. The shares of these four groups by years are plotted in Figure 2.3-4 (acquiring side) and 2.3-5 (target side). On the acquiring side, the share of manufacturing has declined since mid-1980. The share of other services has increased, mainly due to the expansion of finance and insurance. The others only account for a minor share of total cross-border M&As and the share has declined slightly over time. On the target side (Figure 2.3-4), such a pattern is not apparent. The shares of different industries appear to be relatively stable over time.

Table 2.3-2: Shares of different industries (%)

Period	Industry	0	1	2	3	4	5	6	7	8	9
1980-1985	Acquiring	0.08	28.95	37.17	12.90	1.90	1.33	17.22	0.12	0.34	N.A.
	Target	0.54	28.50	28.78	14.01	8.98	4.42	12.87	1.62	0.29	N.A.
1980-1990	Acquiring	0.35	14.28	18.25	20.44	5.86	2.56	35.96	2.01	0.30	N.A.
	Target	0.31	10.59	22.05	15.78	17.88	12.09	11.05	10.00	0.26	N.A.
1991-1995	Acquiring	0.22	11.91	21.60	13.09	11.82	4.31	26.78	8.68	1.59	0.01
	Target	1.03	13.22	20.62	13.68	13.34	5.85	10.54	19.87	1.64	0.20
1996-2000	Acquiring	0.52	6.51	14.12	18.08	25.39	2.10	23.93	8.07	1.24	0.03
	Target	0.38	8.08	11.94	17.50	31.49	3.54	15.80	10.27	0.95	0.05
2001-2007	Acquiring	0.17	12.81	9.44	15.01	8.46	2.78	46.40	3.68	1.17	0.07
	Target	0.93	15.99	11.92	16.85	17.08	4.77	24.37	6.30	1.75	0.04
1980-2007	Acquiring	0.29	11.53	12.78	16.32	12.82	2.68	37.51	4.91	1.12	0.05
	Target	0.71	13.46	13.81	16.70	20.63	5.21	19.55	8.43	1.46	0.05

Source of data: Authors' calculation based on SDC data.

Note: 0-Agriculture 1-Mining&Construction 2-Light Manufacturing 3-Heavy Manufacturing 4-Utilities&Transportation 5-Wholesale&Retail 6-Finance&Insurance 7-Services 8-OtherServices 9-Public Administration

Figure 2.3-4. Shares of acquiring industries

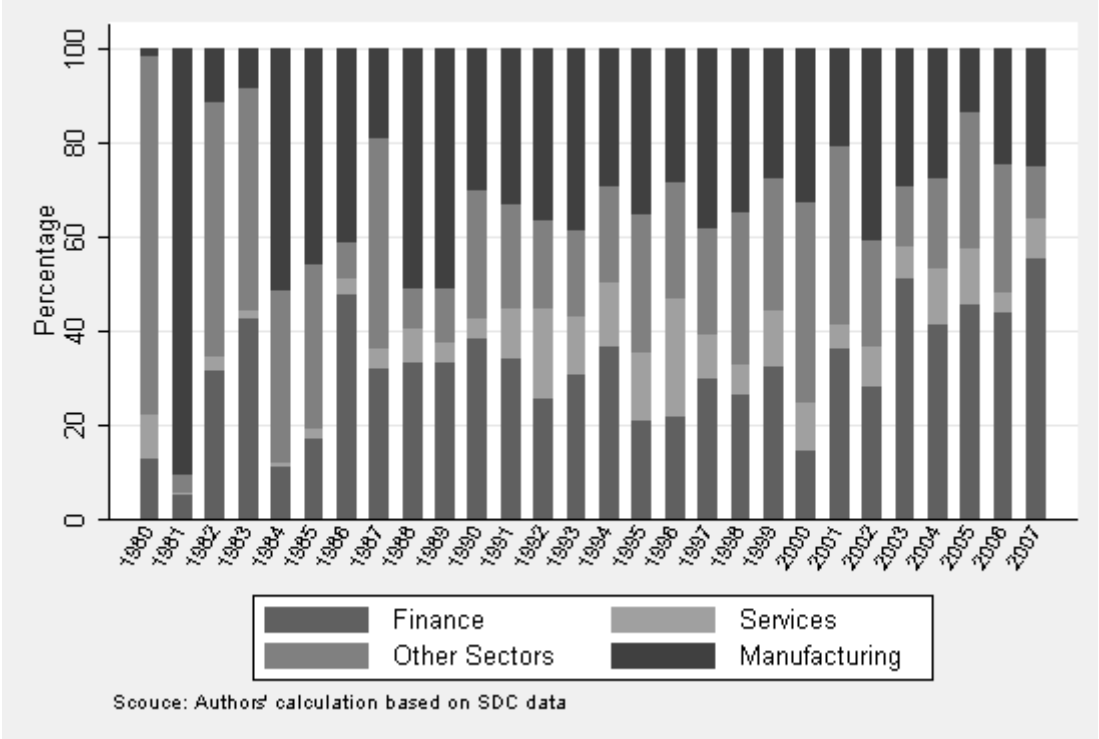
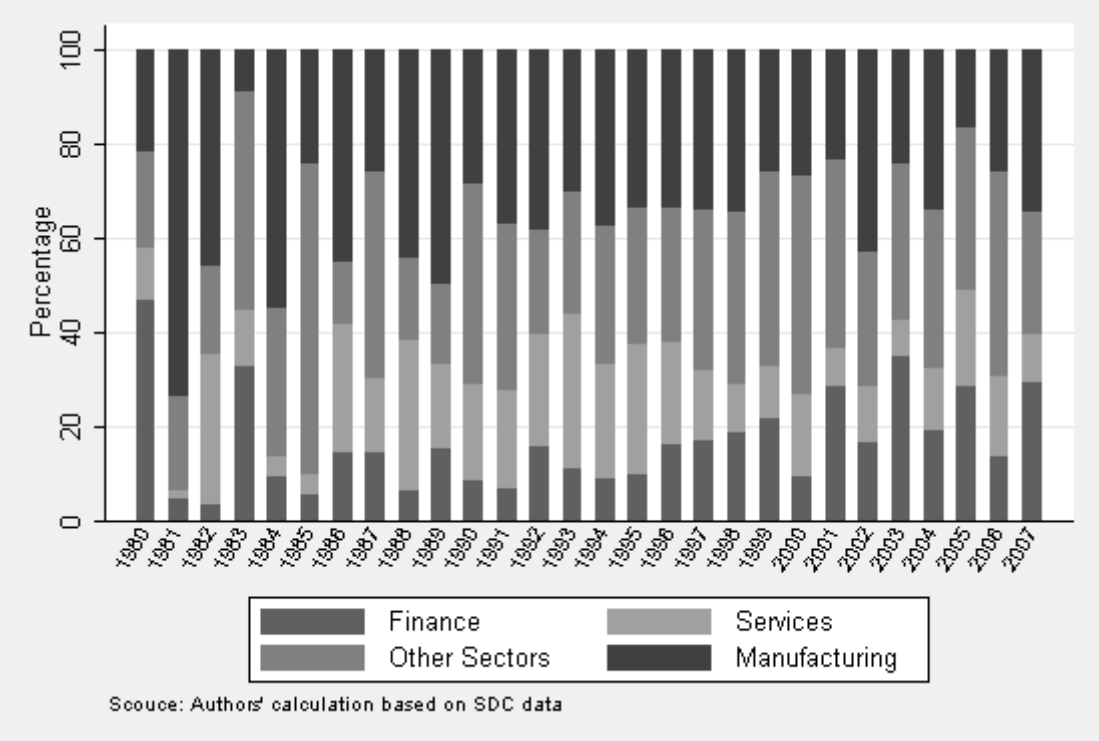


Figure 2.3-5. Shares of target industries



To provide further information on the linkage between acquiring and target industries, we return to the ten-industry groups. Table 2.3-3 presents the shares of industry i acquiring industry j. Some interesting patterns appear. First, as for inter-industry M&As, the finance and insurance industry (industry 6), being an acquiring industry, clearly dominates other industries in cross-border M&As, accounting for 37.6% of total transactions. This is consistent with the findings from the OECD report (2001). Second, intra-industry M&As (i.e., firms merge with or acquire other firms from the same industry) dominate inter-industry M&As (i.e., firms merge with or acquire firms from different industries). In particular, intra-industry M&As are most important in finance and insurance industry, which accounts for almost half of this industry's acquisition (17.9/37.6). Third, for the finance and insurance industry, in terms of inter-industry M&As, it is much more likely to acquire firms from the utilities and transportation industry (industry 4) than those from other industries. As a result, the utilities and transportation industry accounts for the largest share of targets (20.6%), and the finance and insurance industry is closely behind.

We further decompose the shares by two sub-periods: 1990-2000 and 2001-2007 in Tables 2.3-4 and 2.3-5, respectively. The cross-border M&As from the finance and insurance industry dominated other industries in both periods. More importantly, the wedge significantly widened in the second period: the share of finance and insurance as acquiring industries increased from 25.9% in 1990s to 46.4% in the 2000s. Moreover, the target industry has become less concentrated, and has shifted from the utilities and transportation industry (industry 4, as shown in Table 2.3-4) to mining and construction (industry 1), light and heavy manufacturing (industries 2 and 3), and finance and insurance (industry 6).

Table 2.3-3. Shares in total transactions (%, 1980-2007)

		Target Industry										
		0	1	2	3	4	5	6	7	8	9	total
Acquiring Industry	0	0.05	0.03	0.14	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.29
	1	0.00	9.30	0.66	0.32	0.90	0.06	0.26	0.04	0.02	0.00	11.55
	2	0.39	1.09	7.75	0.55	1.65	0.35	0.26	0.66	0.09	0.00	12.80
	3	0.01	0.96	0.55	12.24	0.27	0.29	0.31	1.48	0.18	0.01	16.31
	4	0.02	0.34	0.18	0.16	11.12	0.05	0.12	0.66	0.05	0.03	12.73
	5	0.03	0.29	0.28	0.21	0.08	1.47	0.14	0.14	0.02	0.00	2.68
	6	0.20	1.38	3.61	2.79	6.31	2.79	17.85	2.10	0.53	0.00	37.56
	7	0.00	0.02	0.53	0.31	0.24	0.14	0.31	3.25	0.11	0.00	4.92
	8	0.00	0.05	0.10	0.13	0.04	0.02	0.26	0.10	0.44	0.00	1.12
	9	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.05
	total	0.71	13.47	13.80	16.71	20.63	5.21	19.53	8.43	1.46	0.05	100.00

Source of data: Authors' calculation based on SDC data.

Note: 0-Agriculture 1-Mining&Construction 2-Light Manufacturing 3-Heavy Manufacturing 4-Utilities&Transportation 5-Wholesale&Retail 6-Finance&Insurance 7-Services 8-OtherServices 9-Public Administration

Table 2.3-4. Shares in total transactions (%, 1990-2000)

		Target Industry										
		0	1	2	3	4	5	6	7	8	9	total
Acquiring Industry	0	0.11	0.00	0.18	0.01	0.00	0.12	0.01	0.00	0.01	0.00	0.44
	1	0.00	6.40	0.97	0.25	0.10	0.09	0.21	0.04	0.01	0.00	8.07
	2	0.21	0.57	8.18	0.49	3.08	0.65	0.13	1.32	0.02	0.03	14.69
	3	0.01	0.41	0.61	12.98	0.38	0.31	0.38	2.35	0.35	0.04	17.84
	4	0.01	0.50	0.41	0.24	18.68	0.10	0.10	1.52	0.12	0.00	21.68
	5	0.03	0.27	0.34	0.20	0.09	1.42	0.18	0.09	0.04	0.00	2.67
	6	0.11	0.98	2.02	1.59	5.75	1.24	12.16	1.67	0.38	0.00	25.90
	7	0.00	0.03	1.15	0.46	0.27	0.09	0.36	5.01	0.10	0.00	7.47
	8	0.00	0.07	0.14	0.06	0.06	0.00	0.58	0.03	0.27	0.00	1.21
	9	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02
	total	0.49	9.22	14.02	16.29	28.42	4.03	14.13	12.03	1.30	0.07	100.00

Source of data: Authors' calculation based on SDC data.

Note: 0-Agriculture 1-Mining&Construction 2-Light Manufacturing 3-Heavy Manufacturing 4-Utilities&Transportation 5-Wholesale&Retail 6-Finance&Insurance 7-Services 8-OtherServices 9-Public Administration

Table 2.3-5. Shares in total transactions (%, 2001-2007)

		Target Industry										
		0	1	2	3	4	5	6	7	8	9	total
Acquiring Industry	0	0.01	0.01	0.14	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.17
	1	0.01	11.49	0.30	0.19	0.52	0.04	0.20	0.02	0.03	0.00	12.81
	2	0.57	1.04	5.99	0.52	0.69	0.18	0.20	0.09	0.15	0.00	9.44
	3	0.01	1.17	0.25	11.68	0.23	0.25	0.31	1.01	0.10	0.00	15.01
	4	0.02	0.27	0.05	0.10	7.65	0.02	0.16	0.12	0.02	0.03	8.43
	5	0.02	0.34	0.22	0.21	0.08	1.60	0.13	0.15	0.01	0.00	2.78
	6	0.29	1.61	4.70	3.73	7.60	2.46	22.93	2.40	0.69	0.00	46.42
	7	0.00	0.02	0.19	0.23	0.20	0.20	0.32	2.38	0.14	0.00	3.68
	8	0.00	0.04	0.08	0.19	0.02	0.02	0.08	0.13	0.61	0.00	1.17
	9	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.07
	total	0.92	16.00	11.93	16.86	17.08	4.77	24.34	6.31	1.75	0.04	100.00

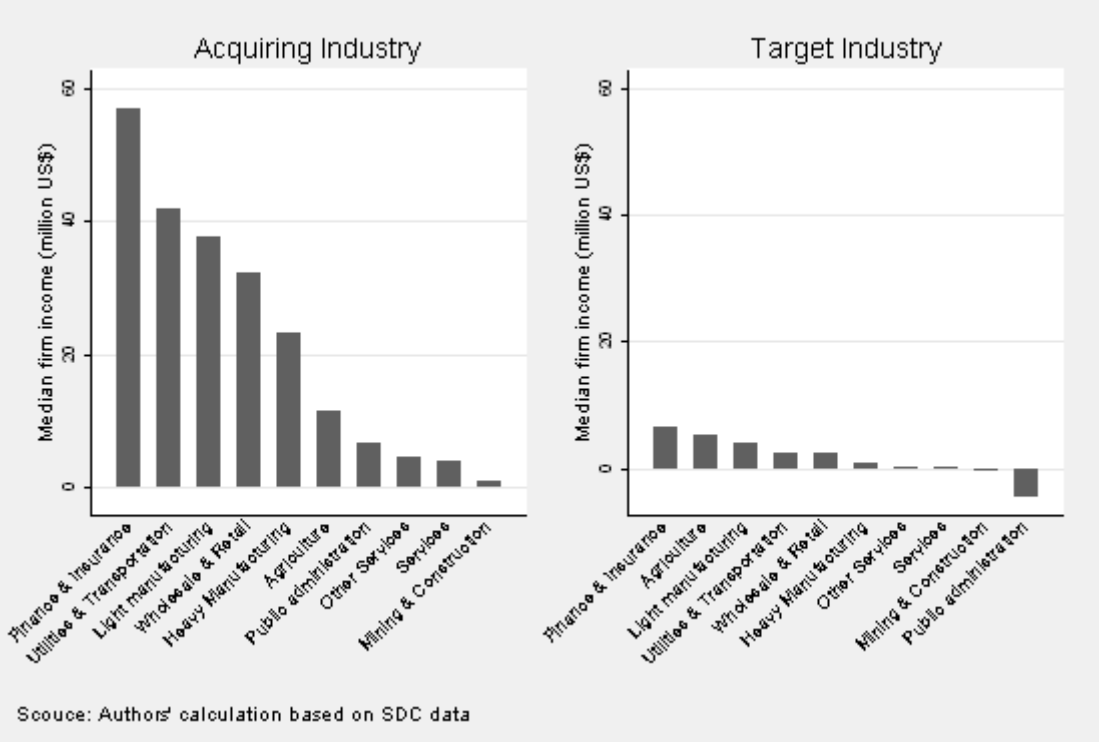
Source of data: Authors' calculation based on SDC data.

Note: 0-Agriculture 1-Mining&Construction 2-Light Manufacturing 3-Heavy Manufacturing 4-Utilities&Transportation 5-Wholesale&Retail 6-Finance&Insurance 7-Services 8-OtherServices 9-Public Administration

2.3.4. Firm Size Distribution by Industry

We now compare firm size across industries. Similar to the cross-economy firm size comparison (in subsection 2.2.3), acquiring firms are much larger than target firms. Moreover, there is a large variation of median firm size across industries. By industry, finance and insurance has the largest income as a target and as an acquirer, the largest asset as an acquirer, and largest sales as a target.

Figure 2.3-6. Median firm income (by industry)



Note: In public administration section, there are 53 observations in the target side and only one observation has the record of income, which is -4.36.

Figure 2.3-7. Median firm asset (by industry)

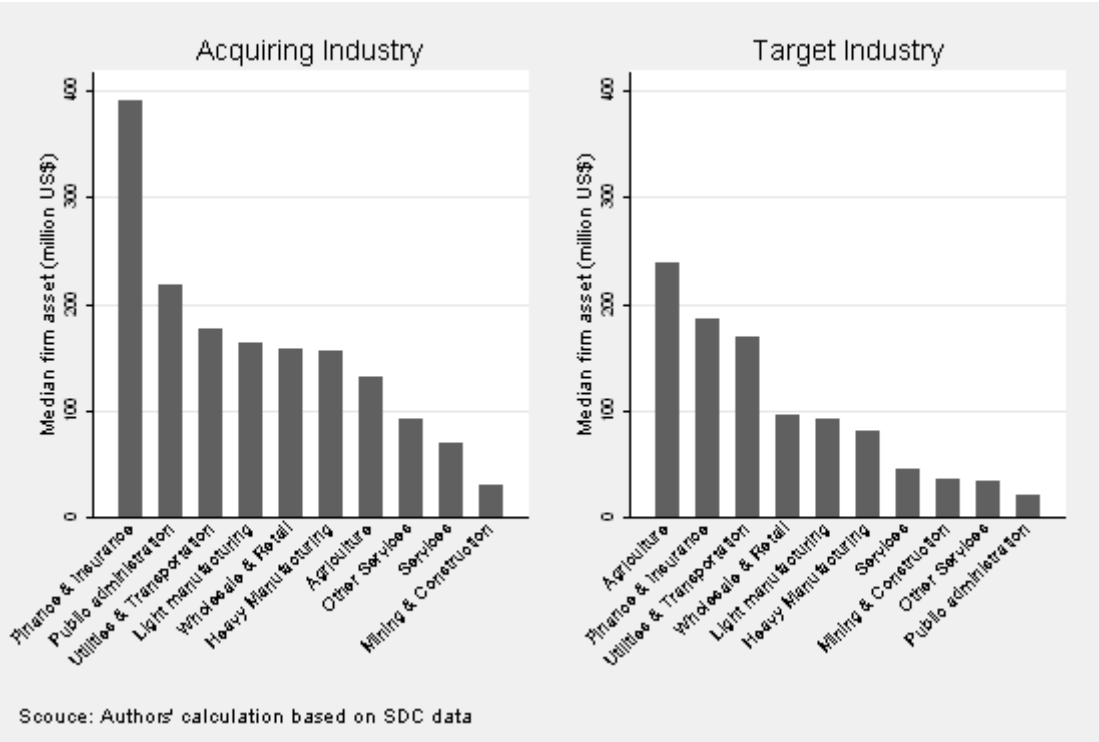
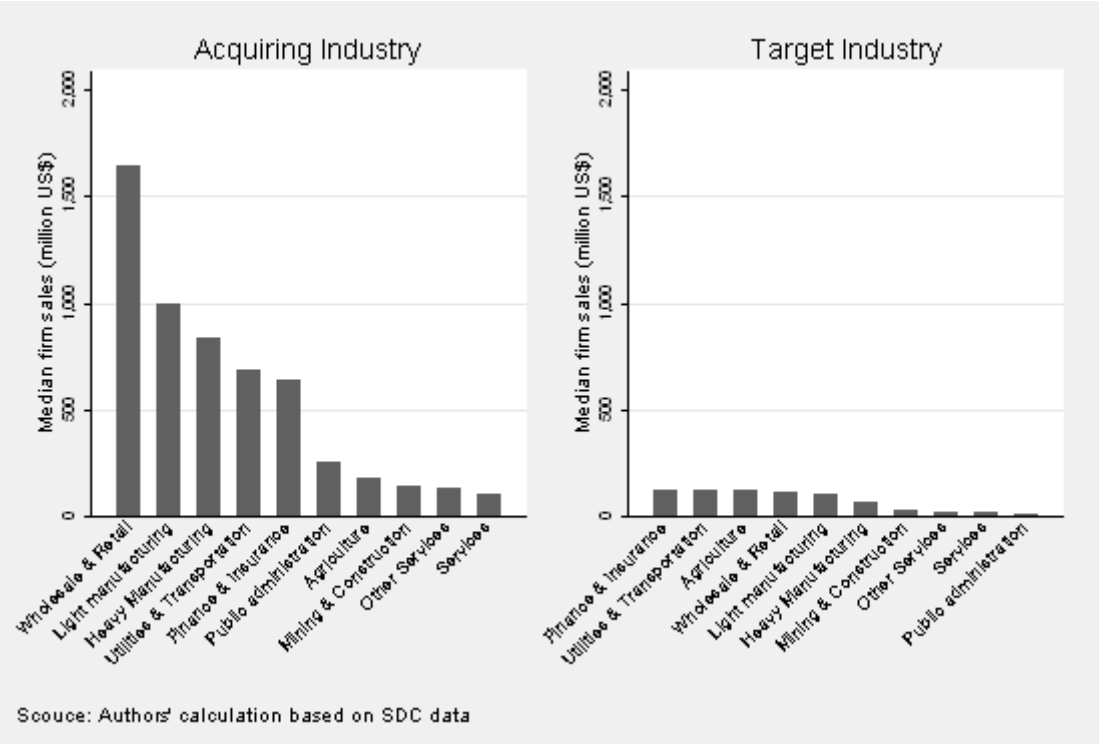


Figure 2.3-8. Median firm sales (by industry)



2.4. Characteristics of Acquirers and Targets

In this subsection we compare acquiring firms and target firms in terms of their size. The general observation is that both the target and acquirer's sizes have declined over time. This clearly indicates that the barriers to cross-border M&As in APEC have reduced. The barriers could be technical and information barriers, but they could also be policy barriers. Because of the reduction of barriers, smaller firms are able to participate in M&A activities. And this is a key source of efficiency improvement.

In terms of the logarithm of sales revenue, median acquiring firms are significantly bigger than median target firms (Figure 2.4-1). But the sizes of both acquiring and target firms have been declining since early 1990s, suggesting that M&As as a form of economic integration and a major source of capital flows have become more accessible to the APEC economies.

Alternatively, we can use asset value as a proxy for firm size and repeat the exercise above (Figure 2.4-2). Interestingly, the median asset values of acquiring firms have declined at a faster rate than those of the target firms. Before 1999, acquiring firms had significantly larger asset than target firms but this gap narrowed quickly after 1999.

Figure 2.4-1. Acquiring and target firms' sales revenue

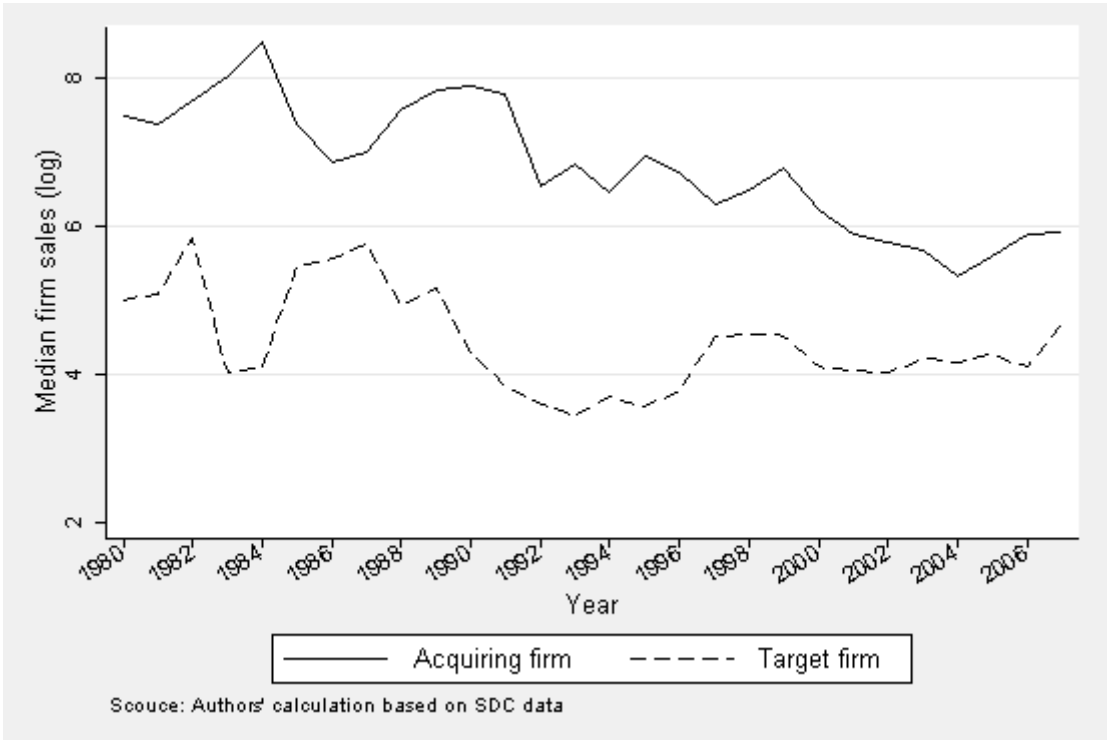
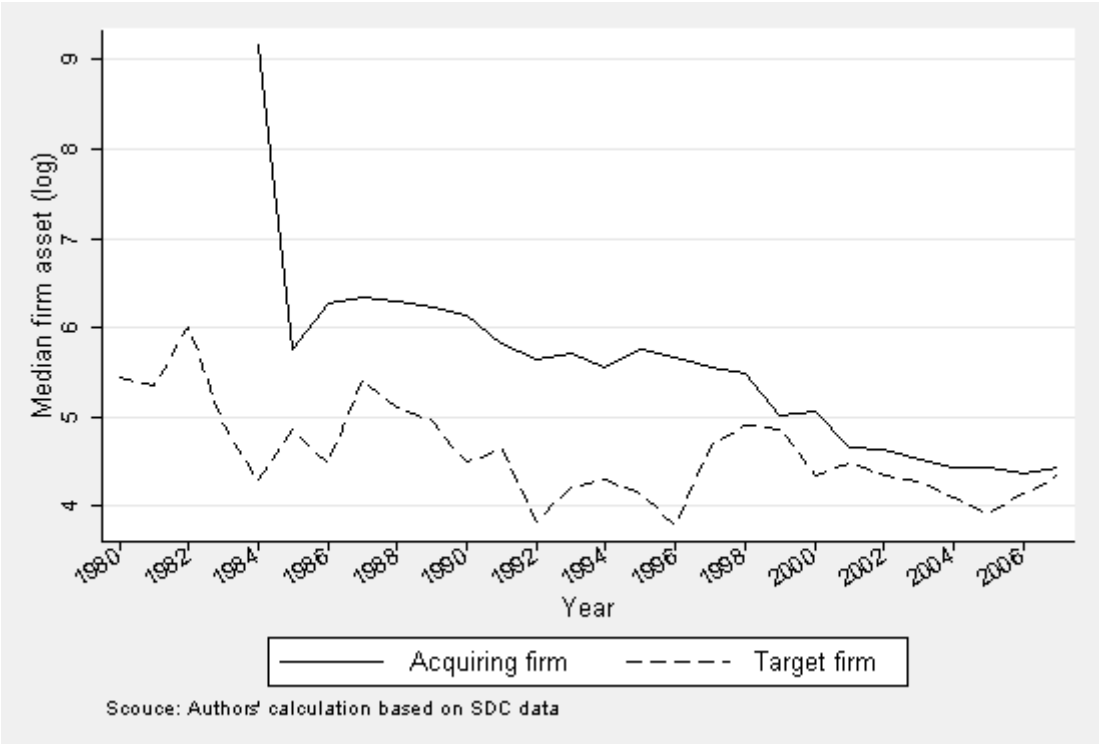


Figure 2.4-2. Acquiring and target firms' asset (median)



2.5. Summary of Patterns

In this section, we have analyzed various patterns of intra-APEC cross-border M&As. Our sample covers all APEC economies and spans the whole period from 1980 to 2007. The main findings are as follows:

(1). (General trend of cross-border M&As in APEC): Cross-border M&As within APEC have expanded rapidly, but with large fluctuations. During the sample period (1980-2007), annual growth rates are 21.5% in value and 25.3% in number. The growth exhibits three waves or cycles: 1980-1990, 1990-2000, and 2000-2007. The time trend of cross-border M&As is closely related to domestic M&As of the APEC economies. However, cross-border M&As have increased more rapidly than domestic M&As over time.

(2). (Individual economies' cross-border M&As): Industrialized economies (especially the United States, Canada, and Australia) and emerging economies in the East Asia have been the key driving forces for cross-border M&As within APEC. The United States has transformed from a popular target economy to become both an active acquirer and target economy. Canada has been active in cross-border M&As throughout the sample period. The importance of China in cross-border M&As has increased rapidly, especially in the past decade. Hong Kong, China and Singapore have both gained in relative importance. The time trends of different APEC economies are generally highly correlated. The scale, income and asset of firms participating in cross-border M&As vary widely across APEC economies.

(3). (Sectoral cross-border M&As): On the acquiring side, the share of mining and construction and that of light manufacturing have declined since mid-1980. In contrast, the shares of utility and transportation and of finance and insurance have increased over time. On the target side, similar pattern is seen albeit to a lesser extent. In addition, most industries heavily target the same industries for cross-border M&As.

(4). (Individual firms' cross-border M&As): Over time, the scale of acquiring firms has decreased. This indicates that more and more firms participate in acquisitions and the barriers to acquisitions have been reduced gradually, perhaps due to policy changes or deeper market integration across the APEC economies. Acquiring firms are generally larger and more profitable than target firms. Consequently, advanced technologies and management skills are transferred from more efficient firms to less efficient firms, thereby improving overall industry productivity.

III. Empirical Analysis of Cross-Border M&As, Trade, Greenfield FDI, and GDP

In the previous section, we have described the patterns of cross-border M&As in APEC economies. We now turn to examining the determinants of intra-APEC cross-border M&As and the impacts of cross-border M&As on trade, greenfield FDI and GDP in this region.

Gravity model framework is deployed in this empirical analysis. Gravity models are commonly used in the trade and FDI literature. Despite its simplicity, gravity model fits data well. The strategy is to introduce new variables to the gravity models in order to see how these variables affect the dependent variables. We start with a focus on the determinants of cross-border M&As (in section 3.2). Then, we examine how cross-border M&As affect international trade (in section 3.3), greenfield FDI (in section 3.4), and GDP (in section 3.5). Following the literature, we will report the results based on the pooled cross-sectional OLS estimators. We also run the regressions by the fixed-effect panel data method to check the robustness of our estimates from the OLS. We use the standard F-test to test whether the OLS or fixed-effect models are preferred. When our diagnostic test cannot reject the OLS results, we report the OLS results because the fixed effects estimators will absorb the effect of all time-invariant variables into the unobserved country-specific intercept. However, if the OLS results fail the test, we would report the fixed-effect results.

3.1. Data and Summary Statistics

The M&A dataset is constructed based on Thomson Financial's SDC database. Data on real GDP, real GDP gap and exchange rates are obtained and calculated based on the Penn World Table (PWT 6.2, 2000 as base year). Data on relationship between two economies, e.g. the distance between two capital cities of two economies, and whether they have common official languages, are obtained from the French Research Center in International Economics (CEPII). Bilateral trade data are from the World Bank's website. Finally, bilateral FDI data are obtained from OECD Online Statistics Databases, and are thus confined to outward investments by the APEC members that belong to OECD.[7]

Since the M&A data are at firm level while other data are at economy level, we aggregate the bilateral cross-border M&A deals for each APEC member to economy level. All relevant data are on annual basis. Table 3-1 presents summary statistics of the key variables.

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7 The FDI outflow economies are Australia, Canada, Japan, Korea, Mexico, New Zealand and United States. The inflow economies are all APEC economies (but the amounts are zero for Brunei Darussalam in our sample years).

Table 3-1. Summary Statistics at Economy Level, on Annual Basis (1980– 2004)

Variables	Number of Observations	Mean	Standard Deviation
Value of M&A (Thousand US$) (log)	1048	10.615	2.369
M&A Stock Value (Thousand US$) (log)	1199	12.491	2.409
Number of M&A(log)	1302	1.143	1.117
M&A Stock Number (log)	1302	2.513	1.565
Import (Thousand US$) (log)	1302	15.108	2.068
Export (Thousand US$) (log)	1302	15.136	1.955
GDP (Thousand US$)(log)	499	19.191	1.699
Distance (Kilometers) (log)	410	8.744	0.884
GDP Growth (%)	413	0.427	0.244
GDP Gap_ij (Thousand US$) (log)	1302	0.245	0.535
Exchange Rate Depreciation (%)	1302	0.046	0.217
Greenfield FDI (Thousand US$) (log)	938	11.777	2.325
Population (Thousand people) (log)	431	10.411	1.515
Area (Square Kilometers) (log)	431	12.991	2.746

3.2. Cross-border M&As and Their Determinants

3.2.1. The Hypothesis: What Affect Cross-border M&As

Many factors could potentially affect cross-border M&A activities. The possible correlations between cross-border M&As and other economic factors such as trade flows, greenfield FDI flows and GDP are explored in this study with an aim to understand how these may drive cross-border M&As.

First, we investigate the impacts of exports on cross-border M&As. Suppose economy i exports to economy j. Will this trade pattern affect economy i's decision on acquiring assets/firms in economy j? The result is ambiguous – depending on the types of firms or the types of assets the acquisitions aim at. On the one hand, a firm from economy i may acquire another firm's assets in economy j, such as distribution network and after-sales services, to help its product exports to economy j. In other words, acquisition of foreign asset extends economy i's supply chain. This firm may also consider buying a competing firm in economy j to use it as a production base (to substitute for its exports) and enhance its market power. In both cases, more exports from economy i to economy j would lead to more acquisition on economy j's assets by economy i. On the other hand, exports from economy i

may also reduce the incentives of firms in the economy to acquire foreign asset for the sake of accessing the foreign market. This implies that exports may reduce cross-border M&As.

Second, we study the impacts of imports on cross-border M&As. When a firm imports intermediate goods or raw materials from another economy, it has the incentive to acquire the supplier to internalize demand and supply of those inputs. The most important motive is to secure the supply of those inputs. Under this circumstance, more imports induce more cross-border M&As. Moreover, a domestic competing firm may also have incentive to acquire a foreign firm that exports to the domestic market. The objective for this type of M&As is to enhance a firm's market power in the domestic market and/or to acquire foreign technologies. In either case, more imports lead to more cross-border M&As. In contrast, when economy i has already imported a lot of intermediate goods or raw materials that a firm in economy i needs for its production, it is not necessary for it to acquire the foreign suppliers because it is more efficient to buy from the market and the issue of securing supply is less prominent. In this case, more imports would result in less acquisition in the exporting economy. In short, the impacts of imports on cross-border M&As are not obvious.

Third, we examine the impacts of greenfield FDI on cross-border M&As. Cross-border M&A is also a kind of FDI. To emphasize its difference from other types of FDI, in this report greenfield FDI refers to total FDI excluding cross-border M&As. In general, a firm needs to make a fix investment to build a plant/factory in another economy when it undertakes greenfield FDI. In contrast, when a firm enters a foreign market via M&As, it may simply bring in technologies, management expertise and other tangible and intangible asssets, without involving a large amount of capital to build the plant/factory. Greenfield FDI and cross-border M&As share a lot of similarities: both serve as a channel for firms to enter foreign markets and acquire foreign resources. In this regard, they are substitutes to each other. However, they can also be complements. After investing in a foreign country and building its production facilities (greenfield FDI), a firm may purchase foreign logistic firms to help distributing its products (cross-border M&As). In this regard, greenfield FDI has positive impacts on cross-border M&As. Given these opposite effects, the net impacts of greenfield FDI on cross-border M&As are not clear.

Finally, we explore the impacts of GDP on cross-border M&As. With higher GDP, domestic firms are richer and will consider expanding their businesses. Although reinvestment can help the firms to expand their production capacity and extend to other businesses, they can achieve these goals more easily and quickly through M&As, both domestic and cross-border. This suggests that when an economy has a larger GDP, it will acquire more foreign assets. On the other hand, foreign companies may also have stronger incentives to acquire this economy's assets because they have better value and a more sizeable market. That implies that when an economy has larger GDP, it also attracts more foreign acquisitions, i.e., it attracts more cross-border M&As as a target economy.

Therefore, we expect that GDP has a positive effect on an economy's cross-border M&As both as an acquiring economy and as a target economy.

The possible impacts of international trade, greenfield FDI, and GDP on cross-border M&As are our primary interest. In addition, we will discuss the impacts of other factors on cross-border M&As below after presenting the empirical findings.

Before we proceed to our models and regressions, it is important to point out that in the main model, we would not include greenfield FDI as an independent variable. The reason is because we only have bilateral FDI outflow data for those APEC economies that also belong to OCED. Hence, if we include greenfield FDI as part of the independent variables, it would reduce the sample size by about two-third because we would have to restrict the sample to acquiring economies that belong to both OECD and APEC. This will significantly reduce the generality of our empirical results and depart from our original objective which is to examine all intra-APEC cross-border M&As. However, we will also run a regression model with greenfield FDI as an independent variable using data from only those APEC economies that also belong to OECD. At the end of this section, we will report and discuss the impacts of greenfield FDI on cross-border M&A deriving from the subsample economies.

3.2.2. The M&A Model

A typical gravity model states that the flows of trade between two economies are negatively related to the distance between two economies, and positively and proportionally related to their economic size (proxied by GDP). Other variables could also be introduced as additional independent variables. The gravity model, originally used to examine trade flows, has also been used to study FDI flows. However, there are very few applications to cross-border M&A studies, with an exception of the recent paper by di Giovanni (2005). di Giovanni (2005) focuses primarily on the impacts of financial institutions on cross-border M&As,. While our M&A model shares some common independent variables as hers, we have different focuses. Our cross-border M&A model is given below.

$$\ln(MA_{ijt}) = \beta_0 + \beta_1 \ln(EX_{ijt-1}) + \beta_2 \ln(IM_{ijt-1}) + \beta_3 \ln(Stock_{ijt}) + \beta_4 \ln(GDP_{it})$$
$$+ \beta_5 \ln(GDP_{jt}) + \beta_6 \ln(GDPgrowth_{it}) + \beta_7 \ln(GDPgrowth_{jt}) + \beta_8 \ln(GDPgap_{ijt})$$
$$+ \beta_9 \ln(GDPgap_{jit}) + \beta_{10} \ln(ER_{it}) + \beta_{11} \ln(ER_{jt}) + \beta_{12} \ln(Dist_{ij}) + \beta_{13} Border_{ij}$$
$$+ \beta_{14} Lang_{ij} + \sum_{1981}^{2004} \beta_{15,t} Y_t + \sum_{1}^{3} \beta_{16,k} Continent_i + \sum_{1}^{3} \beta_{17,k} Continent_j + \beta_{18} RTA_{ijt} + \beta_{19} WTO_{it}$$
$$+ \beta_{20} WTO_{jt} + \xi_{ijt}.$$

Very broadly, i is the economy that the acquiring firm belongs to and j is the economy that the target firm belongs to in a given cross-border M&A deal. The dependent variable MA_{ijt} is measured by the

number of cross-border M&As with economy i as the acquiring side and economy j as the target side in year t. The idiosyncratic error term is given by ξ_{ijt}. The independent variables in the model include the following:

- EX_{ijt-1} and IM_{ijt-1} are the value of economy i's exports to and imports from economy j in year t-1, respectively;
- $Stock_{ijt}$ is the accumulated number of M&As with economy i as the acquirer and economy j as the target, calculated as the sum of MA_{ijt} from 1980 up to year t-1;
- GDP_{it} is economy i's GDP in year t and GDP_{jt} is economy j's GDP in year t;
- $GDPgrowth_{it}$ and $GDPgrowth_{jt}$ are the average GDP growth rates of the two economies from year t-5 to year t;
- $GDPgap_{ijt}$ and $GDPgap_{jit}$ are used to estimate the asymmetric effect of technology gap (or income gap) on cross-border M&As. If economy i is more advanced, i.e., it has a larger GDP per capita than economy j in year t, we use $GDPgap_{ijt}$ to measure the gap between the two economies' per capita GDP; and $GDPgap_{jit}$ takes the value of zero. On the contrary, If economy i is less advanced than economy j in year t, we let $GDPgap_{ijt}$ be zero and $GDPgap_{jit}$ be the gap between the two economies' per capita GDP;
- ER_{it} is economy i's currency depreciation rate (not equal to exchange rate?) against the US dollar from year t-1 to year t; ER_{jt} is economy j's depreciation rate;
- $Dist_{ij}$ is the distance between economies i and j;
- $Border_{ij}$ is a dummy variable which is equal to 1 if the two economies have a common border and zero otherwise;
- $Lang_{ij}$ is a dummy variable which equals 1 if the two economies have common official (or primary) language and zero otherwise;

- Y_t is the year dummy which is equal to 1 for year t and zero otherwise;
- $Continent_i$ ($Continent_j$) is a dummy variable indicating the acquiring (target) economy's continent;[8]
- RTA_{ijt} is a dummy variable equal to 1 if economy i and economy j have common regional trade agreement in year t;
- WTO_{it} is a dummy variable which is equal to 1 if economy i is a WTO (or GATT before 1995) member in year t and zero otherwise; WTO_{jt} is similarly defined.

Most of the above independent variables have been used in various studies of trade flows with gravity models. They can also potentially affect cross-border M&As. Other variables like *RTA* and *WTO* capture, to some extent, the effect of trade liberalization on cross-border M&As.

3.2.3 The Empirical Results [Subheading move to next page]

Based on the M&A model, we obtain some interesting empirical results using the OLS approach. These are summarized in Table 3-2. But we have not reported all estimators (for example, *Continent*) in the table. In order to resolve the reverse causality issue, we have introduced time lag for the exports and imports. The coefficient of exports is *positive* and statistically significant. This indicates that more exports from economy i to j would lead to more acquisition from economy i in economy j.[9] This suggests complementarities between exports and cross-border M&As. There are two possible channels underlied. A manufacturing firm, which produces goods and exports to a foreign market, may purchase a services firm in the importing economy to facilitate its exporting activity in that market. This would be a result of inter-industry M&As (a firm from manufacturing industry acquires a firm in the tertiary industry). Alternatively, the exporting firm can acquire another firm from the same industry but in the importing economy which has its own distribution (or other services) network. This would be a result of intra-industry M&As. The latter channel appears to be more common in our dataset as we have observed from subsection 2.3.3 where there have been more intra-industry M&As than inter-industry M&As.

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8 We categorize the APEC economies according to the following classification: Asia: Brunei Darussalam, P.R. China, Hong Kong, China, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Chinese Taipei, Thailand, Vietnam; North America: Canada, Mexico, United States; South America: Chile, Peru; Russia, and; Australasia: Australia, New Zealand, Papua New Guinea.

9 As discussed earlier, there is no clear theoretical prediction on how trade affects cross-border M&As. di Giovanni (2005) uses exports, but not imports, as the independent variable. She found positive effect of exports on cross-border M&A flows, which is consistent with our finding despite that fact that she uses the same year's exports while we use the previous year's exports.

In contrast, the coefficient of imports is *negative* and significant. It means that if economy i imports more from economy j, firms from economy i would reduce their acquisitions on country j's firms. There seems to exist substitution between imports and cross-border M&As. This is perhaps due to the fact that when an economy imports a lot of materials and intermediate products, reflecting the market is fairly liberalized, security of supply is not an issue. Hence, they prefer buying from imports to acquiring the foreign suppliers, which could be very costly.

With regard to GDP, the empirical results show strong positive impacts. This suggests larger economy is more likely to be an acquirer and a target. This finding is consistent with our hypothesis stated in subsection 3.2.1.

Although the size of an economy measured by GDP has significant impacts on cross-border M&A activities, the GDP growth rates of either the acquiring or target economy do not have significant impacts. Using the comparison of GDP per capita to capture technology gap, there is clear evidence that if economy i has higher income per capita than economy j, increasing the gap would reduce economy i's acquiring of economy j's firms. However, the technology gap has no significant impact on foreign asset acquisitions if the acquiring economy has lower GDP per capita than the target economy.

There exists agglomeration or positive externality in cross-border M&As. Economies with a larger stock of cross-border M&As in the same target economy tend to acquire more assets in the same destination.

In terms of policy factors, the direct effects are not as expected. First, although the RTA effect is positive, it is not significant. However, we also run the regression using NAFTA only. We find that its effect on cross-border M&As is positive and significant. These results suggest that the effectiveness of each RTA between the APEC economies, with respect to promoting cross-border M&As, indeed may vary.

Second, we find that WTO membership either has insignificant (for the acquiring economy) or negative (for the target economy) influences on cross-border M&As for either the acquiring economies or target economies. This looks like a surprising result. But we note that there are only very few economies that were not WTO members during the studied period. In addition, it is not uncommon in the literature that the effects of WTO on trade and GDP are not as expected. In any case, even though RTA and WTO membership may not have significant impacts on cross-border M&As, they may well affect cross-border M&As through their influences on international trade and greenfield FDI.

Moreover, we find that exchange rates of the acquiring economy and the target economy do not have any significant effect on cross-border M&As.[10]

One might wonder whether the Asian financial crisis, which occurred in 1997, affects our estimation. The answer is no. We have run a regression with the above model but including the Asian financial crisis dummy (an interaction term between a Southeast Asian economy and the year dummy, 1997 (for the immediate effect), or 1998 (for the lasting effect) and found that the basic results reported in Table 3-2 do not change.

The model results for the other usual determinants in the gravity model are as expected. Distance has negative impact on cross-border M&As, as this increases information barriers that tend to hamper M&A deals. Common border and common official languages between the acquiring and the target economies increase cross-border M&As, as a result of lower information costs.

Since our data is in a panel framework, we also apply the fixed-effect approach to estimate the model. Compared with OLS, the fixed-effect method further includes dummy variables for each pair of economies i and j (with direction). Our diagnosis test supports the OLS approach.

Finally, about the impact of greenfield FDI on cross-border M&As. We have also run the regression with greenfield FDI on the right-hand-side of the model using the reduced sample. The estimated effects of greenfield FDI (both inwards and outwards) are highly insignificant (the coefficient is 0.037 with standard error 0.046, which is not significant), while the effects of other independent variables are similar under both models.

[10] However, the fixed-effect approach shows that the depreciation (or appreciation) of the acquiring economy's currency would significantly reduce (or increase) its M&As overseas. This is consistent with the view that depreciation (appreciation) reduces (increases) the firms purchasing power when they go to acquire foreign assets.

Table 3-2. Regression Results of the M&A Model

Independent Variables	OLS Results	Independent Variables	OLS Results
EX_{ijt-1}	0.076	ER_{it}	-0.039
	(0.031)**		(0.373)
IM_{ijt-1}	-0.063	ER_{jt}	-0.477
	(0.029)**		(0.369)
$Stock_{ijt}$	0.402	$Dist_{ij}$	-0.205
	(0.025)***		(0.037)***
GDP_{it}	0.175	$Border_{ij}$	0.360
	(0.026)***		(0.101)***
GDP_{jt}	0.100	$Lang_{ij}$	0.128
	(0.026)***		(0.054)**
$GDPgrowth_{it}$	0.107	RTA_{ijt}	0.021
	(0.119)		(0.080)
$GDPgrowth_{jt}$	0.128	WTO_{it}	-0.037
	(0.146)		(0.084)
$GDPgap_{ijt}$	-0.289	WTO_{jt}	-0.200
	(0.050)***		(0.102)**
$GDPgap_{jit}$	-0.018		
	(0.035)		
Observations	1172	R-squared	0.67

Note: 1) Robust standard errors in parentheses;

2) * significant at 10%; ** significant at 5%; *** significant at 1%;

3) Coefficients of year dummies, continent dummies and intercepts are not reported.

3.3. Imports and Exports: The Effects of Cross-border M&As

3.3.1 The Trade Model

In this section, we estimate the impacts of cross-border M&As on trade. Our model is given below.

$$\ln(EX_{ijt}) = \beta_0 + \beta_1 \ln(MA_{ijt-1}) + \beta_2 \ln(MA_{jit-1}) + \beta_3 \ln(EX_{ijt-1}) + \beta_4 \ln(GDP_{it}) + \beta_5 \ln(GDP_{jt}) + \beta_6 \ln(GDPgrowth_{it}) + \beta_7 \ln(GDPgrowth_{jt}) + \beta_8 \ln(GDPgap_{ijt}) + \beta_9 \ln(GDPgap_{jit}) + \beta_{10} \ln(ER_{it}) + \beta_{11} \ln(ER_{jt}) + \beta_{12} \ln(Dist_{ij}) + \beta_{13} Border_{ij} + \beta_{14} Lang_{ij} + \beta_{15} RTA_{ijt} + \sum_{1981}^{2004} \beta_{16,t} Y_t + \sum_{1}^{3} \beta_{17,k} Continent_i + \sum_{1}^{3} \beta_{18,k} Continent_j + \beta_{19} WTO_{it} + \beta_{20} WTO_{jt} + \xi_{ijt}.$$

All the variables in the above model have been defined and explained in section 3.2.2. In particular, the dependent variable EX_{ijt} is the value of exports from economy i to economy j in year t. With EX_{jit}, economy i's imports from economy j have also been captured in the above trade model. For the same reason given in the M&A model, we do not include greenfield FDI as an independent variable.

The key variable of interest to us is cross-border M&As and we would determine its possible effects on trade. Suppose a manufacturing firm in economy i has acquired some assets of a firm in economy j. If the assets acquired are for trade service (such as distribution), this will facilitate the acquiring firm's exporst to economy j and we expect that exports from i to j will increase (i.e., cross-border M&As have a positive effect on exports). On the other hand, if the assets acquired are for production (such as a production plant), then after acquisition, the acquiring firm could use the target firm to serve the target economy. This will then possibly substitute for the imports from the acquiring economy. In this case, exports from the acquiring economy to the target economy will decrease. In overall terms, the impact of M&A on exports is ambiguous.

Alternatively, suppose a firm in economy j has been acquired by another firm from economy i. If the target firm is exporting, say intermediate inputs, to the acquiring economy i, then we expect to see exports from economy j to economy i increase after [the cross-border vertical integration by] M&A. In contrast, if both the acquirer and target firms produce the same products for the target economy, then the acquiring firm may have incentives to to reduce exports to overseas target. In that case, cross-border [horizontal integration by M&As] will reduce the target firm's exports. Both types of M&As can be taken as intra-industry M&As either vertically or horizontally in the supply chain, and

this is consistent with the dominance of intra-industry M&A as observed in subsection 2.3.3. The impact of an increase in cross-border M&As on trade between economy i and economy j is not clear cut.

On the impact of WTO and RTA on trade, existing literatures do not have consistent conclusion. Rose (2004) finds little evidence that countries benefit from joining the GATT/WTO, but more recent studies (Subramanian and Wei, 2007; Tomz, Goldstein and Rivers, 2007; Liu, 2009) have shown some evidence that WTO membership does promote trade. Focusing on APEC economies, our result lends support to the positive effects of WTO membership and RTA formation.

3.3.2 The Empirical Results

Table 3-3 shows the regression results of the trade (or export) model based on OLS estimation. The coefficients of cross-border M&As are of key interest. To avoid endogeneity, we use time lag for M&A variables. The result shows that past cross-border M&As between two economies have significant positive effect on current trade, both exports and imports. More precisely, if firms from economy i acquire more firms in economy j in a given year (i.e. economy i as an acquirer) or vice versa (i.e. economy i as a target), it would increase economy i's exports to economy j in the following year. In other words, if there are more M&As between economies i and j (irrespective of which one is acquirer/target), there would be more trade between the two economies. The finding is supported by the supply chain linkage motivation of cross-border M&A and trade activities, discussed in subsection 3.3.1. If a firm from economy i has acquired an input supplier in economy j, by reducing the market transaction cost after the acquisition, the former will import more from economy j. If an exporting firm from economy i has acquired the services related assets of a firm in economy j for supporting its exports, the increased efficiency as a result of acquisition will facilitate the former's exports to economy j.

Some other estimates need further discussion. We find that common language does not have a significant effect on trade, but common national borders increases trade. Distance has negative effect, though insignificant, on trade flows. Trade between two economies is positively related to each economy's GDP size and GDP growth. The gap between the GDP per capita of the acquiring and target economies reduces trade.

Export trade is also larger if any one of the economies in the pair is a WTO member. However, RTAs have a negative and significant effect on trade between the RTA members. This last result is unexpected. Nevertheless, when we only have NAFTA in the RTA variable, we obtain the expected positive and significant effect.

We have also run a regression including the dummy of Asian financial crisis and found that after controlling this effect, the results are the same as those reported in the Table 3-3.

Although it is very common in the literature to use the OLS approach to estimate the gravity models on trade flows, we still need to check whether unobserved country-specific heterogeneity exists which rejects our OLS results. We do this by applying the fixed-effect approach to the same trade model and run the diagnosis test to see whether it supports the OLS results. The answer is positive and hence the OLS estimates cannot be rejected.

Table 3-3. Regression Results of the Trade Model

Independent Variables	OLS Results	Independent Variables	OLS Results
MA_{ijt-1}	0.263	ER_{it}	0.395
	(0.040)***		(0.879)
MA_{jit-1}	0.130	ER_{jt}	-0.867
	(0.038)***		(0.764)
GDP_{it}	0.439	$Dist_{ij}$	-0.068
	(0.039)***		(0.055)
GDP_{jt}	0.452	$Border_{ij}$	1.405
	(0.041)***		(0.205)***
$GDPgrowth_{it}$	0.669	$Lang_{ij}$	0.113
	(0.252)***		(0.086)
$GDPgrowth_{jt}$	0.109	RTA_{ijt}	-0.462
	(0.262)		(0.206)**
$GDPgap_{ijt}$	-0.347	WTO_{it}	0.462
	(0.096)***		(0.135)***
$GDPgap_{jit}$	-0.515	WTO_{jt}	0.550
	(0.095)***		(0.167)***
Observations	661	R-squared	0.82

Note: 1) Robust standard errors in parentheses;

2) * significant at 10%; ** significant at 5%; *** significant at 1%;

3) Coefficients of year dummies, continent dummies and intercepts are not reported.

3.4. Greenfield FDI: The Effects of Cross-border M&As

3.4.1 The FDI Model

Although the gravity model was first used to study international trade, it was later adopted to analyze FDI flows. In the current FDI gravity model, cross-border M&As is included as an additional explanatory variable along with other control variables. Moreover, FDI in this model is greenfield FDI as opposed to total FDI in the general application of the FDI gravity model. The specification of the model is as follows[11] (same problem of the following equation as those in the previous sections)

$$\ln(FDI_{ijt}) = \beta_0 + \beta_1 \ln(MA_{ijt-1}) + \beta_2 \ln(MA_{jit-1}) + \beta_3 \ln(GDP_{it})$$
$$+ \beta_4 \ln(GDP_{jt}) + \beta_5 \ln(GDPgrowth_{it}) + \beta_6 \ln(GDPgrowth_{jt}) + \beta_7 \ln(GDPgap_{ijt})$$
$$+ \beta_8 \ln(GDPgap_{jit}) + \beta_9 \ln(ER_{it}) + \beta_{10} \ln(ER_{jt}) + \beta_{11} \ln(Dist_{ij}) + \beta_{12} Border_{ij}$$
$$+ \beta_{13} Lang_{ij} + \sum_{1981}^{2004} \beta_{14,t} Y_t + \sum_{1}^{3} \beta_{15,k} Continent_i + \sum_{1}^{3} \beta_{16,k} Continent_j + \beta_{17} RTA_{it} + \beta_{17} WTO_{it}$$
$$+ \beta_{18} WTO_{jt} + \xi_{ijt}$$

3.4.2 The Empirical Results

Due to data limitation as explained earlier, we run the regression based on a smaller sample in which only those APEC economies that also belong to OECD are included. The regression results from the FDI model are shown in Table 3-4. Since the F-test rejects the OLS model in favor of the fixed-effect model, we only report the results from the latter approach.

Our empirical results find that if firms from economy i acquire more firms in economy j in a given year, economy i's greenfield FDI outflows to economy j will decrease in the following year. On the contrary, for the acquisitions of economy i's firms by economy j, its effect on greenfield FDI from i to j is insignificant. These two observations are consistent with the view that cross-border M&As and greenfield FDI are substitutes. In particular, a larger cross-border M&As (acquiring foreign assets) in the previous year may indicate that it is an effective investment mode in the target economy and so it would be used more this year, resulting in less greenfield FDI outflows to the target economy.

The effect of the source economy's GDP on greenfield FDI outflows is positive and significant. This indicates that an economy with larger economic size is also more likely to make more greenfield FDI. For a similar reason, the effect of the GDP growth in the source economy on greenfield FDI

[11] Note that we do not include trade on the right hand side of the model as another explanatory variable. We have tried to include it, but the coefficient is insignificant. This is not surprising as other explanatory variables, such as GDP and distance, have already captured the trade effect.

outflows is also positive and significant. In contrast, the size of the host economy and the growth of the host economy both show negative (although insignificant) effect on attracting greenfield FDI. For economies with different development levels, the GDP gap has insignificant effects on greenfield FDI flows between the two economies.

While many other variables show insignificant impacts on greenfield FDI, the host economy's exchange rate impact is negative and significant, meaning when the exchange rate of the host economy j depreciates, its greenfield FDI inflow will decrease and vice versa. This implies that multinationals do not focus just on the current cost (purchase price) of investment but also on the future returns (profit potential) of the investment. Thus, currency depreciation in the host economy, which implies cheaper to invest from acquirer firms' point of view, does not necessarily attract more foreign direct investment (greenfield). On the other hand, when economy i's currency depreciates, it takes more greenfield FDI in other economies and vice versa although the impact is not significant.

The same results reported in Table 3-4 can also be obtained if we control for Asian financial crisis.

Table 3-4. Regression Results of the FDI Model

Independent Variables	Fixed-Effect Results	Independent Variables	Fixed-Effect Results
MA_{ijt-1}	-0.321	$GDPgap_{ijt}$	-3.277
	(0.125)**		(2.285)
MA_{jit-1}	-0.058	$GDPgap_{jit}$	3.037
	(0.151)		(3.324)
GDP_{it}	7.802	ER_{it}	0.280
	(2.854)***		(1.519)
GDP_{jt}	-2.174	ER_{jt}	-3.005
	(2.182)		(1.488)**
$GDPgrowth_{it}$	2.455	RTA_{ijt}	-0.363
	(1.354)*		(0.477)
$GDPgrowth_{jt}$	-0.752	WTO_{it}	0.491
	(0.697)		(0.449)
Observations	203	R-squared	0.45

Note: 1) Robust standard errors in parentheses;

2) * significant at 10%; ** significant at 5%; *** significant at 1%;

3) Coefficients of year dummies, continent dummies and intercepts are not reported.

3.5. GDP: The Effects of Cross-border M&As

3.5.1. The GDP Model

In this section, we are interested in how cross-border M&As along with the other economic activities such as international trade affect an economy's GDP. While GDP affects trade, the latter in turn influences GDP performance. To resolve endogeneity, we follow Frankel and Romer (1999) in estimating the GDP model. This is an augmented model of Frankel and Romer (1999) in that cross-border M&As is included as an additional independent variable. Specifically, the GDP model is

$$\ln(GDP_{it}) = \beta_0 + \beta_1 \ln(MA_{it}) + \beta_2 \ln(Trade_{it}) + \beta_3 \ln(Pop_{it}) + \beta_4 \ln(Area_{it}) + \xi_{ijt},$$

where

- The dependent variable GDP_{it} is the GDP of economy i in year t;
- $Trade_{it}$ is the predicted total trade by economy i with all other APEC economies in the economy's GDP, in year t;
- MA_{it} is the predicted cross-border M&As values (both as an acquirer and as a target) of economy i in the economy's GDP, in year t;
- Pop_{it} is the population of economy i in year t;
- $Area_{it}$ is the area of economy i in year t.

As using the *actual* trade and M&A values simultaneously as explanatory variables in the GDP model will cause endogeneity bias, Frankel and Romer (1999) proposed to use the *predicted* trade, which is estimated based on some exogenous factors including distance, area, landlock, and common border. In order to construct the predicted $Trade_{it}$, we first estimate the following model:

$$\begin{aligned}\ln(\tau_{ijt}) &= \beta_0 + \beta_1 \ln(Dist_{ij}) + \beta_2 \ln(Pop_{it}) + \beta_3 \ln(Area_i) \\ &+ \beta_4 \ln(Pop_{jt}) + \beta_5 \ln(Area_j) + \beta_6 (L_i + L_j) + \beta_7 B_{ij} \\ &+ \beta_8 B_{ij} \ln(Dist_{ij}) + \beta_9 B_{ij} \ln(Pop_{it}) + \beta_{10} B_{ij} \ln(Area_i) + \beta_{11} B_{ij} \ln(Pop_{jt}) + \beta_{12} B_{ij} \ln(Area_j) \\ &+ \beta_{13} B_{ij} (L_i + L_j) + \xi_{ij},\end{aligned}$$

Where τ_{ijt} is total trade between economies i and j at time t, L is the dummy variable indicating whether the economy is landlocked or not, and B is a dummy variable for a common border between economies i and j. The difference between our model and that of Frankel and Romer (1999) is that we use the trade level rather than trade share as the dependent variable (the former is more consistent with the gravity trade models).

The predicted trade value between economy i and each of the other APEC economies in year t is used. The predicted trade of economy i in year t is then calculated as the sum of its trade with each of the other economy i, e.g., $\hat{Trade}_{it} = \sum_{j \neq i} e^{\hat{a}' X_{ijt}}$. Here $\hat{a}' X_{ijt}$ is the expression of the right-hand-side of the above model for constructed trade. The exponential function is used to convert the logarithm of trade to its level.

Following the same approach, we construct the predicted MA_{it} for economy i in year t. In particular, we first estimate the following model:

$$\ln(MA_{ijt}) = \theta_0 + \theta_1 \ln(Dist_{ij}) + \theta_2 \ln(Pop_{it}) + \theta_3 \ln(Area_i)$$
$$+ \theta_4 \ln(Pop_{jt}) + \theta_5 \ln(Area_j) + \theta_6 (L_i + L_j) + \theta_7 B_{ij}$$
$$+ \theta_8 B_{ij} \ln(Dist_{ij}) + \theta_9 B_{ij} \ln(Pop_{it}) + \theta_{10} B_{ij} \ln(Area_i) + \theta_{11} B_{ij} \ln(Pop_{jt}) + \theta_{12} B_{ij} \ln(Area_j)$$
$$+ \theta_{13} B_{ij} (L_i + L_j) + \xi_{ij},$$

The predicted M&A value between economy i and each of the other APEC economies in year t is used. The predicted M&A value of economy i in year t is then calculated as the sum of its M&As with each of the other economy i, e.g., $\hat{MA}_{it} = \sum_{j \neq i} e^{\hat{\theta}' X_{ijt}}$, where $\hat{\theta}' X_{ijt}$ is the expression of the right-hand-side of the above model for constructed M&A value.

Greenfield FDI is however not included in the model. As discussed before, including greenfield FDI will significantly reduce the sample size due to data limitation.

3.5.2. The Empirical Results

We report in Table 3-4 the regression results of the GDP model. Since the diagnostic test in the GDP model does not give conclusive answer, that is, we cannot definitely say that the OLS approach should be rejected or accepted, we report results from both approaches. The main difference from these two regression approaches lies in the effect of predicted trade on GDP. The trade value has positive impact on GDP after controlling for country-specific fixed effects. This is consistent with the findings in Frankel and Romer (1999). The contribution of our regression is that we find M&As also positively associate with GDP. The effect is statistically significant in both the OLS and the fixed-effect model.

Table 3-5. Regression Results of the GDP Model

Methods	OLS Results	Fixed-effect Results
Predicted Trade	−0. 031	1. 264
	(0. 028)	(0. 103)***
Predicted M&A	0. 399	0. 083
	(0. 019)***	(0. 013)***
Population	−0. 231	−0. 118
	(0. 028)***	(0. 213)
Area	−0. 063	
	(0. 012)***	
Observations	278	278
Number of Group		18
R-squared	0.76	0.84

Note: 1) Robust standard errors in parentheses.

2) * significant at 10%; ** significant at 5%; *** significant at 1%.

3) Brunei Darussalam is not included due to missing trade values.

3.6. Summary of Empirical Findings

We have run four separated regressions to estimate the relationship between cross-border M&As, trade, FDI, and GDP.[12] The basic framework is the gravidity model. Most of the effects obtained are consistent with the literatures. However, cross-border M&As is the new variable and we summarise its relationship with other economic variables, namely, trade, greenfield FDI and GDP below. In this summary, we report the key regression results.

(1). (Cross-border M&As and trade): If an economy exports more to another economy, the former will also acquire more assets in the latter. However, if an economy imports more from another economy, the former will acquire fewer assets in the latter. On the other hand, if an economy acquires more assets in another economy, the former will trade more (both import and export) with the latter.

By making reference to the observed industry behaviour in cross-border M&As (see 2.3.3 and Tables 2.3-3 to 2.3-5), there is an apparent tendency of intra-industry M&As in APEC (with firms tending to acquire or merge with firms from the same industry across-border). Such intra-industry cross-border

12 We have also jointly run the four regressions to see if their error terms are correlated. We found that they are actually not correlated and therefore the results obtained from the four separate regressions can be relied on.

M&As may take the form of vertical integration through the extension of supply chain either upstream or downstream to create internal efficiency in the production process on a regional basis. This could help, in particular multinationals, to secure more stable and guaranteed source of intermediate inputs, better sharing of resource cost in product research, design and development, and assured protection of innovation and hence more willing transfer of technology within the conglomerates transcending border constraint. Another form of intra-industry cross-border M&As is the horizontal integration of supply across-border to create economies of scale in production, and to enhance market power, competitiveness and ultimately market share.

While intra-industry cross-border M&As is more common in APEC, there are spillovers to other related sectors in inter-industry M&As. For instance, manufacturers may tend to acquire assets in utilities and transportation, wholesale and retail, and services other than finance and insurance to obtain better support services in transport and logistics, sales, distribution and marketing services to achieve overall cost effectiveness and promote sales in the host/home/adjacent markets.

(2). (Cross-border M&As and greenfield FDI): On the one hand, greenfield FDI has no significant impacts on cross-border M&As. On the other hand, if there are more M&As between two economies, the acquiring economy's greenfield FDI outflows to the target economy would decrease.

(3). (Cross-border M&As and GDP): Cross-border M&A activities and the size of GDP are related. Larger economies in terms of GDP level tend to acquire more foreign assets. The reason may be that they are more capable to purchase foreign assets because they have more purchasing power. On the other hand, larger economies also attract more foreign acquisitions as they represent better market potential.

More importantly, cross-border M&As result in more GDP. We find that after acquiring more foreign assets, an economy's GDP will also increase. This finding is encouraging: capital outflows as a result of foreign asset acquisitions do not necessarily reduce domestic economic activities; in contrast, they increase the economies' GDP perhaps through raising the economies' exports, transferring technologies back to the economies, and integrating regional economies.

The above individual results characterize the various patterns of intra-APEC cross-border M&As and their relationship with other economic variables. However, a key question is whether or not cross-border M&As should be encouraged. The answer is basically yes. This is because intra-APEC cross-border M&As help to raise the GDP levels of the APEC economies. Intra-APEC cross-border M&As raise GDP directly and indirectly. On the one hand, based on our GDP model (subsection 3.5), we find that an economy's cross-border M&A activities have positive and significant effects on the economy's GDP. This is the direct effect. Cross-border M&As are an effective way to

transfer technologies and managerial expertise between economies. They are also a type of international capital flows. Moreover, they are likely to create synergies (such as reducing costs, becoming more efficient by integrating complementary tasks, etc). All these benefits from cross-border M&As help increase GDP of the economies that are involved in these activities.

On the other hand, based on our trade model and GDP model, we find that intra-APEC cross-border M&As raise GDP indirectly. Cross-border M&As promote international trade, which in turn promotes GDP. The trade-promoting effect of cross-border M&A activities can be easily understood: when a firm acquires trade-related services assets abroad, this would make the firm's exports easier and less costly; such acquisitions also help the firm to source inputs and even final goods from the foreign markets and bring them to the home economy, resulting in larger imports. As it is commonly known from the literature, international trade is conducive to GDP.

Hence, we identify another important factor, namely cross-border M&As, which promotes GDP. In fact, this "new" factor affects GDP through a different channel as compared to other factors such as international trade and greenfield investment. The classical theory of trade emphasizes that trade can result in higher GDP by taking advantage of each economy's comparative advantage. The new trade theory points out that freer trade could also generate agglomerates, thus increasing economic productivity due to increasing-return to scale. International trade also results in more varieties of goods for consumers. Furthermore, trade could increase the level of competition and thus increase economic productivity. Trade could also increase the exposure of the trading economy to a larger set of ideas or technologies, thus increasing the rate of technical progress. The trade of intermediate goods could be an alternative way to increase the aggregate productivity of domestic economy. The ways that greenfield FDI affect GDP are different nevertheless. Foreign investments could enhance productivity in the form of technology and business-know-how direct transfers and spillovers (Romer 1993). FDI could directly reduce the cost of accessing foreign markets, thus improving trade and growth indirectly.

The channel through which cross-border M&As promote productivity and GDP is similar to that of greenfield FDI. However, there are at least two important differences. First, cross-border M&As could be more cost effective as firms do not need to make a large fixed investment to setup the plants when entering the foreign markets. Second, cross-border M&As help to transfer intangible assets (such as managerial skills, cooperate culture, etc) to the local firms more easily and effectively. Therefore, although some existing empirical studies in the literature do not find greenfield FDI having GDP promotion effect, we do find that intra-APEC cross-border M&As promote GDP in this region.

IV. Policy Implications

Globalization has been an ongoing force driving the world economy. However, government policies remain deterministic in the pace and effects of globalization. It is well-recognized that the globalization process has shown great impacts on all countries, albeit with different degrees. It is also well noticed that the impact of globalization may be differently felt by different economies and sectors. In this report, we focus on the economic aspects of globalization, which is mostly characterized by the flows of goods and capital, that is, international trade and investment including greenfield FDI and M&As. In this section, we will give a partial review of literature on the impacts of trade and FDI and their policy implications. We will also discuss the policy implications derived directly based on our empirical findings on the relationship between trade, greenfield FDI, cross-border M&As and GDP, as shown in the preceding section. It is worth emphasizing that our empirical studies may shed some lights on policy design, but it involves no subjective judgment. A more robust policy discussions should be carried out based on welfare analysis

Cross-border M&As have become one of the most significant phenomena arising from globalization. UNCTAD (2000) reports that during the 1990s, most of the growth in international production has been via cross-border M&As (including the acquisitions by foreign investors of privatized state-owned enterprises) rather than greenfield investment. In this study we have also seen the importance of cross-border M&As within the APEC economies (in Section 2) and we have empirically estimate the determinants of cross-border M&As in this region and the impacts of cross-border M&As on trade, greenfield FDI and GDP.

Our empirical exercise has the following main policy implications. First, intra-APEC cross-border M&As are conducive to GDP and trade flows. These empirical results suggest the benefits of removing barriers to cross-border M&As from an economic development perspective. Second, trade liberalization not only promotes trade flows, but also induces more cross-border M&As. Deeper trade liberalization is hence beneficial. Third, while we are arguing for further regional integration, we should pay more attention to removing barriers to cross-border M&As. This recommendation is supported by our finding that the existing regional trade agreements (RTA), with an exception of the North American Free Trade Agreement (NAFTA), are not effective in promoting cross-border M&As directly as they are not originally motivated to increase cross-border M&As. Moreover, we do not find evidence that an economy's WTO membership helps promote the economy's cross-border M&As directly. These two findings imply that the existing regional integration in APEC has not given sufficient support to cross-border M&As.

4.1. Cross-Border M&As and Their Impacts on Trade and GDP

Table 3-3 shows that cross-border M&As have positive and significant effects on the import/export trades. Table 3-4 shows that cross-border M&As also have positive and significant effects on GDP. Although we did not directly measure the welfare effect of having more cross-border M&As, the message from Table 3-3 and Table 3-4 is clear: cross-border M&As promote trade flows and GDP, and is thus welfare improving. While there may be worries about possible anti-competitive impacts of cross-border M&As, the fact that cross-border M&As result in larger trade flows and higher GDP has a strong implication that they facilitate market transactions in overall terms, rather than hindering competition.

As FDI can take the form of either greenfield FDI or cross-border M&As, let us relate our empirical studies on the impacts of cross-border M&As to the literature on the impacts of FDI in general. It is commonly thought that the benefits of FDI are multi-dimensional, as it is widely regarded as an amalgamation of capital, technology, marketing, and management. While the empirical evidence is not definite, our study on the APEC economies from 1980 to 2007 finds a strong and positive relations between cross-border M&As and GDP. Besides the GDP promotion effect, cross-border M&As also have a significantly positive relations with trade flows[13].

[Policy Implication 1] Intra-APEC cross-border M&As increase GDP levels and trade flows. Hence, policies should introduce incentives directed at removing barriers to cross-border M&As.

Given the particular nature of cross-border M&As, we would like to make the following observations. First, we have found intra-industry cross-border M&As more prevalent in APEC than inter-industry M&As. There are both vertical and horizontal M&As associated with intra-industry cross-border M&As. Some acquirers are probably more concerned about the supply chain efficiency and are motivated to acquire foreign assets to extend the corporate supply chain on a regional basis, taking advantage of the different comparative advantages in the target economies for the various components in the supply chain. While this helps the acquirer to secure stable external supply of key inputs and intermediate goods, it also helps improve productive efficiency through the sharing of comparative advantages among the acquiring and target economies. Other acquirers probably aim more at horizontal integration of production processes across border to achieve larger economies of scale to elevate market competitiveness and hence market share in the region.

[13] This effect is much more significant for the sample of China plus the APEC economies that are also belong to OECD. To save space, we do not include the table in the previous section.

Both types of intra-industry cross-border M&As contribute positively to trade and GDP. Both will drive economic integration at the regional level, although there may be concern about the need to balance market concentration with market competition.

Second, services sector liberalization for cross-border M&As is important. As our industry behavioral data indicates, although there are spillovers to related sectors, inter-industry cross-border M&As are less significant than intra-industry cross-border M&As. Moreover, barriers to FDI in general and cross-border M&As in particular in the services sector are usually higher than those in the manufacturing sector. Removing those barriers should help improve productive efficiency at both the firm and economy levels as proxied by the impact of cross-border M&As on GDP.

From our study, it is noted that firms in the manufacturing sectors have more incentive to acquire foreign assets in utilities and transportation, wholesale and retail, as well as services other than finance and insurance. Manufacturing activities could be better served in cross-border transport and logistics, and distribution and marketing to bring about closer cross-border linkages in the production and distribution of products. This indirectly should help expand regional economies in inter-industry transactions. This lends support to argument for liberalization of cross-border M&As in services sector.

Third, human capital movement is a crucial factor for successful cross-border M&As. In the case of M&As. It is an important channel for the transfer of technology, management skills and corporate culture to the target firms. More efforts are needed (as compared to greenfield FDI) to integrate various assets from different economies. Human resource plays an important role in the process. Barriers to mobility across economies should be removed.

There are examples of the efforts made by various economies to encourage cross-border M&As. According to UNCTAD (1998), in the recent decades, dozens of economies (both the developing and the developed) have removed many of their restrictions on FDI inflows (greenfield and M&As). For example, during 1997, 151 changes in FDI regulatory regimes were made by 76 countries, 89 per cent of them in the direction of creating a more favorable environment for FDI. Policies such as lower income taxes or income tax holidays, import duty exemptions, and subsidies for infrastructure, are common around the world now.

As for other barriers which should be lowered or completely removed in order to promote cross-border M&As, we can make a reference to the survey by IPM (2005) which provides a comprehensive list and illustration of those barriers classified according to legal barriers, tax barriers and economic barriers (see Appendix 3). Although the survey was done for European Union in the

banking area, it provides a useful guideline to understand various barriers in other regions and other sectors.

4.2. Trade Liberalization and Its Impacts on Cross-Border M&As

Trade policies may be the most common economic instruments around the world. As shown by our empirical study, cross-border M&As are affected by trade flows and hence, trade policies can affect cross-border M&As indirectly, through their influences on trade flows. While it is generally believed that trade liberalization promotes trade flows, it is clear from our study that trade liberalization also has positive and indirect impacts on cross-border M&As.

[**Policy Implication 2**] Trade liberalization is important in helping to promote cross-border M&As.

Although barriers to trade have been lowered through continuous efforts jointly by all economies, various kinds of trade barriers still have significant impacts on trade flows, albeit to various extents in different economies. While the traditional trade barriers such as tariffs and quotas have already been reduced to relatively low level, especially in developed economies, other forms of barriers such as anti-dumping and technical barriers are on the rising trend. Since this issue has been extensively and intensively discussed by many people on many occasions, we will not repeat it, but will like to stress one point, which is, removing barriers to trade not only promotes trade flows but also cross-border M&As.

4.3. Regional Economic Integration and Breakdown of Cross-border Barriers

In the previous subsection, we have argued the importance of trade liberalization for cross-border M&As. The argument is based on our finding that economies with larger exports will tend to have more cross-border M&As, and so trade liberalization indirectly facilitates cross-border M&As. In fact, in Section 3, we have also tried to understand how formal institutional set up affects cross-border M&As directly. The two forms considered are (i) formation of RTAs, and (ii) accession to the WTO. These institutional changes/agreements are motivated mainly by liberalization of trade in goods and services, and investment facilitation. By their very nature, they represent changes in trade regimes and investment policies. There are more than 200 types of RTAs in the world. Our study has tried to cover as many RTAs formed by APEC economies as possible, such as NAFTA, ASEAN, and SPARTECA. According to the WTO website, till July 2008, there are 153 members and observers of the WTO. Some of the APEC economies joined the WTO at various stages over the period covered by our study. These variations allow us to examine how memberships of the RTAs and WTO, affect cross-border M&As, directly.

Let us first look at the implications of the RTAs. On the one hand, RTA membership may directly affect cross-border M&As. Based on our M&A model and the results reported in Table 3-2, we find that after controlling for other variables, RTAs show positive but insignificant (direct) effect on cross-border M&As. However, for some RTAs, such as NAFTA, the impact is not only positive, but also significant. This implies that RTAs could potentially promote cross-border M&As directly.

Let us now turn to examine the impacts of WTO membership. Based on the M&A model and the results reported in Table 3-2, we do not find the positive direct impact of WTO membership on cross-border M&As. However, based on the trade model and the results reported in Table 3-3, we observe that WTO members trade more than non-members after controlling for other variables. Therefore, we can claim that WTO membership has indirect impacts on cross-border M&As through its impacts on trade flows. It is note that more exports result in more foreign asset acquisitions (as shown by Table 3-2). Hence the indirect effects are clearer.

[**Policy Implication 3**] Formal institutional setup in the APEC economies such as RTA and WTO accession does not seem to promote cross-border M&A directly. Perhaps more cross-border M&A policy elements should be included in the regional integration agreements.

It is well understood that RTA is mainly driven by free trade in commodities. Although many RTAs also include agreements on removing barriers to capital flows and even human resources flows, it is to some degree less successful. Our finding that RTAs in APEC (NAFTA is an exception) do not promote cross-border M&As directly tends to suggest that the current RTAs can be strengthened in regard of removing barriers to cross-border M&As. Even between economies in the same RTA, many forms of cross-border barriers still exist; it is imaginable that they could be more serious between economies not having a common RTA.

The case in WTO accession is similar. An economy needs to change its regulatory framework to comply with the WTO requirements. However, the requirements emphasize more on facilitating trade flows than on capital flows. It is indeed more difficult to monitor compliance of an economy's promise on liberalization of investment than that on liberalization of trade. In our study, we do not observe that an economy's WTO entry has direct positive impacts on its cross-border M&A activities. Thus, it is perhaps fair to say that the need to bring down the barriers to cross-border M&As have not attracted sufficient attention from members of this organization. Hence, breakdown various cross-border barriers (including those to cross-border M&As) should be on the high priority of the agenda on regional and global integration.

V. Concluding Remarks

Cross-border M&As are getting more and more important within APEC and between APEC and other regions in the world. However, rigorous studies on the motivations for and determinants of cross-border M&As are scant. Our study, with the focus on intra-APEC cross-border M&As, helps to shed light on understanding cross-border M&As and their relationship with other economic activities. It is a necessary step towards designing the right policies (such as competition policies, regulatory frameworks, and incentive packages) on both domestic and cross-border M&As.

Our study focuses on intra-APEC cross-border M&As from 1980 to 2007 and analyzes (i) the patterns of cross-border M&As within APEC; (ii) the determinants of cross-border M&As; (iii) the impacts of cross-border M&As on international trade, greenfield FDI, and economic growth; and (iv) the possible policy implications.

As one of the very first to take an econometric analysis on intra-APEC cross-border M&As and their economic impacts, our study has the longest time coverage of cross-border M&As, uncovers more details of cross-border M&As in APEC, and examines more issues related to cross-border M&As. It first characterizes the main features of intra-APEC cross-border M&As, including (i) the general trend of cross-border M&As in APEC, (ii) the individual economies' cross-border M&As, (iii) sectoral cross-border M&As, (iv) individual firms' cross-border M&As.

The study then empirically investigates the determinations of intra-APEC cross-border M&As and the relationship between (i) cross-border M&As and trade, (ii) cross-border M&As and greenfield FDI, (iii) cross-border M&As and GDP in the APEC region. Based on these findings, we obtain some policy implications.

There are many directions to extend this study in order to enhance our understanding on cross-border M&As and their implications on other economic activities. First, we could develop some theoretical models with cross-border M&As so that we can see clearly the linkage between cross-border M&As and other economic variables. Those findings would form hypotheses for further empirical analysis.

Second, we need to collect more bilateral FDI data so that we could do an even more complete empirical investigation on the relationship between greenfield FDI and cross-border M&As.

Third, we could apply our analysis to explore the other regions' (e.g., OECD) and even global cross-border M&As. By doing this, we would be able to know how our findings based on intra-APEC cross-border M&As differ from others.

Fourth, welfare measurement is important for economic activities and policies. We could make use of the CGE (computable general equilibrium) model to see the linkage of cross-border M&As and all other economic activities and the welfare changes from policy changes which affect cross-border M&As directly and indirectly.

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Appendix 1: Transaction numbers of intra-APEC cross-border M&As by economies (1980-2007)

		target economy																			
		Australia	Brunei	Canada	Chile	China	Hong Kong, China	Indonesia	Japan	Malaysia	Mexico	New Zealand	Papua N Guinea	Peru	Philippines	Russia	Singapore	Republic of Korea	Chinese Taipei	Thailand	U.S.	Vietnam
acquiring economy	Australia		1	162	29	108	121	81	16	64	13	745	50	14	53	15	112	10	19	36	780	11
	Brunei	2				1	3	1	2	3					1		1			2	2	
	Canada	309			143	179	77	58	16	13	309	54	37	140	37	66	17	22	14	11	5463	7
	chile			3					1		9			26							10	
	China	81		36	1		477	11	23	14	1	8	1	3	7	8	71	11	11	14	109	5
	Hong Kong, China	201		68	5	1999		62	102	124	8	33	1	2	72	3	256	62	100	96	325	16
	Indonesia	23		4		8	17		4	25					5		48			5	13	1
	Japan	182	2	77	8	237	180	107		88	15	25	2	2	76	13	93	129	90	175	1560	17
	Malaysia	161	10	22	1	84	252	157	6			19	7	3	74	1	345	10	11	92	79	23
	Mexico	3		10	15	3		4	1	1				9	3					2	143	
	New Zealand	412		20	9	8	13	3	2	4	4		4		1	1	5	1		3	62	3
	Papua N Guinea	4						2							1		1				1	
	Peru			5	6						1											
	Philippines	6		4		13	19	8	1	12	1		1				13	1		7	23	3
	Russian	3		10	1	3		1	4	2				1			2	3		1	34	
	Singapore	266	8	9		453	456	276	45	451	2	71	3	1	105	4		38	74	184	210	48
	Republic of Korea	32		22	2	101	35	24	41	10	3	2		1	5	8	15		11	12	139	14
	Chinese Taipei	13		6	1	112	62	2	22	10	3				9		28	15		20	148	3
	Thailand	9		2	1	30	19	27	8	13	1	2			28	1	24	2	4		25	14
	United States	1256	1	4839	224	914	532	106	710	130	773	242	11	108	129	222	268	430	203	155		25
	Vietnam	4		2		1				2							1				4	

Appendix 2: Structural Control in Competition Laws within APEC Region

WBC income group	Economy	Competition Law with general concern on Mergers & Acquisitions Control	Mergers and Acquisitions Control							
			Competition Authority	Competition Law with general concern on Mergers & Acquisitions Control	Type of Integration				Type of Notification	
					Horizontal Integrations	Vertical Integrations	Conglomerates	Trans-border acquisitions	Mandatory	Voluntary
High income economies	Brunei Darussalam		-	-						
	Singapore	√	Competition Commission of Singapore -CCS	Competition Act(2004)						
	United States	√	Antitrust Division of the Department of Justice -DOJ Federal Trade Commission -FTC	Antitrust laws(Sherman Act 1990, Clayton Act, Federal Trade Commission Act, Hart-Scott-Rodino Antitrust Improvements Act)						
	Hong Kong, China		Telecommunication Authority -OFTA (applied only on Telecom section)	Telecommunications Authority Guidelines -Mergers and Acquisitions in Telecommunications Markets(2004)						
	Canada	√	Competition Bureau	Competition Act -(1986)						
	Australia	√	The Australian Competition and Consumer Commission -ACCC	Trade Practices Act(1974)						
	Japan	√	Japan Fair Trade Commission -JFTC	The Act on Prohibition of Private Monopolization of Fair Trade(known as Antimonopoly Act-AMA)(1947) Last amendment in 2005 that came into force in 2006						
	Chinese Taipei	√	Fair Trade Commission -FTC	Fair Trade Law(FTL), February 4, 1992						
	New Zealand	√	Commerce Commission	Commerce Act (1986)						

	Korea, Rep.	√	Korea Fair Trade Commission -KFTC	Monopoly Regulation and Fair Trade Act -MRFTA(1980)						
Upper middle income economies	Russia	√	Ministry of Anti-monopolistic Policy -MAP	Law "On Competition and the Limitation of Monopolistic Activity in Product Markets"						
	Chile	√	National Economic Prosecutor's Office Tribunal of Defense of Free Competition(Competition Tribunal)	Decree Law N°211/1973 which establishes the rules for the defense of free competition(1973)						
	Malaysia	√	The Securities Commission -SC The Foreign Investment Committee -FIC	Securities Commission Act -SCA(1993) and the Malaysian Code on Take-Overs and Mergers(1998) "Guidelines for Regulation for Acquisition of Assets, Mergers and Takeovers"						
	Mexico	√	Federal Competition Commission -CFC	Federal Law of Economic Competition(1992) -Chapter II						
Lower middle income economies	Thailand	√	Competition Commission	Trade Competition Act(1999) -Section 26						
	Peru		National Institute for the Defense of Competition and the Protection of Intellectual Property -INDECOPI (applied only on Electricity Sector)	Law 26876(1997) Supreme Decree 017-98-INTINCI(1998), amended by S.D. 087-2002-EF(2002)						
	China	√	The Fair Trade Bureau -FTB of the State Administration for Industry & Commerce -SAIC	Regulations on development and protection of competition(1980),Law of the People's Republic of China for Countering Unfair Competition (1993), Price law(1998) and the Anti-monopoly Law(2007)						

	Indonesia	√	Commission for the Supervision of Business Competition(Komite Pengawasan Persaingan Usaha -KPPU)	Law No.5/1999: Concerning prohibition of monopolistic practices and unfair business competition(1999)						
	Philippines	√	-	Corporation Code of the Philippines Y RA 8799(The Securities Regulation Code)						
Low income economies	Vietnam	√	Competition Council Competition Administration Department	Competition Law(2005)						
	Papua New Guinea	√	Independent Consumer & Competition Commission -ICCC	Independent Consumer & Competition Commission Act(2002)						

indicates that the item is explicitly present in the provisions of the Law.

indicates that the item is implicitly present in the provisions of the Law/Act/Statutes.

Sources: UNCTAD (2000), respective competition laws, APEC Electronic Individual Action Plans (e-IAP), and APEC Competition Policy Database.

Appendix 3: Obstacles to Cross-border M&As

	I. Legal Barriers	II. Tax barriers	III. Implications of supervisory rules and requirements	IV. Economic barriers	V. Attitudinal barriers
a) Execution risks	1. Legal uncertainty 2. Opaque decision making processes 3. Legal structures 4. Limits or controls on foreign participations 5. Defence mechanisms 6. Impediments to effective control 7. Difficulties to assess the financial situation	14. Uncertainty on tax arrangements 15. Uncertainty on VAT regime	23. Concerns regarding financial stability 24. Misuse of supervisory powers 25. Supervisory approval processes		35. Political interference 36. Employees' reluctance 37. Shareholders' acceptance of quotation changes 38. Shareholders' and analysts' apprehension of failure risk
b) One-off costs	8. Restriction on offers	16. Exit tax on capital gains		28. Fragmentation of the European capital markets	
c) Ongoing costs	9. Employment legislation 10. Accounting systems 11. Divergent consumer protection rules 12. Data protection 13. Differences in private law	17. Transfer pricing 18. Inter-group VAT 19. No homogeneous loss compensation 20. Specific domestic tax breaks 21. Discriminatory tax treatments 22. Taxation on dividends	26. Divergences in supervisory practices 27. Multiple reporting requirements	29. Different product mixes 30. Non-overlapping fixed costs 31. Lack of middle-size institutions 32. Absence of critical size 33. Market power 34. Differences in economic cycles	39. Political concessions 40. Consumer mistrust in foreign entities

APEC

Investment Experts Group (IEG) Seminar for Sharing Success Factors in the Improvement of Investment Environment
27 July 2009

Cross-border Mergers and Acquisitions within APEC and Their Implications for Exports, Greenfield FDI, and GDP

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Presented by Larry D QIU, University of Hong Kong and
Elley Mao, Hong Kong China (HKC) Government

Cross-border M&As in APEC

- Introduction
- Objectives
- Interesting Patterns
- Empirical results
- Policy implications
- Conclusion

Introduction

- Globalization shortens distance (intensified utilization of IT helps minimize physical barriers)
- Globalization drives international flows
  - goods) foreign exchanges
  - capital) # fixed assets
  - knowledge) # human capital
- Motivates economic integration at regional/ global level

Means to economic integration

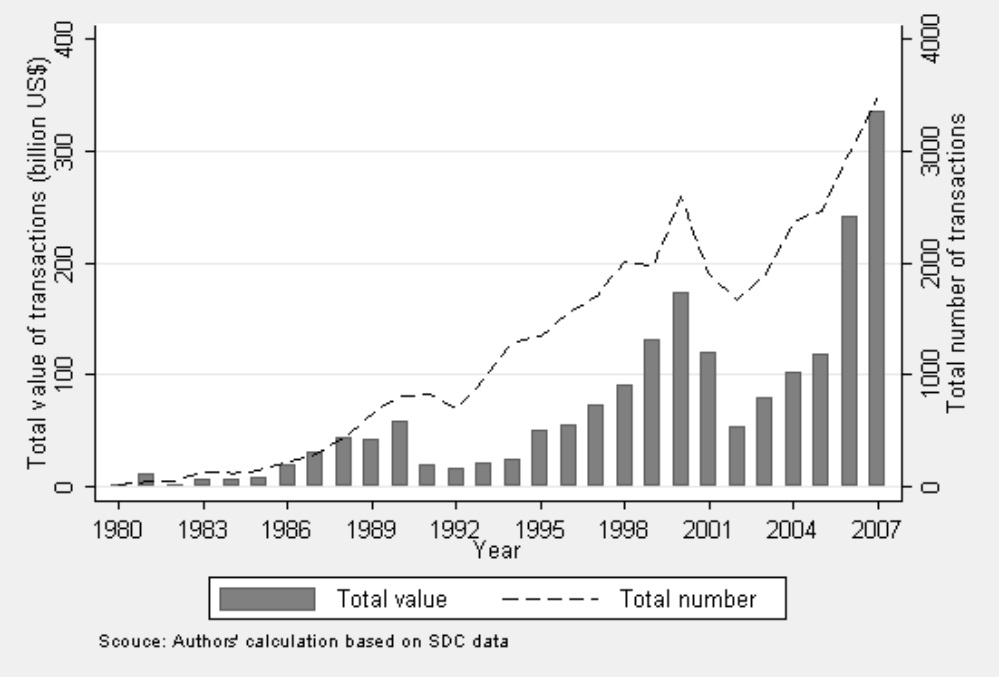
- Breakdown trade barriers (tariffs and non-tariffs) to facilitate flows in goods and services
- Breakdown investment barriers to facilitate flows in capital

# greenfield FDI) # Cross-border M&As	) Fixed assets)) human capital	) Knowledge, technology, skills, management, institutions (corporate culture, governance and transparency)

Objectives

- Examine the patterns of cross-border M&As within APEC;
- Explore the determinants of cross-border M&As;
- Analyze the impacts of cross-border M&As on international trade, greenfield FDI, and GDP;
- Discuss the possible policy implications based on observations of M&A patterns and empirical analysis.

Patterns of cross-border M&As within APEC

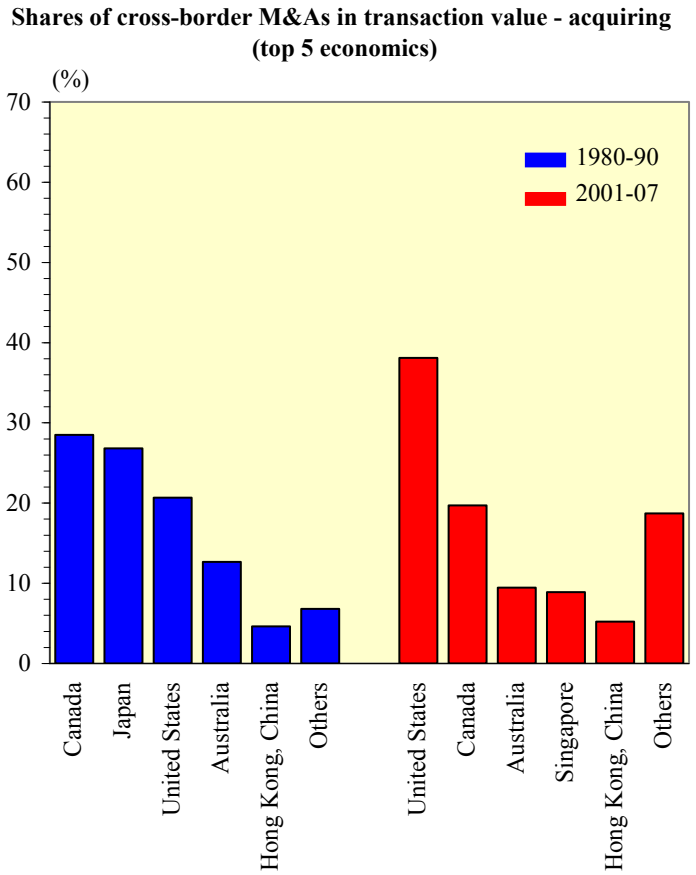


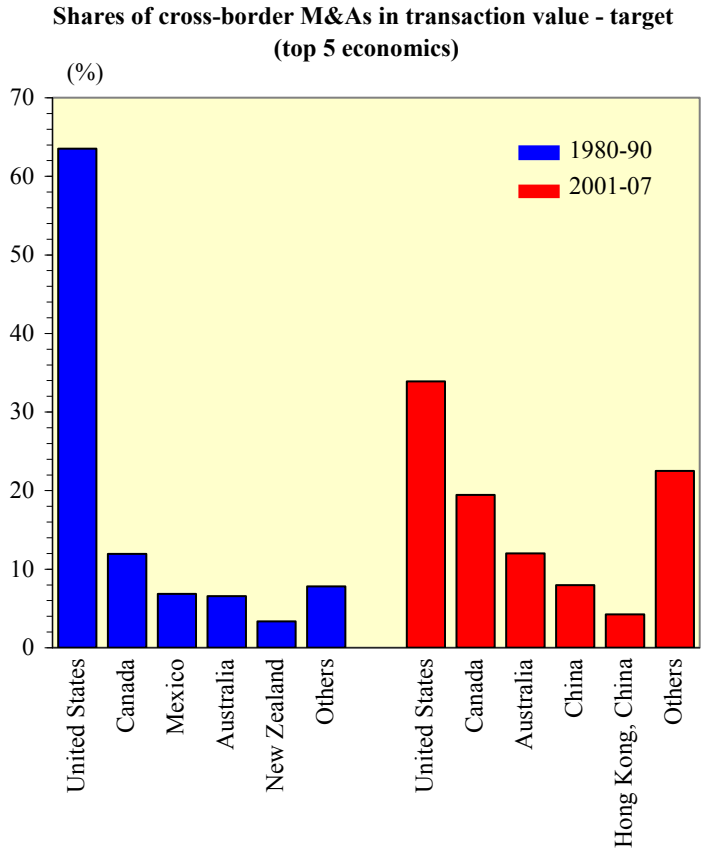
- Rapidly rising Cross-border M&As within APEC.

	1980	2007	Growth rate p.a.
Value	US$1.75 bn	US$335.6 bn	21.5%
No.	8	3,493	25.3%

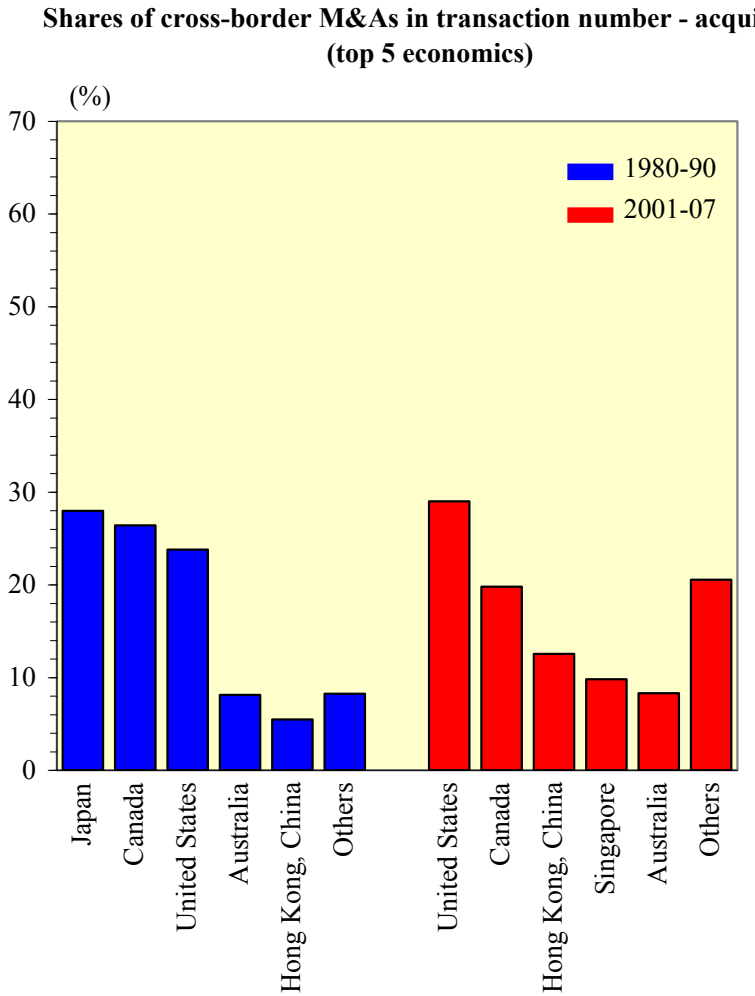
Patterns of Cross-border M&As within APEC (cont'd)

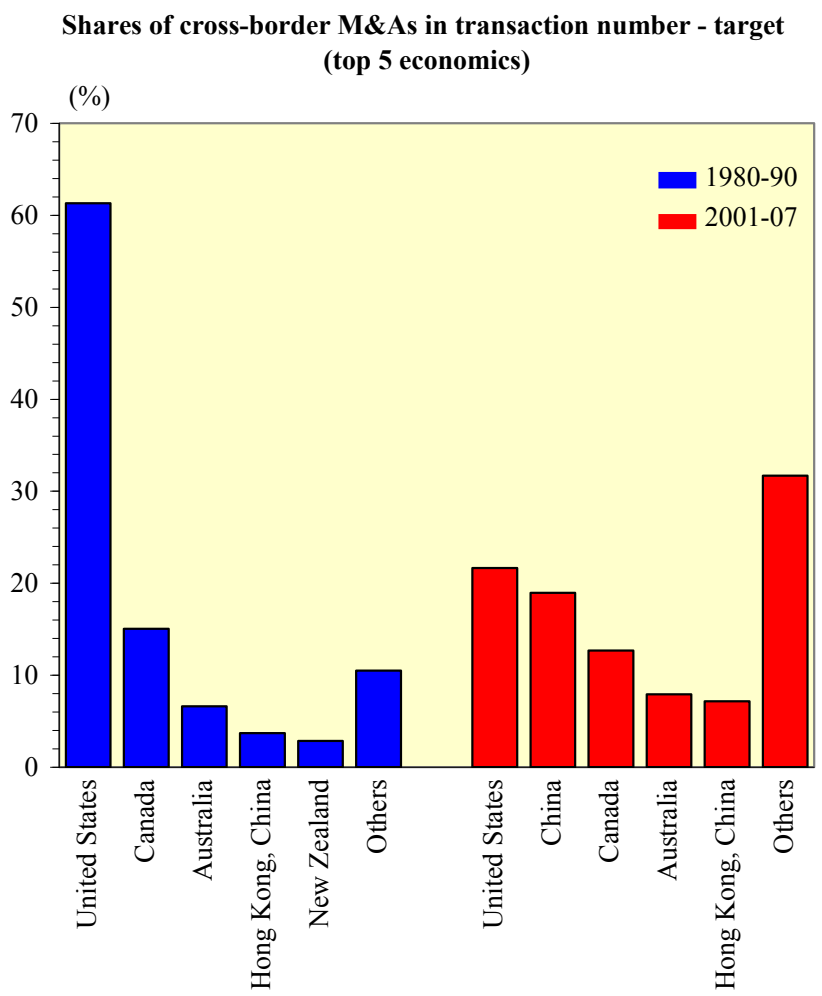
- Broader spread of acquirer and target economies over time





Patterns of Cross-border M&As within APEC (cont'd)





Patterns of Cross-border M&As within APEC (cont'd)

- There are more cross-border intra-industry M&As in APEC than inter-industry M&As

Inter vs. intra industry shares in total cross-border transactions (%, 1980-2007)

		Target Industry									
		0	1	2	3	4	5	6	7	8	Total
Acquiring Industry	0	0.05	0.03	0.14	0.01	0.00	0.05	0.01	0.00	0.00	0.29
	1	0.00	9.30	0.66	0.32	0.90	0.06	0.26	0.06	0.00	11.55
	2	0.39	1.09	7.75	0.55	1.65	0.35	0.26	0.75	0.00	12.80
	3	0.01	0.96	0.55	12.24	0.27	0.29	0.31	1.66	0.01	16.31
	4	0.02	0.34	0.18	0.16	11.12	0.05	0.12	0.71	0.03	12.73
	5	0.03	0.29	0.28	0.21	0.08	1.47	0.14	0.16	0.00	2.68
	6	0.20	1.38	3.61	2.79	6.31	2.79	17.85	2.63	0.00	37.56
	7	0.00	0.02	0.53	0.31	0.24	0.14	0.31	3.36	0.00	4.92
	8	0.00	0.05	0.10	0.13	0.04	0.02	0.26	0.54	0.00	1.12
	9	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.05
	Total	0.71	13.47	13.80	16.71	20.63	5.21	19.53	9.89	0.05	100.00

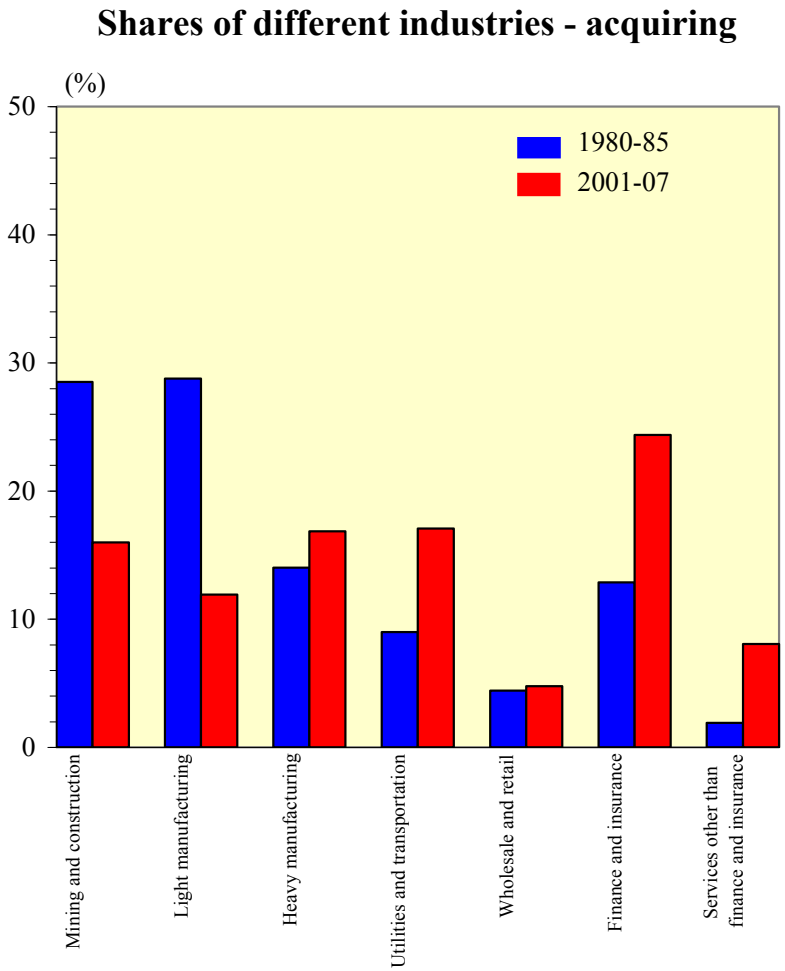
Notes: 0 – Agriculture; 1 – Mining and construction; 2 – Light manufacturing; 3 – Heavy manufacturing; 4 – Utilities and transportation; 5 – Wholesale and retail; 6 – Finance and insurance; 7 – Services other than finance and insurance; 8 – Public administration.

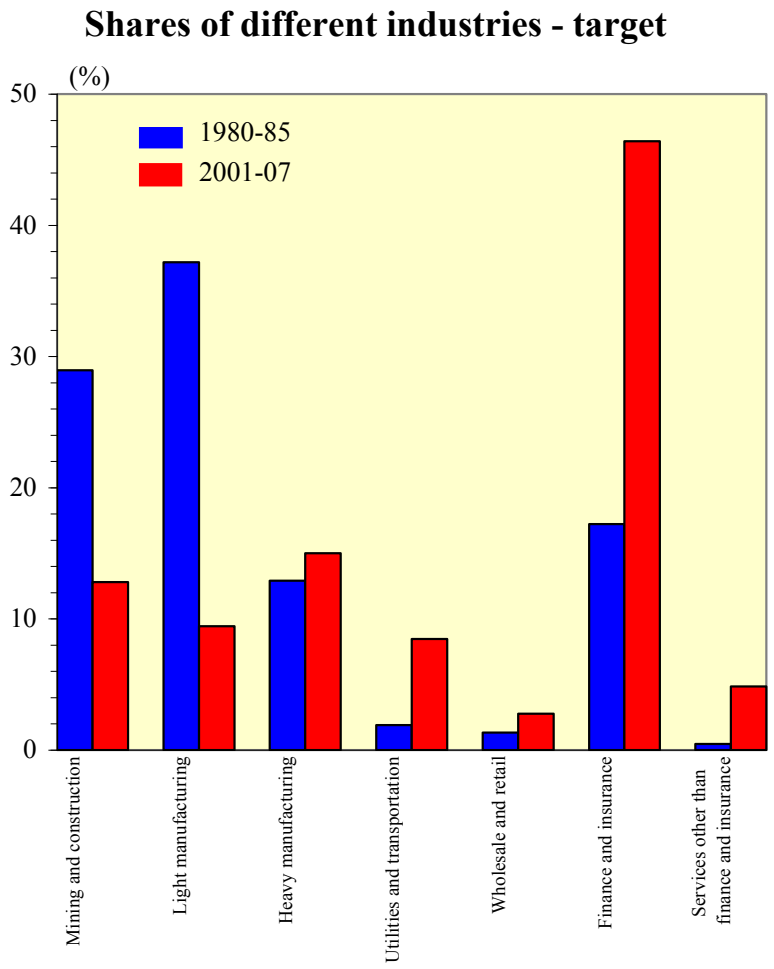
- cross-border vertical integration (supply chain)
- cross-border horizontal integration (scale economies)

Patterns of Cross-border M&As within APEC (cont'd)

- Finance and insurance shows rising significance both as acquiring and target industry.
- Utilities and transportation is the heavy target.
  - The largest inter-industries acquirer is finance and insurance.

Patterns of Cross-border M&As within APEC (cont'd)

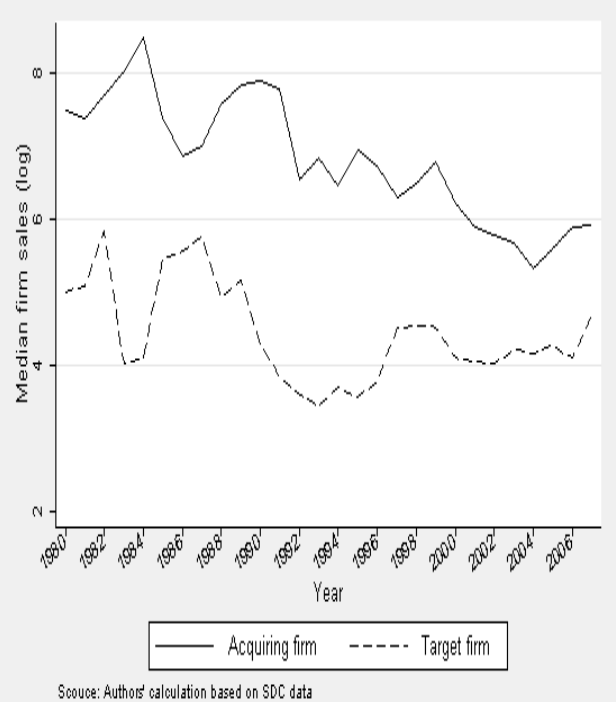




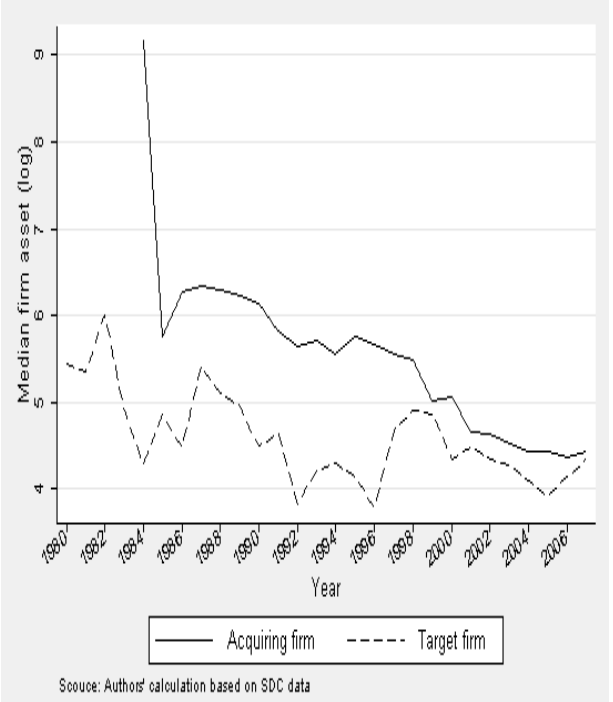
Patterns of Cross-border M&As within APEC (cont'd)

- Reducing barriers to cross-border M&As within APEC over time.

Acquiring and target firms' sales revenue



Acquiring and target firms' asset (median)



Empirical Analysis

General approach

- Use gravity model
  - Distance, GDP, other control variables
- Commonly used in international trade and FDI research
  - Fits data well
- New in this study
  - Include cross-border M&As
  - OLS vs. Fixed effect approach

Empirical Analysis (cont'd)

Model Structure

(i) M&A model

$$\ln(MA_{ijt}) = \beta_0 + \beta_1 \ln(EX_{ijt-1}) + \beta_2 \ln(IM_{ijt-1}) + \beta_3 \ln(Stock_{ijt}) + \beta_4 \ln(GDP_{it})$$
$$+ \beta_5 \ln(GDP_{jt}) + \beta_6 \ln(GDPgrowth_{it}) + \beta_7 \ln(GDPgrowth_{jt}) + \beta_8 \ln(GDPgap_{ijt})$$
$$+ \beta_9 \ln(GDPgap_{jit}) + \beta_{10} \ln(ER_{it}) + \beta_{11} \ln(ER_{jt}) + \beta_{12} \ln(Dist_{ij}) + \beta_{13} Border_{ij}$$
$$+ \beta_{14} Lang_{ij} + \sum_{1981}^{2004} \beta_{15,t} Y_t + \sum_{1}^{3} \beta_{16,k} Continent_i + \sum_{1}^{3} \beta_{17,k} Continent_j + \beta_{18} RTA_{ijt} + \beta_{19} WTO_{it}$$
$$+ \beta_{20} WTO_{jt} + \xi_{ijt}.$$

Empirical Analysis (cont'd)

Regression Results of the M&A Model

Independent Variables	OLS Results	Independent Variables	OLS Results
EX_{ijt-1}	0.076	ER_{it}	-0.039
	(0.031)**		(0.373)
IM_{ijt-1}	-0.063	ER_{jt}	-0.477
	(0.029)**		(0.369)
$Stock_{ijt}$	0.402	$Dist_{ij}$	-0.205
	(0.025)***		(0.037)***
GDP_{it}	0.175	$Border_{ij}$	0.360
	(0.026)***		(0.101)***
GDP_{jt}	0.100	$Lang_{ij}$	0.128
	(0.026)***		(0.054)**
$GDPgrowth_{it}$	0.107	RTA_{ijt}	0.021
	(0.119)		(0.080)
$GDPgrowth_{jt}$	0.128	WTO_{it}	-0.037
	(0.146)		(0.084)
$GDPgap_{ijt}$	-0.289	WTO_{jt}	-0.200
	(0.050)***		(0.102)**
$GDPgap_{jit}$	-0.018		
	(0.035)		
Observations	1172	R-squared	0.67

Empirical Analysis (cont'd)

(ii) The trade model

$$\ln(EX_{ijt}) = \beta_0 + \beta_1 \ln(MA_{ijt-1}) + \beta_2 \ln(MA_{jit-1}) + \beta_3 \ln(EX_{ijt-1}) + \beta_4 \ln(GDP_{it})$$
$$+ \beta_5 \ln(GDP_{jt}) + \beta_6 \ln(GDPgrowth_{it}) + \beta_7 \ln(GDPgrowth_{jt}) + \beta_8 \ln(GDPgap_{ijt})$$
$$+ \beta_9 \ln(GDPgap_{jit}) + \beta_{10} \ln(ER_{it}) + \beta_{11} \ln(ER_{jt}) + \beta_{12} \ln(Dist_{ij}) + \beta_{13} Border_{ij}$$
$$+ \beta_{14} Lang_{ij} + \beta_{15} RTA_{ijt} + \sum_{1981}^{2004} \beta_{16,t} Y_t + \sum_{1}^{3} \beta_{17,k} Continent_i + \sum_{1}^{3} \beta_{18,k} Continent_j + \beta_{19} WTO_{it}$$
$$+ \beta_{20} WTO_{jt} + \xi_{ijt}.$$

Empirical Analysis (cont'd)

Regression Results of the Trade Model

Independent Variables	OLS Results	Independent Variables	OLS Results
MA_{ijt-1}	0.263	ER_{it}	0.395
	(0.040)***		(0.879)
MA_{jit-1}	0.130	ER_{jt}	-0.867
	(0.038)***		(0.764)
GDP_{it}	0.439	$Dist_{ij}$	-0.068
	(0.039)***		(0.055)
GDP_{jt}	0.452	$Border_{ij}$	1.405
	(0.041)***		(0.205)***
$GDPgrowth_{it}$	0.669	$Lang_{ij}$	0.113
	(0.252)***		(0.086)
$GDPgrowth_{jt}$	0.109	RTA_{ijt}	-0.462
	(0.262)		(0.206)**
$GDPgap_{ijt}$	-0.347	WTO_{it}	0.462
	(0.096)***		(0.135)***
$GDPgap_{jit}$	-0.515	WTO_{jt}	0.550
	(0.095)***		(0.167)***
Observations	661	R-squared	0.82

Empirical Analysis (cont'd)

(iii) The greenfield FDI model

$$\ln(FDI_{ijt}) = \beta_0 + \beta_1 \ln(MA_{ijt-1}) + \beta_2 \ln(MA_{jit-1}) + \beta_3 \ln(GDP_{it})$$
$$+ \beta_4 \ln(GDP_{jt}) + \beta_5 \ln(GDPgrowth_{it}) + \beta_6 \ln(GDPgrowth_{jt}) + \beta_7 \ln(GDPgap_{ijt})$$
$$+ \beta_8 \ln(GDPgap_{jit}) + \beta_9 \ln(ER_{it}) + \beta_{10} \ln(ER_{jt}) + \beta_{11} \ln(Dist_{ij}) + \beta_{12} Border_{ij}$$
$$+ \beta_{13} Lang_{ij} + \sum_{1981}^{2004} \beta_{14,t} Y_t + \sum_{1}^{3} \beta_{15,k} Continent_i + \sum_{1}^{3} \beta_{16,k} Continent_j + \beta_{17} RTA_{it} + \beta_{17} WTO_{it}$$
$$+ \beta_{18} WTO_{jt} + \xi_{ijt}$$

Empirical Analysis (cont'd)

Regression Results of the FDI Model

Independent Variables	Fixed-Effect Results	Independent Variables	Fixed-Effect Results
MA_{ijt-1}	-0.321	$GDPgap_{ijt}$	-3.277
	(0.125)**		(2.285)
MA_{jit-1}	-0.058	$GDPgap_{jit}$	3.037
	(0.151)		(3.324)
GDP_{it}	7.802	ER_{it}	0.280
	(2.854)***		(1.519)
GDP_{jt}	-2.174	ER_{jt}	-3.005
	(2.182)		(1.488)**
$GDPgrowth_{it}$	2.455	RTA_{ijt}	-0.363
	(1.354)*		(0.477)
$GDPgrowth_{jt}$	-0.752	WTO_{it}	0.491
	(0.697)		(0.449)
Observations	203	R-squared	0.45

Empirical Analysis (cont'd)

(iv) The GDP model

$$\ln(GDP_{it}) = \beta_0 + \beta_1 \ln(MA_{it}) + \beta_2 \ln(Trade_{it}) + \beta_3 \ln(Pop_{it}) + \beta_4 \ln(Area_{it}) + \xi_{ijt},$$

Predicted value of trade and M&As

$$\begin{aligned}\ln(\tau_{ijt}) &= \beta_0 + \beta_1 \ln(Dist_{ij}) + \beta_2 \ln(Pop_{it}) + \beta_3 \ln(Area_i) \\ &+ \beta_4 \ln(Pop_{jt}) + \beta_5 \ln(Area_j) + \beta_6 (L_i + L_j) + \beta_7 B_{ij} \\ &+ \beta_8 B_{ij} \ln(Dist_{ij}) + \beta_9 B_{ij} \ln(Pop_{it}) + \beta_{10} B_{ij} \ln(Area_i) + \beta_{11} B_{ij} \ln(Pop_{jt}) + \beta_{12} B_{ij} \ln(Area_j) \\ &+ \beta_{13} B_{ij} (L_i + L_j) + \xi_{ij},\end{aligned}$$

$$\begin{aligned}\ln(MA_{ijt}) &= \theta_0 + \theta_1 \ln(Dist_{ij}) + \theta_2 \ln(Pop_{it}) + \theta_3 \ln(Area_i) \\ &+ \theta_4 \ln(Pop_{jt}) + \theta_5 \ln(Area_j) + \theta_6 (L_i + L_j) + \theta_7 B_{ij} \\ &+ \theta_8 B_{ij} \ln(Dist_{ij}) + \theta_9 B_{ij} \ln(Pop_{it}) + \theta_{10} B_{ij} \ln(Area_i) + \theta_{11} B_{ij} \ln(Pop_{jt}) + \theta_{12} B_{ij} \ln(Area_j) \\ &+ \theta_{13} B_{ij} (L_i + L_j) + \xi_{ij},\end{aligned}$$

Empirical Analysis (cont'd)

Regression Results of the GDP Model

Methods	OLS Results	Fixed-effect Results
Predicted Trade	−0. 031	1. 264
	(0. 028)	(0. 103)***
Predicted M&A	0. 399	0. 083
	(0. 019)***	(0. 013)***
Population	−0. 231	−0. 118
	(0. 028)***	(0. 213)
Area	−0. 063	
	(0. 012)***	
Observations	278	278
Number of Group		18
R-squared	0.76	0.84

Empirical Analysis (cont'd)

Interest findings

- Complementarities between exports and GDP with cross-border M&As
  - More exports lead to more acquisitions (acquirer to target)
  - Higher GDP lead to more cross-border M&As (acquirer and target)
- Complementarities between cross-border M&As and GDP with trade
  - More cross-border M&As lead to more trade (acquirer and target)
  - Higher GDP lead to more trade (acquirer and target)
  - More cross-border M&As lead to higher GDP (acquirer and target)
  - More trade leads to larger GDP (acquirer and target)
- Greenfield FDI and cross-border M&As are substitutes
  - More cross-border M&As lead to less greenfield FDI.

Empirical Analysis (cont'd)

- Weak relations of GDP gap with cross-border M&As and greenfield FDI
  - Larger GDP gap will not induce more capital flow through M&As and FDI
- Weak relations of Exchange Rate with cross-border M&As, greenfield FDI and trade
  - Exchange rate depreciation unlikely to entice more trade/FDI/cross-border M&As

Policy implications

- Minimize barriers to cross-border M&As
- Facilitate cross-border human resources flows
- Liberalize trade further.
- Include more cross-border M&A policy elements in the regional facilitation/integration agreements (such as RTA and WTO).
- Drive economic integration at the regional level.

The End

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IEG/EC

Capacity Building for Sharing Success Factors in the Improvement of Investment Environment

Singapore
July 27, 2009

The Japan External Trade Organization (JETRO), the Ministry of Economy, Trade and Industry and the APEC co-hosted a symposium on capacity building on the 27th of July 2009 in Singapore. Entitled "Capacity Building for Sharing Success Factors in the Improvement of Investment Environment", the symposium was conceived as a follow-up to the importance of capacity building highlighted at the Leaders' Declaration in Sydney, Australia in September 2007, and in response to instructions from Ministers to implement customized capacity building for each APEC member as well as to cater to calls for improvements in the business climate. The two objectives of this symposium were: 1) to provide capacity building to enhance the abilities of government officials to plan, develop and implement policies concerning international investment rules and 2) to share successful experiences of APEC economies and identify their key success factors. The two broad areas treated at the symposium were: (a) the improvement of supply chain connectivity and transport infrastructure; and (b) "behind the border" improvements in individual economy business environments to stimulate FDI flows. Various models for implementing improvements in these areas were presented, and their advantages debated.

SUMMARY OF CONCLUSIONS

A consensus arose that increasing cross-border economic integration was a necessary (if not sufficient) condition for advancing economic growth, and by implication the living standards of the populace, as this was associated with an influx of technology, knowledge, skills and hence productivity improvements amongst less developed economies. The symposium

concluded that increasing foreign direct investments (FDI), mergers and acquisitions (M&A) and Public-Private-Partnerships (PPP) were three avenues to advance these goals in the Asia-Pacific region. Throughout the symposium, three strands of discussion emerged:

- Improving supply chain connectivity (including transport infrastructure capacity and quality) was critical in promoting FDI by catalysing the integration of supply chains across borders. However there was a need for governments to pursue an integrated, multi-agency strategy. There might be merit in governments at the sub-region level (eg ASEAN) agreeing to a master-plan of sorts, since without bilateral or multilateral government direction, necessary investments could not realistically be asked of the private sector. The discussion around increasing intra-ASEAN road transport usage, which in turn would enhance efficiency ("faster than sea, cheaper than air"), underlined this point. Such plans should reflect the need for environmental sustainability and security. The role of government incentives in attracting logistics FDI was debated, with some arguing that incentives could not substitute for a holistic strategy that included more general business environment improvement.
- Investors' confidence was critical to enhancing investments. In APEC, there was a need to enhance the business environment in terms of agreed KPIs such as the World Bank's ease of doing business indicators. To this end, participants agreed that it was necessary for governments to deploy effective models of consultation with the private sector (particularly existing investors) to ensure correctness of both policy reform and implementation, as the example of KADIN's engagement with the Indonesian government underlined. However investment and M&A liberalization would always be limited by considerations of each economy's interests, competitive fairness, "invisible barriers" and the need for inclusive development.
- APEC had a role to play in disseminating knowledge of PPP models, best practices and exemplary KPIs. The symposium discussed a number of these, such as: (a) privatization of public utilities (eg Manila Water Company); (b) Private Finance Initiatives (PFIs) in the UK; and (c) government building of infrastructure ahead of FDI demand (eg EDB and the Airport Logistics Park of Singapore). What was agreed by participants was the importance of an integrated investment strategy of which the pursuit of FDI and PPPs should be important constituents.

DETAILED DISCUSSION

The meeting opened with remarks from Mr. Yoshichika Terasawa, the Managing Director of JETRO Singapore. Mr. Terasawa said that APEC members had agreed to prevent protectionism and refrain from raising new barriers to global trade and investment till the end of 2010. APEC members discussed measures for the current economic crisis and the improvement of the business environment through regulation reforms. Mr. Terasawa

reiterated how JETRO with Japanese companies was promoting regional integration in ASEAN. Mr. Terasawa also highlighted the role that JETRO was playing with Japanese companies to stimulate business activities in APEC and the ASEAN region in particular.

Mr. Ravi Menon, APEC's Senior Officers' Meeting (SOM) Chair, emphasized the need for each economy to position itself for the recovery from the current economic crisis and to plan for integration with the new emerging economy. Mr. Menon highlighted the need to identify key performance indexes (KPIs) to measure progress, and for each economy to implement "behind the border" business environment improvements. He also reiterated the five key areas for business environment improvement identified at the previous week's meeting. By enhancing supply chain connectivity, Mr. Menon suggested that the APEC region would be made more attractive for investment and hence more competitive in economic terms.

The first panel comprised of presentations by three key personnel.

Mr. Takashi Tsuchiya, Director General of the Trade and Economic Cooperation Department in JETRO, Japan, highlighted the importance of logistics infrastructure in attracting FDI. Mr Tsuchiya explained that recently, land transport had been increasingly viewed as a more viable and advantageous transportation option due to its efficiency, time savings (vis-à-vis sea) and lower cost (vis-à-vis air).

Mr Tsuchiya proposed two effective ways to reduce cost- 1) secure return cargo and 2) improve loading rates via less-than-container loads (LCL). Through a trial land transport exercise between Bangkok and Hanoi, Mr Tsuchiya revealed that having single stop service at borders would facilitate greater time efficiency. Mr Tsuchiya also highlighted a few key success factors for land transport, as seen through the trial exercise, namely reducing costs through boosting cooperation among carriers, ensuring information sharing among shippers, expediting custom clearance, introducing a GPS cargo monitoring system and lastly, guaranteeing quality by developing human resource in logistics and having better equipment for the handling of materials. All these factors aim to minimize cost, decrease time and increase quality.

Mr. Tsuchiya used the example of road transport between Thailand and Vietnam to demonstrate how intra-government agreements could mesh with private investment to generate efficiency gains. Mr. Tsuchiya also stressed the necessity of public sector support in order to attract private sector FDI. Mr. Tsuchiya suggested governments to provide incentives to the private sector such as tax breaks.

Mr. Albert Lim, the Head of the Logistics and Supply Chain Management Cluster at the Singapore Economic Development Board, presented that Singapore had been ranked as the

World's Best Logistics Hub by the World Bank and was also one of the world's busiest ports and airports. Among other factors, this was due to Singapore's speedy and efficient customs clearance processes and special government incentive programs to attract logistics hubs. Consequently, not only had Singapore attracted a critical mass of world-class logistics firms; it also hosted regional distribution centers and "supply chain control towers" (handling procurement and SCM optimization) for many world-class Multinational Companies (MNCs). Going forward Singapore sought to develop enhanced SCM technology deployment, Green SCM, secure SCM and niche logistics. These past and future policies might serve as reference points for economies seeking to nurture their own logistics sectors to contribute to economic development, though policy relevance would hinge on the current level of development of an economy's logistics sector.

Mr. Lim constantly emphasized the role played by Singapore's integrated governmental strategy, involving multi-agency co-operation (eg between EDB and the Singapore Customs), in attracting logistics FDI by building world-class infrastructure and improving bureaucratic efficiency. Mr. Lim also highlighted how pertinent it was for governments to work closely with industry players to enhance the industry.

Mr. Tim Meisner, the Director General of Marine Policy at Transport Canada, introduced Canada's policy framework for strategic gateways and trade corridors. Mr. Meisner explained the drivers behind the gateway strategy and emphasized the importance of maintaining competitive and the need to adopt a long-term approach towards planning. Mr. Meisner highlighted the characteristics of the Asia-Pacific gateway and corridor and constantly stressed on participation of all levels of government and private sector and an integrated approach of policy or governance. The Canada government is also involved in two other gateways, namely Continental and Atlantic. The main strategy for both gateways, remarked Mr. Meisner, was closer collaboration and cooperation between the public and private spheres. Mr. Meisner also provided examples on how leaders from Asia-Pacific could build upon infrastructure to improve competitiveness, touching on adding value by forming partnerships and learning from Maritime Centres, having a gateway performance table (that allowed greater interaction amongst all involved parties) and having a knowledge-based economy.

Mr. Meisner concluded by highlighting two challenges that decision-makers from APEC economies should consider having- 1) an integrated transportation network, and 2) improved policies, structures and work processes. Mr. Meisner reiterated the key role of strong, transparent partnerships between the public and private sectors in realizing both the overall plan for regulatory reform as well as concrete investment projects for infrastructure improvement via co-funding.

In the morning panel discussion and Q&A session, participants debated the role of government incentives in attracting FDI, the need for transparency in public policy formulation as well as the need for supply chain improvements to be undertaken within a multi-lateral framework. The panel discussion was moderated by Mr Roy Nixon, APEC IEG (Investment Experts' Group) Convenor, and was attended by all three (3) speakers. In that session, the following were the main topics of discussion engaged by the panellists and participants:

- Ensuring and promoting FDI involves a combination of providing incentives and affording investors comprehensive infrastructure and a conducive environment to conduct business and the ratio of factors will have to be customized to each scenario.
- All policymakers among APEC member economies should understand that consultation with the private sector is critical in ensuring and promoting investments.
- In light of the competition to attract FDI, it is critical that each APEC member economy recognize the importance of differentiation, the good execution of plans and the delivery of promises. This will also ensure investors' confidence.

The second panel consisted of presentations by six (6) speakers.

Dr. Charles Adams, Visiting Professor of Economics at the Lee Kuan Yew School of Public Policy at the National University of Singapore highlighted the importance of FDI and the many direct and indirect benefits arising from FDI such as transfer of technology know-how and increased government revenue. Dr. Adams also remarked that FDI is generally longer term in nature and more stable than other capital flows. Research revealed that middle-income economies appeared to reap the benefits of FDI more than lower-income economies and FDI tend to be unevenly distributed amongst recipient economies.

Dr. Adams also spoke of the need for a compelling argument for FDI like economic motivators, economic and political stability, tax and incentives, sectoral needs and FDI investment friendly regimes. It is critical for economies to integrate their policies and liberalization reforms into their broader developmental strategies and provide open, transparent and stable regimes to attract FDI if they are to maximize the benefits of FDI. Dr. Adams also spoke on the lessons from the reform experience from IMF, World Bank and UNCTAD and shared regarding forward-looking FDI issues. The current crisis has cast doubts on the benefits of FDI. However, it is pertinent to consider FDI as long term and for economies to pursue an integrated FDI attraction strategy so as to maximize the benefits of FDI. As recent topics on FDI, he pointed that China with its economic growth will be potentially the source economy on not only accepting FDI but also direct investment to foreign economies, and also that SWFs may become a more important source of FDI as a sponsor for risk money.

Mr. Chris Kanter, Vice President for Investment and Transportation, KADIN Indonesia, spoke on the role of public consultation with business in the process of reform implementation. He used Indonesia's example to highlight the business climate improvements that could result when both public and private sector interlocutors pursue an integrated strategy in such consultations. Mr Kanter highlighted three important challenges for economies to address in developing FDI- engage and consult investors at the earliest stage of reform, aim for integrity in the rule of law and continually review weak points in implementation. As has been the Indonesian experience since President's Yudhoyono's first term, consulting with investors would allow governments to reap big benefits in terms of understanding investor priorities and their experience of how reforms were actually being implemented. Success factors in the consultation process as seen in Indonesia included: consolidating the voice of business through a ministerial chamber structure, differentiating consultation on policy from consultation on policy implementation, deploying consultative processes with both the executive and legislative branches of government, robust support from the top political leadership (in Indonesia, the President personally chairs a National Team for the acceleration of investment and exports) as well as sincerity, hard work and a willingness to compromise on both sides. As for the rule of law, a crucial success factor in stimulating FDI, the Indonesian government has had a robust Presidential democracy that has facilitated the laying of strong foundations for investment in Indonesia.

Governments can follow the Indonesia example by developing a process to review the investment climate and address weak points. Going forward APEC can play a vital role in supporting the process of investment reform. However in evaluating the success of investment reform packages, Mr Kanter opined that there was a need to move away from a quantitative "matrix approach" centered on "ticking the boxes", as all too often the few boxes that were un-ticked were the most crucial ones determining the success of the entire package.

Mr. Virgilio C. Rivera, Jr., Group Director for the Regulation and Corporate Development Group at the Manila Water Company, shared the positive experience of how the Manila government had worked with the private sector to improve the water supply system. Previously, only 58% of the population had access to water. 12 years later, and the number stands at 99%. Ensuring good water infrastructure also played a critical role in attracting FDI to Philippines. Such was the success of the Manila Water Company that they are now using their expertise and competitive advantages to bid for similar projects in the region.

Mr. Rivera underlined the government's political will in a progressive regulatory framework, alignment of business and social objectives, adoption of best practices in corporate governance, strong financial support and a credible shareholder base as key factors behind the successful private-public partnership. Mr. Rivera constantly stressed the importance of collaborations between governments and the private sector. Going forward, governments can

draw on the Philippine experience in developing a private-public sector partnership in the management of public infrastructure that generates both benefits to the public as well as business results.

Mr. Neil Arora, Executive Director for Macquarie Capital (Singapore) explained that infrastructure has predominantly been a domestic business as local players can price in domestic risks more effectively with no foreign exchange risks. However, in recent years, foreign players have started to be involved in building an economy's infrastructure.
Mr. Arora discussed how the British PFI model of PPP could serve to increase private sector participation in infrastructure development while at the same time increase FDI inflows. The Private Finance Initiative (PFI), implemented in the UK invites the private sector to build and operate an infrastructure asset for a given time period in exchange of Government payments based on performance. PFI is part of the broader Public-Private-Partnership (PPP) concept which offers key benefits such as cheaper projects, less delay, no cost overrun and high user satisfaction as a result of risk transfer, broader competition, economies of scale and less litigation. However, for PPP projects to attract FDI, certain investment grade attributes (identified pipeline of projects, fair equity return for risks taken, developed debt capital markets, whether parties are able to manage construction and O&M risks, presence of a central body with applicable skills and a good regulatory framework) have to be present. Mr. Arora also stressed that choosing the right PPP model was crucial in determining success in attracting FDI, while highlighting the UK as a successful case story. Mr. Arora reiterated that PPP is an effective method to increase private sector participation and it can attract FDI, but only if key attributes are in place; this is where individual governments play a pivotal role.

Ms. Elley Mao, of the Economic Analysis and Business Facilitation Unit, Financial Secretary's Office in Hong Kong, shared her analysis of patterns in cross-border M&As. Ms. Mao mentioned that globalization had motivated economic integration at the regional and global levels by breaking down trade barriers to facilitate flows in goods and services and breaking down investment barriers to facilitate flows in capital. Within APEC itself, there had been evidence of rapidly increasing cross-border mergers and acquisitions (M&A) and it was revealed that there were more cross-border intra-industry M&As in APEC as compared to inter-industry M&As with firm sizes decreasing over time, suggesting lower barriers. The finance and insurance sectors had been the largest inter-industry acquirer, whilst the utilities and transportation industries were the heaviest targets.

Prof. Larry Qiu of the School of Economics and Finance at the University of Hong Kong spoke of the complementarities between cross-border M&As and FDI and how economies could increase cross-border M&As by minimizing barriers and differences across economies,

facilitating human resource flows and including more cross border M&A policy elements in regional facilitation/integration agreements. It was discovered that there were strong positive relationship between exports and GDP and cross-border M&As. Complementary relationship was also found between cross-border M&As and GDP with trade. Hence, to facilitate and stimulate cross-border M&As, it is pertinent for economies to ensure higher GDP as a high GDP will lead to more trade and simultaneously more cross-border M&As. Prof Qiu's research also suggested that cross border M&A had positive effects on GDP size.

In the afternoon panel discussion and Q&A session, moderated by Mr Roy Nixon and attended by five (5) speakers and Dr. Takashi Omori, APEC Economic Committee Chair, participants discussed the relevance of paying competitive salaries and seconding talent from the private sector in order to attract able leaders into the public sector; the tendency for middle-income economies to benefit disproportionately from FDI; and the need to fix a concession agreement and employ good negotiators on both sides prior to a PPP negotiation process. In that session, the following were the main topics of discussion engaged by the panellists and participants:

- All policymakers among APEC member economies should be aware that there is a suitable model (FDI or PPP) for each economy and it is critical for policymakers to decide which will be the better model to maximise returns.
- Collaboration and consultation between the private and public realms are critical to increase trade and investments in the economy.

The Symposium benefitted from the participation of Mr Roy Nixon, APEC IEG Convenor; Mr Noriyuki Mita, Director for the Economic Partnership Division, Trade and Policy Bureau, METI, Japan; and Mr Ravi Menon, Second Permanent Secretary at Singapore's Ministry of Trade and Industry and the APEC SOM Chair.

(A) How have you or your economy benefited from the projects?

I have learned from the other economies' experiences of success and their latest developments

The project is pretty related with my work. I learnt the methodology etc

It was interesting to hear the experiences from the private sector

yes, know more about the APEC success factors

Why using the cares of FDI regimes and like collocation in Russian in work for importing legislation

capacity building for officials

very informative

acquired better understanding in APEC countries

Sharing experience from presenters representing solve APEC economies of their successful stories on the topic

better understanding of the work being done in capacity building for sharing success factors as well at work of sub-group of APEC

we can learn from other economy and business people success factors to improve our investment environmental

Give me a hint to explore our new business

Valuable information on investment in APEC region

Positive information especially regarding FDI regimes and behavior

The whole presentation has benefitted me especially on how to improve the investment plan and also the importance of liberalization of the FDI regimes

Good analytical presentation and case studies of success stories in the current scenario

It benefits by learning other countries experiences . Particularly about the instruments and actions that have helped other economies to boost investment. (take the best practices as model for future actions)

(B) What new skills, knowledge, or value have you gained?

About the condition that are current drivers of inward FDI

FDI knowledge

the methodology and experts' opinions

the differ from of ppp

How the APEC economy inform their success story and we could learn from them
1) PFI method to stimulate FDI, 2) MLA and it's implementation for press field FDI

governments play an important role in attracting FDI

yes, the PFI experience is good for us

different model of country's direction

Logistics policy in APEC and the problems

knowledge on cross-border M&A study and the presentation on the same topic

Better understanding of factors capacity building for sharing success factor

I learn about what recent issues in supplying chain connectivity and ease of doing business especially related with investment

very detailed information

Manila Water Experience; Business Structure of PPP.

News from various experts, in particular PPP

Better understanding of best practices for attracting FDI and policy strategy for fostering on environment attractive to investors

PPP/ PFI

A better understanding of PPP's

I gained a lot especially relating the investment reforms, FDI regimes, ASEAN logistics, transportation, and cross border merger and acquisition.

Insight knowledge of experiences of other countries especially developed countries and factors contributing to their success.

Sharing experiences

It was important to address the impact of long term practices on the investment climate. Not only in regulatory and policy reforms matters but also in infrastructure . And in order to this policies to succeed

(C) What, if any, changes do you plan to pursue in your home economy as a result of the project?

Plan actions to improve FDI climate

none immediately. But the learning will help inform future policy

Learn from country success factors and how to implement our country

to analyze (more fundamental different methods incl. PFP to stimulate FDI to analyze the experiences of Macquarie capital

plan for the future in much advance

not for the time being except on reporting and sharing information

not much due to nature of our business

continue research into the respective area and share results. Remove trade barriers

no

bring up the issues of discussion with management

Encourage consultations at an early phase in policy projects.

try to proceed with PPP/PFI

Probably on quality consultation

Evaluate some of the measures adopted in the country

Infrastructure development is an important issue in my economy so it would be important to develop a roadmap with fully support of the government in collaboration with the private sector.

(D) What needs to be done next? How should the project be buit upon?

sumarize the main success factors of economies and wov

in-depth study of MTA, FDI

more easy studies, but practice

corroboration how and build the strength

to organise the seminar including PPP experience of AOEC members in a frame of the world financial crises

I think another capacity building that invite speculum form another economy on business people should be held

solicit specific challenges and find presenters with success stories in order to benefit participants

Proper planning and effective implementation of the project

To include case in developing and understand countries and problems they face. Probably a 2day seminar

Since infrastructure is an important issue the improvement of investment environment, it would be interesting to share experiences and explore further on the best models for promoting the private

(E) Is there any plan to link the project's outcomes to subsequent collective actions by fora or individual actions by economies?

Some of the discussion falls within scope of the Investment Facilitation Action Plan (IFAP)

Maybe in the near future

(F) Please use the same scale to rate the project on an overall basis.

[total]	[5]Good	[4]	[3]	[2]	[1]Poor
24	4	20	2	0	0
100%	16.7	83.3	8.3	0	0

(G) What is your assessment of the overall effectiveness of the project?

good however, need more time for the speakers and also more time for floors

Very educational and interesting

Good in including experiences of countries in attracting FDI's through successful measures and policies

The project have fulfill my expectations . I think the issues were properly addressed by the speakers and the cases of studies were very illustrative.

(H) Was the project content

just right	too detailed	not detailed enough
17	1	3

(I) If you have any expectancy for next year's themes, please let us know

public private partnership

the important of FDI and how much space can the country do?

Pls conduct studies a business services sectors as well, not just manufacturing or logistic industries

more detailed information for 'supply chain' management strategies in Singapore

Intellectual Properties

Effects of financial crisis on investment flows. I.e. stimulus either fostering or hindering investment.

Best practices in PPP process and strategies to involve the private sector.

(J) Please provide any additional comments. How to improve the priject, if any?

too many speakers. Need more time for elaborate the importance of FDI

Thanks to the organisation staff

the secretariat should save the paper to the participants, so we can learn what will be presented by the presenter

Should be a 2 day seminar . One day for Supply chain and one day for ease of doing business.

It would be interesting to make examination on the investment climate in the APEC economies which could incorporate policy recommendations on the ones which needs improvements.