STUDIES IN TRADE AND INVESTMENT

62

TOWARDS COHERENT POLICY FRAMEWORKS: UNDERSTANDING TRADE AND INVESTMENT LINKAGES

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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

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PREFACE

As economic integration continues, the distinction between domestic and international issues becomes more tenuous. Enhancing coordination and coherence among international trade, investment and domestic policies is of increasing importance for developing countries of the Asia-Pacific region to compete effectively and reap the benefits of globalization. In this context, this publication brings together a number of papers that highlight the increasing significance of trade and investment linkages and their effect on the development of domestic industries and services.

The first two chapters focus on investment provisions and regulation through trade agreements, while the third chapter concentrates on the issue of rules of origin in those agreements and the need for more coherent and harmonized approaches to the design of those rules. The fourth chapter explores in some detail the interactions between foreign direct investment flows and import and export flows using a gravity model approach. Chapters V and VI are country case studies that examine the linkages between trade and investment liberalization and the development of small- and medium-sized enterprises in Indonesia, and education services in Malaysia, respectively. The last chapter examines the drivers of outward foreign direct investment from the developing economies in the region.

The studies featured in this volume were presented and discussed at the ESCAP Expert Group Meeting on Trade and Investment Policy Coherence held on 11-12 September 2007 or at the Asia-Pacific Research and Training Network on Trade (ARTNeT) Consultative Meeting on Trade and Investment Policy Coordination, held on 16-17 July 2007. The four ARTNeT papers featured in this publication were prepared as part of an exploratory regional study on trade and investment policy linkages coordinated by Mr. Yann Duval, under the overall supervision of Mr. Xuan Zengpei, Director, Trade and Investment Division (TID), ESCAP and Ms. Tiziana Bonapace, Chief, Trade Policy Section, TID, ESCAP. The assistance of Tavitra Ruyaphorn and Praphaphorn Tamarpirat in preparing the manuscript for publication is appreciated. The generous support of the International Development Research Centre, Canada to ARTNeT is gratefully acknowledged.

The full text of this publication, as well as more information on ARTNeT, is available online at <www.artnetontrade.org> or <www.unescap.org/tid/>.

ACRONYMS AND ABBREVIATIONS

ACCEC	Services chapter of the China-ASEAN Free Trade Area
AFAS	ASEAN Framework Agreement for Trade in Services
AFC	Asian financial crisis
AFTA	ASEAN Free Trade Area
AIA	ASEAN Investment Area
AICO	ASEAN Industrial Cooperation
ANZCERTA	Australia-New Zealand Closer Economic Relations Trade Agreement
APEC	Asia-Pacific Economic Cooperatiopns
APTA	Asia-Pacific Trade Agreement
ARIC	Asian Regional Integration Center
ASEAN	Association of Southeast Asian Nations
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BIPAs	bilateral investment protection and promotion agreements
BITs	bilateral investment treaties
BKPM	National Investment Coordinating Board (Indonesia)
CECA	Comprehensive economic cooperation agreement
CEPA	comprehensive economic partnership agreement
CEPEA	Comprehensive Economic Partnership of East Asia
CEPT	common effective preferential tariff
CLMV	Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam
CMIE	Centre for Monitoring Indian Economy Pvt. Ltd
DDA	Doha Development Agenda
EAS	East Asia Summit
EECA	The European Economic Cooperation Agreement
EFTA	European Free Trade Agreement
ERP	effective rate of protection
ESCAP	Economic and Social Commission for Asia and the Pacific
FDI	foreign direct investment
FTA	free trade agreement or free trade area
GATT	General Agreement on Tariffs and Trade
GFKF	gross fixed capital formation
GSP	Generalized System of Preferences
ICSID	International Centre for the Settlement of Investment Disputes
IEC	International Electro-technical Commission
IMU	International Medical University
ISLFTA	India-Sri Lanka Free Trade Agreement

ISO	International Organization for Standardization
ITU	International Telecommunications Union
KI	Kamatsu Indonesia
LDCs	least developed countries
MFN	most favoured nation
MGC	Mekong-Ganga Cooperation
MIGA	Multilateral Investment Guarantee Agency
MNEs	multinational enterprises
MOHE	Ministry of Higher Education
MQA	Malaysian Qualifications Agency
MQF	Malaysian Quality Framework
MRAs	mutual recognition arrangements
MSIDC	Malaysian Services Industry Development Council
MUST	Malaysian University of Science and Technology
NAFTA	North American Free Trade Agreement
NTB	non-tariff barriers
PTA	preferential trade agreement
QAD	Quality Assurance Division
R and D	research and development
REOI	regional economic integration organization
RTA	regional trade agreement
SAARC	South Asian Association for Regional Cooperation
SAPTA	South Asian Preferential Trade Agreement
SMEs	small and medium-sizes enterprises
SPARTECA	South Pacific Regional Trade and Economic Cooperation Agreement
TIS	trade in services agreement
TRIMs	trade-related investment measures
UCSI	University College Sedaya International
UNCITRAL	United Nations Commission on International Trade Law
UniKL	Universiti Kuala Lumpur
UNISEL	Universiti Industry Selangor
UNITAR	University Tun Razak
UNITEM	Universiti Terbuka Malaysia
UTAR	Universiti Tunku Abdul Rahman
WTO	World Trade Organization

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I. INVESTMENT PROVISIONS IN REGIONAL TRADING ARRANGEMENTS IN ASIA: RELEVANCE, EMERGING TRENDS AND POLICY IMPLICATIONS

*By Nagesh Kumar**

Introduction

Regional economic integration has been an important trend of the 1990s, led by the concept of a single European market created by the European Union in 1992 and the North American Free Trade Agreement (NAFTA) in 1994. These Regional Trade Agreements (RTAs) pursued a deeper type of integration covering preferential free trading arrangements complemented by investment liberalization across the region. The level of economic integration was progressively deepened, and coverage of RTAs expanded over time. Thus, European Union progressively evolved into an economic union and then a monetary union with a single currency, while expanding the membership to cover 27 countries and eventually even more.

A major motivation for pursuing deeper regional economic integration has been to facilitate restructuring or rationalization of industry across the region on the most efficient basis so as to exploit the economies of scale and specialization and strengthen the competitiveness of each country's industries. These RTAs have over time become major factors in shaping global patterns of trade, foreign direct investments (FDI), production and competitiveness. As they began to account for the bulk of global trade, other regions also started to evolve their own schemes of global economic integration.

Asian countries that had continued to support multilateralism all along, began to respond to the trend of regionalism towards the end of the 1990s. The East Asian Financial crisis of 1997 provided a much needed stimulus for regional economic integration in Asia. The ASEAN countries expedited the programme of implementation of an ASEAN Free Trade Area (AFTA) from 2002 to 2008 and moved on to further deepen the economic integration. Japan revised its trade policy in 1999, giving due place to regional economic integration, and concluded its first FTA with Singapore. Other Asian countries followed the trend. In particular, ASEAN facilitated regional economic integration by bringing all major Asian countries, including Japan, China, India, Republic of Korea, and Australia and New Zealand, together as dialogue partners. This has led to ASEAN+1 FTAs evolving between ASEAN countries and the dialogue partners besides a number of FTAs between the dialogues partners themselves. These include those under negotiation between India and the Republic of Korea and India and Japan. The South Asian Association for Regional Cooperation (SAARC) has also adopted a SAFTA

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in 2004 which is being implemented over a 10-year period from 2006. India has been a part of this emerging trend of RTAs and FTAs in Asia. Besides being a member of SAFTA, it is evolving bilateral FTAs with a number of Asian countries. It considers these subregional and bilateral initiatives as building blocks for broader Asian economic integration and it has a vision of an Asian economic community.

The East Asian cooperation trend led to the launch of several regional initiatives such as the Chiang Mai Initiative which brought together the ASEAN countries plus China, Japan and the Republic of Korea. Another initiative of interest is the launch in December 2005 of the East Asia Summit (EAS) as an annual forum for dialogue on regional affairs among the leaders of ASEAN plus Australia, China, India, Japan, New Zealand and the Republic of Korea which comprise ASEAN-10. Bringing together leaders of 16 of the largest and most dynamic economies of Asia, EAS is likely to provide a forum to launch a broader Asian community. Asia has recognized the importance of regional economic integration to its development and has responded to the challenge presented by the worldwide trends. Emerging Asian regionalism has to be accompanied by investment liberalization in order to enable the region's businesses to rationalize their operations to exploit the locational advantages or synergies for mutual benefit.

Against that backdrop, this article begins by summarizing the conceptual rationale for investment liberalization to exploit fully the potential of regional trading arrangements. It then examines the treatment of investment in emerging FTAs/RTAs in the Asian and Pacific region and the specific investment provisions and their consistency with existing multilateral provisions on investment in World Trade Organization's Trade-Related Investment Measures Agreement. The provisions of the Framework Agreement on the ASEAN Investment Area and industrial cooperation are summarized in section C. Section D briefly examines the trends in India's RTAs policy in Asia and the emerging patterns of efficiency-seeking industrial restructuring unleashed by it. Finally, section E concludes with a few remarks on the importance of a broader framework for regional economic integration.

A. Relevance of investment liberalization in regional trading arrangements: lessons from European economic integration

Foreign direct investment (FDI) has a close relationship with the process of regional economic integration. By extending the effective size of the market through the partner countries, RTAs strengthen the investment climate for investors from outside the region. The European Union has increased its share in global FDI inflows following the formation of the single market from nearly 30 per cent in 1980s to about 50 per cent in 1990s and has remained at that level (Kumar, 1994; UNCTAD, 2006). More recent studies show that Mexico has seen a sharp rise in FDI inflows since becoming a part of NAFTA, from US$ 12 billion per year on average during 1991-1993 to US$ 54 billion during the period 2000-2002 (Kose and others, 2004). A number of quantitative studies

conducted in intercountry contexts have also found a strong association between membership in RTAs and FDI inflows (See for example, Kumar, 2000 and Medvedev, 2006). However, the effect of market extending (or enlargement) is only one and a relatively minor effect of RTAs. It is argued here that a more important effect of RTAs is strengthening of the overall competitiveness of the region as a whole through extensive industrial restructuring or rationalization across the region. This process of efficiency-seeking industrial restructuring is accomplished by intraregional FDI. It is not a coincidence that the recent RTAs or FTAs generally extend their scope beyond trade to include investment liberalization and facilitation.

The trend of "new regionalism", as the phenomenon is called to distinguish it from the earlier wave of shallow regional economic cooperation, was clearly motivated by the desire to strengthen the competitiveness of the regions' industries, which is evident from the case of the European Union. The major motivation in the formation of the single market was not primarily the promotion of intraregional trade, as is commonly understood. The intraregional trade was already quite high in the European Union before the single market plan, and MFN tariffs were nearly zero for intra-European Union trade. The deeper regional economic integration was undertaken in order to facilitate restructuring or rationalization of industry across the region on the most efficient basis so as to exploit the economies of scale and specialization. The report by Cecchini (1988), which was commissioned by the European Commission and provided the basis for the white paper on the single European market, had empirically established that the European economies were losing substantially in welfare terms by not cooperating among themselves. The projected gains from industrial restructuring to exploit economies of scale and increased competition within the European Union were estimated to be on the order of 3.7 per cent of GDP.

Efficiency-seeking industrial restructuring is facilitated by liberalization of trade and investment regimes as a part of regional trading arrangements that enable free movement of goods across borders. This in turn facilitates internal restructuring by removing the need to maintain horizontal national operations for multinational enterprises (MNEs). Therefore, MNEs restructure their operations by assigning the responsibility for serving specific regional or even global markets in particular product lines to certain affiliates. This strategy is sometimes called product mandating and results from the efficiency-seeking restructuring or specialization within the MNE. European Union integration also facilitated the industrial restructuring of European businesses by adopting a statute of a European company (Societas Europaea, S.E.) and through another legal instrument called the European Economic Cooperation Agreement (EECA). The latter is a form of cooperation between two or more firms which become a single corporate body with the aim of furthering the business activities of the participating firms (Kumar, 1994).

The formation of the single European market has led to a substantial restructuring of industry to seek efficiency or competitiveness. The restructuring takes the form of specific subsidiaries receiving the parent company's mandate for specific

goods or services for the given markets. The product mandates are given for the entire regional market in the specific product lines. For instance, Unilever decided to produce all its dishwasher powder for the European market at its Lyons (France) plant and all the toilet soap for the European market at Port Sunlight (UK) in preference to smaller plants catering to each individual market for the entire range of products.[1]

The single market plan of the European Union has also prompted extensive industrial restructuring of MNEs of the United States of America and Japan that operate in the European Union to restructure their operations on a pan-European basis. For instance, the International Business Machines Corporation (IBM) has reorganized its operations on a pan-European basis with specialization as follows: IBM UK looks after personal computers; IBM Germany, is responsible for mainframe computers and manufacturing; IBM France, for telecommunications; and IBM Italy, for mid-range machines. Thus this type of restructuring enables the enterprise to exploit the economies of scale and specialization. The location for specific product mandates is chosen on the basis of the comparative advantage a particular country has for that particular activity. These could include factor availability and prices, agglomeration economies and other locational advantages.[2] Quantitative studies conducted in intercountry contexts have also found strong evidence of the role of RTAs in shaping the patterns of export-oriented investments made by United States- and Japanese-owned MNEs across countries to exploit the potential of efficiency-seeking industrial restructuring (See Kumar,1998 and 2002).

The studies on the existing RTAs have shown that in the deeper type of integration, the major beneficiaries are relatively poorer or lesser developed economies because industry tends to migrate to them, helping their economies converge with those of more developed ones. It is evident that the poorest economies of the EU, such as Ireland, Greece, Portugal and Spain have rapidly converged with the more developed economies such as Germany, France and the United Kingdom. Although resource transfers have also played a role, investment restructuring (such as relocation of production to low wage locations within the European Union) has played an important role in bringing about this convergence. It is also clear that investment liberalization becomes a key to facilitating the process of industrial restructuring.[3] The barriers to investment flows may impede the realization of the full benefits from regional trade liberalization.

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1 See Kumar, 1994, for illustrations.

2 See Dunning, 1998 for a typology of restructuring; Kumar, 1994, 2001 and Cool and others 1992, provide a detailed analysis and case studies.

3 Also see UNCTAD (2006) for a discussion.

B. Regional trading arrangements in the Asia-Pacific region and treatment of investment

As observed earlier, Asian countries have been rather late entrants in exploiting the potential of FTAs/RTAs. According to data compiled by the Asian Development Bank, Asian countries were involved in only 35 FTAs in 2000. However, there is an indication that once started, Asian countries are fast catching up in the trend of signing FTAs/RTAs. By the end of 2006, Asian countries were involved in as many as 191 FTAs/RTAs among themselves or with the outside world. The bulk of these FTAs/RTAs are at different stages of evolution, and many of them may take years to implement. The trend is clear however, that Asia has recognized the potential of bilateral and regional arrangements to supplement trade liberalization in the multilateral framework.

As the focus of this paper is on the RTAs of Asia-Pacific countries, it does not include FTAs initiated by Asia-Pacific countries with countries outside the region e.g., Singapore-United States or Australia-United States. The FTAs initiated by Asian countries within Asia, whether bilateral or plurilateral, are summarized in table 1. The table shows 84 FTAs with other regional partners. Twenty six of these agreements have been notified to WTO and 58 were in different stages of their evolution. Patterns across subregions suggest that countries in Central and West Asia were integrating among themselves, with 17 FTAs. The subregions of East Asia, South-East Asia and South Asia were integrating across the subregions. There are currently 12 FTAs between East Asia and South-East Asia and 10 between South-East Asia and South Asian countries. The East Asian and South-East Asian countries also have 12 FTAs with Pacific countries. Thus, those subregions, East Asia, South-East Asia, South Asia and the Pacific, seem to be integrating with each other. This might eventually lead to the formation of a broader community.

1. Treatment of investment in Asia-Pacific RTAs

As regionalism is a relatively recent trend in Asia, most of the FTAs are in the early stages of their evolution. A number of them are still being considered by the countries concerned and others are in the process of negotiation or implementation. Table 2 lists the 56 FTAs/RTAs initiated by Asian countries with Asian partners, for which some information is available from ESCAP's Asia Pacific Regional Trade and Investment Agreements Database (APTIAD). It also indicates whether the scope of FTA/RTA extends to cover investment and commercial presence as a mode of service delivery which is akin to FDI in services. It finds that only 26 of the 56 RTAs listed do cover investment provisions. A closer examination will suggest some patterns. One is that more recent agreements are generally more likely to include investment than the older ones. This is because the importance of investment liberalization in economic integration and its role in facilitating efficiency-seeking industrial restructuring have been recognized.

Table 1. Free trade arrangements involving Asian countries within the region, 2006

BILATERAL FTAs	WTO notified		NOT WTO NOTIFIED												TOTAL	
			Under implementation		Signed negotiation		Under negotiation		(FA) signed/under		Proposed		Total not notified		Notified and not notified	
	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006
Within subregion																
Central and West Asia	2	9	0	0	8	8	0	0	0	0	0	0	8	8	10	17
East Asia	0	1	0	0	0	0	0	1	0	0	0	2	0	3	0	4
South Asia	0	1	0	2	0	1	0	1	0	0	0	1	0	5	0	6
South-East Asia	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Pacific	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Across subregion																
Central and West Asia + South Asia	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2
East Asia + South Asia	0	0	0	0	0	1	0	1	0	0	0	2	0	4	0	4
East Asia + South-East Asia	0	3	0	1	0	1	0	5	0	0	0	2	0	9	0	12
East Asia + Pacific	0	0	0	0	0	0	0	1	0	2	1	3	1	6	1	6
South-East Asia + South Asia	0	0	0	1	0	0	0	2	0	2	0	5	0	10	0	10
South-East Asia + Pacific	0	4	0	0	0	0	0	2	0	0	0	0	0	2	0	6
Pacific + South Asia	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
Regional or plurilateral																
Asian bloc	4	4	0	2	0	0	0	0	0	1	0	1	0	4	4	8
Asian bloc + Asian country	0	1	0	0	0	1	0	1	0	2	0	0	0	4	0	5
TOTAL	9	26	0	6	8	12	0	14	0	7	1	19	9	58	18	84

Notes: Central and West Asia : Afghanistan, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan.
East Asia : China; Hong Kong, Japan; Republic of Korea; Mongolia; Taiwan Province of China.
South Asia : Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka.
South-East Asia : Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam.
The Pacific : Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu.
Asian plurilateral: refers to groupings of more than two countries where all the members are Asian countries.

Source: Compiled by the author created table based on data provided by ARIC/ADB, tables 5 and 6, available at <www.aric.adb.org>.

Some of the older arrangements are being revised in order to extend their scope to cover investment. The India-Sri Lanka FTA is one such agreement. It was originally signed in 1998 and has been in force since 2000. Now it is evolving into a comprehensive economic partnership agreement covering trade in goods, services and investments. The other noticeable pattern is that FTAs/RTAs involving capital exporting countries such as Australia, Japan, New Zealand and Singapore tend to include investment provisions.

2. Scope of investment provisions in Asia-Pacific RTAs

To examine in greater detail the scope of investment provisions in Asian RTAs, we focused on 18 agreements involving investment provisions for which texts are available. The texts of another eight agreements containing investment provisions are not yet available.

Generally the investment chapter of the agreements is structured as follows: definitions of investments; treatment of investors and investments from the partner country, including liberalization of those; criteria for determining the origin of investors (such as rules of origin in the case of trade in goods); and provisions for MFN. Some investment chapters also cover treatment of performance requirements (which are like non-tariff barriers in the case of trade in goods), such as local content requirements. Sometimes they specify the types of performance requirements prohibited under the framework of the agreement, such as the TRIMs Agreement in WTO, while others may just quote TRIMs provisions.

An important part of the investment chapters is devoted to investment protection and promotion and sometimes covers cooperation and transparency. Investors from the partner countries are assured of a fair compensation in the event of any nationalization or expropriations. They also list the conditions that can be considered as expropriations. Those provisions may seem innocuous but have become important in the light of NAFTA disputes on regulatory takeovers considered as expropriation. In those cases, companies have filed suits against Governments of partner countries concerning the policy changes affecting their profitability or prospects and have sought compensation for what they deem as expropriation. The investment chapter also covers provisions on settlement of investment disputes and whether an investor from one party can resolve disputes against the host Governments or disputes between Governments. Finally, there are provisions for safeguards, exceptions and review of the agreement.

The investment provisions included in recent FTAs/RTAs are generally more ambitious than earlier bilateral investment protection and promotion agreements (BIPAs). The scope of BIPAs has generally tended to include limited national treatment of investments (as opposed to investors) made in accordance with national laws and policies, investment protection and promotion and dispute settlements. Therefore, BIPAs do not generally cover investment liberalization, which has been the main objective of the RTAs/FTAs.

Table 2. Treatment of investment in selected Asian regional trade agreements

Short title or acronym	Regional trade agreement	Status	Coverage of investment and mode 3 in services	
			Commercial presence	Investment (others)
AJCEP	Framework Agreement for ASEAN-Japan Comprehensive Economic Partnership	In force since 2004	No	Yes
ANZCERTA	Australia-New Zealand Closer Economic Relations Trade Agreement	Iin force since 1983	Yes	No
APTA	Asia-Pacific Trade Agreement (formerly, the Bangkok Agreement)	In force since 1976	No	No
ASEAN-CER	Framework Agreement for ASEAN-ANZCERTA Free Trade Area	Under negotiation since 2004	Yes	Yes
AFTA	ASEAN Free Trade Area	In force since 1993	No	Yes
ASEAN Services	ASEAN Framework Agreement on Services	Iin force since 1996	Yes	No
ASEAN-China FA	ASEAN-China Framework Agreement on Comprehensive Economic Cooperation	In force since 2003	Yes	Yes
ASEAN-India FA	ASEAN-India Framework Agreement on Comprehensive Economic Cooperation	In force since 2004	Yes	Yes
ASEAN-Korea FA	ASEAN-Republic of Korea Framework Agreement on Comprehensive Economic Cooperation	In force since 2006	Yes	Yes
Australia-China	Australia-China Free Trade Agreement	Under negotiation since 2005	No	Yes
Australia-Japan	Australia-Japan Trade and Economic Framework	Under negotiation since 2007	No	Yes
Australia-Malaysia	Australia-Malaysia Free Trade Agreement	Under negotiation since 2005	No	Yes
Australia-Thailand	Thailand-Australia Free Trade Agreement	In force since 2005	Yes	Yes
Bhutan-India	Bhutan-India Free Trade Agreement	In force since 2006	No	No
BIMSTEC	Bay of Bengal initiative for Multi-Sectoral Technical and Economic Cooperation	In force since 1997	No	Yes
China-Hong Kong, China	China and Hong Kong, China Closer Economic Partnership Agreement	In force since 2004	Yes	No
China-Republic of Korea	China-Republic of Korea Free Trade Agreement	Under negotiation since 2005	No	No
China-Macao, China	China and Macao Special Administration Region (SAR) Closer Economic Partnership Agreement	In force since 2004	Yes	No

Table 2. ***(continued)***

Short title or acronym	Regional trade agreement	Status	Coverage of investment and mode 3 in services	
			Commercial presence	Investment (others)
China-Pakistan	China and Pakistan Free Trade Agreement	Pending country ratification	No	Yes
China-Thailand	China and Thailand Free Trade Agreement	In force since 2003	No	No
India-Afghanistan	India and Afghanistan Preferential Trade Agreement	In force since 2003	No	No
India-Bangladesh	Trade Agreement between India and Bangladesh	In force since 2006	No	No
India-Nepal	Indo-Nepal Treaty of Trade	In force since 1991	No	No
India-Singapore	India-Singapore Comprehensive Economic Cooperation Agreement	In force since 2005	Yes	Yes
India-Sri Lanka	India-Sri Lanka Free Trade Agreement	In force since 2001	No	No
India-Thailand	India-Thailand Framework Agreement for Establishing an FTA	In force since 2004	No	Yes
Japan-Brunei Darussalam	Japan-Brunei Darussalam Economic Partnership Agreement	Under negotiation	No	No
Japan-India	Japan-India Economic Partnership Agreement	Under negotiation since 2007	Yes	Yes
Japan-Indonesia	Japan-Indonesia Economic Partnership Agreement	Under negotiation since 2005	No	No
Japan-Republic of Korea	Japan-Republic of Korea Free Trade Agreement	Under negotiation since 2004	No	No
Japan-Malaysia	Japan-Malaysia Economic Partnership Agreement	In force since 2006	Yes	Yes
Japan-Philippines	Japan-Philippines Economic Partnership Agreement	Pending country ratification	Yes	Yes
Japan-Singapore	Japan-Singapore New-Age Economic Partnership Agreement	In force since 2002	Yes.	Yes
Japan-Thailand	Japan-Thailand Economic Partnership Agreement	Pending country ratification	Yes	Yes
Japan-Viet Nam	Agreement between Japan and Viet Nam on Economic Partnership	Under negotiation since 2006	No	No
Kazakhstan-Uzbekistan	Kazakhstan and Uzbekistan Free Trade Agreement	In force since 1997	No	No
Republic of Korea-India	Republic of Korea-India Comprehensive Economic Partnership Agreement	Under negotiation since 2006	Yes	Yes

Table 2. ***(continued)***

Short title or acronym	Regional trade agreement	Status	Coverage of investment and mode 3 in services	
			Commercial presence	Investment (others)
Rep. of Korea-Singapore	Free Trade Agreement between Republic of Korea and Singapore	In force since 2006	No	Yes
Lao PDR-Thailand	Lao People's Democratic Republic-Thailand Preferential Trading Arrangement	In force since 1991	No	No
Malaysia-Republic of Korea	Malaysia-Republic of Korea Free Trade Agreement	Under negotiation since 2005	No	No
Malaysia-New Zealand	Malaysia-New Zealand Free Trade Agreement	Under negotiation since 2005	No	No
Malaysia-Pakistan	Agreement on the Early Harvest Programme for Malaysia-Pakistan FTA	In force since 2006	No	No
MSG	Trade Agreement Among the Melanesian Spearhead Group Countries	In force since 1994	No	No
New Zealand-China	New Zealand-China Free Trade Agreement	Under negotiation since 2004	No	Yes
New Zealand-Hong Kong, China	Hong Kong, China-New Zealand Closer Economic Partnership	Under negotiation since 2001	No	No
New Zealand-Singapore	Agreement between New Zealand and Singapore on a Closer Economic Partnership	In force since 2001	Yes	Yes
New Zealand-Thailand	New Zealand-Thailand Closer Economic Partnership Agreement	In force since 2005	No	Yes
Pakistan-Sri Lanka	Pakistan-Sri Lanka Free Trade t Agreemen	In force since 2005	No	No
PATCRA	Papua New Guinea-Australia Trade and Commercial Relations Agreement	In force since 1977	No	Yes
PICTA	Pacific Island Countries Trade Agreement	In force since 2006	No	No
PTA-D-8	Preferential Tariff Agreement - Group of Eight Developing Countries	Pending country ratification	No	No
SAFTA	South Asian Free Trade Area	In force since 2006	No	No
Singapore-Australia	Singapore-Australia Free Trade Agreement	In force since 2003	Yes	Yes
Singapore-Pakistan	Singapore-Pakistan Free Trade Agreement	Under negotiation since 2005	No	No
Singapore-Sri Lanka	Singapore-Sri Lanka Comprehensive Economic Partnership Agreement	Under negotiation since 2003	No	No
SPARTECA	South Pacific Regional Trade and Economic Cooperation Agreement	In force since 1981	No	No

Source: Compiled by the author, based on the database of Asian RTAs available on the ESCAP website, <www.unescap.org/tid/aptiad/>.

The key investment provisions in the 18 agreements are summarized in table 3. Characteristics of these provisions are summarized below.

(a) Definition of investments

Most of the FTAs/RTAs signed by Asia-Pacific countries have adopted a broad definition of investments covering the transfer of any assets or intellectual property. However, some of them, such as the ASEAN Investment Area and New Zealand-Thailand FTA, have employed a narrow definition restricting the scope to only direct investments. The ASEAN Investment Area and Japan-Malaysia FTA have specifically excluded portfolio investments from their scope, thus effectively confining them to direct investments. Most of the agreements also define the criteria for determining the origin of an enterprise or investor and generally tend to adopt majority ownership in the country of origin as the basis for determining the nationality of the enterprise.

(b) Treatment of "investors" or pre-establishment national treatment

A key provision of the investment arrangements in FTAs relates to pre-establishment national treatment as it determines the level of investment liberalization. Most of the FTAs/RTAs involving Asia-Pacific countries provide pre-establishment national treatment on a positive list basis or they provide a progressive liberalization by placing sectors in an annex where foreign investors are treated equally with national or domestic investors. However, an increasing number of agreements have also incorporated pre-establishment national treatment based on a negative list basis. These typically include countries that have adopted open regimes for foreign capital already, such as Singapore. These agreements therefore provide a liberal treatment to foreign investors; unless specified in the annex, all investments from the partner country receive treatment "not less favourable" to that given to a national investor (however, more favourable treatment is not excluded).

(c) Treatment of "investments" or post-establishment national treatment

More countries tend to accord national treatment to investments that have already been made. Hence, national treatment in the post-establishment phase is generally built on the negative list basis or on the same basis as pre-establishment national treatment. Thailand's FTAs with Australia and New Zealand are cases in point, where the pre-establishment national treatment is based on a positive-list basis and post-establishment national treatment is on a negative list basis.

(d) Performance requirements and consistency with TRIMs

Treatment of performance requirements is another type of liberalization of investment policy regimes. Here the benchmark or MFN treatment is provided by the WTO Agreement on Trade-Related Investment Measures (TRIMs). The TRIMs Agreement seeks to eliminate a few types of performance requirements, such as local

Table 3. Key Investment Provisions in selected Asian regional trade agreements

Agreement	Definition of Investment	Pre-establishment national treatment	Post-establishment National Treatment	MFN	Performance Requirements promotion, facilitation	Investment Protection, provisions	Dispute Settlement
Framework Agreement on ASEAN Investment Area (1998, amendments 2001, 2003)	Direct investments	Negative list	Negative list	Yes	-	Yes	ASEAN DSM
Framework Agreement on Comprehensive Economic Cooperation between the Association of Southeast Asian Nations and the People's Republic of China	To be defined	Progressive (+list)	Implicit	Implicit	To be defined	Yes	To be defined
ASEAN-ANZCERTA Framework Agreement	To be defined	Progressive	Implicit	Implicit	To be defined	Yes	To be defined
ASEAN-India Framework Agreement	To be defined	Progressive	Implicit	Implicit	To be defined	Yes	To be defined
ASEAN-Republic of Korea Framework Agreement	To be defined	Progressive (+list)	Implicit	Implicit	To be defined	Yes	To be defined
ASEAN-Japan Framework Agreement	To be defined	To be defined	Implicit	Implicit	To be defined	Yes	To be defined
Mainland (China) and Hong Kong, China Economic Partnership Agreeement	-	-	-	-	-	Yes	-
Agreement between Japan and the Republic of Singapore for a New-Age Economic Partnership	Broad	Negative list	Negative list	Yes	Agreement on Trade-Related Investment Matter (TRIMs)-plus	Yes	Investor-State, State-State
Japan-Malaysia Economic Partnership Agreement	Broad	Negative list	Negative list (excludes portfolio investments)	Yes	TRIMs	Yes	Investor-State, State-State

Table 3. ***(continued)***

Agreement	Definition of Investment	Pre-establishment national treatment	Post-establishment National Treatment	MFN	Performance Requirements promotion, facilitation	Investment Protection, provisions	Dispute Settlement
Japan and the Republic of the Philippines for an Economic Partnership	Broad	Negative list	Negative list	Yes	TRIMs-plus; (labour and environmental standards)	Yes	to be negotiated
Free Trade Agreement between the Government of the Republic of Korea and the Government of the Republic of Singapore	Broad	Negative list	Negative list	Yes	TRIMs-plus	Yes	Investor-State, State-State
India-Singapore Comprehensive Economic Cooperation Agreement	Broad	Positive list	Positive list	Yes	TRIMs	Yes	Investor-State, State-State
India-Thailand Framework for Establishing a FTA	To be defined	Progressive	Implicit	Implicit	To be defined	Yes	To be defined
Australia-Singapore	Broad	Negative list	Negative list	-	-	Yes	Investor-State, State-State
Australia-Thailand		Positive list	Negative list	Yes	-	Yes	Investor-State, State-State

Source: Compiled by the author on the basis of original texts of FTAs.

content regulations and requirements limiting imports to a certain proportion of output. It retains a number of other performance requirements and investment measures, including export obligations that can be imposed by WTO members on enterprises and investors.[4] Various FTAs/RTAs have tended to expand the list of investment measures included in TRIMs in order to cover others, such as export obligations, the requirement to transfer technology or perform research and development. By prohibiting such performance requirements for investments originating in FTA partner countries, these provisions seek to liberalize the conditions for investment. A number of Asian RTAs/FTAs have included TRIMs plus provisions on performance requirements. These include the Japan-Singapore New Age Partnership Agreement, which lists a number of investment measures that will not be imposed by the parties. That agreement also includes TRIMs-plus provisions. That agreement is perhaps unique in Asia in that it also includes performance requirements based on labour and environmental standards. These two Agreements tend to follow the treatment of performance requirements as incorporated by the FTAs signed by the United States, which is trying to incorporate WTO plus provisions into investments and intellectual property rights agreements among others, through bilateral FTAs. Other FTAs/RTAs have provided for TRIMs-type of treatment either explicitly (India-Singapore, Japan-Malaysia) or implicitly (by being silent and hence leaving the treatment to TRIMs).

(e) MFN, investment protection, promotion and facilitation

MFN provisions are generally included in most RTAs/FTAs. Different RTAs/FTAs vary in terms of the extent of investment promotion and facilitation covered. Some of them, such as the China-Hong Kong, China, CER, focus exclusively on investment facilitation. Some of them go on to specify facilitation activities such as cooperation between the investment promotion agencies and linking up of websites (as provided in the India-Singapore CECA) to promote investment flows. Provisions on investment protection are also generally found in almost all FTAs/RTAs, providing fair and equitable treatment in the event of expropriation, although there are a variety of terms on what constitutes an expropriation. A liberal definition of expropriation adopted by NAFTA covers the changes in business prospects resulting from any policies or regulations imposed by the host government. This liberal treatment has led to a large number of disputes in NAFTA brought by companies against Governments. Asian RTAs have followed a more cautious approach in this respect although there is variation among them.

(f) Dispute settlement mechanism

Most of the FTAs/RTAs also provide guidelines for settlement of investment disputes. They provide a limited form of investor-to-State dispute settlement through consultation and suggest other means of settlement if the consultation does not work. Most of the FTAs/RTAs also refer to the dispute settlement mechanisms available within

[4] See Correa and Kumar (2003) for a detailed analysis of the TRIMs Agreement and its provisions.

the framework of the International Centre for Settlement of Investment Disputes (ICSID) managed by the World Bank and the United Nations Commission on International Trade Law (UNCITRAL), such as setting up of ad hoc tribunals. Most of the RTAs/FTAs generally provide for State-to-State dispute settlement.

C. ASEAN free trade and investment area for facilitating industrial restructuring

Among the Asian RTAs, ASEAN stands out as one that has recognized the potential of regional trade and investment liberalization in fostering efficiency-seeking industrial restructuring and overall competitiveness of the group. ASEAN has closely followed the example of the European Union in regional trade liberalization through AFTA, liberalizing trade in services through the ASEAN Framework Agreement for Trade in Services (AFAS) and facilitating the exploitation of the potential for industrial restructuring through additional policy measures. These include the ASEAN Industrial Cooperation (AICO) scheme and ASEAN Investment Area (AIA). In this section, we take a brief look at the steps taken by ASEAN to exploit the potential of regional economic integration, especially in industry.

1. ASEAN Free Trade Agreement (AFTA)

The decision taken during the Fourth ASEAN Summit, held in Singapore on 28 September 1992, to establish the ASEAN Free Trade Area (AFTA) by the year 2008 is the most significant and ambitious step taken by ASEAN so far in terms of regional economic integration. That treaty was signed in Singapore by the five original founding members, Indonesia, Malaysia, the Philippines, Singapore and Thailand plus Brunei Darussalam, which joined ASEAN in 1984. This group is known as ASEAN-6. In mid-1995, Viet Nam gained admission as the seventh member of ASEAN. The Lao People's Democratic Republic and Myanmar followed suit two years later in 1997, and Cambodia joined in 1999. These four new members are called the CLMV group. AFTA provides a framework and forum for ASEAN member States for moving towards deeper economic integration among themselves. The main mechanism for the implementation of AFTA is the Common Effective Preferential Tariff (CEPT). The CEPT is an agreed effective tariff; it is preferential to ASEAN member States, and is to be applied to goods that have been identified for inclusion under the CEPT scheme originating from member States. The original schedule required the CEPT tariffs to be reduced to between 0 and 5 per cent, within 15 years, i.e. by 2008, while non-tariff barriers were to be eliminated beginning 1 January 1993. In September 1994, ASEAN agreed to accelerate the establishment of AFTA by reducing the initial time frame from 15 to 10 years. Under the 1994 amended timetable, the full realization of AFTA, with tariffs falling between zero and 5 per cent was expected by the year 2003 for the original ASEAN six. The deadline for Viet Nam was 2006 and for Myanmar and Lao People's Democratic Republic, 2008. To facilitate recovery from the economic crisis of 1997, ASEAN members announced a further

advancement of the AFTA schedule in December 1998 for the six original signatories by one year from 2003 to 2002. Those signatories also agreed to achieve a minimum of 90 per cent of their total tariff lines with tariffs between 0-5 per cent by the year 2000. In theory, this would account for 90 per cent of intra-ASEAN trade.[5]

Furthermore, ASEAN has complemented formation of AFTA with other initiatives to facilitate intraregional trade and speed up the industrial restructuring with other initiatives. These include harmonization of customs procedures and standards. ASEAN initially targeted 2002 for the adoption of an ASEAN Harmonized Tariff Nomenclature and brought forward the adoption of the WTO Valuation Agreement (WVA) to 2000. ASEAN is developing product-specific mutual recognition arrangements (MRAs) for cosmetics, pharmaceuticals and electrical and telecommunications products, among others. ASEAN harmonized national standards with international standards such as those of the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and the International Telecommunications Union (ITU), for 20 priority product groups that are among the most widely traded in the region, such as radios, televisions, refrigerators, air conditioners and telephones.

2. ASEAN Framework Agreement on Trade in Services

In recognition of the growing importance of trade in services, ASEAN adopted the AFAS on 15 December 1995 in order to substantially eliminate barriers to trade in services among ASEAN countries and to improve the efficiency and competitiveness of ASEAN services providers. AFAS provides the broad guidelines for ASEAN member countries to progressively improve market access (MA) and provide national treatment for ASEAN service providers following GATS-Plus commitments. To further expedite liberalization of trade in services, ASEAN amended AFAS in 2003 to enable the application of the "ASEAN minus X" formula in the implementation of member countries' services commitments. Under this formula, countries that are ready to liberalize a certain service sector may proceed do so without having to extend the concessions to non-participating countries. Under AFAS, major progress has been achieved in liberalization of financial services and air transport services. Mutual recognition arrangements (MRAs) have also been concluded on engineering services and nursing services, and negotiations are in progress for architecture, accountancy, surveying, medical practitioners and tourism. ASEAN expects to have a free flow of services across all sectors and modes throughout the region by 2015.[6]

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5 See <http://www.aseansec.org/> for more details.

6 For more details, see <http://www.aseansec.org/6626.htm>.

3. ASEAN Industrial Cooperation Scheme

To facilitate efficiency-seeking industrial restructuring and strengthen the competitiveness of ASEAN's manufacturing industry, the ASEAN Industrial Cooperation Scheme (AICO) was approved in 1996. For companies in the scheme, the ASEAN market was almost fully integrated even before the 2002 deadline for CEPT of 0-5 per cent. Under AICO, goods produced by and traded between companies operating in two or more ASEAN countries enjoyed full AFTA treatment immediately, i.e., 0-5 per cent tariffs. Therefore, participating companies could benefit from economies of scale by restructuring across the region by taking advantage of preferential tariff rates. To maintain the relevance of the AICO scheme beyond 2002 when the CEPT rates reached 0-5 per cent as called for by AFTA, the AICO scheme was amended to provide for new preferential tariff rates to be given to newly approved AICO projects: zero per cent for Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia and Singapore; 0-1 per cent for the Philippines; 0-3 per cent for Thailand; and 0-5 per cent for Myanmar and Viet Nam. The Philippines, Thailand and Myanmar and Viet Nam worked towards reducing the preferential tariff rates to zero per cent for AICO arrangements. By early 2004, 118 applications for AICO arrangements had been approved, which were expected to generate an estimated value of about US$ 1.2 billion worth of transactions per year.[7]

4. ASEAN Investment Area

The Framework Agreement on the ASEAN Investment Area (AIA) was signed in 1998 to allow free flow of direct investment, technology and skilled professionals between ASEAN countries to enable investors to harness the synergies of member countries in order to maximize business and production efficiency by adopting regional business strategies and regional production networks. AIA calls for opening all industries in the region to ASEAN investors and granting of national treatment to them (excepting those on temporary exclusion lists, or TEL). The industries on the temporary exclusion lists were to be reviewed after two years and phased out by 2010 by ASEAN-6 countries and by 2015 by the CLMV countries. In 2001, the AIA Agreement was amended to cover manufacturing, agriculture, mining, forestry and fishery sectors, as well as services incidental to these sectors and provided a new expedited schedule for phasing out TEL. The new schedules required phasing out of TEL in manufacturing in the case of ASEAN-6 countries and Myanmar by 2003 and for the other three countries by 2010. The "ASEAN investor" has been defined very liberally and qualifies a number of foreign joint ventures. Recognizing the importance of investment in delivery of services, and to exploit business opportunities to globally competitive service industries, ASEAN, in a 2003 amendment to AIA, expanded it to include such services as education, health care, telecommunication, tourism, banking and finance, insurance, trading, e-commerce, distribution and logistics,

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[7] For more details see <http://www.aseansec.org/6361.htm>.

transportation and warehousing. The amendment also covered professional services such as accounting, engineering and advertising, on the basic of "ASEAN minus X" principle, as agreed in the AFAS.

5. Beyond AFTA and AIA

ASEAN has moved towards deepening regional economic integration by aiming to create an ASEAN economic community by 2020 as a part of the ASEAN Vision 2020 adopted at the Ninth ASEAN Summit in Bali, Indonesia, October 2003. Subsequently the date of completion of the ASEAN Economic Community has been advanced to 2015. ASEAN has also facilitated the broader Asian economic integration by bringing together other major Asian and Pacific countries such as Australia, China, Japan, India, New Zealand and Republic of Korea as dialogue partners. This has led to the beginning of FTA negotiations with them (the so called ASEAN+1 FTAs), most of which have investment provisions, as observed in the previous section. This interaction as dialogue partners has also facilitated FTAs between individual ASEAN countries and the dialogue partners (e.g. India and Singapore) and also between the dialogue partners themselves (e.g. India-Japan) (see Kumar, 2005). This interaction has led to multiple FTAs combining nearly all pairs of ASEAN members and dialogue partners, representing an emerging virtual community. However, this virtual community is not real as it will not provide a seamless market to the businesses to restructure themselves and to exploit the synergies fully due to varying scope, coverage and rules governing different agreements with respect to investment provisions. ASEAN needs to drive this process to create a broader framework that can coalesce all these bilateral arrangements in a single framework. Such attempts have not succeeded so far in the framework of ASEAN+3, which brought together China, Japan, and the Republic of Korea, because of differences between two of the partners, China and Japan. In December 2005, the first East Asia Summit was held in Kuala Lumpur with leaders of ASEAN and the six dialogue partners (Australia, China, India, Japan, New Zealand and the Republic of Korea). At their second session in Cebu, Philippines in January 2007, summit leaders launched a track-II study on the feasibility of a comprehensive economic partnership of East Asia (CEPEA) covering the 16 countries. It is conceivable that CEPEA could provide a framework for a broader regional arrangement for liberalization of trade and investment regimes in Asia. This could facilitate the exploitation of efficiency-seeking industrial restructuring on the continent. A number of studies have highlighted the relevance of a broader regional arrangement such as CEPEA in bringing major welfare gains to the region and the rest of the world because of its trade-creating potential (see Kumar, 2005; Brooks and others, 2005; and RIS, 2006).

D. Investment in the regional economic integration policy of India

India has long attached high importance to regional economic integration in its trade policy. It was a founding member of the Bangkok Agreement that happens to be one of the first preferential trade agreements in the region, having been signed in 1975. Now renamed the Asia-Pacific Trade Agreement, it also includes Bangladesh, China, Lao People's Democratic Republic, Republic of Korea and Sri Lanka. India has also been an active member of the Asian Clearing Union since its inception in the mid-1970s and of the South Asian Association for Regional Cooperation which was formed in 1985. In recent years, especially over the past decade, India's efforts towards regional economic integration have acquired considerable momentum, as summarized below.

1. India's RTAs in Asia-Pacific

Within the South Asian sub-region, India has concluded two FTAs: the India-Sri Lanka Free Trade Agreement (signed in 1998 and effective from 2000) and the South Asian Free Trade Agreement (signed in 2004 and effective from 2006). Aside from those initiatives, India has had long-standing arrangements in the sub-continent, such as its bilateral treaties on trade and transit, FTAs with Nepal and Bhutan, and the exchange of trade preferences with South Asian countries under four rounds of the South Asian Preferential Trade Agreements (SAPTA) since 1995. A preferential trade agreement was also signed between Afghanistan and India and in March 2003. The initial evidence on the India-Sri Lanka Free Trade Agreement, which was signed in 1998 and has been in operation since 2000, appears positive with respect to increasing trade and investment flows. There is a move towards a further deepening within the framework of a comprehensive economic partnership, covering trade in goods, services, investment and economic cooperation (see Kelegama and Mukherjee, 2007).

India's regional economic integration initiatives outside the South Asian subregion have been driven by the "Look East Policy" adopted by the country in 1991, to strengthen economic relationships with East Asian countries. The policy was initially aimed primarily at improving political, strategic and economic relationships with ASEAN but has since been extended to reinforce economic relationships with China, Japan and the Republic of Korea. As part of the so-called Look East Policy, India became a sectoral dialogue partner of ASEAN in 1992 and full dialogue partner in 1996. In November 2002, the India-ASEAN partnership was upgraded to a Summit-level dialogue and has brought about a substantial transformation of economic relations since then. The Framework Agreement on Comprehensive Economic Cooperation between India and ASEAN, incorporating the FTA, was signed at the Ninth ASEAN Summit in Bali, Indonesia in 2003. At the Summit in Lao People's Democratic Republic in 2004, the long-term Partnership for Peace, Progress and Shared Prosperity agreement based on the work

done by the think-tanks of ASEAN and India (RIS, 2004). The India-ASEAN FTA currently under negotiation is expected to be implemented in a phased manner from 2007.

That framework agreement is complemented by a Comprehensive Economic Cooperation Agreement (CECA) signed between India and Singapore in 2005, and the Early Harvest Scheme of the India - Thailand free trade framework agreement (preferential concessions were exchanged on a specified set of commodities) which has been in force since September 2004.

India is also a part of the Bay of Bengal Initiative for Multi-Sectoral Techno-Economic Cooperation (BIMSTEC), which combines seven South and South-East Asian countries and which is also moving towards an FTA, with a Framework Agreement signed in 2004. India also has a programme of sub-regional cooperation focusing on infrastructure development, the Mekong-Ganga Cooperation (MGC) programme, which includes Cambodia, Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam. All these FTAs or comprehensive arrangements that are being fostered by India with ASEAN countries involve investment liberalization.

In recent years, India has strived to strengthen its economic linkages with North-East Asian countries such as China, Japan, and the Republic of Korea. Joint study groups were established with each of these countries to examine the feasibility of free trade arrangements or comprehensive economic partnership arrangements. A comprehensive economic cooperation arrangement between India and the Republic of Korea is currently being negotiated and is likely to be completed in 2007. Negotiations on the India-Japan comprehensive economic partnership arrangement were launched in early 2007 and will be completed by 2008. The arrangements with the Republic of Korea and Japan will both have investment provisions. China and India are also examining the possibility of negotiating a preferential trading arrangement.

In addition, there are currently discussions with Australia and New Zealand to set up study processes for evaluating the feasibility of bilateral arrangements.

As a result of the conscious engagement by India of the East Asian economies, i.e., ASEAN, China, Japan and the Republic of Korea, as a part of its so-called Look East Policy, those countries emerged as India's largest trading partners, ahead of North America and Europe. The share of those countries in India's trade raised from 17 per cent in 2000 to 28 per cent in 2006, indicating a major shift in the geography of India's economic engagement (see Kumar, 2007).

India sees this growing engagement with East Asian countries as a building block for a broader Asian grouping and has articulated a vision of an Asian economic community as an "arc of advantage" for peace and shared prosperity in Asia. The community would bring together different sub-regions of Asia in a phased manner.[8]

[8] See Prime Minister Dr. Manmohan Singh's speech at the Third ASEAN-India Business Summit, 21 October 2004. Also see RIS (2003).

The formation of an Asian economic community could be viewed as the culmination of India's Look East Policy.

2. Emerging patterns of industrial restructuring

India's emerging FTAs with countries such as the Republic of Korea, Singapore, Sri Lanka and Thailand have already led to significant industrial restructuring. A typical example is an investment made by an Indian tyre company, CEAT Ltd., to set up a large export-oriented tyre plant in Sri Lanka to cater to India's growing markets in Pakistan, the Middle East and other countries, taking advantage of the abundant supply of natural rubber in Sri Lanka. As a result of the growing trend of investments made by Indian companies to exploit the potential of the India-Sri Lanka FTA, India has emerged as the third largest source of FDI in Sri Lanka. UNCTAD's World Investment Report 2003 has highlighted how Sri Lanka attracted Indian investments of US$ 145 million in a very short period, making India the third largest source of investments for the island. Because of the investments in building supply capabilities in Sri Lanka facilitated through the India-Sri Lanka FTA, the trade deficit of Sri Lanka has been reduced by half. This success has prompted Sri Lanka to seek to expand the scope of the India-Sri Lanka FTA to cover investments and services in a comprehensive economic partnership agreement (see RIS, 2004a).

Similarly, the India-Nepal trade and transit treaty, giving unilateral duty-free access for Nepali products to the Indian market, has also led to some industrial restructuring. For instance, Colgate-Palmolive India Ltd., a subsidiary of Colgate-Palmolive, Inc. has set up a venture in Nepal, with an authorized capital of Rs 540 million, for the production of 12,000 tonnes of toothpaste and tooth powder per annum to feed the company's market in North India. As a result, toothpaste exports from Nepal to India have grown from US$ 11 million in 1997-98 to about US$ 61 million in 1998/9, making toothpaste one of the most important items in Nepal's exports to India (FNCCI, 2000). Other companies, such as Hindustan Lever, have followed suit. Dabur India, a domestic Indian group, has invested in a fruit-processing plant to produce and package fruit juices for the Indian market. Dabur's principal focus is ayurvedic and herbal medicinal preparations, and it has started using its Nepal plant for these preparations. Dabur Nepal accounts for as much as 15 per cent of Nepal's exports to India (Mukherjee, 1998). Currently all the fruit juices sold by Dabur in North India are packaged at its plant. Kodak Nepal, a venture of Kodak India and Eastman Kodak, United States, was also planning to service the North Indian market from its Nepalese base (Financial Times, 26 August 1999). Subsequently however, this process of industrial restructuring between India and Nepal was disrupted because of the political turmoil in Nepal. It is expected that with peace returning to Nepal and a revival of the democratic process, the process will be restarted.

The India-Singapore Comprehensive Economic Cooperation Agreement (CECA) was signed in 2005, so it may be too early to expect major industrial restructuring. However, one can see a growing interaction and integration between the two countries, stimulated by the CECA. For example, the financial institutions of the two countries started interacting after the signing of the CECA. The Singapore investment company Temasek has become an important investor in India. Over 2000 Indian companies have reportedly set up office in Singapore to expand into the East Asian region. Some large information technology companies such as Tata Consultancy Services and Satyam have made Singapore their regional headquarters. However, the emerging pattern of industrial restructuring is best illustrated by the recent acquisition of NatSteel, Singapore by Tata Steel of India, accompanied by a pattern of supply-chain integration. Apparently, the Tata Steel and NatSteel plants in different South-East Asian countries are to be covered by a regional production network, which would involve pallets being shipped from India to the NatSteel plants and special steel to come from NatSteel's South-East Asian plants to India. In this way, the synergy or the locational advantages of India emanating from its iron ore deposits will be available to the NatSteel plants and NatSteel's production of special steels would be available to Tata Steel, to mutual advantage (Kumar, 2007).

E. Concluding remarks

It has been argued that investment liberalization occupies an important place in regional economic integration, complementing trade liberalization to facilitate the process of restructuring of industry along more efficient lines. This restructuring enables fuller exploitation of the locational advantages or synergies among member countries of the regional trading bloc and facilitates businesses benefiting from economies of scale and specialization. The single market plan of the European Union has unleashed such a pattern of industrial restructuring not only among European corporations but also among the operations of foreign multinationals operating in the European Union. Such restructuring also facilitates the creation of supply capabilities in relatively poorer countries, leading to a convergence of levels of development.

In recent times, Asian countries have also started to attach a far greater importance to regional economic integration in their trade policies after decades of multilateralism. A large number of free trade arrangements are taking shape in Asia at the subregional levels in South-East Asia (ASEAN) and South Asia (SAARC) or between the sub-regional groupings and their dialogue partners and between the dialogue partners. There are also discussions on building on these efforts to evolve a broader grouping. Although many of the Asian RTAs are in the early stages of development, the trend is quite clear. Another noticeable trend is that an increasing number of Asia-Pacific RTAs have extended their scope to include investments. Hence, there is recognition of the importance of investment liberalization for exploiting the full benefits of RTAs.

The investment provisions included in Asian RTAs have tended to be progressively liberal, given the varying levels of development existing in the region.

They have also included provisions on investment protection, promotion and facilitation, MFN and dispute settlement. Asia-Pacific RTAs are consistent with the provisions on investment as contained in the TRIMs Agreement and have sometimes adopted a more ambitious approach to eliminate performance requirements.

The attempts of ASEAN to deepen regional economic integration progressively through expedited schedules of implementation of AFTA, adoption of the ASEAN Investment Area, the ASEAN Industrial Cooperation Schemes and the Framework Agreement on Trade in Services, indicate recognition of the potential of industrial restructuring by the grouping.

ASEAN has also facilitated economic integration with other Asian countries by bringing them together as dialogue partners. This process has led to a number of bilateral FTAs that form an emerging virtual community. However, due to the varying scope and coverage of trade and investment rules in these initiatives, they hardly provide a seamless market through which the region's enterprises could achieve efficiency-seeking industrial restructuring. These attempts can be viewed as building blocks for a broader Asian community, as has been envisioned by some Asian leaders. The Community could become an arc of advantage, peace and shared prosperity in Asia.

The launch of the East Asia Summit in 2005, which brought together leaders of ASEAN and its six dialogue partners, provides an important forum for initiatives towards creating an East Asian economic area. The outcome of the second EAS included an agreement to launch a feasibility study for a comprehensive economic partnership of East Asia. By providing a framework for removing trade and investment barriers, that partnership would have the potential for unleashing a process of efficiency-seeking restructuring across countries in Asia and facilitating exploitation of their locational advantages and synergies for mutual benefit.

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II. INVESTMENT REGULATION THROUGH TRADE AGREEMENTS: LESSONS FROM ASIA

By Pierre Sauvé *

Introduction

Developing countries in Asia have a large stake in maintaining an open global system of trade and investment. The integration of the region into the world economy has been driven largely by market forces, particularly by private foreign direct investment and the related rise of intra-industry trade. When assessing the growth of Asia's trade and the respective roles of policy, technology and markets in influencing patterns of regional integration, a key conclusion that emerges is that technological change, markets and the private sector, particularly multinational firms and FDI, have been crucial in deepening integration. To date, empirical studies suggest that bilateral and regional trade and investment agreements have had only a limited impact on Asia's integration process, the most significant liberalization efforts having been unilateral in character.

Increasing trade integration within East and South- East Asia has been closely associated with changes in industrial organization and the spread of international production sharing, or the fragmentation of vertically integrated supply chains. The attractiveness of East and South- East Asia as production and investment locations has been enhanced by a variety of measures that reduce the friction and cost of trade, such as investment in ports and other infrastructure, the establishment of special economic zones and bonded industrial warehouses and duty drawback schemes. These arrangements have allowed investors to take advantage of economies of scale and specialization.

There are, however, unmistakable signs that the dynamics of Asian integration are changing, not least because of the protracted difficulties encountered in multilateral trade negotiations and the concomitant shift towards greater reliance on preferential routes to trade and investment integration, but also in the light of the emergence of, and competitive threats and opportunities from, China and India as regional giants.

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Countries in Asia and in other regions are increasingly experimenting with preferential trade and investment agreements, most often on a bilateral basis. Such a trend is currently on a strong upswing throughout Asia and increasingly spans several regions. Indeed, Asia's "noodle bowl" of overlapping trade agreements is not only expanding, but is increasingly involved with complex agreements in other parts of the world (see table 1). Such cross-regional agreements are driven by a variety of concerns such as energy security and access to minerals and other natural resources. They may also represent efforts by Asian countries to "lock in" reforms by making them part of formal trade and investment treaties with a major developed country or region. Many such agreements are also motivated by political considerations, as countries seek to cement diplomatic alliances by providing economic benefits to partners.

As Asia's preferential trade and investment agreements are still for the most part at an early stage, it is difficult to assess their effects empirically and assign structural influences to their core provisions. Yet, as they are implemented, such agreements will begin to have an impact on both regional and global trade and investment flows. Accordingly, it is important that preferential trade and investment liberalization be conducted in such a way that it supports, rather than contradicts, the openness that has so far been a defining characteristic of Asia's trade expansion and its integration into world markets.

This article takes stock of recent trends in the investment dimensions of deepening economic integration in Asia. It first explores the forces underlying the recent trend towards regional integration in Asia, in particular the distinction between de facto (driven by markets) and de jure (driven by formal institutional arrangements) forms of integration. The article then reviews the salient features of attempts to liberalize investment in Asia, focusing on the process of investment liberalization conducted among ASEAN countries through the Asian Investment Agreement (AIA) and between individual ASEAN countries and a set of key third country partners in Asia. Further, it draws on a sample of 19 key preferential trade agreements that demonstrate various degrees of comprehensiveness governing the protection and liberalization of cross-border investment activity.

The article concludes by assessing the possible effects of the recent shift towards de jure or treaty-driven forms of investment liberalization and rule-making, offering insights notably on the implications of ongoing trends for third-country investors and service providers operating in the region.

Table 1. A typology of Asian preferential trade agreements

Bilateral		Regional/Plurilateral	
Exclusively East Asian	**Geographically diverse**	**Exclusively East Asian**	**Geographically diverse**
Japan-Singapore (2002) Japan-Malaysia (2005) Japan-Philippines (2006) Japan-Brunei Darussalam (2007) *Japan-Indonesia* *Japan-Republic of Korea* *Japan-Thailand* *Japan-Vietnam* Republic of Korea-Singapore (2006) Malaysia-Republic of Korea (2005) Thailand-China (2003) Thailand-Lao People's Democratic Republic (2001) China-Hong Kong, China (2004) China-Macao (2004)	China-Pakistan (2005) China-Chile (2006) *China-Australia* *China-New Zealaand* *Indonesia-Australia* Japan-Mexico (2005) Republic of Korea-Chile (2004) Republic of Korea-United States (2007) *Japan-Australia* *Japan-India* *Republic of Korea-Mexico* *Republic of Korea-Canada* *Malaysia-Australia* *Malaysia-New Zealand* *Malaysia-Pakistan* *Malaysia-United States* Singapore-New Zealand (2001) Singapore-Australia(2003) Singapore-United States (2004) Singapore-Jordan (2004) Singapore-India (2005) *Singapore-Bahrain; Singapore-Canada; Singapore-The United Arab Emirates; Singapore-Egypt; Singapore-Kuwait; Singapore-Mexico;Singapore-Pakistan;* Singapore-Panama (2006); *Singapore-Peru Singapore-Qatar; Singapore-Sri Lanka;* Thailand-India (2003); Thailand-New Zealand (2005); Thailand-Australia (2005); Thailand-Bahrain (2002); Thailand-Peru (2005);*Thailand-United States*	ASEAN Free Trade Area (1992) China-ASEAN [(2004 (goods) and 2006 (services)] Republic of Korea-ASEAN (2006) Japan-ASEAN	Asia-Pacific Economic Relation Cooperation (1989) Singapore-European Free Trade Association (2003) Republic of Korea- European Free Trade Association (2005) *Thailand- European Free Trade Association* *ASEAN-India* *China- Gulf Cooperation Council* *China-Southern Africa Customs Union* Trans-Pacific (Singapore, Brunei Darussalam, New Zealand, Chile) (2005) *European Union-ASEAN* *European Union-India* *European Union-Republic of Korea*

Source: Nicolas (2006); updated by the author based on APTIAD (<www.unescap.org/tid/aptiad/>).
Note: Entries in italics refer to agreements under negotiation.

A. Understanding the rise of Asian regionalism

A major transformation in the global governance of cross-border trade and investment activity has occurred since 1995. The first major development was the creation of the World Trade Organization (WTO)[1], the global institution governing the conduct of international trade, in 1995. Rules contained in the Marrakesh Agreement establishing the WTO feature the most ambitious and comprehensive multilateral provisions ever ratified. Somewhat paradoxically, the second major development in international trade relationships during the same period has been the proliferation of bilateral, regional and other preferential trade agreements among nations. As the Doha Development Agenda (DDA)[2] of WTO continues to sputter, it is likely that recourse to preferential trade and investment liberalization will proliferate further in coming years. Such developments are forcing many WTO member states to review and reassess their trade policy strategies and priorities.

The creation of preferential trade agreements (PTAs) is by no means new. However, as figure 1 shows vividly, the sheer number and the speed with which such agreements have been negotiated since 1995 are simply astonishing. All but one WTO member - Mongolia - today conduct some measure of their trade relations on a preferential basis under one or more PTAs, and it is estimated that more than half of world trade activity today is governed by preferential rules. This section analyzes the recent history, characteristics and political economy of regional and bilateral trade integration from the viewpoint of two core concepts: integration of markets vs. integration by agreements, with a particular focus on Asia.

As its name suggests, the concept of integration of markets focuses on the idea that economies can integrate among themselves by relying primarily on the forces of the marketplace, i.e. by allowing the private sector to be the vanguard of trade and investment integration. This has at times been dubbed de facto integration. The second core concept is integration by agreements, which focuses on trade integration centered on recourse to de jure trade and investment treaties. This channel of integration emphasizes the primacy of legal instruments to further economic integration among countries.

There is little doubt that the two channels of integration are closely related and ultimately complementary in nature. The integration of markets without formal trade and investment agreements can create uncertainty for businesses inasmuch as the institutional foundations of an integrating area may not be sufficiently clear, transparent or predictable. At the same time, de jure integration can be meaningless if the underlying economic forces are not favourable towards integration, as the early experiences at

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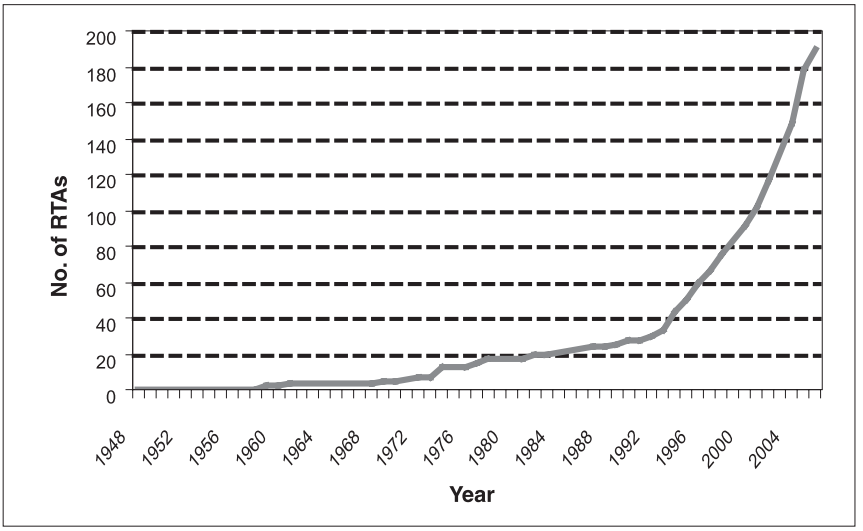
1 See Large Instruments Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, done at Marrakesh on 15 April 1994 (GATT Secretariat publication. Sales No. GATT/1994-7/).

2 See A/C.2/59/3, annex.

Figure 1. Evolution in the number of multilaterally - notified preferential trade agreements, 1948-2006



Source: World Trade Organization, 2007.

trade integration in Africa and Latin America in the 1960s and 1970s have so clearly revealed.

In today's globalizing environment characterized by deeper forms of integration among nations and the operation of regional and global innovation and production networks, the question arises as to the better means of integration in driving trade integration. Is there a logical sequence for policymakers to consider when examining these two channels of integration? Given that East and South-East Asia and Latin America are fertile regions in which various types of PTAs have proliferated in recent years, it is useful to review the experiences of these two regions in addressing these questions.

Asia has lagged behind Latin America in concluding formal trade agreements because key trading powers in the region, such as Japan, the Republic of Korea, Singapore, and Hong Kong, China had traditionally been more supportive of an open multilateral system, while China and Taiwan Province of China only recently joined the WTO.

The process of regional integration in Asia can be regarded as de facto in character even though by the end of 1990s most countries in the region had shown considerably greater interest in de jure forms of regionalism. The recent momentum towards formal (de jure) regional integration has been accompanied by a proliferation of bilateral PTAs not only within Asia but also with extra-regional countries, in particular with Latin America.

After a first wave of largely failed attempts to promote treaty-based forms of regional integration in the 1960s and 1970s, Latin American countries renewed de jure integration efforts in the early 1990s, with two agreements - namely the 1994 North American Free Trade Agreement (NAFTA, linking Canada, Mexico and the United States, itself an extension of the 1988 Canada-United States Free Trade Agreement) and the 1995 Common Market of the South (MERCOSUR),[3] linking Argentina, Brazil, Paraguay and Uruguay, setting a process in motion that would witness the emergence of a large and growing number of bilateral and regional PTAs among Latin American countries and with extra-regional countries by the end of the 1990s.

It is noteworthy that, given the different models of regional integration that have predominated in the two regions, intraregional trade in Latin America remains considerably lower than that observed in East Asia, despite Latin America's putative first mover advantage in de jure integration (see table 2).

The (timid) starting point of Asian de jure integration came with the ASEAN Free Trade Area (AFTA) initiated by the member countries of the Association of Southeast Asian Nations (ASEAN) in 1992. This process had been preceded by the launch in 1989 of the Asia-Pacific Economic Cooperation forum (APEC) (Petri, 2006). Although APEC is not a formal regional trade agreement, it provides a rather unique institutional setting - a best practice club of sorts - aimed at promoting trade and investment liberalization, economic and technical cooperation and regulatory convergence on a voluntary basis among its 21 member economies. While APEC is not a PTA in legal terms, it features a roadmap, known as the Bogor Goals, to achieve free trade and investment in the region by 2010 for its developed country members and by 2020 for its developing country members.[4]

The recent surge in Asian PTA negotiations can be seen as the region's response to a number of important factors. First, the halting pace of multilateral negotiations at WTO, combined with the success of deeper integration initiatives within the European Union and NAFTA, have raised interest in the efforts at closer economic integration with "like-minded" countries, including in the neighborhood (Bergsten, 1997). The most recent generation of PTAs typically covers a number of policy areas that go

3 MERCOSUR was created by the signing of the Treaty of Asuncion in 1991, and the transition phase to implement the common market was to begin in 1995.

4 At Osaka in November 1995, an agreement was reached on a set of fundamental principles to bring about the liberalization of trade and investment among APEC member economies. If the Bogor Goals are realized and the commitments of the 21 member economies are fully implemented, APEC countries could enjoy a substantial improvement in aggregate welfare through free trade and investment opportunities in the region, without however having entered into formal treaty arrangements. APEC adopted "open regionalism" as its underlying paradigm with the intention of sharing the benefits of free trade with non-members and thus trying to comply with the most favoured nation (MFN) principle of the WTO. The work of APEC in trade and investment liberalization has not however achieved the hoped-for success so far. However, this need not necessarily be viewed as a failure of "open regionalism", but rather the result of the broadening of APEC's agenda, which now includes such topics as security, trade facilitation and best practices in regulatory reform.

well beyond existing multilateral disciplines and offer deeper market access commitments (OECD, 2007). This includes "behind the border" subjects such as services, investment and competition policy that can lower service link costs between production networks, thereby enhancing export competitiveness in countries reliant on export-led growth models of development (Kimura and Ando, 2005; Thorbecke and Yoshitomi, 2006).

Table 2. East Asian and Latin American intraregional trade, various years

Year	Share of intraregional East Asian exports in total East Asian exports	Share of intraregional Latin American exports in total Latin American exports
1985	34.1%	10.0%
1990	39.7%	10.9%
1995	48.1%	17.2%
2000	46.4%	13.1%
2006	51.7%	13.1%

Source: United Nations Commodity Trade Statistics Database, various years.

A second main reason behind the rising interest in institutionalized integration in related to the much keener sense of Asian interdependence that took root in the aftermath of the Asian financial crisis of 1997-1998 which, combined with the "benign neglect" of multilateral financial institutions such as IMF, resulted in increased support for heightened regional coordination and integration (Van Hoa, 2002; Nicolas, 2007).

Before 1997, most economists considered economic cooperation in Asia (through trade and investment) as an example of a successful de facto regionalism, i.e., explained by the predominant interplay of market forces. However, the financial crisis of 1997-1998 revealed the weaknesses of informal regional cooperation arrangements. The financial crisis and its subsequent contagion to a number of economies in East and South-east Asia painfully demonstrated that the East Asian economies were closely intertwined and that a resolution of the crisis called for heightened regional cooperation in the trade and financial fields.

A rising sense of Asian identity emerged in the aftermath of the crisis. After the proposal to create an Asian Monetary Fund failed to materialize because of objections from the United States, ASEAN leaders responded by inviting China, Japan and the Republic of Korea to join a cooperative framework known as "ASEAN+3", in an effort to achieve greater economic cooperation in the region. The ASEAN+3 summit in November 1999 produced the "Joint Statement on East Asian Cooperation" which covered a wide range of areas for regional cooperation. In the early 2000s, other new economic situations - such as the quick recovery and recurring growth in Republic of Korea, the emergence of China as an economic superpower and the continued stagnant state of the Japanese economy - provided fresh impetus to new forms of Asian economic regionalism, including PTAs.

Although the financial crisis might have been the direct cause, a number of additional factors have contributed to the breakthrough and proliferation of the policy-led regionalism in Asia. First, regionalism was the natural result of decades of fast growth and the industrial transformations and economic restructuring that came in its wake. In a very tangible manner, de facto regionalism has paved the way and greatly facilitated the region's subsequent quest for de jure integration. The developments depicted above have created a new centre of East Asian economic activity that has begun to pose a genuine competitive challenge to North America and Europe in terms of its contribution to world output, trade and FDI. This is so even as two-way trade and FDI linkages between Asia and both regions have deepened.

A third factor encouraging the trend towards de jure integration in Asia is also closely connected to the fallout from the financial crisis, and is linked to region-wide perceptions of "benign neglect" on the part of international financial institutions, particularly IMF, in the aftermath of the Asian crisis. Asian policymakers perceived that major international institutions and the main global trading powers, particularly the United States, fell short in their support for the region on the path to deepened cooperation, particularly in the monetary and financial fields.

A final impulse is more inherently defensive in nature, owing to rising concerns throughout Asia over the competitive threats, including in terms of FDI attractiveness, of China's rise as the manufacturing hub of the world and of India's growing assertiveness in services innovation and trade. There can indeed be little doubt that the rise of China and its growing economic and political influence and assertiveness in the region and beyond, appear to have elicited a more favourable view of regional and bilateral cooperation and agreements. This is particularly true in Japan where the private sector began to express fears over the loss of market share, wild swings in currency values and declining FDI attractiveness (Pangestu and Gooptu, 2004; Masuyama, 2004; Gaulier and others, 2005; Damuri and others, 2006).

For countries such as India, Malaysia and Thailand, which compete with China for horizontal FDI, Eichengreen and Tong (2006) note that those countries have experienced greater difficulties in attracting foreign investment in manufacturing as a result of China's emergence. Their version of the China threat - that of an "FDI sucking sound", has arguably provided them with a strong incentive to pursue unilateral reforms at the domestic level and enter into PTAs to cement such reforms.

Using the Asian Development Bank's Asian Regional Integration Centre Free Trade Agreement database, Kawai (2007) recently identified several key features of East Asian PTAs, focusing on their configuration, outward-orientation, scope (or "WTO+" commitments) as well as their rules of origin regimes. Box 1 summarizes the ADB findings.

Box 1. Salient features of East Asian preferential trade agreements

Configuration

East Asian preferential trade agreements can be divided into bilateral and plurilateral (regional) agreements. Bilateral refers to agreements between two countries, whereas the term "plurilateral" covers agreements involving more than two customs territories (e.g. Australia-New Zealand-Chile-Singapore-Brunei Darussalam FTA), one territory (or territories) and a trading bloc (e.g. European Free Trade Association-Republic of Korea) or two trading blocs (e.g. European Union-Association of Southeast Asian Nations). On the whole, Asian countries are primarily opting for simple bilateral PTA configurations rather than the more complex plurilateral ones, as the former may be easier and speedier to negotiate and may be preferred by leading trading partners. There were 25 bilateral PTAs concluded by East Asian countries as of mid-2007, representing 76 per cent of all concluded PTAs). Among those currently under negotiation, bilateral PTAs also predominate, making up 80 per cent of the total. There are eight plurilateral agreements among concluded PTAs in East Asia, and an additional eight other agreements under negotiation.

Orientation

Looking at East Asian PTAs, the high degree of outward orientation is striking. Of all concluded PTAs, 22 were with countries or groups of countries outside East Asia in mid-2007. The outward orientation of East Asian PTAs under negotiation is even higher at 85 per cent. Having launched PTA negotiations with India, Australia and New Zealand, ASEAN as a group has most recently commenced PTA negotiations with the European Union. Singapore has concluded eight cross-regional PTAs with a wide geographical spread from North America and Latin America to the China, Japan, Middle East. Republic of Korea and Thailand, have also all concluded PTAs with trading partners in Latin America. China has concluded a PTA (goods only) with Pakistan and is negotiating PTAs with the member countries of the Cooperation Council for the Arab States of the Gulf as well as Iceland. The above trends lend support to East Asia's purported aim of maintaining strong commercial ties with the rest of the world, even as integration deepens internally.

Scope

The 33 PTAs (covering goods and/or services) concluded in East Asia may be broken down into four subcategories based on their scope of coverage: (a) goods-only; (b) goods and services; (c) goods, services and the so-called "Singapore Issues" (e.g. trade facilitation, trade and investment, trade and competition, transparency in government procurement); and (d) goods, services, Singapore Issues and deepened regulatory cooperation in areas such as labour standards, trade and environment, small and medium-sized enterprises, regulatory harmonization or convergence. Two-thirds of the PTAs agreed by East Asian countries as of mid-2007, a total of 21 agreements, featured WTO-plus provisions beyond trade in goods and services (the

Box 1. *(continued)*

treatment of trade-related intellectual property-related matters being subsumed under the goods trade). Of the total, nine feature disciplines on the Singapore Issues only, while 12 are yet more comprehensive in scope, featuring disciplines on both the Singapore Issues and regulatory cooperation matters.

Rule of origin regimes

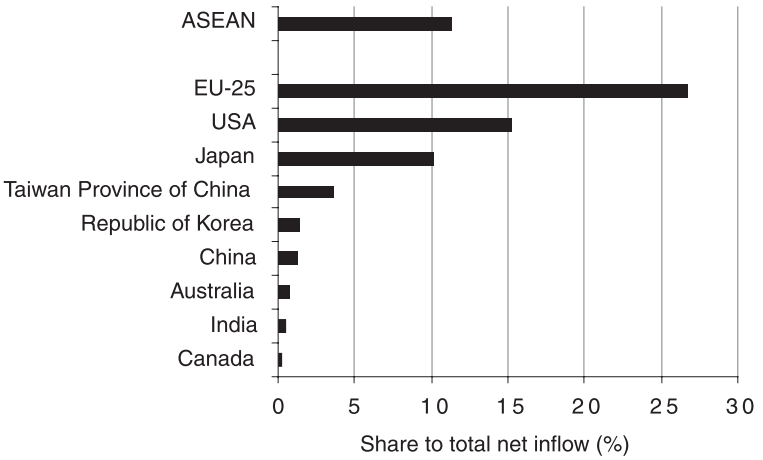
Rules of origin exist to determine which goods will enjoy preferential tariff treatment and thus prevent trade deflection among PTA members. Three such regimes can be found in PTAs: (a) a change in tariff classification (CTC) rule defined at a detailed level in the Harmonized System level; (b) a regional (or local) content or value-added rule requiring a product to satisfy a minimum regional (or local) value added (VA) in the exporting country or region of a PTA; and (c) a specific process (SP) rule mandating a particular production process for individual goods or product categories. Of the 28 free trade agreements concluded in East Asia, the majority (18) have adopted a combination of the three rules of origin regimes depicted above rather than applying one specific regime. Of the remaining, three have adopted the value added rule, another three use a combination of value added and CTC rules, while another four combine value added and specific process rules. The simplest rule of origin can be found under AFTA and the ASEAN-China FTA, which specifies 40 per cent regional value content across all tariffs. Many agreements involving Japan, the Republic of Korea and Singapore tend to use a combination of rules of origin.

Source: Kawai, 2007.
Note: The ADB defines "East Asia" as comprising the following group of countries: China including the Special Administrative Regions of Hong Kong, China and Macau, Japan, the Republic of Korea, Mongolia and Taiwan, Province of China.

B. Recent trends in FDI flows to Asia

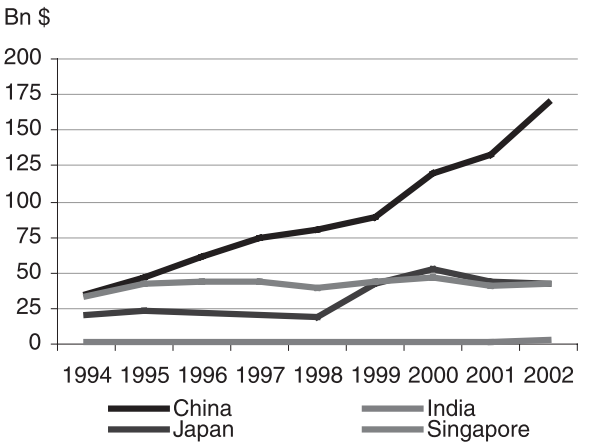
FDI flows to Asia and Oceania reached a new high in 2006 of US$230 billion up 15 per cent from 2005. The share of the region in total FDI in developing countries thus rose from 59 per cent to 63 per cent. Most FDI in and from the Asian region continues to come from and be directed towards Japan, the European Union and the United States. However, apart from Japan, other Asian countries are increasingly investing within the region (see figure 2). Taiwan Province of China thus invested more than US$4 billion in ASEAN countries during the period 2001-2005, making the island economy the sixth largest investor in the ASEAN block. Republic of Korea and China are also investing heavily in the region, having become the ninth and tenth most important investors, respectively, in ASEAN between 2001 and 2005. During the same period, intra-ASEAN FDI was more than $13 billion, constituting 11 per cent of the total FDI to the region.

Figure 2. ASEAN FDI net inflow from selected countries/regions, 2001-2005



FDI has provided a major boost to Asian trade in recent decades (ADB, 2006). As noted previously, production networks within the region have spurred trade in parts and components to other Asian countries, whereas vertical supply chains with countries outside the region have increased trade in capital goods, intermediate goods and final products. Through their global distribution and marketing chains, multinationals investing in Asia has played an important part in this process. This is reflected in the growing role of foreign-owned firms in exports from developing Asian countries (see figure 3 and ADB, 2006).

Figure 3. Exports of foreign affiliates, 1994-2002



Notes: For Singapore, data only refer to manufacturing.
Source: UNCTAD 2006.

C. Preferential investment liberalization in Asia: salient features

This section focuses attention on the key investment provisions found in a sample of 19 preferential trade and investment agreements (PTAs) in Asia and assesses their implications for third-country investors. As investors in services are often treated separately, interactions between the investment and service chapters of the agreements reviewed are also discussed. Box 2 lists the sample of Asian agreements featuring the investment provisions under review. This section draws on ongoing work by the author for which the core findings are summarized in tables 3 to 8 (Sauve and others, 2007).

By and large, the incipient research findings support the main insights found in Kumar (2007) which drew attention to an investment rule-making landscape in Asia characterized by increasing complexity and diversity but with a continued bias towards investment liberalization and the ability of third-country investors to broadly share in the benefits of ongoing trends in regional integration.

1. Definition and rules of origin for investment

Most PTAs in the region use a broad and "asset-based" definition of investments in the investment chapter, whereas a narrower "enterprise-based" definition of service investments is used in the services chapters (see table 3). Most definitions of commercial presence require ownership or control by natural or legal persons covered under the agreement as defined under its rules of origin/denial of benefits clauses (see below). The European Commission's recent mandate to negotiate an European Union-ASEAN agreement applies an enterprise-based definition of investors, but is highly transparent as one single chapter governs all investors.

In general, rules of origin (denial of benefits clauses) applied to investors and their investments (including Mode 3 commercial presence for FDI in service industries) under Asian PTAs are fairly liberal (see table 4). The most restrictive origin criterion for juridical persons - ownership and control - is applied in only two of the PTAs reviewed. Third-country juridical persons constituted or otherwise organized under the laws of a party with substantial business operations there - or in some cases those of any party - therefore enjoy preferential treatment under most agreements, conferring de facto MFN treatment to third country investors and contributing to minimizing the investment-distorting effects of PTAs. Rules of origin for natural persons extend benefits to permanent residents in some agreements, including those of EFTA (with the possibility of reservations for particular types of service suppliers). This is not the case for past or currently negotiated agreements of the United States or European Union, however.

It is important to contrast the "benign" rule of origin provisions found in the services and investment chapters of Asian PTAs (which are similar to those of most PTAs in general with the exception of a few South-South PTAs such as Mercosur, the Andean Pact or the China-Hong Kong CEPA, which have tended to adopt slightly more

Box 2. Investment in Asian preferential trade agreements: agreements under review

- Japan-Malaysia Economic Partnership (2006)
- Japan-Mexico Economic Partnership (2005)
- Japan-Singapore New-Age Economic Partnership Agreement (2002)
- Thailand-Australia Free Trade Agreement (TAFTA) (2005)
- European Community-Chile Association Agreement (2003-2005)
- Commission mandate to negotiate an European Community preferential trade agreement with ASEAN (excluding. Myanmar, Lao People's Democratic Republic and Cambodia) (2007)
- Free Trade Agreement between European Free Trade Association (EFTA) and Singapore (2003)
- Free Trade Agreement between EFTA and the Republic of Korea (2006) (Norway is not a party to the investment chapter)
- Trans-Pacific Strategic Economic Partnership among Brunei Darussalam, Chile, New Zealand and Singapore (May 2006) (not notified to the WTO)
- The New Zealand-Singapore Closer Economic Partnership (2001)
- Free Trade Agreement between the Republic of Korea and the Republic of Chile (2004)
- Free Trade Agreement between the Republic of Korea and the Republic of Singapore (2006)
- India-Singapore Comprehensive Economic Co-operation Agreement (2005)
- Framework Agreement on ASEAN Investment Area (AIA) (1998) and the ASEAN Framework Agreement on Services (AFAS) (1995) as amended by the 2003 Protocol
- Draft for Free Trade Agreement between the United States and the Republic of Korea (2007)
- Free Trade Agreement between the United States and Singapore (2004)
- Proposal by the United States for an investment chapter in a PTA with Thailand (2006)
- Services chapter of the China-ASEAN Free Trade Area (ACCEC; 2007)

restrictive denial of benefits clauses designed to confer first mover advantages to investments that are owned and controlled by juridical persons that are nationals of the integrating area) to those governing rules of origin in goods trade, whose restrictive nature in selected sectors have been shown to carry considerably greater risks for trade- and investment-distortive conduct (the paper reverts to the issue of rules of origin for goods trade in section D below).

Moreover, even if rules of origin (denial of benefits) for investment are liberal overall, market access restrictions - such as maximum levels for foreign equity participation - still restrict coverage substantially in some service industries (though considerably less frequently in manufacturing). In contrast, some Asian countries such as Singapore have made significant market access commitments in the services sector.

2. Key treatment provisions

Third-country service providers (modes 1, 2 and 4) covered under Asian PTAs can expect to be granted national treatment less often than investors (mode 3). Many agreements in the region list national treatment for services on a positive list basis and for investment on a negative list basis, whereas some agreements typically include national treatment on a negative list basis for both services and investments. Whereas an in-depth analysis of each country's sector and sub-sector schedules is necessary to establish whether obligations are more far-reaching in one agreement than another, agreements predicated on negative listing suggest wider coverage (Fink and Molinuevo, 2007; Roy, Marchetti and Lim, 2006).

Tables 5 to 7 summarize the key treatment provisions found in Asian PTAs. Most PTAs include most-favoured-nation (MFN) clauses. There is no apparent pattern, however, as to which types of agreements exclude MFN provisions and whether agreements are based on negative or positive-list approaches. Several agreements, notably those entered into by EFTA countries with partners in the region (Republic of Korea and Singapore), include a wide exception to MFN treatment for all other PTAs in clauses related to regional economic integration organization exceptions. NAFTA-inspired agreements, such as the United States agreements with the Republic of Korea and Singapore, allow the parties to benefit from better treatment granted to third parties in another PTA signed after-but not before-the entry into force of the PTA. As more recent agreements tend to include wider commitments, the NAFTA-type approach to MFN treatment, if still imperfect, is better able to multilateralize preferential commitments. That said, the tendency towards permitting broad exemptions to MFN treatment reduces its practical relevance in the context of Asian PTAs.

For both national treatment and MFN clauses, semantic differences across agreements may have important implications. Negative list service chapters typically use the term "in like circumstances" instead of the GATS language, "like service suppliers and services", which tends to be used in positive-list agreements, such as in EFTA agreements and AIA. If future jurisprudence establishes that the first term is broader in

scope, then third-country service suppliers may have obtained lower coverage. On the other hand, future jurisprudence might also clarify whether, mentioning both "services" and "service providers" entails wider coverage than referring only to the latter as is the case in United States agreements with Singapore and the Republic of Korea.

3. Provisions on investment protection

In contrast to treatment standards, provisions on investment protection typically does not vary depending on whether the investment is in services or in other sectors (see table 8). Most of the sample PTAs reviewed feature key investment protection provisions, including umbrella clauses[5] , transfer provisions, overall treatment standards, expropriation clauses and compensation requirements. Apart from certain exceptions, protection provisions are largely comparable to those found in bilateral investment treaties.

Transfers of capital in connection with foreign investments are also protected in a relatively consistent and robust manner across Asian PTAs. Agreements guarantee investors the right to transfer current and capital transactions without delay, and to use particular currencies at specified exchange rates, subject to common exceptions in the case of serious balance-of-payments, exchange rate or monetary policy difficulties.

It is not clear from available case law whether "fair and equitable treatment" is an independent treatment standard. If it is, then third-country investors might have obtained stronger protection rights under some PTAs than investors covered under agreements that: do not include this standard; or include it but mention that it is similar to established customary international law, as is the case in United States agreements.

Apart from the European Union agreements, all reviewed PTAs with investment coverage broadly mimic standard bilateral investment treaty provisions on direct and indirect expropriation and compensation requirements. However, the EFTA-Singapore agreement refers to "de facto" rather than 'indirect' expropriation and does not specify compensation requirements in detail. Whether this has important implications is not clear from available jurisprudence, but it is doubtful in this case, given Singapore's overall investor-friendly environment and the fact that the two terms are often used interchangeably.

4. Provisions on dispute settlement

Except for European Union agreements, all PTAs with investment coverage reviewed in this paper offer investors the choice of investor-to-state dispute settlement under the World Bank's International Centre for the Settlement of Investment Disputes (ICSID) or ad hoc procedures using UNCITRAL rules in most instances (see table 8).

5 An umbrella clause stipulates that the host country assumes the responsibility to respect other obligations it has with regard to investments of investors of the other contracting party and thus not only in connection with an investment agreement.

Table 3. Investment and commercial presence: definitions and relationships

Agreement	Definition of investment	Definition of commercial presence in services chapter	Relationship between investment in services and horizontal investment disciplines
Japan-Malaysia	Asset based- open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence.	Service chapter prevails in case of inconsistencies with the investment chapter's obligations on national treatment, most favoured nation, and performance requirements.
Japan-Mexico	Asset based- closed list: includes FDI, portfolio investment and various forms of tangible and intangible property.		Investment disciplines apply.
Japan-Singapore	Asset based- open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence.	Relationship not expressly defined. Singapore has scheduled a reservation giving precedence to the services disciplines in case of inconsistencies with investment chapter's obligation on national treatment and performance requirements.
Thailand-Australia Free Trade Agreement	FDI as defined by IMF.	GATS definition of commercial presence.	One single schedule of commitments for services and investment.
European Community-Chile	Direct investment include branches	GATS definition of commercial presence. Ownership or control not necessary.	Services chapter solely governs commercial presence.
Draft European Community mandate for European Community-ASEAN[a]	Builds on GATS provisions of commercial presence and extends them to investors in non-services sectors. Ownership or control not necessary.		One schedule of commitments for services and investment.
EFTA-Singapore	Asset based-open list: includes FDI, portfolio i nvestment and various forms of tangible and intangible property.	GATS definition of commercial presence.	The investment chapter's national treatment and most favoured nation obligations do not apply to commercial presence in any service sector.
EFTA-Republic of Korea	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence.	The investment chapter's national treatment and most favoured nation obligations do not apply to commercial presence in sectors covered by the services chapter.
Trans-Pacific Strategic Economic Partnership (SEP)	Investment chapter still under negotiation.	GATS definition of commercial presence. Ownership or control not necessary.	No investment disciplines yet, only services disciplines apply

Table 3. ***(continued)***

Agreement	Definition of investment	Definition of commercial presence in services chapter	Relationship between investment in services and horizontal investment disciplines
New Zealand - Singapore	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence. Ownership or control not necessary.	The investment chapter's national treatment and most favoured nation obligations do not apply to commercial presence as governed by services chapter.
Chile - Republic of Korea	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.		Investment disciplines apply.
Republic of Korea - Singapore	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.		Investment disciplines apply.
India - Singapore	Asset based-open list: Includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence.	Service chapter prevails in case of inconsistencies.
AIA/AFAS	Asset based- open list. Excludes portfolio investment.	Not explicitly defined, but implicitly follows GATS.	Does not apply to investment in services.
United States -Republic of Korea draft	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	GATS definition of commercial presence for financial services.	Investment disciplines apply.
United States -Singapore	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.		Investment disciplines apply. investment chapter does not
United States -Thailand[b]	Asset based-open list: includes FDI, portfolio investment and various forms of tangible and intangible property.	No draft available.	National treatment provision in apply to services. Service chapter prevails in case of inconsistencies.
Services chapter of the China-ASEAN Free Trade Area draft	Investment chapter still under negotiation.	GATS definition of commercial presence .	No investment disciplines yet, only services disciplines apply

Notes: a) Excluding Myanmar, Lao People's Democratic Republic and Cambodia.
b) United States proposal.
Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Service investors will not be able to bring a dispute to investor-State arbitration if it relates to matters not covered by the investment chapter, as is sometimes the case in agreements with separate, self-contained, chapters covering all aspects relating to trade and investment in financial services (following the NAFTA precedent). The latter thus have to rely on ad hoc Sate-to-State arbitration. Service companies tend to enjoy access to investor-to-State arbitration for all aspects covering investment in services (with the exception of financial services), whereas national treatment and MFN provision for commercial presence are not covered by the investor-to-State mechanism in other agreements.

In contrast to United States agreements, some PTAs require consent by the disputing parties - though only in the case of pre-establishment disputes for some agreements - and do not always include explicit transparency provisions. Many agreements moreover do not allow for consolidation of two or more separately-submitted claims with a question of law or fact in common and arising out of the same events or circumstances.

D. The rise of preferential trade and investment agreements and their likely impacts

The general consensus in policy research circles is that the process of economic integration in Asia has so far been driven primarily by economic forces due to the FDI-induced integration of production networks, as well as by the impetus flowing endogenously from continued region-wide growth which, ceteris paribus, naturally increases trade and investment activity at the regional level (Dobson and Yue, 1997; Kimura and Ando, 2003; Damuri and others, 2006). A report by the Asian Development Bank (2002) finds that, while PTAs have the potential to increase intraregional trade and investment flows, as observed most markedly in the case of the European Union and NAFTA, their impact on the Asia-Pacific region to date has been small.

However, this dynamic is undergoing significant change as Asian countries increasingly turn towards bilateral PTAs rather than the "open regionalism" more systematically pursued by ASEAN and APEC (Scollay, 2004; ADB, 2006)[6] . In particular, Japan, India, the Republic of Korea, Singapore and Thailand have all been active in trying to facilitate economic integration - and to some extent counterbalance the rise of China, through negotiations of formal trade agreements featuring comprehensive disciplines on a bilateral or regional investment. The same countries have also been active signatories of bilateral investment treaties, both within and outside the region, as the scale of their own FDI outflows has grown.

6 The APEC process can still be argued today as proceeding along open regionalism lines in the sense that its Member countries individual action plans are typically pursued on an MFN basis.

Table 4. Rules of origin/denial of benefits

Agreement	Natural persons		Juridical persons		
	Extended to domestic nationals (or "citizens")	Extended to permanent residents	Limited to domestically owned or controlled service suppliers/investors	Extended to judicial persons constituted under domestic laws and having substantial business operations in the domestic territory	Other provisions
Japan-Malaysia	Yes	No (Japan) Yes (Malaysia)	No	Yes	Parties can deny FTA benefits to service providers and investors from non-parties with which a party does not maintain diplomatic relations or where certain trade sanctions apply. Investment chapter does not extend benefits to branches of enterprises of third States.
Japan-Mexico	Yes	No	No	Yes	Parties can deny FTA benefits to investors from non-parties with which a party does not maintain diplomatic relations or where certain trade sanctions apply.
Japan-Singapore	Yes	No (Japan) Yes (Singapore)	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any party (services chapter only)
Thailand-Australia Free Trade Agreement	Yes	No	Yes (for services and investment disciplines)	Yes (for investment chapter)	
European Community-Chile	Yes	No	No	Yes	
Draft European Community mandate for European Community-ASEAN[a]	Yes	No	No	Yes	Benefits also extended to juridical persons with substantial business operations ("possesses a real and continuous link") in the territory of any party.
European Free Trade Association-Singapore	Yes	Yes for investors. Not automatically for service suppliers.	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any party (services chapter only)

Table 4. ***(continued)***

Agreement	Natural persons		Juridical persons		
	Extended to domestic nationals (or "citizens")	Extended to permanent residents	Limited to domestically owned or controlled service suppliers/investors	Extended to judicial persons constituted under domestic laws and having substantial business operations in the domestic territory	Other provisions
European Free Trade Association - Republic of Korea	Yes	Yes for investors. Not automatically for service suppliers	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any WTO member, if service supplier is owned or controlled by person of a party (services chapter only).
Trans-Pacific SEP[b]		Yes	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any party (services chapter only).
New Zealand - Singapore	Yes	Not automatically.	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any party (services chapter only). No substantial business operations test in investment chapter.
Chile - Republic of Korea	Yes	Yes	No	Yes	Parties can deny FTA benefits to investors from non-parties with which a party does not maintain diplomatic relations or where certain trade sanctions apply (investment chapter only).
Republic of Korea - Singapore	Yes	Yes	No	Yes	
India - Singapore	Yes	Yes	Yes (for services supplied through commercial presence and investment disciplines)	Yes (for services supplied cross border and through consumption abroad)	Benefits can be denied if the juridical person is owned or controlled by persons of the denying party (only for modes 1 and 2 in services).
AFAS/AIA	Yes	Yes for investors. Not automatically for service suppliers.	No	Yes	Benefits also extended to juridical persons with substantial business operations in the territory of any party (services chapter only). Investment chapter allows for cumulated equity calculations.

Table 4. ***(continued)***

Agreement	Natural persons		Juridical persons		
	Extended to domestic nationals (or "citizens")	Extended to permanent residents	Limited to domestically owned or controlled service suppliers/investors	Extended to judicial persons constituted under domestic laws and having substantial business operations in the domestic territory	Other provisions
Unite States-Republic of Korea draft	Yes	No	No	Yes	Parties can deny FTA benefits to service providers and investors from non-parties with which a party does not maintain normal economic relations or where certain trade sanctions apply.
United States-Singapore	Yes	No	No	Yes	Parties can deny FTA benefits to service providers and investors from non-parties with which a party does not maintain diplomatic relations or where certain trade sanctions apply.
Services chapter of the China-ASEAN Free Trade Area draft[b]	Yes	No	Yes (for commercial presence)	Yes	

Notes: [a]) Excludes Myanmar, Lao People's Democratic Republic and Cambodia.
[b]) Only for services (investment chapter not finalized).
Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Based on what we know about PTAs in general, the rush towards regional and bilateral integration could have important implications for the future of trade and investment flows in Asia. In a recent "meta-analysis" of all relevant econometric studies of preferential trade agreements, the World Bank (2004) found that regional/bilateral trade increases as a result. Such an outcome is confirmed by general equilibrium simulations and there is strong evidence that PTAs contribute to the increased regionalization of world trade patterns (Pelagidis and Papasotirou, 2002).

The more interesting question for third-country investors, though, is whether increased intraregional trade comes at their expense. Athukorala (2006) finds that even though there has been a rapid expansion of components trade within AFTA, this has been complemented by increased trade in final goods with countries outside the region.[7]

7 Production-sharing leads to massive double counting of published trade data as goods cross multiple borders in the course of their production. If not controlled for, this will overestimate the importance of intra-regional trade, and underestimate the importance of extra-regional trade and thus generate misleading inferences as to regional integration trends in trade (Athukorala, 2003; Athukorala and Yamashita, 2006).

Table 5. Treatment of investment

	Establishment				Post-establishment			
	National treatment		Most favoured Nation		National treatment		Most favoured Nation	
	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list
Japan-Malaysia		+		+ (Not vis-à-vis ASEAN members for Malaysia)		+		+ (not vis-à-vis ASEAN members for Malaysia)
Japan-Mexico		+		+ (Not past agreements, and three sectors in future agreements)		+		+ (not past agreements, and three sectors in future agreements)
Japan-Singapore		+		Request		+		Request
Thailand-Australia Free Trade Agreement	+			+		+		+
European Community-Chile ***(does not replace BITs)***	+		No most favoured nation clause or request		+		No most favoured nation clause or request	
Draft European Community mandate for European Community-ASEAN[a] ***(does not replace Bilateral investment treaties)***	+			+ (Regional economic integration organization-like clause)	+			+ (Regional economic integration organization -like clause)
European Free Trade Association-Singapore		+		+ (Regional economic integration organization clause)		+		+ (Regional economic integration organization clause)
European Free Trade Association-Republic of Korea ***(replaces and suspends Swiss Bilateral investment treaties)***		+		+ (Regional economic integration organization clause)		+		+ (Regional economic integration organization clause)
Tran-Pacific SEP	No investment disciplines yet.							
New Zealand – Singapore		+		+		+		+
Chile – Republic of Korea ***(replaces and suspends Bilateral investment treaties)***		+		+ (Regional economic integration organization clause)		+		+ (Regional economic integration organization clause)
Republic of Korea – Singapore		+		Request		+		Request
India – Singapore	+ India	+ Singapore		Request	+			Request
ASEAN Investment Area ***(does not replace Bilateral investment treaties)***		+		+ (intraregional)		+		+ (intraregional)
United States-Republic of Korea Draft		+		+ (not past agreements, and three sectors in future agreements)		+		+ (not past agreements, and three sectors in future agreements)
United States-Singapore		+		+ (not past agreements, and three sectors in future agreements)		+		+ (not past agreements, and three sectors in future agreements)
United States-Thailand[b]		+		+ (not past agreements, and three sectors in future agreements)		+		+ (not past agreements, and three sectors in future agreements)
Services chapter of the China-ASEAN Free Trade Area draft	Investment chapter under negotiation. No draft available.							

Notes: a) Excludes Myanmar, Lao People's Democratic Republic and Cambodia.
b) United States proposal

Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Table 6. Treatment of services

Agreement	Establishment						Post-establishment					
	Market access		National treatment		Most favoured nation		Market Access		National treatment		Most favoured nation	
	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list
Japan-Malaysia	+		+			+ (not binding for preferences under other PTIA)	+		+			+ (not binding for preferences under other PTIA)
Japan-Mexico				+		+ (not past agreements, and 3 sectors in future agreements)				+		+ (not past agreements, and 3 sectors in future agreements)
Japan-Singapore	+		+			Request	+		+			Request
Thailand-Australia Free Trade Agreement	+		+			Request	+		+			Request
European Community-Chile	+		+		No most favoured nation clause or request		+		+		No most favoured nation clause or request	
Draft European Community mandate for EC-ASEAN[a]	+		+			+ (Regional economic integration organization -like clause)	+		+			+ (Regional economic integration organization -like clause)
European Free Trade Association-Singapore	+		+			+ (Regional economic integration organization clause)	+		+			+ (Regional economic integration organization clause)
European Free Trade Association-Republic of Korea	+		+			+ (Regional economic integration organization clause)	+		+			+ (Regional economic integration organization clause)
Trans-Pacific SEP		+		+		+ (not past agreements, and 3 sectors in future agreements for Chile, New Zealand and Singapore)		+		+		+ (not past agreements, and 3 sectors in future agreements for Chile, New Zealand and Singapore)
New Zealand – Singapore	+		++		No most favoured nation clause or request				+		No most favoured nation clause or request	
Chile – Republic of Korea				+		Request				+		Request
Republic of Korea – Singapore		+ (not mode 3)		+ (not financial services)		Request	+	+ (not mode 3)		+ (not financial services)		Request
India – Singapore	+		++			Request	+		+			Request

Table 6. *(continued)*

Agreement	Establishment						Post-establishment					
	Market access		National treatment		Most favoured nation		Market Access		National treatment		Most favoured nation	
	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list	Positive list	Negative list
ASEAN Framework Agreement for Trade in Services	+		+			+ (intraregional)	+		+			+ (intraregional)
US-Republic of Korea draft		+		+ (not mode 1 in financial services)		+(Not past agreements, and 3 sectors in future agreements)		+		+ (not mode 1 in financial services)		+(Not past agreements, and 3 sectors in future agreements)
United States-Singapore		+		+ (not mode 1 in financial services)		+(Not past agreements, and 3 sectors in future agreements)		+		+ (not mode 1 in financial services)		+(not past agreements, and 3 sectors in future agreements)
Services chapter of the China-ASEAN Free Trade Area draft	+		+			+ (intraregional)	+		+			+ (intraregional)

Notes: a) Excludes Myanmar, Lao People's Democratic Republic and Cambodia.
Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Furthermore, as noted above, and observed by Dobson and Yue (1997) and Kawai (2007), increased regionalization in Asia is offset by continued dependence on non-Asian markets and multinational investors. The end result is that even as the Asian region continues to experience greater integration, its dependence on the global economy constrains inward-looking policy choices.

Will the recent shift towards PTAs change such a pattern? When compiling all the regression estimates of authoritative studies, the World Bank (2005) was unable in a recent study to reach any definitive conclusions as to whether PTAs are in fact trade- or FDI-diverting per se. It seems that some agreements can induce such effects, while others do not. The devil, as always, lies in the details of individual agreements. So what, then, may explain some of the variations observed?

First, PTAs that are open to trade with third countries and cover practically all economic sectors are typically found to be less trade- and investment-diverting on average. Too high external tariff barriers relative to preferential tariffs and too many exceptions will tend to lead to trade and investment diversion and thus likely hurt third-country suppliers or compel them to adopt business models - via FDI - that they would otherwise not pursue. Also, since countries in Asia continue to rely significantly on extra-regional trade for their growth dynamism, trade diversion would hurt Asian countries themselves (Athukorala and Yamashita, 2006).

Table 7. Specifications in treatment standards

Agreement	National treatment				MFN				National treatment/MFN to other party		National Treatment/ most favoured nation to other party	
	Services treatment to 'like'		Investment treatment to 'like'		Services treatment to 'like'		Investment treatment to 'like'					
	Circum-stances	Service suppliers/ services	Circum-stances	Investors/ Investments	Circum-stances	Service suppliers/ services	Circum-stances	Investors/ investments	Service suppliers	Service suppliers and services	Investors	Investors and investments
Japan-Malaysia		+	+			+	+			+		+
Japan-Mexico	+		+		+					+		+
Japan-Singapore		+	+			+ (Request)	+ (Request)			+		+
Thailand-Australia Free Trade Agreement		+	+			+ (Request)	+			+		+
European Community-Chile		+	+ ("economic activity")		No most favoured nation clause or request					+	"legal or natural persons"	
Draft European Community mandate for European Community-ASEAN[a]	Like investors (incl. service suppliers) and "all measures affecting establishment"[2]				Like investors (incl. service suppliers) and "all measures affecting establishment"							"investors" and "all measures affecting establishment"
European Free Trade Association-Singapore[b]		+	+ ("*Situation*")			+	+ ("*Situation*")			+		+
European Free Trade Association-Republic of Korea		+	No reference to factual comparisons			+	No reference to factual comparisons			+		+
Trans-Pacific SEP	+		No investment disciplines yet.		+		No investment disciplines yet.			+	No investment disciplines yet.	
New Zealand – Singapore		+	+ ("*Situation*")		No most favoured nation clause or request		+ ("*Situation*")			+		+
Chile – Republic of Korea	+		+		Does not mention factual comparison in request		+			+		+
Republic of Korea – Singapore	+		+		Does not mention factual comparison in requests					+		+
India – Singapore		+	+		Does not mention factual comparison in requests					+		+

Table 7. ***(continued)***

Agreement	National treatment				MFN				National treatment/MFN to other party		National Treatment/ most favoured nation to other party	
	Services treatment to 'like'		Investment treatment to 'like'		Services treatment to 'like'		Investment treatment to 'like'					
	Circum-stances	Service suppliers/ services	Circum-stances	Investors/ Investments	Circum-stances	Service suppliers/ services	Circum-stances	Investors/ investments	Service suppliers	Service suppliers and services	Investors	Investors and investments
ASEAN Framework Agreement for Trade in Services / Association of Southeast Asian Nations	"discriminatory measures"			+		+		+		+		+
United States-Republic of Korea draft	+		+		+		+		+			+
United States-Singapore	+		+		+		+		+			+
United States-Thailand[c]	No draft available		+		No draft available		+		No draft available			+
Services chapter of the China-ASEAN Free Trade Area draft		+	No investment disciplines yet.			+	No investment disciplines yet.			+	No investment disciplines yet.	

Note: a) Excludes Myanmar, Lao People's Democratic Republic and Cambodia.
b) The definition of establishment can be found in footnot 3 of the analysis.
c) United States proposal.

Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Table 8. Investment protection and dispute settlement

Agreement	Umbrella clause	Transfers	Standard of treatment/ Fair and equitable	Compen-sation	Expropriation		Dispute settlement		Scope of application of investment protection disciplines to goods and services
					Direct	Indirect	State-State	Investor-State	
Japan-Malaysia		+	+	+	+	+	+	+	All protections apply.
Japan-Mexico		+	+	+	+	+	+	+	All protections apply.
Japan-Singapore		+		+	+	+	+	+	All protections apply.
Thailand-Australia Free Trade Agreement		+	+	+	+	+	+	+ (Post-establish-ment only)	Protection applies to commercial presence.
European Community-Chile		+	References to BITs				+		Protection applies to free transfers.

Table 8. ***(continued)***

Agreement	Umbrella clause	Transfers	Standard of treatment/ Fair and equitable	Compen-sation	Expropriation		Dispute settlement		Scope of application of investment protection disciplines to goods and services
					Direct	Indirect	State-State	Investor-State	
Draft European Community mandate for European Community-ASEAN[a]	?	?	References to BITs				+		Protection applies to free transfers.
European Free Trade Agreement-Singapore	+	+	+	+	+	'de facto'	+	+	Protection applies to commercial presence.
European Free Trade Agreement-Republic of Korea ***(replaces and suspends Swiss BIT)***	+	+	+	+	+	+	+	+	Protection applies to commercial presence.
Trans-Pacific SEP	No investment disciplines yet.								
New Zealand – Singapore		NT and most favoured nation		NT and most favoured nation			+	+	Protection applies to commercial presence.
Chile – Republic of Korea ***(replaces and suspends BIT)***		+	+	+	+	+	+	+	All protections apply.
Republic of Korea – Singapore		+	+	+	+	+	+	+	All protections apply.
India – Singapore									The services chapter incorporates selected protections of the investment chapter to be applied to commercial presence. The protection of the investment chapter applies to other investments.
		+		+	+	+	+	+ (Not for NT or post-establish-ment)	
AIA ***(does not replace BITs)***		+	+	+	+	+	+	+ (Post-establish-ment only)	Protection applies to investment in services.
Unite States-Republic of Korea Draft		+	+	+	+	+	+	+	Protection applies to commercial presence.
United States-Singapore		+	+	+	+	+	+	+	Protection applies to commercial presence.
United Statees-Thailand[b]		+	+	+	+	+	+	+	Protection applies to commercial presence.
Services chapter of the China-ASEAN Free Trade Area	No investment disciplines yet.								

Notes: a) Excludes Myanmar, Lao People's Democratic Republic and Cambodia.
b) United States proposal.

Source: Compiled based on APTIAD (<www.unescap.org/tid/aptiad/>) and legal text of individual agreements.

Until recently, the tendency had been towards declining margins of regional preference - for example between the average MFN and preferential tariffs - for ASEAN members, indicating that trade liberalization conducted multilaterally was moving faster than that conducted along regional lines (Kimura and Ando, 2003; Damuri and others, 2006). The recent acceleration of tariff cuts under AFTA, the proliferation of preferential trade agreements and the continued negotiation gridlock in Geneva, suggest that the relationship described above has been somewhat reversed over the course of the Doha Development Round of negotiations, which began in 2001.

At the same time, it must be emphasized that third-country traders and investors have benefited from the continued commitment of Asian countries to liberalize their trade and investment regimes, as well as their regulatory regimes in services, on an autonomous basis. Simply put, and as noted earlier in regard to liberal rule of origin/ denial of benefits clauses, third countries have often enjoyed quasi- or de facto MFN treatment in their trade and investment relations with Asian countries.

Box 3. Tariff reductions in selected Asian preferential trade agreements

ASEAN Free Trade Area: Negative list approach, 0 per cent target. The CEPT scheme allows countries to maintain temporary exclusions, a sensitive products list and general exclusion lists. Commodities are phased into inclusion gradually, and there is a longer time frame for the CLMV countries. ASEAN-6 reached 0-5 per cent tariff in 2003 and Viet Nam in 2006. Lao People's Democratic Republic and Myanmar are to do so in 2008, and Cambodia in 2010.

Japan-Singapore: Positive-list approach. Tariffs on Singapore's imports from Japan will be 0 per cent immediately. Complete tariff elimination in Japan with 10-year transition period. Japan maintains some exceptions, including meat and meat products, fruit and vegetables, dairy products, and cane and beet sugar.

ASEAN-China: Negative-list approach. Under the normal track, tariffs will be eliminated by 2010 for ASEAN-6. Under the sensitive track, tariff reductions will start in 2012, to reach 0-5 per cent tariff levels by 2018. ASEAN-4/CLMV countries are given five more years to follow a similar tariff reduction scheme. Tariffs on goods under the Early Harvest Programme, which includes agricultural products (Chapters 01 to 08 of the HS code), will be reduced to zero for ASEAN-6 and China.

ASEAN-India: Positive-list approach. Progressive elimination of tariffs in substantially all trade in goods. Under the normal track, tariffs will be reduced or eliminated by 2011 for Brunei Darussalam, India, Indonesia, Malaysia, Singapore and Thailand, and by 2016 for other ASEAN members. Specific treatment is foreseen for sensitive products. The early harvest programme follows a positive-list approach.

Source: Feridhanusetyawan, 2005.
Note: ASEAN-6: Original five signatories of ASEAN plus Brunei Darussalam. ASEAN-4 or CLMV.

To date, there is very limited evidence of trade and investment policy backsliding in Asia, such that the wedge between actual (applied) and bound policies and measures and the fact that third countries are not direct beneficiaries of the protective properties of policy bindings have not proven unduly problematic in most instances.

Many of the recent or currently negotiated Asian PTAs focus on economy-wide liberalization rather than creating "carve-outs" to serve particular rent-seeking sectors and interests (ADB, 2006; Plummer, 2006). For this reason, Frankel (1997), Fink and Primo Braga (1999), Li (2000), Clark and Tavares (2000), Gilbert, Scollay and Bora (2001) and Soloaga and Winters (1999) all find that AFTA has been more trade-creating than diverting. Also, recently concluded negotiations over an ASEAN-China PTA, while initially limited to goods trade (a services complement has since been added), liberalizes 98 per cent of all tariff lines and includes trade in agricultural products which can help to create momentum for further agricultural liberalization in the Asia-Pacific region (Cheong and Kwong, 2005; Feridhanusetyawan, 2005).

Of course, there are important exceptions to the trends depicted above. Some of the recent PTAs of Thailand and a number of agreements into which India has entered appear to have been driven more by mercantilistic than liberal ideals and feature highly selective preferential tariff dismantling rather than comprehensive liberalization, ultimately calling into question their compatibility with the disciplines of Article 24 of GATT (Sally, 2006). Nonetheless, most Asian PTAs - those in existence today and those under negotiation - tend to be liberal in character and maintain relatively small margins of preference for regional producers (ADB, 2006; Plummer, 2006; Kawai, 2007; Hapsari and Mangunsong, 2006; also box 3).[8]

An important question is whether such a benign policy environment will continue to define the norm or whether the region's recent conversion to PTA-centric forms of integration will raise new hurdles for third country traders and investors.

A second source of potential variance in the effects of PTAs relates to the design of rules of origin for goods trade. Lacking a harmonized global rule of origin regime, PTAs with too strict or complex rules-of-origin have been shown to exert trade- and investment-diverting effects that can nullify or impair some of the new trade opportunities a PTA is supposed to create (Panagariya, 1998). One study has shown that the rules of origin adopted in the NAFTA were equivalent to an added tariff of 4.3 per cent (Estevadeordal and Suominen, 2004). It is therefore unfortunate that, apart from ASEAN members within AFTA, Asian PTAs have so far tended to eschew simple and transparent rules of origin for trade in goods (James, 2006). This is notably the case

8 Though margins of preference under AFTA fell steadily between 1994 and 2001, a period during which Uruguay Round tariff cuts became effective, Hapsari and Mangunsong (2006), citing work by Damuri et al. (2006), report evidence of rising preference margins - hence of likely trade diversion - within ASEAN in 2002-03, a trend which the protracted state of the WTO's Doha Development Agenda is unlikely to counter.

of an otherwise "benign" agreement such as that between Japan and Singapore (see box 4).

Box 4. Rules of origin in AFTA and the Japan-Singapore PTA

AFTA: Rules of origin are relatively simple and liberal. A product has to satisfy 40 per cent of its content originating from any member States. Cumulative rules of origin state that inputs for finished products eligible for preferential treatment in other member states shall be considered as originating in the member State where working or processing of the finished product has taken place, provided that the aggregate ASEAN content of the final products is not less than 40 per cent.

Japan-Singapore: Rules of origin are less liberal and rather complex. Liberal rules of origin typically apply a general rule that the local content of the product has to be at 40-50 per cent. In the Japan-Singapore agreement, rules of origin are product specific, or the originating content must be no less than 60 per cent of the total value of the materials. The material must undergo the final production process in the territory of either party. Simple cutting, mixing, and packaging are not considered sufficient transformation for rules of origin. Origin can accumulate bilaterally.

Source: Feridhanusetyawan, 2005.

Moreover, even though AFTA rules of origin are relatively simple, the Asian Development Bank (2006) finds that one of the reasons why the promotion of intraregional trade in AFTA has not achieved its full potential relates to the costs of complying with regional rules of origin, especially when compared with the relatively small margins of preference granted by AFTA tariff concessions. It seems that only multinationals in very high-tariff sectors such as automobiles have found it worthwhile to go through the bureaucratic procedures of obtaining an AFTA rule-of-origin certificate.

Cuyvers and others. (2005), Plummer (2006) and Baldwin (2006) note that one of the great challenges, for both Asian and non-Asian countries, is to prevent Asian PTAs from creating a "noodle bowl" of criss-crossing rules which would increase the costs of trade within Asian. If this is not done, many firms would find it cheaper simply to pay the MFN duty rather than comply with complex rules. The likely end result may be fewer new trade and investment opportunities in the region.

One means of minimizing the potentially adverse impact of PTAs on third-country producers is to have them integrate "deeper" and "wider" than is possible at the multilateral level: i.e., address more sectors, liberalize more comprehensively and address a wider set of regulatory impediments to trade and investment. Even if tariffs are fully removed, the business environment in Asia is still far from borderless (Kimura and Ando, 2003), partly because technical barriers accompanying inspection procedures for exports and imports are for instance prevalent (Wakasugi, 2007).

Moreover, it is most likely in non-goods trade - such as services, that the greatest benefits from integration can accrue. As noted previously, trade and investment in many key Asian service sectors is still restricted by excessive or discriminatory regulations. This can be problematic for service sector multinational enterprises, but also for firms in manufacturing and in other sectors that are tightly connected to production networks throughout the region.

One of the basic pillars of regional and international production sharing is low trade facilitation and service link costs. Gains from services liberalization in Asia (and elsewhere) have generally been found to exceed those from goods liberalization by significant margins, by up to a factor of five according to one study (Robinson and others, 1999). Dee and Hanslow (2000) find that APEC countries could realize gains of US$110 billion from liberalizing services trade, and that China alone could benefit by as much as US$70 billion by removing its stringent service sector restrictions. Chadha (2000), Brown et al (1996), Chadha and others (2000), Bejamin and Diao (2000) come to similar conclusions. Even though the largest economic gains from services liberalization come from non-preferential market opening, PTAs can be useful tools for moving forward in what are often politically sensitive areas (McKibbin and Wilcoxen, 1996; OECD, 2002).

To convey a sense of shared will to engage in economic cooperation beyond the reciprocal exchange of market access commitments, the newer generation of preferential trade agreements in Asia, such as those agreed between Singapore and Japan, ASEAN and China, and ASEAN and Japan, as well as the India-ASEAN agreement, all explicitly use the term "comprehensive economic partnership" rather than "free trade agreement" (Feridhanusetyawan, 2005).

In services, Asian PTAs typically adopt a GATS+ approach, whether in terms of agreed rules or especially negotiated market opening commitments (Roy, Marchetti and Lim, 2006; Fink and Molinuevo, 2007). Many such agreements also feature cooperative initiatives relating to the movement of natural persons, including in the realm of mutual recognition agreements in regulated professions (UNCTAD, 2007), though this is not the case of recent US PTAs.

Japan, Lao People's Democratic Republic, Republic of Korea, Singapore and Viet Nam have all made notable commitments on services trade and investment in their PTAs. On the other hand, countries such as Indonesia, Malaysia and Thailand have tended to schedule very limited commitments over and above those taken in the Uruguay round (with the obvious exception of AFAS for intra-ASEAN trade and investment in services).

The Singapore-Japan agreement is a prime example of a PTA that, apart from its chapters on investment and services, goes far "behind the border" in addressing infrastructure and rules, customs procedures and a variety of other indirect measures affecting trade flows. Such advances have prompted Hertel and others (2001) to conclude that the so-called "new-age" agreement between Singapore and Japan would not likely

be trade-diverting overall and that third countries would not lose out.[9]

The rise of preferentialism in Asia has, with few exceptions, generally been characterized as a "WTO-plus" process (WTO+), which, ceteris paribus, should help to create a better institutional setting for markets to function across borders and should therefore stimulate greater trade among partners, including third countries.

Turning more specifically to the possible impacts of deepening economic integration on investment behavior, Chase (2003) notes that bilateral or regional integration should be of particular interest to multinational firms since proximity has obvious benefits for investors spreading production across borders. Unfortunately, studies investigating the effect of PTAs on investment flows are relatively few. Stein and Duade (2001), Yeyati and others (2003), and Medvedev (2006) find that PTAs do increase intra-bloc investment. Similarly, a recent study by the OECD (2007) finds that PTAs with comprehensive investment provisions exert a strongly positive impact on induced FDI flows among partner countries. Such results would appear to indicate that the recent surge in Asian PTAs should increase investment flows among Asian countries. This is particularly the case since the most substantial impact on FDI seems to occur when PTAs coincide with domestic liberalization and concerted efforts at macroeconomic stabilization among member countries. These are the conditions that have generally been observed in Asia in recent years (Blomstrõm and Kokko, 1997; 2001; Graham and Wada, 2000).

Once again, the interesting question for third countries is whether PTA-driven integration leads to investment diversion or creation. Some evidence suggests that investment diversion can become a source of genuine concern under some PTAs, with adverse third-country effects. For instance, the World Bank (2000) found that FDI declined in EFTA members following the phase-in of the European Union Internal Market Program (IMP) and did not recover until the establishment of the European Economic Area. In addition, Serven and Lederman (2005) show that NAFTA resulted in diversion of FDI from other countries in Latin America, as Mexico's share of United States-sourced investment remained stable throughout the 1990s, while the share of other countries declined.

The evidence for PTA-induced investment diversion is not clear cut, however. Echoing the more recent findings of the OECD, Adams and others. (2003). Dee and Gali (2003) show that strong investment provisions in PTAs have a net investment-creation effect. Kimura and Ando (2003; 2005) note that the generally low margins of preference among Asian countries will tend to mitigate biases against foreign firms. The existence of sophisticated production and distribution networks would encourage activities of all multination enterprises in Asia could thus be in the interest of multinational investors in the region.

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9 It should be noted, however, that such a result is based on ex ante calculations and not the actual effects of the agreement.

As noted above, the most recent vintage PTAs promote economic ties through various investment facilitation activities, some of which also benefit third-country firms. The framework agreement of the ASEAN Investment Area and the Singapore-Japan agreement both foresee information sharing, simplification and transparency of procedures and rules. Such provisions stand to benefit not only PTA members but also non-Asian multination enterprises investing in Asian markets as they enhance service links between production networks (Thorbecke and Yoshitomi, 2006). Te Velde and Bezemer (2004) thus find that membership in a PTA can lead to further extra regional FDI inflows, i.e. the increased opportunities for investment among partner countries also stimulate FDI from third countries. This is confirmed in the case of MERCOSUR, where most new FDI has came from outside the PTA (Chudnovsky and Lopéz , 2001) as well as in the case of the Canada-United States FTA (subsequently NAFTA), where FDI to Canada from Europe increased much more than that from the United States (Globerman, 2002).

Apart from PTAs, bilateral investment treaties (BITs) are another legal instrument used to promote economic integration. The aim of host countries in signing BITs is to enhance the investment climate (i.e. BITs may be seen as serving a "signalling" function vis-à-vis foreign investors) and attract more FDI by granting strong protection rights against discriminatory (investment liberalization) or confiscatory (investment protection) state conduct.

Most Asian countries have signed numerous BITs. China has, for instance, signed BITs with over 100 countries and the Republic of Korea and Malaysia with more than 60 each. Most such agreements are North-South in character and involve treaties entered into between Asian and OECD countries, but intra-Asian BITs are also becoming increasingly common, in response to the rise of a number of Asian-origin multinational firms.

In theory, BITs can be an important instrument in promoting FDI to Asia from multinationals headquartered in OECD countries and in enhancing host countries' investment regimes. However, empirical studies devoted to the subject conclude that BITs exert an indeterminate influence on investment flows between signatories. Hallward-Driemeier (2003), Tobin and Rose-Ackerman (2006) and Yackee (2006) find either no or even a negative impact of BITs on induced FDI flows.

In contrast, Neumayer and Spess (2005), Salacuse and Sullivan (2005) and Banga (2003) find strong and positive associations between the number of BITs a country has signed and its FDI inflows. Banga (2007) further finds evidence of a link between BITs and the recent FDI outflow performance of a number of Asian countries. However, association is different from causation, and Aisbett (2007) shows that these latter studies fail to take into account that BIT signatories tend to experience large FDI inflows before signing the agreement, and that BITs have no marginal effect by themselves after they have been signed.

Moreover, BITs do not seem to "substitute" for property-rights - as Neumayer and Spess (2005) claim; that is, investors do not regard BITs as a sufficient safeguard against a general disrespect of property rights by host governments. This does not rule out, however, that investors can value the usefulness of BITs when deciding where to invest, particularly as confidence in the robustness of investor-State arbitration procedures increases in the context of heightened judicial activism.

Also, BITs should not be seen in isolation from broader integrating trends. One recent study suggests that BITs might influence investment behaviour when complemented by an investor-friendly political and economic environment (Tobin and Rose-Ackerman, 2006).

Further, there is scant evidence on whether BITs matter more for FDI flows in certain sectors, than in others (in either manufacturing or services), or for some types of investments rather than others (that is, resource-versus efficiency-versus market-seeking FDI). Expropriation risks are typically greatest in natural resource industries, for instance, such that BITs may have a particularly useful role to play in such sectors despite their more marginal use in other areas (Aisbett, 2007). Finally, it is still uncertain whether BITs with pre-establishment rights, such as those negotiated by Canada and the United States, exert greater impacts on investment flows relative to agreements limited to post-establishment rights.

The empirical evidence currently available thus suggests that BITs do not on the whole appear to exert determinative impacts on the investment decisions of multinational firms, though some of the finer elements of analysis, notably regarding their effect on various types of investment are quite clearly worthy of greater analytical scrutiny, including within the ARTNeT community.

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III. RULES OF ORIGIN: DIVERSE TREATMENT AND FUTURE DEVELOPMENT IN THE ASIA AND PACIFIC REGION

*by Rajan Sudesh Ratna**

Introduction

The term "rules of origin" speaks for itself : rules that determine the origin of a product in international trade. Because of varying definitions that have been used, rules of origin are perceived as a technical and incomprehensible set of rules governing international trade. The general approach that most countries have followed in operationalizing their free trade agreements (FTAs) or preferential trade agreements (PTAs) is based on well-recognized principles that govern preferential rules of origin throughout the world and address the industry's perceptions of the threats and opportunities arising from such trading arrangements.

Different FTAs and PTAs follow different qualifying criteria for determining the origin of manufactured products. A single country may follow different rules-of-origin criteria under different agreements. This situation not only creates confusion in the minds of the trading community, but also provides discretionary powers to different agencies involved in the procedural and implementation aspects of exports and imports. It also leads to higher costs in procuring a preferential certificate of origin, thereby making the transaction cost of trade higher.

To set the discussion in a proper perspective, this article first provides a conceptual background to the rules of origin. It then examines the kind of rules-of-origin criteria that are generally followed in different preferential agreements, as well as the commonalities that exist. Finally, the article examines whether there is a case for harmonization of preferential rules of origin.

A. Conceptual basis for rules of origin

Rules of origin are the criteria needed to determine the national origin of a product. By definition, each good originates in only one country. If a product is produced wholly in one country, determining the origin is not a difficult task. However, in a world where more and more goods are produced through the amalgamation of inputs from different sources and countries, conferring origin to a product is not always an easy task. Rules of origin are complex; how does one determine the country of origin of a

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product when its production or manufacturing takes place in more than one country or several inputs are used from several sources? The rules are necessary to ensure that the provisions applied selectively on the basis of origin are not avoided by minimal processing, trade deflection and similar circumvention methods.

1. Non-preferential rules of origin

Determining the origin of a product is necessary in both the preferential as well as the multilateral (non-preferential) regimes. In the multilateral context, this principle was recognized during the 1986-1994 Uruguay round of negotiations under the General Agreement on Tariffs and Trade (GATT). It was felt that ascertaining the country of origin of imported products was necessary in applying basic trade policy measures such as tariffs, quantitative restrictions, anti-dumping and countervailing duties and safeguard measures. This was also needed for requirements relating to origin marking, public procurement and for statistical purposes in the multilateral context. The Committee on Rules of Origin, constituted at the World Trade Organization (WTO), is looking into Harmonization of the rules of origin.

The WTO Rules of Origin Agreement provides for the following four basic principles (Lazaro and Medalla, 2006):

(a) Non-discrimination: rules of origin must apply equally for all purposes of non-preferential treatment;

(b) Predictability: rules of origin must be objective, understandable and predictable;

(c) Transparency: rules of origin must not be used directly or indirectly as instruments to pursue trade policy objectives;

(d) Neutrality: rules of origin must not, in and of themselves, have a restrictive, distorting or disruptive influence on international trade.

At the same time, annex II of the Agreement[1] sets a number of disciplines applicable to rules of origin in preferential regimes, which provide that rules of origin should: clearly define requirements for conferring origin; be based on a positive standard; be published in accordance with GATT Article X:I; and be applied prospectively. It is important to note that the Agreement distinguishes (if not focused on one) between preferential and non-preferential rules of origin.

Members of WTO have inconsistent positions across product groups regarding definitions of specific criteria to determine origin. Negotiating positions across product sectors are determined by the corresponding national trade interests, rather than by any

1 Common Declaration with regard to Preferential Rules of Origin.

common principle to be adopted in a uniform manner. The Harmonization Work Programme is slated to be ready only by 2007.

2. Preferential rules of origin

Countries which are participating as members in regional trade agreements (FTAs or PTAs) offer zero or reduced duty access (tariff preferences) on imports from their trading partners (the participating countries). They therefore often apply a different set of rules to determine the origin of products to grant preferential tariff treatment. These rules are known as preferential rules of origin. The justification for preferential rules of origin is to prevent trade deflection, or simple trans-shipment, whereby products from non-participating countries (non-RTA members) are redirected through any RTA partner in order to avoid the payment of customs duties. Hence, the role of preferential rules of origin is to ensure that only goods originating in participating countries enjoy tariff or other preferences. The purpose is also to ensure that the countries which have high MFN duties or restrictions on imports can protect their revenues from erosion. Therefore, these countries are invariably an integral part of preferential bilateral and regional free trade agreements, and receive the non-reciprocal tariff preferences that developed countries offer to developing countries under the Generalized System of Preferences (GSP) Scheme.

The preferential rules of origin can also be manipulated to achieve other objectives, such as protecting domestic producers. Restrictive rules of origin raise the costs of supplying the markets of preferential partners by requiring changes in production, which lead to the use of higher-cost inputs, and by incurring expenses in proving conformity with the rules. These restrictive rules mean that only a proportion of products which are eligible for preferential treatment will actually be granted preferential access. Market access will be constrained, compared with what is promised on paper in the trade agreement. The impact of preferential trade agreements on market access and hence trade flows is a function of both the extent of preferential tariff liberalization and the rules of origin. The rules of origin are, therefore, a key element in determining the magnitude of the economic benefits that accrue from trade agreements and who gets them. The costs of administering the systems of the rules of origin and the expenses incurred by firms to prove conformity with these rules are equally important. Such costs will be greater if there is a degree of unpredictability in the application of the systems of the rules of origin and in particular with regard to the acceptance of certificates of origin by customs officials in the foreign market. These costs reduce the value of the tariff preferences that are made available through free trade and preferential trade arrangements.

3. Impact on investment decisions

Rules of origin may also be an important factor in determining the investment decisions of multinational firms. For such firms, complying with the rules on sufficient processing is important, as is the cost of proving compliance with those rules of origin.

Therefore, rules of origin that vary across products and agreements add considerably to the complexity and costs of participating in and administering the trade agreements. The burden of such costs falls particularly heavily upon small and medium-sized firms. Therefore, a clearer understanding of preferential rules of origin and of their proper application is of utmost importance for the implementation and success of any agreement.

Keeping in view the developmental role of the rules of origin (Panchamukhi and Das, 1999), they could have the following important positive effects on a preferential trading arrangement: preventing trade deflection; facilitating value addition; and expanding intraregional trade and investment flows. These are outlined below.

Preventing trade deflection. In any preferential trading arrangement, participants set their own external tariffs but give preferential tariff treatment to each other. The divergence between external tariffs of the participants and the preferential tariffs given to an RTA partner is a potential source of trade deflection. In the absence of any rules of origin within the RTA, the participant with the lowest external tariffs is likely to serve as an entry point into the regional market for the goods of the non-participants. In this sense, rules of origin are an important tool for checking the trade deflection of third country (non-participant) goods from one participant to another participant.

Facilitating value addition. The modalities of determining the origin of a product are aimed at "substantial transformation" in inputs. Thus, rules of origin facilitate value addition in the country of manufacture. Such requirements, checking the import content of value addition, have the potential for generating backward and forward linkages in a country adhering to the rules. Thus, a participant is prevented from becoming a mere trading country as these requirements act as a deterrent to activities relating to packing, repacking, transportation, simple assembly or reassembly etc.

Expanding intraregional trade and investment flows. Cumulative rules of origin allow manufacturers to import raw materials or inputs from a country which is party to the same regional trade agreement without undermining the origin of a product. In effect, such imported materials from RTA partner countries are treated as being of domestic origin in the exporting country. A regional preferential trading arrangement having the provision of cumulative rules of origin is more liberal and better, as it enhances intraregional trade prospects. It has the potential to stimulate intraregional trade flows of different categories of goods among the participants. It also has a favourable effect on the balance of trade for the country that uses the cumulation provision. The cumulation provision enhances the possibility of sourcing of inputs from the region and thereby facilitates the backward-forward linkages of industries among RTA partners. This ultimately leads to intraregional investment flows as well as the transfer of technology.

The restrictive effects of rules of origin on intraregional trade arising out of countries' high import dependence could be reduced somewhat if countries take greater advantage of the regional cumulation facility. Origin rules not only can prevent trade deflection within a regional grouping but can also contribute to the development process

for participants through trade and value addition effects. However, rules of origin should be designed so as not to restrict trade owing to their complex methods of implementation.

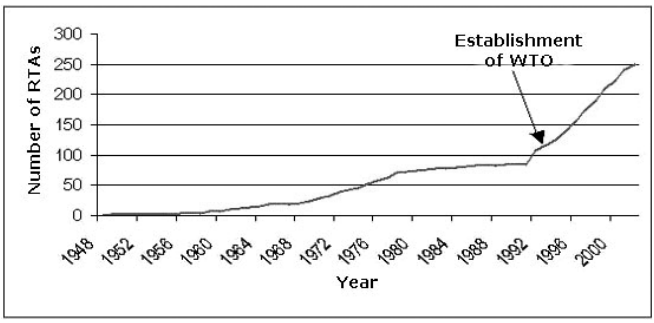
Whether the rules of origin are in the form of meeting a local-content requirement as a proportion of value added or change in the tariff heading or a particular processing requirement, all have a developmental role to play as they create greater economic activities in the exporting country. The rules of origin have important implications for the development of the manufacturing sector as a whole, which in turn contributes to enhancing the export supply capabilities of the member country and to greater economic activity and growth in the region.

B. Regional trade agreements in the ESCAP region

International trade is today characterized by a proliferation of regional trading arrangements among developed and developing countries. Recently, there has also been an intensification of economic engagements of individual countries with trading partners through preferential trading agreements, free trade agreements and comprehensive economic partnership agreements. The developed as well as the developing countries are participating in such arrangements very actively.

Currently, the number of agreements notified to WTO is more than 200[2], a six-fold increase in just two decades (figure 1). Given the rush to conclude RTAs, it is expected that the number will reach 300 in a few years. Today, with the exception of Mongolia, all the WTO members States are participating in one or more RTA negotiations.

Figure 1. RTAs notified to GATT/WTO (1948-2002, cumulative)



Source: WTO, 2002.

The boom in RTAs reflects changes in certain countries' trade policy objectives, the changing perceptions of the multilateral liberalization process and the reintegration into the global economy of countries with economies in transition. This last category

2 The recent accession of new members to the European Union has reduced the total number of RTAs according to WTO.

accounts for many of the agreements signed in the early 1990s, when countries in Eastern Europe and the former Union of Soviet Socialist Republic negotiated RTAs with the European Union, the European Free Trade Association (EFTA) and with each other. This fact in illustrated in Table 1 below:

Table 1. Regional trade agreements: Overall scenario

	East Asia and the Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	North	Total
Number of countries	32	36	39	21	8	48	25	209
North-South bilateral								
Countries belonging to at least one RTA	4	12	6	10	0	2	10	44
Average number of RTAs per country	2	1	2	1		1	4	2
Maximum number of RTAs per country	4	4	4	3	0	1	24	24
All others								
Countries belonging to at least one RTA	24	22	33	20	8	47	10	164
Average number of RTAs per country	2	6	8	5	4	4	8	5
Maximum number of RTAs per country	3	12	17	12	9	9	15	17
All agreements								
Countries belonging to at least one RTA	26	26	35	20	8	48	11	174
Average number of RTAs per country	2	6	8	5	4	4	11	5
Maximum number of RTAs per country	7	12	19	13	9	9	29	29

Source: World Bank, 2005. Global Economic Prospects. (Washington, D.C. World Bank).
Note: a) North is OECD 24 plus Lichtenstein, and South is all other countries.
b) Bilateral agreements are defined as Regional Trade Agreements with two members.

It may be pointed out that on average, each country belongs to six RTAs, although there is considerable variation across regions and levels of development. Northern countries have participated to the greatest extent, each signing on average 13 agreements. A substantial number of developing countries (45) have signed bilateral preferential agreements with a Northern partner. Since 2000 several major new trends have emerged in the pattern of regional trade agreements, which take RTAs well beyond agreements between adjacent countries. For example:

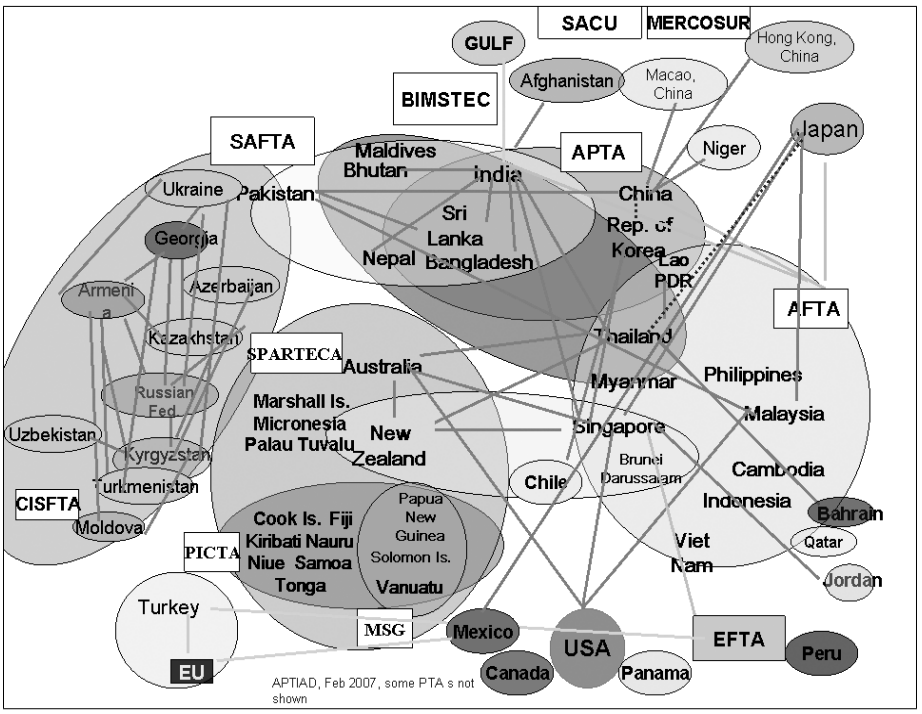
- The European Union's move towards bilateral market access FTAs and economic partnership agreements with African, Caribbean and Pacific countries;

- The shift in the position of the United States towards bilateral preferential agreements;

- The efforts of a handful of developing countries to open markets through RTAs.

An important feature of the rise in the number of RTAs is the growing number of overlapping agreements and the so-called spaghetti bowl that has emerged from the proliferation of bilateral/regional agreements. A web of differing trade arrangements can entangle administrative procedures - customs procedures, technical standards and rules of origin - and thereby raise the costs for both enterprises and Governments. Figure 2 illustrates the "spaghetti bowl" or, possibly a more fitting term for Asia and the Pacific, "noodle bowl" view of the preferential trade routes in this region. It shows the entanglement of bilateral and regional free trade and other types of agreements that are in force. There are about 40 more that are being negotiated, and many more that are being considered in either political or policy circles.

Figure 2. The "spaghetti-bowl" of trade agreements



Source: Mikic, 2007.

Many agreements between country pairs are duplicated by other agreements to which the same two countries are parties. With conflicting rules, these agreements would lead to fragmented markets and increase the transaction costs of trade, thus

adversely affecting the volume of trade as well as global and national welfare. Therefore, to achieve significant benefits in terms of lower administrative costs and more effective implementation, it would be necessary to rationalize the current structure of such "spaghetti-bowl" agreements.

C. Qualifying criteria under rules of origin

Preferential rules of origin are used to determine the origin of goods which may enter a country under preferential treatment, i.e., they are used to establish whether the goods are eligible for special treatment under a regional trading arrangement. The main purpose is to ensure that the benefits of preferential tariff treatment are confined to only those products which have been harvested, grown, produced or manufactured in the exporting RTA member. Products which originate in the non-RTA members, and merely pass through in transit, or undergo only a minor or superficial process in the exporting country are not entitled to any preferential benefit. Evolving an appropriate system of

Box 1. Products that are wholly produced or obtained

(a) Raw or mineral products extracted from a country's soil, its water or its seabeds;

(b) Agricultural products harvested there;

(c) Animals born and raised there;

(d) Products obtained from animals referred to in paragraph (c) above;

(e) Products obtained by hunting or fishing conducted there;

(f) Products of sea fishing and other marine products taken from the high seas by its vessels;

(g) Products processed and/or made on board its factory ships exclusively from products referred to in paragraph (f) above;

(h) Parts or raw materials recovered there from used articles which can no longer perform their original purpose nor are capable of being repaired;

(i) Used articles collected there which can no longer perform their original purpose there nor are capable of being restored or repaired and which are fit only for disposal or for the recovery of parts or raw materials;

(j) Waste and scrap resulting from manufacturing operations conducted there;

(k) Goods produced there exclusively from the products referred to in paragraphs(a) to (j) above.

Source: Asia-Pacific Trade Agreement (APTA).

rules of origin is necessary in regional trading arrangements to fulfil various objectives. Unfortunately, there has not been any standard framework that could be used as a reference point by the policymakers in devising origin criteria in a regional grouping (Ratna and Ramanan, 2005).

When a product is produced in a single stage or is "wholly obtained or produced" in the partner country then it is easier to establish the origin of the product. In such cases, the proof that the product was produced in the preferential trade partner is normally sufficient. If and when a product for export is wholly obtained or produced in a single country, no one can deny that this country is the country of origin. Therefore, in all the FTAs/PTAs a list of "wholly obtained or produced" items is prescribed. Although there are slight variations in defining what constitutes wholly obtained or produced, the broad principles remain the same in all agreements. A list of such products is given in box 1.

1. Products that are not wholly obtained or produced

Determining the country of origin of a product becomes difficult owing to the globalization of economic activities, outsourcing and the use of a mix of inputs supplied by foreign countries and domestic supplies. Therefore, for such cases a general term of "not wholly produced or obtained" is used. In these cases, the rules of origin define how to ascertain whether the particular product has undergone sufficient working or process or has been subject to a substantial transformation (in general these terms can be used interchangeably) in the territory of another member of the FTA or PTA and that it has not simply been trans-shipped from a non-qualifying country or has been subject to only minimal processing. Unfortunately, there are no simple and standard rules of origin that can be identified to prevent trade deflection. A number of different rules are available, each of which has different implications for a producer of a given product. Three main methods are used for "not wholly obtained or produced" products, to establish if sufficient processing or substantial transformation has been undertaken, as follows: change of tariff classification; value addition; specific manufacturing process. These are described below.

Change of tariff classification [Origin is granted if the exported product falls into a tariff classification that is different from the tariff classification of any imported inputs that are used in its production].

This approach is used in the majority of current preferential trade agreements and is a feature of both European Union agreements and NAFTA. Application of this approach has been facilitated by the widespread adoption of the harmonized system. The level of the classification at which change is required is an issue, however. Most agreements specify that the change should take place at the tariff heading level (the 4-digit level, known as CTH). However, since the harmonized system was not devised for the purpose of determining substantial transformation or manufacturing operation, this criterion has certain limitations.

Value added [A minimum percentage of total value added should be achieved in the exporting country with the help of indigenous inputs].

As a general rule, under the percentage criterion, imported inputs (i.e., materials, parts and components) are considered to have undergone substantial transformation if a given percentage of value is added to the imported inputs used for the manufacture of the finished product. This requirement can be defined in are of two ways:

(a) By providing the minimum percentage of the value of the product (on f.o.b. value or ex-factory price/cost) that must be added in the exporting country (direct method of calculation), or

(b) By providing the maximum percentage of non-originating inputs to be used in manufacturing the exported product (indirect method of calculation).

In practice, it is method b which is more commonly used in trade agreements. However, this method also has certain limitations as the value added content would change depending on several factors, such as exchange rate fluctuations and inefficient manufacturing processes.

For the calculation of value added, different agreements use different methods of treating the "profit" of the local trader. While in some agreements this is taken into account, in cases of others it is not. This issue has always been a bone of contention of various negotiations on RTAs.

Specific manufacturing process [This rule defines certain manufacturing or processing operations that a product must undergo in the exporting country to confer origin (positive test) or manufacturing or processing procedures that do not confer origin (negative test)].

The formulation of these rules can require the use of certain originating inputs or prohibit the use of certain non-originating inputs. Rules based upon specific manufacturing processes are widely used in conjunction with change of tariff classification and/or the value added criterion, and are a particular feature of the rules applied to the textiles and clothing sectors.

Product-specific rules [This rule defines the origin criteria for a product at the 6 or 8-digit HS level by using any one or a combination of different criteria].

The product-specific rules serve a dual purpose: they can either be more liberal than the general rule to allow imports under more relaxed criteria or they can be more stringent in order to make it impossible to allow any preferential imports of a product, bringing it into the de facto exclusion list.

2. Cumulation

To increase intraregional trade and facilitate the sourcing patterns within the region in the context of a PTA, the concept of cumulation plays a crucial part in rules of origin schemes. It allows the use of low-cost sources of inputs without compromising the originating status of a final product, by including intermediate products and operations as part of the originating product, even when they are produced outside the country. The possible extent of cumulation depends on the applied rules, outlined below.

Bilateral cumulation. Bilateral cumulation operates between two countries and allows producers in either partner country to use materials and components originating in the other country as if they originated in its own country.

Diagonal cumulation. Diagonal cumulation operates between more than two countries and allows producers to use materials and components originating in either country that is part of the agreement. In one form this is an extension of bilateral cumulation by extending it to the regional level.

Full cumulation. Full cumulation takes into account all of the operations conducted within the countries that are members to an agreement, even if they are carried out on non-originating material. Thus, there are no restrictions on using only originating materials and components for the final good. This concept allows more fragmentation of the production process among members of a trade agreement and increases economic linkages and trade in PTAs.

3. Determining costs

There are generally three ways of determining the cost of a product for calculating the regional value content:

(a) The ex-factory cost includes overheads costs, labour costs and raw materials cost;

(b) The ex-factory price includes overhead costs, labour costs, raw material costs and profit;

(c) The free-on-board (f.o.b.) price includes overhead costs, labour costs, raw material costs, profit and costs of inland transportation.

There are other related issues that are also addressed in the rules of origin. They relate to their definition and treatment, some of which are as follows:

Neutral elements. "Neutral elements" refer to such factors of production as plant and equipment, fuel, machinery and other elements, the origin of which is not to be taken into account in determining the origin of the product. While these are explicitly mentioned

in some rules of origin, in others they are not mentioned. However, in both cases the net result is the same. Irrespective of their origin, they are not accounted for in the local value addition.

Drawback rule. The term drawback refers to a refund of duties paid on imported goods when they are further exported to third countries. The "no drawback" provision was provided to prohibit this, e.g., in the case when intermediate non-preferential goods are imported to undergo further processing and then are exported as final goods to third countries under preferential access. This rule ensures that duties applicable to third-country materials are paid to protect certain industries within a free trade area.

Interchangeable materials. The rules of origin also cover the way to treat interchangeable materials, as in some cases it is not commercially practical to keep separate stocks of interchangeable materials originating in each country. The rules provide that the country of origin of each of the commingled materials may be allocated on the basis of an inventory management method recognized in the country in which the materials or goods were commingled.

Minimal or non-qualifying operations. Since the basic objective of the rules of origin is to prevent trade deflection or trans-shipment of goods from non-RTA partners, the rules of origin identify certain operations or processes through which the origin of a product cannot be conferred even if other conditions of the rules of origin are met. They are designed with the objective that such operations have nothing to do with the actual manufacturing process of that product nor do they alter the basic nature of the product. Such operations relate to packaging and repackaging, disassembly and assembly products, marketing and labelling. An illustrative list of such operations is presented in box 2.

D. Rules of origin as practiced in different regional trade agreements

The framing of rules of origin, being an integral part of RTAs, has emerged as one of the most controversial issues in any trade negotiations. Each country has adopted a comprehensive approach thus far in terms of laying down originating criteria for its preferential imports. However, different criteria have been adopted in different RTAs owing to different perceptions among the RTA partners. There are a variety of reasons for having seen a "spaghetti-bowl" phenomenon in rules of origin too, leading to confusion in the minds of the trading community. The following paragraphs examines rules of origin in some important agreements.

Box 2. Minimal or non-qualifying operations

(a) Operations to ensure the preservation of products in good condition either for transportation or storage (ventilation, spreading out, drying, chilling, placing in salt, sulphur dioxide or other aqueous solutions, removal of damaged parts and similar operations);

(b) Simple operations consisting of removal of dust, sifting or screening, sorting, classifying, matching (including the making-up of sets of articles), washing, painting, cutting up;

(c) Changes of packaging and breaking up and assembly of consignments;

(d) Simple slicing, cutting or repacking or placing in bottles, flasks, bags, boxes, fixing on cards or boards, etc.

(e) The affixing of marks, labels or other such distinguishing signs on products or their packaging;

(f) Simple mixing;

(g) Simple assembly of parts of products to constitute a complete product;

(h) Slaughter of animals;

(i) Peeling, unflaking, removing grain and removal of bones;

(j) A combination of two or more of the operations specified above.

Source: Asia Pacific Trade Agreement (APTA).

1. Generalized System of Preferences (GSP)

GSP is a unilateral tariff preference scheme offered by developed countries for eligible products originating in designated developing countries. The GSP rules of origin have played a key role in implementing GSP schemes for more than 35 years (UNCTAD, 1999). After the 35-year operation of the GSP system, the basic structure of rules of origin remains the same (UNCTAD, 1970). The main elements are presented in box 3.

Box 3. Main elements in GSP rules of origin

(a) Origin criteria
  (i) List of wholly produced goods
  (ii) List of minimal processes that do not confer country-of-origin states
  (iii) Process criterion
  (iv) Percentage criterion

(b) Direct consignment

(c) Documentary evidence
  (i) Combined declaration and certificate of origin
  (ii) Consignment of small value
  (iii) Verification of form A
  (iv) Exhibition and fairs

(d) Sanctions

(e) Mutual cooperation between preference-giving and preference-receiving countries

(f) Special facilities in favour of preference-receiving countries
  (i) Cumulative rules of origin (cumulation)
  (ii) Donor country content rule

Source: United Nations Conference on Trade and Development.

However, GSP rules of origin differ substantially from one scheme to another. For example, the GSP schemes of the European Free Trade Area (EFTA), European Union and Japan use the process criterion (European Union and Japan use a percentage criterion for certain products, such as processed foods, chemicals, and machinery), while those of Australia, Canada, New Zealand, and the United States use the percentage criterion. Each scheme uses different definitions and requirements, as can be seen in box 4.

2. Rules of origin in Asia-Pacific RTAs

In the case of Asia, there are several FTAs in operation and a number of bilateral or regional FTA negotiations are under way. One of the important FTAs in Asia is AFTA, which includes the 10 ASEAN member countries. The origin criterion under the AFTA is solely based on the 40 per cent domestic content rule, supported by the regional cumulation among the 10 member States of ASEAN. On the other hand, while the ASEAN-China FTA prescribes 40 per cent value added as the qualifying criterion, in the case of ASEAN-Republic of Korea FTA it is CTH or 40 per cent value added criterion. In

the case of PTAs in the region, while APTA prescribes a 45 per cent value addition, SAPTA prescribes a 40 per cent value addition.

Box 4. Some important GSP rules of origin

1. European Union
Goods, the production of which involved more than one country, shall be deemed to originate in the country where they underwent their last, substantial, economically justified processing or working in an undertaking equipped for that purpose, resulting in the manufacture of a new product or representing an important stage of manufacture. This basic concept is interpreted as process criterion, percentage criterion, or a combination of these two criteria in determining the country of origin.

2. Japan
The country-of-origin status is given to the country where the last substantial process or operation resulting in the manufacture of new characteristics took place. Japan has a shortlist of product-specific rules on selected products.

3. United States
In the case of GSP rules of origin, the United States applies the percentage criterion. The cost or value of materials produced in the preference-receiving country and the cost or value of any article incorporated in the eligible article that has resulted from substantial transformation of any imported materials into a new and different article of commerce, plus the direct cost of processing operations performed in the preference-receiving country must not be less than 35 per cent of the appraised value of the merchandise in the United States. In short, a minimum 35 per cent local content rule is observed.

Source: Ujiie (2006).

The origin criterion under the Singapore-Australia FTA is based on the 50 per cent domestic content rule, while that of the Singapore-New Zealand FTA follows the 40 per cent domestic content rule. The Singapore-United States FTA mainly follows the rules of origin under NAFTA. While NAFTA origin rules are comprehensive, specific and detailed, its origin criteria are of the following: (a) change in tariff heading (at the 4, 6, or 8-digit level depending on the goods produced) for a number of products; (b) substantial process (assembly process plus manufacture of a major part) for colour televisions and other products; (c) assembly process plus percentage criterion (e.g., 50 per cent domestic content) for watch movements and others; (d) manufacture of a major part plus the percentage criterion for footwear and other products; or (e) percentage criterion for automobiles (USTR, 2006).

The India-Sri Lanka FTA signed in December 1998 is considered to be another role model for bilateral FTAs, as there is an application of twin criteria, i.e., CTH + 35 per

cent value addition to confer origin status. The twin criteria have similarly been applied to/the India-Nepal agreement (CTH + 30 per cent); India-Thailand Early Harvest Scheme (CTH + 40 per cent); India-Singapore (CTH + 40 per cent); and SAFTA (CTH + 40 per cent for India and Pakistan, 35 per cent for Sri Lanka and 30 per cent for least developed country members).

The heterogeneous nature of the rules of origin that are applied in different RTAs is presented in table 2.

Table 2. Rules of origin criteria in different RTAs

RTAs	Type	Qualifying criteria	Cumulation
ASEAN Free Trade Area	Regional	- Value content needs to be at least 40 per cent - f.o.b. value calculation basis	- Full
Australia-New Zealand Closer Economic Relations Trade Agreement	Regional	- Value content needs to be at least 50 per cent - Factory cost calculation basis	- Bilateral (Full)
Asia-Pacific Trade Agreement	Regional	- Value content needs to be at least 45 per cent (35 per cent for least developed countries) - Ex-factory price calculation basis	- Full
China - ASEAN	Regional	- Value content needs to be at least 40 per cent - Elimination of the duty rates for products under HS Chapter 07 and 08 (vegetables and fruits) which originate in the party of the agreement	Regional
India - Nepal	Bilateral	- Change in tariff heading (4-digit level) and - Value content needs to be at least 30 per cent	- Bilateral
India - Sri Lanka	Bilateral	- Change in tariff heading (4-digit level) and - Value content needs to be at least 35 per cent - f.o.b. value calculation basis	- Bilateral
South Asian Free Trade Area	Regional	- Change in tariff heading (CTH) - Value content needs to be at least 40 per cent (for India and Pakistan), 35 per cent for Sri Lanka and 30 per cent for least developed countries - f.o.b. value calculation basis	- Diagonal

Table 2. ***(continued)***

RTAs	Type	Qualifying criteria	Cumulation
South Asian Preferential Trade Agreement	Regional	- Value content needs to be at least 40 per cent (30 per cent for goods of least developed countries) - f.o.b. value calculation basis	- Diagonal
Singapore - Australia	Bilateral	- Value content needs to be at least 50 per cent (product-specific rule: 30 per cent) - Factory cost calculation basis	- Bilateral
Singapore - Japan	Bilateral	- Either change in tariff heading (4-digit level) or - Value content needs to be at least 60 per cent - f.o.b. value calculation basis	- Bilateral
Singapore - New Zealand (Agreement between New Zealand and Singapore on a Closer Economic Partnership)	Bilateral	- Value content needs to be at least 40 per cent - Ex-factory cost calculation basis	- Bilateral
Singapore - United States	Bilateral	- Either change in tariff heading (2,4 or 6-Digit level) and/or (for specific products): - Value content needs to be at least 30 - 60 per cent - Highly product-specific	- Bilateral
South Pacific Trade and Economic Co-Operation Agreement	Regional	- Value content needs to be at least 50 per cent - Factory cost calculation basis - Non-reciprocal	- Bilateral (Full)
Thailand - Australia	Bilateral	- Product-specific change in tariff heading (4 or 6-digit level) and/or for specific products - Value content percentage of 40 – 55 per cent - f.o.b. calculation basis	- Bilateral
United States - Australia	Bilateral	- Change in tariff heading (2,4 or 6-digit level) and/or for specific products - value content needs to be at least 35 per cent (automotive: 50 per cent net cost) - f.o.b. calculation basis	- Bilateral

It can be observed that almost every combination has been used different qualifying criteria also overlap each other and use different cumulation schemes. These cases clearly imply that more different rules will appear in the near future, creating not only more administrative costs for both public and private sectors, but also more burdens, especially for the newcomers entering various markets. This is a major concern among the manufacturing and trading communities.

The complexity of these systems is further increased by the mutual overlapping of trade agreements, making the sourcing process for companies even more complex. For instance, a company that manufactures a product in Singapore has to fulfill different rules of origin criteria when it wants to export these goods to ASEAN or Japan. Owing to different thresholds in value added, its sourcing opportunities and strategic investment decisions could be affected. How the sourcing opportunities and investment decisions could be affected as a result of preferential rules of origin can be seen in box 5, which summarizes a study by UNCTAD on the impact of rules of origin on bilateral trade and investment flows under the India-Sri Lanka FTA.

Box 5. The Indo-Lanka free trade agreement and FDI

The free trade agreement gives duty-free market access to India and Sri Lanka on a preferential basis. In covering 4,000 products, it was foreseen that there would be a gradual reduction of import tariffs over three years for India and eight years for Sri Lanka.

To qualify for duty concessions in either country, the rules of origin criteria spelled out value added at a minimum of 35 per cent for eligible imports. For raw materials sourced from either country, the value-added component would be 25 per cent.

The effect of these changes led to an increase of Sri Lankan exports to India from US$71 million in 2001 to $168 million in 2002. India's exports to Sri Lanka increased from $604 million in 2001 to $831 million in 2002. Although the agreement does not address investment, it has stimulated new FDI for rubber-based products, ceramics, electrical and electronic items, wood-based products, agricultural commodities and consumer durables. Because of the agreement, 37 projects are now in operation, with a total investment of $145 million.

Source: UNCTAD, 2003. World Investment Report.

The above example illustrates the positive dimensions of the rules of origin in a bilateral context. The same agreement should be examined in the context of some other agreements for which India and Sri Lanka are signatories and thus exchange tariff concessions in those agreements as well. India and Sri Lanka are members of SAFTA and APTA. In the case of SAFTA, the rules of origin prescribe the criteria for Sri Lanka's exports to India as CTH + 35 per cent, but for India's exports to Sri Lanka it is CTH + 40

per cent. Therefore, while there is no extra burden on Sri Lanka's exporter to export an item to any other SAARC member, including India, the Indian exporter is required to meet an additional obligation. The same goods on which India can enjoy tariff preference for export to Sri Lanka with CTH + 35 per cent (bilateral FTA rules of origin), they would now require an additional 5 per cent value for exporting to Sri Lanka under SAFTA (to meet the SAFTA rules of origin of 40 per cent). This situation is not ideal for the Indian exporter, as the sourcing pattern of the inputs would need to be re-worked in order to meet this additional 5 per cent threshold. This adds to the transaction cost of the Indian exporter. In this case, therefore, while the Sri Lankan exporter enjoys the benefit of harmonization, the Indian exporter does not.

Coming now to APTA concessions on similar products, both the Indian and Sri Lankan exporters are required to include an additional value as the APTA rules of origin provides for 45 per cent value addition. Therefore, they need to re-work their sourcing patterns to fulfil the rules of origin criteria, which is burdensome to the exporters. The different rules in different agreements, therefore, either force the exporters to forgo tariff concessions and export on an MFN basis or change their sourcing requirements agreement. Even attracting investments in such cases is difficult, as the industry does not know in advance what rules will have to be followed to export to the same country and under which agreement. The situation becomes more complex if the tariff concessions and products also vary from one agreement to another agreement among the same countries that are parties to both at the same time. The transaction costs will definitely increase as the exporter has to accommodate the lack of harmonized rules of origin.

E. Conclusions

As seen from the preceding sections, the preferential rules of origin substantially differ from agreement to agreement and country to country. The current proliferation of agreements has spun a complex web of rules of origin. Not only does each agreement have its own rules of origin, but also a bewildering array of product-specific rules of origin has emerged. Adopting the less restrictive rules of origin could result in significant trade deflection and redundancy of a trade agreement, while adopting the most restrictive rules of origin may result in no increased trade under the agreement.

A manufacturing process that meets one particular set of rules of origin criteria may not meet other rules of origin criteria. This raises some difficult options for the business and trading communities. A consolidation of multiple membership agreements around more liberal rules of origin will serve as a tool for diminishing spaghetti-bowl-related costs of trading under preferential regimes.

1. Is harmonization of preferential rules of origin possible?

So far there has not been any standard framework that could be used as a reference-point by policymakers in devising origin criteria for a regional grouping. There

has been very little analytical or empirical research carried out on assessing the economic effects of rules of origin systems, despite the fact that such an assessment should form the very basis of the origin system. This is partly because the economic theory has so far not provided a "standard" against which the efficacy, benefits and costs of rules of origin could be determined (Falvey and Reed, 1997). Methodological difficulties, as well as lack of relevant statistical information, have also constrained empirical analysis (Hoekman, 1993).

Given the above background, it is valid to question whether harmonization of preferential rules of origin is possible. To address this question, one would need to examine the common elements and differences in the preferential rules of origin. While it may be possible to harmonize the common elements, it may be difficult to harmonize such elements where differences exist. Narrowing these differences will be challenging, as each member of an RTA has different objectives and interests for framing such rules. The increasing number of bilateral agreements in the Asian and Pacific region further complicates the matter.

In this regard, an encouraging example relates to the recent consolidation of bilateral trade agreements among the Central European countries into a Central European Free Trade Agreement (CEFTA). The new agreement consolidates 32 bilateral free trade agreements into a single regional trade agreement. The free trade area shall be established during a transitional period ending at the latest on 31 December 2010. The new consolidated agreement replaces the complexity of bilateral free trade agreements in order to promote trade and investment by means of fair, clear, stable and predictable rules. Such harmonization and simplification of rules of origin in the Asia-Pacific region (especially in Asia) would contribute to a deepening of integration.

In the case of the Asia-Pacific region, any attempt to harmonize the preferential rules of origin would have to consider the following negotiations that are taking place:

(a) Apart from ASEAN's own AFTA, the group now has bilateral FTAs with China and Republic of Korea and is negotiating bilateral FTAs with Australia, India and New Zealand. A working group is examining the possibility of having a comprehensive free trade agreement for ASEAN+6 (to include Japan plus the five countries listed above).

(b) The Asia-Pacific Trade Agreement includes Bangladesh, China, India, the Republic of Korea, Sri Lanka and the Lao People's Democratic Republic as its members. It is one of the largest RTA in terms of market size in this region. Attempts are being made to enlarge its membership, especially towards Central Asia. It would be worth mentioning that in APTA (earlier known as the Bangkok Agreement), each member had been free to maintain its own rules of origin for grant of tariff preferences. An effort was made to harmonize and adopt common rules of origin during the third round of negotiations. The secretariat of the United Nations Economic and Social

Commission for Asia and the Pacific (ESCAP) facilitated the discussions in the standing committee and prepared the draft template on common rules of origin. After negotiations on the text were held, a consensus was reached on common rules of origin that are relatively simple, transparent, general and liberal, i.e., a flat rate of a minimum 45 per cent of local value content (35 per cent for least developed countries).

As has been stated previously, in having a closer look at the rules of origin for these RTAs, one could easily identify the broader commonality on several elements which could possibly be harmonized:

(a) General definitions;
(b) List of wholly obtained or produced goods;
(c) Insufficient or minimal operations or processes that do not confer origin;
(d) Neutral elements;
(e) Consignment criteria;
(f) Certificate of origin;
(g) Denial of preferential tariff treatment;
(h) Claim for preferential tariff treatment;
(i) Administrative arrangements relating to issuance and verification of certificate of origin.

One may note that very few differences exist on the elements listed above, and any attempt to harmonize them would yield a positive result. Given the diverse rules of origin specified in different agreements, the following elements would require greater understanding and lengthy discussions relating to harmonization:

(a) Qualifying criteria for not-wholly obtained or produced goods;
(b) Cumulation;
(c) No drawback rule;
(d) Treatment of profits by local traders;
(e) Product-specific rules.

As presented in this article, especially in table 2, it appears very clear that each agreement has used different methods as qualifying criteria for non-wholly obtained or produced goods, which may include value addition, CTH or specific process, or a combination thereof.

In the case of Asia, it may also be noted that, with either the expansion of membership of APTA or the implementation of the ASEAN+6 FTA, most of the bilateral agreements would become meaningless due to more liberal rules of origin of APTA or AFTA, which have only 45 per cent and 40 per cent value addition criteria respectively, as the producers and exporters would try to make use of the most liberal rules of origin. As each RTA partner will experience a lowering of its external MFN tariff over time,

adopting liberal rules of origin may not adversely affect domestic producers. Therefore, they may not require stringent rules of origin to facilitate investment flows or protect the domestic industry. Given the outcome of the harmonization work programme in WTO, one could attempt to begin to build certain flexibilities into the preferential rules of origin so that they do not in themselves constitute barriers to trade and commerce.

One important issue that needs to be addressed relates to the concept of full cumulation in any bilateral or regional agreement. This would enhance the economic integration of the region without leaving the less developed economies or LDCs on the sidelines, as labour-intensive production stages could be outsourced to lower-wage countries. This would integrate them in investment and sourcing decisions and allow companies to build up economies of scale. All members of the RTAs would be more flexible in their procurement operations and be able to produce competitive goods for trading partners within and outside the RTA (James, 2006).

Another point that would need to be addressed relates to the treatment of "profit" by local traders, whether it includes local value added or not. Finally, it will be important to address the issue of the "no-drawback" rule in preferential rules of origin. For the sake of having a transparent and predictable regime, it is important that these issues are addressed appropriately during the harmonization exercise. A clear understanding would reduce the discretionary powers of the issuing authorities of the exporting party as well as the customs authorities of the importing parties and would reduce the burden on the exporters and importers.

In this entire exercise, the most difficult task relates to harmonization of product-specific rules. On the services, one can learn from the WTO Harmonization Work Programme. In the context of RTAs, it would be desirable to keep the rules of origin simple and transparent, and preferably without any product-specific rules. Thus, it would be preferable to follow a single set of general rules as qualifying criteria for the not-wholly obtained or produced goods.

Thanks to the series of multilateral trade negotiations for trade liberalization under the auspices of GATT/WTO, average tariffs are now much lower than before. However, the lack of uniformity in rules of origin causes unnecessary delay and cost, not only to the customs authorities, but also to business and trading communities. The establishment of a single set of rules of origin would bring about a number of benefits to the public and private sectors. It would certainly reduce the time and costs required, thus facilitating trade. It would contribute equally to the international trading system by strengthening certainty, predictability and consistency of origin determination. It would also reduce the number of trade dispute cases by implementing a single set of origin rules.

2. Objectives of Harmonization

The final result of harmonization should not be too cumbersome or burdening. The harmonized preferential rules of origin should meet the following objectives:

(a) *Trade deflection/circumvention.* The basic objective of the harmonized rules should be to prevent trade deflection, and create trade among the members;

(b) *Simple.* The harmonized rules should be simple to operate, easy to follow, transparent and predictable;

(c) *Cost.* The cost of proving the origin of a product or for procuring the certificate of origin should not be high, as that burden would have a greater impact on small and medium-sized enterprises;

(d) *Cumulation.* The cumulation rule should allow greater integration among RTA members and facilitate intraregional trade and investment flows;

(e) *Trade facilitation.* Simple rules of origin place less of a burden on customs procedures and make the process of verification simpler;

(f) *Sensitivity.* Restrictive rules of origin targeted at sensitive products are not effective in protecting domestic industry, and may nullify the tariff concessions;

(g) *Product specific rules*. Product specific rules should be avoided in the harmonized rules;

(h) *Special and differential treatment*. Rules of origin should be devised by taking into account the differential levels of development of the ESCAP member States.

As a first step, therefore, instead of trying to develop "harmonized preferential rules of origin", a more pragmatic approach would be to start with a "framework on common preferential rules of origin". The framework should set out a common understanding on the principles, rules and good practices to be followed in the preferential rules of origin.

Given the fact that, compared with other regions in the world, the ESCAP region lacks a true regional approach on this subject, it has become necessary that greater attention be given to preparing a framework on harmonizing the preferential rules of origin. The following approach could be taken:

First stage. The member States of ESCAP could propose an activity in the work programme for formulating a framework on the preferential rules of origin.

Second stage. A detailed study would be carried out to analyze in depth the different texts on rules of origin of some of the important RTAs of the ESCAP region and suggest

a framework on preferential rules of origin, using such texts as the APTA rules of origin, and ASEAN's FTA with its trading partners.

Third stage. ESCAP member States discuss, finalize and adopt the framework.

Final stage. Member States of ESCAP would adopt a common set of rules of origin in their RTAs on the basis of the framework adopted.

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IV. IMPORTS, EXPORTS AND FOREIGN DIRECT INVESTMENT INTERACTIONS AND THEIR EFFECTS

*By Santi Chaisrisawatsuk and Wisit Chaisrisawatsuk**

Introduction

There is almost universal agreement that, under general assumptions, freer trade will lead to welfare improvements for those countries that engage in it. The importance of investment liberalization and its inextricable link with trade liberalization has also been increasingly recognized, with the result that many trade agreements now include investment provisions dealing not only with Mode 3 supply of services (commercial presence) but also with flows of capital either in terms of foreign direct investment (FDI) or foreign portfolio investment (FPI). Current theoretical studies have shown that international trade and investment are complementary rather than substitutes if trade between two economies is based on their comparative advantages. However, if the trade between the two countries is based on their absolute advantages, there may be substitution between trade and investment, as businesses decide to supply products and services through exports or FDI. The degree of complementarity between trade and investment therefore remains an empirical question.

This chapter explores how international trade and investment flows affect each other, using data from OECD and six ASEAN countries,[1] and examines whether trade and investment linkages are different between developed and developing economies, or between countries that participate actively in bilateral or regional trade agreements. After a brief overview of the literature and global trends in trade and investment flows in section A, the methodology and data used in the study are presented in section B. The empirical results obtained and policy implications are discussed in section C, followed by concluding remarks in section D.

A. Trade and investment linkages: literature review and global trends

The "proximity-concentration hypothesis" (Krugman, 1983; Horstmann and Markusen, 1992; Brainard, 1993 and 1997) suggests that greater transaction costs resulting from higher trade barriers and transportation cost, lead to horizontal cross-

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1 Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand.

border production expansion and thus, stimulate international investment. In this view, international trade is more or less a substitute for international investment. On the contrary, the "factor-proportion hypothesis" (Helpman, 1984; Markusen, 1984; Helpman and Krugman, 1985; Ethier and Horn, 1990) appears to predict that international trade and investment are complements, as firms take advantage of factor price differences through cross-border vertical production integration.

According to Aizenman and Noy (2005), it is common to expect bidirectional linkages between FDI and trade in goods. However, it is difficult to indicate whether inflows and outflows of FDI have different effects on trade in different types of goods. They suggested that there is a strong feedback type of relationship between FDI flows and trade, especially in manufacturing goods. Applying Geweke's (1982) decomposition method, they found that the Granger causality from FDI flows to trade openness was stronger than that from trade to FDI flows.

Raff (2004) investigated the effect of FTA or customs unions on FDI location selection and its impacts on social welfare. The study showed that economic integration, through tariff reductions, would lead to greater FDI and hence, improved social welfare. However, Raff also indicated that FDI inflows resulting from trade expansion were not necessarily beneficial to the host or home countries. There was some evidence that increased FDI due to trade enhancement led to less competition in the domestic market and inadequate technology transfers.

The hypothesis of complementarity between trade and investment stems from the fact that there are increasing trends in intra-industry trade in many regions of the world. By engaging in bilateral as well as multilateral trade agreements, countries also often hope that the resulting trade creation will induce more FDI inflows. Gain from trade will be enhanced and pushed up to its potential by increasing a country's competitiveness if trade and FDI are complementary.

It is common to also see a close connection between domestic investment and trade especially in developing countries, as imports of capital goods is often a necessary condition for the expansion of domestic investment in host countries. Brauerhjelm, Oxelheim, and Thulin (2005) investigated the relationship between domestic investment and FDI outflows. They found evidence of complementary relationships coinciding with industrial vertical integration practices, as well as of substitution relationships coinciding with industrial horizontal integration. The existence of complementary linkages between international trade and investment, particularly in connection with intra-industry trade, is supported.

At the micro-level, interdependence between international trade and investment is magnified through intrafirm trade (trade among firm's foreign affiliates), outsourcing of raw materials, intermediate goods, output and the firm's vertical integration behaviour, particularly vertical FDI. Hence, the role of FDI inflows as the source of international capitalization is no longer the only concern for developing or least developed economies.

It is extended to cover many other aspects as the linkage between international trade and investment becomes more intensified. As for the host country, more FDI inflows do not always lead to increasing country competitiveness and thus sustainable economic development. The quality of FDI should be investigated more carefully so that it can be assured that the benefits from FDI inflows to the host countries can be fully realized and that problems such as economic instability and income disparity that might result from trade and investment liberalization imbalances can be avoided.

Table 1 summarizes the figures of exports, imports and FDI inflows in different parts of the world. In the past 15 years, world exports, imports and FDI inflows have been growing constantly. Exports and imports grew from US$ 3,720 billion and US$ 3,832 billion to US$ 7,656 billion and US$ 7,940 billion on average from period 1 (1990-1994) to period 3 (2000-2005), respectively (annual increases of 10.58 per cent and 10.72 per cent, respectively). A similar pattern was experienced for FDI inflows. The world's FDI inflows increased from US$ 201 billion to US$ 841 billion in the same period (an annual increase of 31.84 per cent). An increased flow of FDI suggests the rising importance of the role of FDI in economic development.

Despite a similar growth pattern for exports, imports and FDI inflows in different parts of the world, some regions received more FDI inflows than other regions and countries. For example, significant increases occurred in Asia, the European Union and developing countries. The average of FDI inflows to developing countries increased from US$ 62.024 million in period 1 to more than US$ 235 billion in period 3. Asia also experienced significant increases in exports and imports during the past decade. During the same period, the region recorded an improvement in FDI inflows, accounting for 17.41 per cent and 17.18 per cent of global FDI inflows on average during the period 1994-1999 and 2000-2005, respectively. This appears to suggest a positive link between international trade and investment in the region.

Table 1 also shows the increasing rate of exports, imports and FDI inflows in different parts of the world. The rates are measured on a five-year basis. The world's FDI inflows grew significantly during the period 1994-1999 at a rate of 201.93 per cent. In every part of the world, during the period 1994-1999, FDI inflows increased faster than exports and imports. In developing economies and Asia in particular, exports and imports grew at a rate greater than 58 per cent. The growth rates of exports were 62.33 per cent and 68.03 per cent for developing countries and Asia, respectively, while the growth of imports was 58.42 per cent and 58.54 per cent, respectively. Together with the growth in trade (exports and imports), developing countries and Asia also experienced a high growth rate of FDI inflows at 180.60 per cent and 145.34 per cent, respectively.

As a result of the growth of the economies of China and India, particularly as FDI destinations, FDI flows into Asia have accounted for a large share of global FDI. Business activities (measured by exports, imports and FDI inflows) have been concentrated in certain regions of the world, although recent years have seen a better distribution. Exports, imports and FDI inflows have increased significantly in several

Table 1. Exports, imports and FDI inflows, 1990-2005
(five-year simple averages)

(Unit: millions of United States dollars)

Region	Exports, imports and FDI inflows		
	1990-1994	1994-1999	2000-2005
World			
Exports	3 720 438	5 394 946	7 656 527
	-	(45.01)	(41.92)
Imports	3 832 498	5 494 774	7 940 450
	-	(43.37)	(44.51)
FDI inflows	201 002	606 884	840 742
	-	(201.93)	(38.53)
Africa			
Exports	80 464	98 306	162 431
	-	(22.17)	(65.23)
Imports	86 805	107 876	153 925
	-	(24.27)	(42.69)
FDI inflows	4 349	8 537	18 142
	-	(96.30)	(112.51)
Asia			
Exports	598 214	1 005 193	1 599 683
	-	(68.03)	(59.14)
Imports	621 757	985 703	1 515 290
	-	(58.54)	(53.73)
FDI inflows	43 065	105 654	144 448
	-	(145.34)	(36.72)
European Union			
Exports	1 567 640	2 208 076	3 042 750
	-	(40.85)	(37.80)
Imports	1 594 582	2 143 924	3 026 649
	-	(34.45)	(41.17)
FDI inflows	80 109	236,565	379 082
	-	(195.30)	(60.24)
Developing countries			
Exports	1 111 090	1 803 654	2 989 967
	-	(62.33)	(65.77)
Imports	1 170 318	1 853 998	2 842 078
	-	(58.42)	(53.29)
FDI inflows	62 024	174 042	235 274
	-	(180.60)	(35.18)

Note: Figures in parentheses show percentage changes from one five-year period to the next.

parts of the world other than in Europe and developed countries, especially in Africa, Asia and developing countries.

Despite the impressive growth in FDI inflows in every part of the world during the period 1994-1999, the growth rates of FDI inflows dropped significantly in the period 2000-2005 in almost every region except Africa, where FDI inflows grew at 112.51 per cent. The global FDI inflow growth decreased from 207.93 per cent in period 2 (1994-1999) to 38.53 per cent in period 3 (2000-2005). Part of the reason for the big drop in global FDI inflows has been the drop in FDI inflows in Asia, which could be explained by the 1997 Asian financial crisis. Many countries (for example, Thailand) were under strict International Monetary Fund debt restructuring rules during that period. Interest rates skyrocketed in those countries that were facing both political and economic risks. In Asia, the data suggest that the decrease in the FDI inflow growth rate in the period 2000-2005 was associated with small declines in the growth of exports and imports. FDI inflows appear to have grown at a faster pace than exports and imports during the period 1994-1999. In the period 2000-2005, the growth rates of FDI inflows were in line with the growth in exports and imports, except in some regions, such as Africa and the European Union. Growth in FDI inflows in the European Union may be explained by the fact that the European Union has expanded to include Eastern European economies.

Table 2 illustrates the correlation matrix between exports, imports and FDI inflows in selected regions. It shows that FDI inflows and exports are highly correlated in Africa, Asia and developing countries. The correlation coefficients between exports and FDI inflows are very high (around 0.9) in Africa, Asia and developing countries. They are higher than those in the European Union (0.49) and the world (0.62). This indicates the importance of FDI inflows to exports and vice versa in those regions. The same pattern is observed for the correlation between FDI inflows and imports. The correlation coefficients between imports and FDI inflows are greater than 0.85 in Africa, Asia and developing countries (0.87, 0.89 and 0.89, respectively). In addition, highly positive links were found between FDI inflows in different regions. For example, the correlation between FDI inflows to Asia and the European Union is 0.76 while the correlation between FDI inflows to developing countries and FDI inflows to the European Union is 0.75. A similar pattern of correlation is seen in different regions, which suggests that there are complementarities between FDI inflows in different regions due to an increasing trend of outsourcing and the development of the global value chain.

This overview of trade and FDI inflows appears to point to a close link between international trade and investment. The closer the relationship between trade and investment, the better chance the host country has of realizing the benefits from trade and investment liberalization in terms of welfare improvement. Trade liberalization implies a freer (less costly) movement of goods and services, while investment liberalization implies a better environment for the movement of resources. Increasing international trade according to comparative advantages is the key condition for countries to realize gains from trade in terms of welfare improvement. If trade and investment are complementary, FDI inflows are supposed to enhance the gains from trade. In addition,

FDI inflows are also expected to improve the efficiency and productivity of factors of production, thereby enhancing the host country's competitiveness.

Table 2. Correlation matrix between exports, imports and FDI inflows in selected regions

	EX-AF	EX-AS	EX-DC	EX-EU	EX-W	IM-AF	IM-AS	IM-DC	IM-EU	IM-W	FDI-AF	FDI-AS	FDI-DC	FDI-EU	FDI-W
EX-AF	1.0000	0.9638	0.9763	0.9508	0.9613	0.9748	0.9639	0.9673	0.9634	0.9650	0.8976	0.8205	0.8187	0.4654	0.5201
EX-AS	0.9638	1.0000	0.9983	0.9895	0.9981	0.9573	0.9953	0.9987	0.9861	0.9974	0.9145	0.9026	0.8971	0.5229	0.6015
EX-DC	0.9763	0.9983	1.0000	0.9889	0.9973	0.9648	0.9934	0.9980	0.9890	0.9977	0.9191	0.8919	0.8886	0.5196	0.5940
EX-EU	0.9508	0.9895	0.9889	1.0000	0.9949	0.9575	0.9812	0.9895	0.9971	0.9951	0.8994	0.8684	0.8753	0.4920	0.5772
EX-W	0.9613	0.9981	0.9973	0.9949	1.0000	0.9548	0.9911	0.9970	0.9924	0.9997	0.9120	0.9033	0.9029	0.5350	0.6160
IM-AF	0.9748	0.9573	0.9648	0.9575	0.9548	1.0000	0.9617	0.9655	0.9630	0.9567	0.8733	0.7784	0.7886	0.3456	0.4247
IM-AS	0.9639	0.9953	0.9934	0.9812	0.9911	0.9617	1.0000	0.9971	0.9762	0.9896	0.8949	0.8858	0.8745	0.4675	0.5513
IM-DC	0.9673	0.9987	0.9980	0.9895	0.9970	0.9655	0.9971	1.0000	0.9861	0.9963	0.9106	0.8917	0.8882	0.4897	0.5734
IM-EU	0.9634	0.9861	0.9890	0.9971	0.9924	0.9630	0.9762	0.9861	1.0000	0.9942	0.9012	0.8588	0.8686	0.5048	0.5826
IM-W	0.9650	0.9974	0.9977	0.9951	0.9997	0.9567	0.9896	0.9963	0.9942	1.0000	0.9149	0.8982	0.8990	0.5367	0.6153
FDI-AF	0.8976	0.9145	0.9191	0.8994	0.9120	0.8733	0.8949	0.9106	0.9012	0.9149	1.0000	0.8302	0.8406	0.5347	0.5794
FDI-AS	0.8205	0.9026	0.8919	0.8684	0.9033	0.7784	0.8858	0.8917	0.8588	0.8982	0.8302	1.0000	0.9899	0.7616	0.8432
FDI-DC	0.8187	0.8971	0.8886	0.8753	0.9029	0.7886	0.8745	0.8882	0.8686	0.8990	0.8406	0.9899	1.0000	0.7499	0.8434
FDI-EU	0.4654	0.5229	0.5196	0.4920	0.5350	0.3456	0.4675	0.4897	0.5048	0.5367	0.5347	0.7616	0.7499	1.0000	0.9775
FDI-W	0.5201	0.6015	0.5940	0.5772	0.6160	0.4247	0.5513	0.5734	0.5826	0.6153	0.5794	0.8432	0.8434	0.9775	1.0000

Source: Author's calculation.
Note: EX: Exports; IM: Imports: AF Africa; AS: Asia; DC: Developing Countries; EU: European Union; W: World.

B. Methodology and data

1. Methodology

This study applies the gravity model approach in investigating the relationship between international trade and investment in order to address the three main questions:

(a) How are international trade and investment are linked, and is it certain that greater trade leads to more FDI or vice versa?

(b) Are trade and investment linkages different between economies with different characteristics?

(c) Is there a possibility of negative impacts from FDI inflows?

Generally, countries with similar resource endowments produce similar products according to their comparative advantages and are likely to substitute investment for

trade. However, the existence of two-way trade in similar products and two-way investments among developed as well as developing economies indicates that there is room for complementary trade and investment. In this paper, both trade and investment are considered as endogenous variables. Thus, the simultaneous equation estimation is a more appropriate approach and is used in order to capture the "feedback" effects between trade and investment, and to examine the relationships between the different aspects of trade and investment so that the possible negative impacts of FDI inflows on the host economy can be identified. The possibility of improper technology transfer, economic dependency and transfer pricing is higher when there is a positive linkage between FDI inflows and imports from the home country by the host country. The greater the relationship between FDI inflows, as a percentage, and imports from the home country compared with the relationship between FDI inflows and imports from other countries, the higher is the possibility of economic dependency. Five systems of equations are considered here, two on bilateral trade (both exports and imports) and the others on bilateral FDI, and are estimated simultaneously as follows.

Model 1. Linkage between FDI inflows and trade

FDI_{ij} = f(GDP_i, GDP_j, $GDPPC_i$, $GDPPC_j$, TRD_{ij}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

TRD_{ij} = f(GDP_i , GDP_j, $GDPPC_i$, $GDPPC_j$, FDI_{ij}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

where

TRD_{ij} = International trade (exports and imports) between country i and country j;

FDI_{ij} = Bilateral FDI from country i to country j (FDI inflows, where country i is the home country and country j is the host country);

GDP_i and GDP_j = Gross domestic product for country i and country j, respectively;

$GDPPC_i$ and $GDPP_j$ = Per capita GDP for country i and country j, respectively;

$DIST_{ij}$ = Distance between the two economies, i and j;

$RURAL_i$ = Percentage of the population in the rural area of country I;

$RURAL_j$ = Percentage of the population in the rural area of country j;

RTA = The number of regional trade agreements in which both country i and country j participated, which is the variable representing the involvement of the country in the regional trade agreements;

GSP = Dummy variable, which represents the GSP-receiving country;

REGIONAL = Dummy variable of trading partners that belong to the same region;

EX_{iw} and EX_{jw} = Exports of country i and country j to the world, respectively;

IM_{iw} and IM_{jw} = Imports of country i and country j to the world, respectively;

$TRDO_i$ = Trade openness of country i, that is, $(EX_{iw}+IM_{iw})/GDP_i$;

$TRDO_j$ = Trade openness of country j, i.e., $(EX_{jw}+IM_{jw})/GDP_j$.

Model 2. Linkage between FDI inflows and exports of the trading partners

$FDI_{ij} = f(GDP_i, GDP_j, GDPPC_i, GDPPC_j, EX_{ij}, EX_{ji}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

$EX_{ij} = f(GDP_i , GDP_j, GDPPC_i, GDPPC_j, FDI_{ij}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

$EX_{ji} = f(GDP_i , GDP_j, GDPPC_i, GDPPC_j, FDI_{ij}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

where

EX_{ij} = Country i's exports to country j;

EX_{ji} = Country j's exports to country i.

Model 3. Linkage between FDI inflows and imports of the trading partners

$FDI_{ij} = f(GDP_i, GDP_j, GDPPC_i, GDPPC_j, IM_{ij}, IM_{ji}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

$IM_{ij} = f(GDP_i , GDP_j, GDPPC_i, GDPPC_j, FDI_{ij}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

$IM_{ji} = f(GDP_i , GDP_j, GDPPC_i, GDPPC_j, FDI_{ij}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

where

IM_{ij} = Country i's imports from country j;

IM_{ji} = Country j's imports from country i.

Model 4. Linkage between FDI inflows and exports to other trading partners

$FDI_{ij} = f(GDP_i, GDP_j, GDPPC_i, GDPPC_j, EX_{io}, EX_{jo}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

$EX_{io} = f(GDP_i , GDP_j, GDPPC_i, GDPPC_j, FDI_{ij}, DIST_{ij}, RURAL_i, RURAL_j, RTA, GSP, REGIONAL, TRDO_i, TRDO_j)$

EX_{jo} = f(GDP_i , GDP_j, $GDPPC_i$, $GDPPC_j$, FDI_{ij}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

where

EX_{io} = Country i's exports to the world except for country j (EX_{iw} - EX_{ij});

EX_{jo} = Country j's exports to the world except for country i (EX_{jw} - EX_{ji}).

Model 5. Linkage between FDI inflows and imports from other trading partners

FDI_{ij} = f(GDP_i, GDP_j, $GDPPC_i$, $GDPPC_j$, IM_{io}, IM_{jo}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

IM_{io} = f(GDP_i, GDP_j, $GDPPC_i$, $GDPPC_j$, FDI_{ij}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

IM_{jo} = f(GDP_i, GDP_j, $GDPPC_i$, $GDPPC_j$, FDI_{ij}, $DIST_{ij}$, $RURAL_i$, $RURAL_j$, RTA, GSP, REGIONAL, $TRDO_i$, $TRDO_j$)

where

IM_{io} = Country i's imports from the world except for country j (IM_{iw} - IM_{ij});

IM_{jo} = Country j's imports from the world except for country i (IM_{jw} - IM_{ji}).

2. Data

The data on bilateral trade are collected from WITS, COMTRADE and several other international trade databases. The data on trade and GDP are adjusted so that they are all presented in current United States dollars. Owing to the limitation on the bilateral foreign portfolio investment (FPI) data, the study includes only bilateral FDI data obtained from the International Direct Investment Statistics Yearbook and the monthly ASEAN statistical indicators. Therefore, the bilateral annual FDI flows for all 29 OECD countries and these comprising the ASEAN-6, from 1980 to 2004, are included in the data set for the study. The so called "new ASEAN countries", i.e., CLMV countries (Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam) are not included in the data set since the data on bilateral FDI are not available in the countries. The observations with missing information are subtracted from the data set.

C. Empirical results

An overall positive relationship between international trade and investment was expected, i.e., the greater the international trade between countries, the higher the level of FDI it generates and vice versa. In order for a country to enjoy better the gains from trade liberalization, investment has a significant role to play as a complement to trade.

The results of the estimation of model 1 in table 3 show a positive and statistically significant relationship between trade and investment, which is consistent with expectations. A stronger correlation is found from trade to FDI inflows compared with the correlation from FDI inflows to trade. A 1 per cent increase in trade can lead to a 1.21 per cent increase in FDI inflows. The feedback effect investigation also suggests that a bidirectional relationship exists between international trade and investment. The empirical results obtained suggest that if trade creation results from economic integration, regionally or bilaterally, there will be an increase in FDI inflows between the trading partners.

Table 3. Linkages between FDI inflows and trade
(Model 1 parameters estimated)

Independent variables	Dependent variables	
	Ln(FDI_{ij})	**Ln(TRD_{ij})**
Constant	-20.9195	16.9449
	(-34.4624)[a]	(13.9957)
Ln(FDI_{ij})		0.8129
		(20.9386)[a]
Ln(TRD_{ij})	1.2078	
	(30.0999)[a]	
Ln(GDP_i)	-0.1748	0.1575
	(-4.2136)[a]	(4.0809)[a]
Ln(GDP_j)	-0.2098	0.1873
	(-5.0036)[a]	(4.9488)[a]
Ln($GDPPC_i$)	1.8207	-1.4892
	(49.0074)[a]	(-22.6349)[a]
Ln($GDPPC_j$)	-0.0380	0.0298
	(-1.2577)	(1.2138)
Ln(DIST)	0.3285	-0.2804
	(9.2587)[a]	(-10.4359)[a]
$RURAL_i$	-0.0005	
	(-0.5412)	
$RURAL_j$	-0.0123	0.0100
	(-8.4574)[a]	(7.8263)[a]
RTA	0.1573	-0.1250
	(6.2255)[a]	(-5.2829)[a]
GSP	-0.3287	0.2685
	(-7.6329)[a]	(7.5112)[a]
REGIONAL	-0.1501	0.1207
	(-2.3278)[b]	(2.2997)[b]
$TRDO_i$	0.3031	-1.0954
	(4.5078)[a]	(-10.7332)[a]
$TRDO_j$	1.3416	-0.2332
	(12.5162)[a]	(-3.5892)[a]
Number of observations	10 320	10 320
Adjusted R^2	0.5244	0.3471

Note: The numbers in parentheses are t-statistics.
a, b and c indicate that the estimated parameters are significant at the 1 per cent, 5 per cent and 10 per cent levels, respectively.

Tables 4 and 5 show the parameters estimated in model 2 and 3 to investigate the linkages among FDI inflows, exports and imports of the trading partners. The results in tables 4 and 5 suggest that FDI inflow is complementary to exports and imports of the trading partners. An increase in exports from country i (home country) to country j (host country) will lead to greater flows of FDI into the host country from the home country. A closer look at the relationships between FDI inflows and exports from the home country to the host country also indicates that they are complementary. An increase in exports between the trading partners leads to an increase in FDI inflows from the host country and vice versa. The magnitude of the impacts appears to be larger from exports to FDI inflows than the other way around. In addition, an increase in exports from the host country to the home country also generates more FDI inflows to the host country.

Table 4. Linkages between FDI inflows and exports of the trading partners
(Model 2 parameters estimated)

Independent variables	Dependent variables		
	Ln(FDI_{ij})	**Ln(EX_{ij})**	**Ln(EX_{ji})**
Constant	-14.9117	6.1713	4.0973
	(-23.1065)a	(12.0886)[a]	(5.9119)[a]
Ln(FDI_{ij})		0.4649	0.4418
		(29.4629)[a]	(20.0017)[a]
Ln(EX_{ij})	1.4831		
	(24.9095)[a]		
Ln(EX_{ji})	0.3636		
	(8.8150)[a]		
Ln(GDP_i)	-0.7638	0.4668	0.5340
	(-14.9052)[a]	(30.0466)[a]	(25.6266)[a]
Ln(GDP_j)	-0.8246	0.4817	0.5834
	(-16.6472)[a]	(34.1273)[a]	(31.3296)[a]
Ln($GDPPC_i$)	1.8556	-0.8421	-1.0201
	(50.6168)[a]	(-27.9850)[a]	(-25.3075)[a]
Ln($GDPPC_j$)	0.0531	-0.0551	0.1055
	(1.8258)[c]	(-3.9394)[a]	(6.2710)[a]
Ln(DIST)	0.9483	-0.5453	-0.5749
	(20.2704)[a]	(-46.5047)[a]	(-38.2419)[a]
$RURAL_j$	-0.0067	0.0017	0.0074
	(-4.5188)[a]	(2.3200)[b]	(8.3613)[a]
RTA	-0.0033	0.0311	0.0159
	(-0.1479)	(2.8235)[a]	(1.1591)
GSP	-0.4358	0.2269	0.2020
	(-9.9300)[a]	(10.6013)[a]	(7.8343)[a]
$TRDO_i$	1.2923	-0.5776	-0.6418
	(13.1626)[a]	(-10.9499)[a]	(-9.8460)[a]
$TRDO_j$	-0.1299	0.0436	0.5073
	(-1.9329)[c]	(1.3913)	(13.1166)[a]
Number of observations	10 320	10 320	10 320
Adjusted R^2	0.4192	0.6977	0.6966

Note: The numbers in parentheses are t-statistics.
a, b and c indicate that the estimated parameters are significant at the 1 per cent, 5 per cent and 10 per cent levels, respectively.

Table 5. Linkages between FDI inflows and imports of the trading partners
(Model 3 parameters estimated)

Independent variables	Dependent variables		
	$Ln(FDI_{ij})$	$Ln(IM_{ij})$	$Ln(IM_{ji})$
Constant	-16.2736	12.9782	8.7197
	(-29.3338)	(17.9160)[a]	(16.7830)[a]
$Ln(FDI_{ij})$		0.7202	0.5797
		(33.3095)[a]	(39.7280)[a]
$Ln(IM_{ij})$	0.5652		
	(38.6927)[a]		
$Ln(IM_{ji})$	1.0205		
	(42.2784)[a]		
$Ln(GDP_i)$	-0.5190	0.2841	0.3525
	(-17.3549)[a]	(12.4683)[a]	(21.1999)[a]
$Ln(GDP_j)$	-0.6358	0.3710	0.4185
	(-21.0391)[a]	(17.7024)[a]	(26.7514)[a]
$Ln(GDPPC_i)$	1.8504	-1.5120	-0.9737
	(50.4393)[a]	(-35.1412)[a]	(-30.8308)[a]
$Ln(GDPPC_j)$	0.0286	0.0586	-0.0604
	(0.9610)	(2.6291)[a]	(-3.3235)[a]
Ln(DIST)	0.6577	-0.3590	-0.4463
	(23.7483)[a]	(-20.2120)[a]	(-32.5422)[a]
$RURAL_j$	-0.0103	0.0119	0.0035
	(-6.7864)[a]	(10.2917)[a]	(3.6979)[a]
RTA	0.0638	-0.1018	-0.0057
	(3.0175)[a]	(-6.0116)[a]	(-0.4265)
GSP	-0.3355	0.2287	0.2018
	(-7.4595)[a]	(6.7414)[a]	(7.3119)[a]
$TRDO_i$	1.5374	-1.1244	-0.8819
	(15.0364)a	(-13.6487)[a]	(-13.4122)[a]
$TRDO_j$	-0.0847	0.0852	0.0370
	(-1.3524)	(1.7446)[c]	(0.9475)
Number of observations	10 320	10 320	10 320
Adjusted R^2	0.4605	0.4648	0.5966

Note: The numbers in parentheses are t-statistics.
a, b and c indicate that the estimated parameters are significant at the 1 per cent, 5 per cent and 10 per cent levels, respectively.

Table 5, in parallel with table 4, reports the linkages between FDI inflows and imports of the home country (country i) from the host country (country j). Positive relationships are found between the two variables. An increase in FDI inflows by 1 per cent can lead to a 0.72 per cent increase in imports by the home country from the host country. The complementarity between FDI inflows and import of the host country from

the home country are also revealed. A 1 per cent increase in imports by the host country from the home country induces an increase of the same proportion in FDI inflow from the home country. Reverse causality suggests that an increase in FDI inflows from the home country will lead to an increase in imports by the host country from the home country. These relationships express a possibility of economic dependency as a result of FDI inflows. As more investment flows in, the host country's economy becomes more and more dependent on the home country's production technology. The FDI hosting country will have to import more inputs and intermediate goods from the FDI home country, which might, in turn, constrain the development of the domestic industry.

Model 4 describes the effects of exports by the home country to "all countries but the host country" and exports by the host country to "all countries but the home country" on its FDI inflows. The results in table 6 show that FDI inflows and exports of the home country to other trading partners are positively linked. An increase in exports by the home country to other trading partners induces more outward investment, which further confirms that trade can act as a catalyst to attract foreign investment. In contrast, an increase in exports by the home country to other trading partners does not appear to be a major factor in attracting FDI inflows to the host country. Investment decisions, therefore, appear to be biased towards the expansion of home country exports and it is not clear whether the host country can gain competitiveness from FDI inflows. Indeed, a negative effect of FDI inflows on exports of the host country to other trading partners is observed. Consequently, it raises the question of whether a developing country should compete for FDI by offering investment incentives to foreign investors.

A significant negative effect of FDI on exports by the home country to other trading partners is also revealed in this model. This evidence suggests a possibility that an increase in FDI inflows from the home country to the host country could result in reductions in exports by the home and host country to the rest of the world. FDI inflows between the two countries, while generating exports between them, crowd out exports to the rest of the world (increased exports to the home and host countries but decreased exports to other trading partners).

The linkages between FDI inflows and imports from other trading partners of the home and host countries are examined in model 5. Table 7 illustrates the positive and significant effects on FDI inflows as a result of home and host country imports from other trading partners. An increase in FDI inflows will stimulate more imports by the home and host countries from the rest of the world. For example, by investing in the host country, the home country receives returns from its international investments that raise the country's income and, hence, stimulate more imports from the rest of the world, i.e., positive income elasticity for imports is recognized.

However, FDI inflows will generate more imports by the home country from other trading partners than imports by the host country from the rest of the world. Thus, FDI inflows from the home country act as a stimulus for host country imports from its other trading partners (the rest of the world). This finding is consistent with the increasing

development of global value chains through outsourcing and vertical as well as horizontal integration that span entire regions or the whole world, rather than only the home and host countries.

Table 6. Linkages between FDI inflows and exports to other trading partners
(Model 4 parameters estimated)

Independent variables	Dependent variables		
	$Ln(FDI_{ij})$	$Ln(EX_{io})$	$Ln(EX_{jo})$
Constant	-25.4799	-7.0922	-20.6836
	(-48.9753)[a]	(-22.9887)[a]	(-44.1966)[a]
$Ln(FDI_{ij})$		-0.1748	-0.6428
		(-17.7770)[a]	(-46.1655)[a]
$Ln(EX_{io})$	0.7102		
	(13.8300)[a]		
$Ln(EX_{jo})$	0.0380		
	(0.9507)		
$Ln(GDP_i)$	0.0637	1.0624	0.4781
	(1.4973)	(119.6773)[a]	(35.1760)[a]
$Ln(GDP_j)$	0.5719	0.0350	1.3221
	(14.3996)[a]	(4.4708)[a]	(103.4506)[a]
$Ln(GDPPC_i)$	1.4596	0.3047	0.9796
	(34.6741)[a]	(18.0068)[a]	(37.5792)[a]
$Ln(GDPPC_j)$	0.1507	0.0202	0.0895
	(4.7538)[a]	(3.1952)[a]	(7.4624)[a]
Ln(DIST)	-0.3657	0.0637	-0.0917
	(-9.1826)[a]	(7.5806)[a]	(-5.9056)[a]
$RURAL_j$	-0.0068	0.0009	-0.0025
	(-4.0121)[a]	(2.6987)[a]	(-3.9122)[a]
RTA	0.2376	-0.2201	-0.1661
	(4.0496)[a]	(-18.5647)[a]	(-7.3552)[a]
GSP	-0.1438	-0.0032	-0.2318
	(-2.9506)[a]	(-0.3209)	(-12.4018)[a]
$TRDO_i$	0.0249	2.1794	1.1524
	(3.3001)[a]	(82.4915)[a]	(25.8652)[a]
$TRDO_j$	0.0028	0.0584	1.8647
	(0.3224)	(3.7942)[a]	(66.6274)[a]
REGIONAL	0.6227	1.1372	1.5723
	(2.5179)[a]	(22.6956)[a]	(16.6324)\[a]
Number of observations	10 320	10 320	10 320
Adjusted R^2	0.4664	0.8460	0.1635

Note: The numbers in parentheses are t-statistics.
a, b and c indicate that the estimated parameters are significant at the 1 per cent, 5 per cent and 10 per cent levels, respectively.

Table 7. Linkages between FDI inflows and imports from other trading partners
(Model 5 parameters estimated)

Independent variables	Dependent variables		
	Ln(FDI_{ij})	**Ln(IM_{io})**	**Ln(IM_{jo})**
Constant	-33.9655	8.4564	1.7156
	(-67.0877)a	(52.8860)[a]	(7.6332)[a]
Ln(FDI_{ij})		0.2529	0.0981
		(52.5638)[a]	(13.3271)[a]
Ln(IM_{io})	2.5273		
	(39.2666)[a]		
Ln(IM_{jo})	0.7850		
	(16.4975)[a]		
Ln(GDP_i)	-1.2846	0.6628	-0.1350
	(-34.5861)[a]	(134.8737)[a]	(-19.8609)[a]
Ln(GDP_j)	0.1056	-0.2093	0.8743
	(3.2401)[a]	(-42.0496)[a]	(143.2491) [a]
Ln($GDPPC_i$)	1.7946	-0.4938	-0.1462
	(45.4987)[a]	(-48.2526)[a]	(-11.2785)[a]
Ln($GDPPC_j$)	0.1225	-0.0341	0.0330
	(3.8459)[a]	(-6.0299)[a]	(6.4662)[a]
Ln(DIST)	-0.3631	0.1096	0.0201
	(-16.5491)[a]	(23.0007)[a]	(3.9461)[a]
$RURAL_j$	-0.0086	0.0019	0.0042
	(-5.5191)[a]	(6.3213)[a]	(15.6514)[a]
RTA	0.4552	-0.1475	-0.0571
	(17.2297)[a]	(-27.9995)[a]	(-11.2250)[a]
GSP	-0.1729	0.0710	-0.0111
	(-3.7250)[a]	(8.1487)[a]	(-1.4191)
$TRDO_i$	0.0303	0.7861	-0.3290
	(3.9610)[a]	(50.2910)[a]	(-17.2489)[a]
$TRDO_j$	-0.0048	-0.2731	1.2874
	(-0.5307)	(-24.2995)[a]	(109.4603)[a]
REGIONAL	-0.4194	0.1717	0.1093
	(-5.8278)[a]	(13.2197)	(9.4284)[a]
Number of observations	10 320	10 320	10 320
Adjusted R^2	0.4078	0.8358	0.9286

Note: The numbers in parentheses are t-statistics.
a, b and c indicate that the parameters estimated are significant at the 1 per cent, 5 per cent, and 10 per cent levels, respectively.

All the models include the trade openness index, as measured by the ratio of trade to GDP for both the home and host country, as a proxy for a country's level of trade liberalization and facilitation. The results indicate that by improving their trade openness, FDI inflows from the home country to the host country will be stimulated. At the same time, the negative relationship found between trade openness indices and bilateral trade between the home and the host country is contradictory of the results obtained in other studies. Trade openness of a country is affected by a number of factors - including country size - and may therefore not be a reliable indicator of a country's degree of trade liberalization and facilitation.

D. Conclusions

The above empirical study using gravity models suggests that there are bidirectional effects between international trade and investment. Different aspects of international trade are considered in separate models to observe the linkages between trade and FDI inflows. International trade that is measured either by exports or by imports is found to be complementary to FDI inflows. In addition, FDI inflows are observed to have feedback effects with exports of the trading partners and of the other trading partners. Similar linkages between FDI inflows to, and imports by, the trading partners and the other trading partners are also revealed.

Table 8. Summary of trade and investment relationships

	Effect of FDI inflow from home into host country (FDI_{ij}) on trade	Effect of trade on FDI inflow from home country to host country (FDI_{ij})
Total trade between home country and host country	++	+++
Exports from home country to host country (EX_{ij})	+	+++
Exports from host country to home country (EX_{ji})	+	+
Imports of home country from host country (IM_{ij})	++	++
Imports of host country from home country (IM_{ji})	++	+++
Exports from home country to the rest of the world (EX_{io})	-	++
Exports of host country to rest of the world (EX_{jo})	--	+
Imports of home country from the rest of the world (IM_{io})	+	+++
Imports of host country from the rest of the world (IM_{jo})	+	++

Notes: + and - signs represent the directions of the relationships.
+ or - indicates the absolute value of the coefficient between 0 and 0.5.
++ or -- indicates the absolute value of the coefficient between 0.51 and 1.0.
+++ or --- indicates the absolute value of the coefficient greater than 1.0.

The empirical evidence of relationships between international trade and investment suggests a crucial role of policy harmonization in benefiting further, in terms of social welfare improvement, from globalization. The positive correlation between trade and investment found by the study suggests that they are complementary. Since trade liberalization is welfare-improving, FDI induced by trade expansion will also improve social welfare. It is important for both the public and private sectors to realize the complementarity between trade and investment, and respond accordingly. The ongoing process of bilateral trade agreements appears to focus solely on trade liberalization, by reducing both tariff and non-tariff trade barriers, while leaving investment liberalization for later consideration. The creation of the "early harvest scheme" in many bilateral or regional trade negotiations is one good example. Furthermore, the mushrooming of

bilateral trade agreements/negotiations also raises issues concerning the consistency of different agreements to which one country is committed. Failure to provide consistency among trade agreements in which a country is involved could result in higher transaction costs, particularly administrative costs, and possibilities for trade diversion.

Furthermore, not only consistency among trade agreements but also consistency between trade liberalization and investment liberalization should be considered. There is evidence pointing to the role of harmonization between trade and investment policies. Flows of FDI or FPI as well as the speed of those flows in and out of a country, the movement of production bases by firms from one country to another, and firms switching from one supply chain to another are just some of the examples observed. This is vitally important to developing countries, especially those economies that rely heavily on the international sector, in terms of both growth and stability. Thus, to ensure and strengthen the benefits gained from globalization by the host country (the majority of which are developing countries) - a goal that depends on improvements in efficiency and productivity - the host country will need not only to liberalize trade and investment but also to do so in an harmonized and coordinated manner.

E. Limitations of the study

In this study, the linkages between international trade and investment needed to be narrowed down to just the relationship between FDI and trade due to the unavailability of data, particularly on portfolio investment. Additionally, the variable used in this study to address the role of trade facilitation is the trade openness index (measured by the percentages of trade to GDP) of the home and host countries, assuming that the more open a country is to trade, the higher will be the level of trade facilitation. By doing so, the study is limited to a rather aggregate view of the role of trade facilitation on trade and investment. We expected to see a positive relationship between trade and trade openness, and between investment and trade openness. Unfortunately, mixed results are found by the study. As the home or host country becomes more open to trade, the trade between the two trading partners might increase or decrease. This appears to support the possibility of trade creation and trade diversion resulting from the growing number of bilateral trade agreements.

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V. TRADE AND INVESTMENT LIBERALIZATION EFFECTS ON SME DEVELOPMENT : A LITERATURE REVIEW AND CASE STUDY OF INDONESIA

*By Tulus Tambunnan**

Introduction

International trade and investment policy have undergone fundamental changes in Indonesia since 1986. Significant trade liberalization began in 1986 and since 1994 Indonesia has reduced its applied most favoured nation (MNF) tariffs from an unweighted average of about 20 per cent in 1994 to 9.5 per cent in 1998. In 1998, tariffs on food items were reduced to a maximum of 5 per cent. Besides tariffs, Indonesia has undertaken to remove all non-tariff barriers and export restrictions. Since the beginning of the Asian financial crisis in 1997, Indonesia has also deregulated its trade regime in the major agricultural commodities (except for rice, for social reasons), terminated production and trade monopolies in certain intermediate industries (cement, plywood, rattan) and reduced export taxes on wood.

Parallel to international trade reform were reforms in the treatment of foreign investment, with ownership restrictions all but eliminated by 1995. The opening up of nearly all industries to foreign direct investment (FDI) between 1993 and 1995 helped attract large amounts of FDI. Based on the FDI data from the National Investment Coordinating Board (BKPM), FDI increased by 10 per cent from 1990 to 1993 and 30 per cent from 1993 to 1995. In 2004, the Government established an investment policy reform initiative, having as its objective the encouragement and facilitation of private sector investment through reform and implementation of transparent, predictable, market-oriented policies applied equally to both foreign and domestic investors. The new law incorporates market-oriented principles of investment policy and establishes basic guarantees such as equal treatment of Indonesian and foreign investors whenever possible, and protection against expropriation of investment. Investors are permitted to invest in any sector of the economy except in activities which are listed on the "negative list". There are no restrictions on the size of the investment, the source of funds or whether the products are destined for export or for the domestic market.

The impact of international trade and investment policy reforms on the Indonesian economy, focusing on economic growth and development of the domestic manufacturing industry has been studied extensively. However, the implications of these trade and investment policy reforms on the growth of small and medium-sized enterprises

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(SMEs) remains an under researched area of both the literature on SMEs in Indonesia and in general. This article, thus, contributes to filling the gap by examining the impact of international trade and investment policy reforms, particularly in the post-crisis period, on the growth of SMEs in Indonesia. In particular, answers to the following three questions are sought: (a) How does international trade and investment policy reforms affect local SMEs? (b) Has the growth of SMEs exports accelerated since the reforms? and (c) Does investment liberalization generate more subcontracting opportunities for local SMEs?

Following a comprehensive review of the available literature on the effects of international trade and investment policy reforms in the next section, the article provides overviews of international trade and investment reforms in Indonesia and of the development of Indonesian SMEs. The effects of the reforms on Indonesian SMEs are examined in section D, complemented by findings from a case study of a cluster of Indonesian manufacturing SMEs. Conclusions and policy recommendations are presented in section F.

A. Literature review

The Asia-Pacific region provides evidence of the benefits of external trade (in terms of exports and imports) and investment liberalization policies. With the continued growth in external trade and inflow of FDI, the region continues to generate the highest rates of economic growth in the world. The average poverty rate has declined by about 12.5 per cent from the early 1990s to 2000. Through external trade and FDI, the region has been be further integrated into the global economy and benefited from it (Bonapace, 2005).

The surge in exports of manufactured goods from Indonesia that occurred from the late1980s to the mid-1990s coincided with a sharp increase in FDI in the country. Several previous studies have indicated that multinational enterprises (MNEs) were the source of a large portion of the surge of manufactured exports and also made important contributions to changes in the country's export composition.[1] Trade policies in Indonesia also played an important role in the growth of the country's manufactured exports and the change in composition of manufactured exports. James and Ramstetter (2005) emphasized how low levels of protection, adopted by the Indonesian Government in the 1980s with respect to certain industries, was a key facilitator of rapid export growth of those industries. Despite a slowdown in export growth that began in 1996 and continued into 1998 with the Asian financial crisis, Indonesia did not reverse its export-oriented trade-liberalizing reforms. After the crisis, many MNEs expanded their operations in Indonesia (Takii and Ramstetter, 2004).

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1 See for instance, James and Ramstetter (1997) and Ramstetter (1997, 1998, 1999a, 1999b).

1. Effects of international trade reform on SMEs

It is generally believed that trade liberalization should be beneficial for the domestic economy as well as the world as a whole. At an aggregate level, trade reform could bring benefits through the following: improved resource allocation; access to better technologies, inputs and intermediate goods; economies of scale and scope; greater domestic competition; and availability of favourable growth externalities such as the transfer of know-how.[2]

Until quite recently, more attention has been given to the macroeconomic effects of international trade reforms.[3] There is now a small but growing empirical literature on the effects of international trade liberalization at a disaggregated level. Theoretically, reform towards international trade liberalization could affect (positively or negatively) individual legal firms in four major ways:

- Increasing competition. Lower import tariffs, quotas and other non-tariff barriers have the effect of increasing foreign competition in the domestic market, and this is expected to push inefficient/unproductive local firms to try to improve their productivity by eliminating waste, exploiting external economies of scale and scope, and adopting more innovative technologies, or to shut down. The openness of an economy to international trade is also seen as increasing plant size (that is, scale efficiency), as local firms adopt efficient technologies, management, organization and methods of production.[4]

- Lowering production costs due to cheaper imported inputs. Local firms benefit from lower input costs, thereby allowing them to compete more effectively in both domestic markets against imports and in export markets.

- Increasing export opportunities. Opening up to international competition will not only induce increased efficiency in domestic firms but it will also stimulate their exports.[5]

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2 For more development in this sense, see among others, Falvey and Kim (1992).

3 Some of the best known studies on this subject are: Krueger (1978), Dollar (1992), and Kruger and others (2000).

4 This is in line with general theory in which size is predicted to affect the export performance of firms positively. The new international trade theory posits a positive impact of market size in view of economies of scale. It argues that the scale economy provides cost advantages in production, research and development, and marketing efforts. See, for instance, Tybout (1992) and Bonaccorsi (1992) for a survey. The literature associated with export marketing, on the other hand, suggests that large enterprises have greater resources to gather information on markets in foreign countries and to cover uncertainties of a foreign market (see e.g., Wakelin, 1997). It is, therefore, as a general hypothesis, that large enterprises, not SMEs, are likely to be more export-oriented.

5 This is generally supported by the econometric results. See, for example, Aggarwal (2001) and Tybout and others (1991).

- Reducing availability of local inputs. Eliminating export restrictions on unprocessed raw materials will increase exports of the items at the cost of local industries.

It can thus be expected that international trade liberalization that increases foreign competition in the domestic market will hurt some inefficient or uncompetitive SMEs, while benefiting other efficient or competitive SMEs. The efficiency effects of foreign trade liberalization may be observed in an increase in average plant size among SMEs and (presumably) lower average costs. However, the seminal work of Tybout (2000) on the microdynamic effects of international trade liberalization on manufacturing firms in developing countries, for instance, consistently shows that increases in import penetration as well as reductions in protection are associated with reductions, not increases, in plant size. Thus, rather than improve efficiency immediately, an important finding of that study is that liberalization may work against the scale efficiency of SMEs in the short run (or if there are gains of efficiency, they are quite small).[6] Tybout's findings are supported by Tewari's (2001) findings from the experience of Tamil Nadu in India over the past 15 years. After the government removed restrictions on many industries, including textiles, allowing anyone to enter the industries, and simultaneously liberalized trade, there was a spate of entry by relatively small firms in those industries, notably textiles. Firms with 400-500 spindles set up shop, in contrast to the 10,000-20,000-spindle plants that larger firms operated. By the mid-1990s, the average plant size in the spinning industry had fallen significantly. Other important studies on the effect of trade reform on SMEs are given in box 1.

In Indonesia, perhaps the only evidence on the effects of trade reforms on SMEs' exports before the 1997/98 financial crisis is from a field study conducted by Berry and Levy (1994). They surveyed 91 SME exporters in three subsectors of manufacturing and conducted intensive interviews with 30-40 public and non-profit agencies active in SME issues between January and June 1992. The three subsectors were: garments in Jakarta and Bandung (both are in West Java); rattan furniture in Jakarta and Surabaya (East Java); and carved wooden furniture in Jepara (Central Java). From a total of 33 interviewed rattan product exporters, they found that all but one of the firms they had sampled exported 90 per cent or more of their output, and 26 of 33 firms began exporting the same year they entered into production. Most of them started to export or increased the share of exports in their total production after the Indonesian Government imposed bans on the export of unprocessed and semi-processed rattan in 1986 and 1988/89, respectively. It seems that the ban has been a key factor leading to a major expansion in exports of rattan furniture from Indonesia's SMEs.[7] Indeed, there are many cases, though unfortunately no official data are available, showing that free exports of raw materials have created difficulties for SMEs.

6 See further Tybout's review (2000) for further information.

7 Indonesia has long been a major supplier of raw rattan to the major rattan furniture-exporting economies of Taiwan Province of China and the Philippines. In an effort to 'jump-start' the rattan products industry in the country, the Indonesia government imposed this restriction policy (Berry and Levy, 1994).

For example, in the metal working industry, Pasuruan in East Java experienced a serious problem in continuing or expanding its production due to the lack of local scrap metal as its main raw material. This material had been exported mainly to China, leading to a scarcity of raws materials on the local market for SMEs. Another case is from PT Panasonic Manufacturing Indonesia, the leading electronic company in Indonesia, which has subcontracting linkages with many SMEs to manufacture a variety of electronic products, including water pumps. For this latter item, recently, its subcontractors faced difficulties due to the lack of brass as one of their main raw materials because it was freely exported.[8]

Box 1. Important studies on the effects of foreign trade reform policy on local SMEs in Indonesia

Valodia and Velia (2004) investigated the relationship between foreign trade liberalization at the macro level and its micro or firm- level adjustment effects in the South African manufacturing industry, and their findings suggest that there is a strong relationship between firm size and international trade. More than half of the firms not engaged in international trade are small firms. At the opposite extreme, almost half of the firms that are involved in both importing and exporting are large firms employing more than 200 workers. It seems that larger firms have been more successful at integrating their manufacturing activities into global chains of production.

Tewari and Goebel (2002) studied SME competitiveness in Tamil Nadu (in Southern India). They found two interesting facts. First, SMEs in some industries are doing better than those in others, just as some industries are doing better than others. Second, SMEs tied to low-end market segments in large urban or metro areas appear to be the most vulnerable to cheap import competition from overseas. Ironically, SMEs serving similar niches in the rural areas or in small towns do not face the same pressures. Their access to intricate, socially embedded distribution networks linking them to rural markets appears to be a source of strength that non-local competitors will find too costly to replicate.

Others such as Kaplinskly and Readman (2002), Kaplinskly, and others (2002), Roberts and Tybout (1996), and Roberts (2000) suggest that the path to growth for SMEs in a trade liberalized world lies in their ability to compete with imported goods and services, and this depends on their ability to upgrade their production capacities, their access to human resources and new technology, and their ability to improve the quality of their products.

8 This information was obtained in an interview with Mr Daniel Suhardiman, Group Manager, PT Panasonic Manufacturing Indonesia.

Official data as well as the literature show that most of the Indonesian SMEs that are engages exports, do so indirectly by subcontracting with large enterprises in which SMEs manufacture semi-final products which are then finalized by large enterprises. For instance, in food industries, processing raw materials into ready-made foods takes place in SMEs and packaging is done by large enterprises. It has been widely accepted that for SMEs to succeed on the export front they must have some way to lower production or to increase efficiency and quality of their products. Barry and others (2001) suggested that subcontracting with large enterprises or trading companies is one route. Berry and Levy (1999) reported that in Indonesia subcontracting arrangements were common among SME exporters in rattan, furniture and garments. They argue that the growth of exports for SMEs in these manufacturing subsectors no doubt reflects the rapidly-increasing importance of subcontracting arrangements, mainly with commercial intermediaries. No similar evidence can be found in other subsectors such as metal products and electronics industries however.

Some SMEs that export directly do not ship to overseas markets, but instead sell their products to foreign tourists who visit their villages or workshops. They are called "buyers market-oriented" SMEs. Van Dierman (2004), Knorringa (1998), Cole (1998) and Sandee and others. (2002) find that in certain subsectors, most export-oriented SMEs in clusters operate in buyer-driven commodity chains. Their studies show how SMEs can penetrate global markets via buyer-driven trade networks with cases of furniture and garments in Jakarta, garments in Bali, and carved wooden furniture in Jepara (Central Java). These studies also show clearly that foreigners who came to Indonesia as tourists and visited the furniture cluster in Jepara or clusters of garments SMEs in Bali have played an important role in modernizing the production methods and quality of products in these clusters and linking them to international markets.

Shortly after the financial crisis in 1997, van Dierman and others (1998) attempted to assess the impact of foreign trade and investment policy reforms related to the IMF sponsored deregulations under a letter of intent on SMEs in the manufacturing industry in Indonesia. SMEs in the pre-crisis most protected industries were expected to be more adversely affected than those in the less protected ones. However, the assessment was based on secondary data and a survey of the literature on SME development during the crisis period. No field surveys or in-depth interviews were conducted. Thus, the increased production costs due to the huge depreciation of the rupiah currency, not the protection tariffs reduction, could be the reason for the failure of many SMEs in several industries which was observed during that period.

Other studies on SMEs in Indonesia highlight, though not explicitly, the important effects of macroeconomic policies versus specially designed programmes for SMEs, as they conclude that most SME development programmes (e.g., subsidized credit, various training programmes, external trade promotions and subcontracting schemes) have not

been very successful.[9] They argue that friendly macroeconomic policies, including trade policies, such as import and export regulations, are very important for SME growth. For instance, based on his analysis of the effects of macro- and micro-policy environments on rural industries in Indonesia, van Dierman (2004, p. 53) states that a significant number of macro-policies such as trade protection policies, placed additional costs and burdens on rural SMEs. He argues, therefore, that macro-policies that created a favorable economic environment, as reflected by consistently high growth rates in GDP, and not biased in favour or large enterprises, provided the best stimulus for SME growth.[10]

Recently, there has been a debate which is important for both researchers and policymakers in Indonesia: Does participation of SMEs in the global economy lead to their sustainable growth? Some contributors to this debate are rather skeptical (Kaplinsky and others, 2002; Humphrey, 2003). The wood furniture industry cluster in Jepara is a good test case, as underlined by a number of papers on this industry (Sulandjari and Rupidara, 2002; and Loebis and Schmitz, 2005). For instance, the cluster has made gains by participating in export activities: the growth in the number of enterprises and in the number of jobs is undeniable, and the earnings of workers have also increased substantially. However, the industry's prospect for further growth is questionable. On the input side, the industry is suffering from the increasing scarcity and rising costs of raw materials. On the output side, it is suffering from intensifying competition from China, Viet Nam and other countries. More specifically, the gains may not be sustainable for a number of reasons, one of which is the viability of exports that are dependent on wood which is logged illegally and is being depleted. Halting this process is, however, difficult because intensifying price competition in the international market makes enterprises prefer to use the cheaper illegal wood. However, generalizing these findings to other clusters may not be valid since different clusters may have different problems.

2. Effects of investment liberalization on SMEs

As with trade liberalization, investment liberalization should also take into consideration the impact (positive and negative) that it would have on the SMEs. Theoretically, investment liberalization affects SMEs in a number of ways. On the positive side, a better investment environment generates the creation of many new firms or/and encourages existing firms (including SMEs) to expand their production capacities. The expansion of local SMEs can also take place with direct links to large enterprises, including MNEs and FDI through subcontracting production linkages ("complementary effect"). In other words, MNEs and FDI act as a growth source for local SMEs. Moreover, most

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9 For a discussion on the government programmes in support of SMEs in Indonesia, see for instance, Sandee (1995), Sandee and others (2002), van Dierman (2004), and Sato (2000).

10 Hine and Kelly (1997) for instance state explicitly that many factors, including the level of protection, including tariff and non-tariff barrier policies, exchange rate policies, red tape and other unnecessary administration procedures, and multilateral, regional and bilateral trade policies are key macro-issues that indirectly or directly affect the ability of SMEs to enter global markets.

often in the literature, MNCs/FDIs have been considered a positive factor for firms in developing countries for breaking entry-barriers into export markets. Several studies have examined the export-spillover effect of FDI on domestic firms, which often takes place through subcontracting arrangements. Although these studies do not categorize domestic firms by size, it can be assumed that well-developed SMEs (that is, those with better technologies, skilled workers and good management systems) can benefit from this spillover effect. On the negative side, however, reform towards FDI liberalization has the effect of increasing new large enterprises at the cost of existing SMEs unable to compete ("competition effect").

It is difficult to say whether the long-term gradual process of investment liberalization, started first by the introduction of the Foreign Direct Investment Law in 1967, marking the beginning of the openness to FDI, and followed by the "real" liberalization with the introduction of various incentives to attract FDI in the second half of the 1980s and the IMF Reform Agreement after the 1997/98 crisis, has created complementary net effects or competition net effects on local SMEs.[11] However, there are many case studies on subcontracting in Indonesia which may give some insight, and the majority of these studies conclude that such production linkages do not develop smoothly despite investment liberalization. This is attributed to many factors: local SMEs cannot meet the required quality standards owing to their lack of technology and skills; market distortion; and institutional coordination problems, such as the lack of consistency and coherence in policy, an underdeveloped business environment, and difficulties in accessing financial and technological facilities.[12]

FDI is an important source of technology transfer to local firms in developing countries,[13] suggesting that investment liberalization will act as a stimulus for local SMEs from this perspective. Based on his study on the role of FDI in the newly industrializing economies such as the Republic of Korea, Taiwan Province of China, Hong Kong, China, and Singapore, Soesastro (1998, p. 312) states that: "...there is no doubt that FDI plays an important role in cross-border flows, transfers and the diffusion of technology. The story of technology flows in the Asia-Pacific region has centred on the dramatic surge in FDI, particularly in the East Asian developing economies...". It is generally believed that FDI brings in more advanced technologies than alternative channels. This is particularly the case with MNCs, because they play a dominant role in the generation of technology and are usually associated with new or technologically complex products. This is also

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11 The positive effects of FDI on SMEs also depend on the quality of FDI. If many foreign companies invest in local ailing companies, restructure them, and sell the company after restructuring, this means that the quality of FDI is questionable for three main reasons: a) it is short-term, which the general notion of achieving benefits associated with FDI is based on the longer term; b) the restructuring process leaves more people unemployed; and c) the gains made by the sale of the restructured companies are repatriated, resulting in no long-term benefits, lower employment, capital flight and less opportunity for technology transfer and capacity development.

12 The studies include Sato (2000), Supratikno (2001), JICA (2000), Thee (2003) and Iman and Nagata (2002).

13 See Kim (1997), Marcotte and Niosi, 2005), for a survey of literature.

supported by many studies evaluating the technology transfer or spillovers from FDI in Indonesia, though not explicitly on local SMEs. For instance, by using cross-sectional data, Sjöholm (1999a,b) found positive spillovers from FDI in the Indonesian manufacturing industry. Soesastro (1998, p. 319) also concludes that the pattern of inward technology flows for Indonesia seems to be dominated by the use of FDI as the main channel for technology acquisition. In a sense, this has been the country's implicit "technology policy", and the favourable attitude of the Government towards FDI has been based to a large extent on the promise of technology that will be brought in as part of the investment package. Similar evidence can be found in other Asian developing countries, such as Thailand (see Tangkitvanich, 2004 and box 2).

Perhaps the most robust finding in the literature is that the absorptive capacity of local firms in the host country is most important for getting significant benefits from FDI. Without adequate human capital or investments in research and development, the spillover from FDI is limited. Thus, FDI policies in developing countries may need to be complemented by appropriate policy and institutional changes with respect to education, research and development, and human capital accumulation, if local companies (including SMEs) in those countries are to take full advantage of increased FDI (Saggi, 2002).

Most of the existing literature on technology transfers from MNEs and FDI to developing countries does not make a distinction between local SMEs and local large enterprises. However, many case studies on subcontracting between FDI-based companies and local small-scale subcontractors suggest that local SMEs can gain technology development benefits through transfer of technology from FDI (box 2).

3. Key policy lessons

There are three key policy lessons from the above literature review with suggestions for shaping future SME policy in Asian developing countries and for identifying linkages between trade and FDI policy and SME performance in these countries. First, protection rather than open market policies which restricts certain activities of domestic SMEs may actually contribute to an abuse of local market power and, by insulating SMEs from competition, make them less able to penetrate foreign markets or to develop improvements in technology, productivity and efficiency. However, given the fact that the majority of SMEs in these countries are not yet ready to compete, trade liberalization should be accompanied by specially designed SME development schemes to improve their competitiveness through capacity building (including possible linkages that can be formed with potential large enterprises). Otherwise, in the long run local SMEs may die out.

Second, trade policy reform may have unintended negative side effects on SMEs. For instance, liberalizing the export of unprocessed commodities, which are the key raw materials or inputs for SMEs causes local shortages of these items and hence makes local SMEs unable to continue or to expand their production. This requires a careful design of a trade policy reform. All possible negative effects, direct as well as

Box 2. Selected case studies on subcontracting between FDI and local SMEs in developing countries.

Tangkitvanich (2004) studied the automotive industry in Thailand, which consists of many subcontracting processes between foreign assemblers and domestic suppliers. He concludes that, "Linkages between foreign assemblers and domestic suppliers have always been crucial to the competitiveness of the Thai automotive industries. Assemblers have been major sources of technologies, especially management technology in the areas of quality control and production. The linkages also enabled domestic suppliers to gain a foothold in the international production network".

Sato (1998), Iman and Nagata (2002), Tambunan (2007), and Pantjadarma (2004) studied subcontracting linkages between foreign firms and local SMEs in Indonesia. One common conclusion from these studies is that through such production linkages, foreign firms played an important part in capacity building in local SMEs.

Grunsven (1999) states that: "Over the past decade, industrial policy in a number of countries in East and South-East Asia which hitherto had based late industrialization mainly on FDI, has started to recognize the relevance of the development and growth of local enterprises/SMEs in the industrialization process, and has started to address the issue. A transition may be observed from internationalization and production organization embodied in vertically-integrated MNEs towards rapidly increasing vertical disintegration and an enhanced role of enterprise networks in production organisation whereby independent firms across the globe are used by leading MNEs as manufacturing satellites. More generally, global production networks, with a significant role assigned to local firms in agglomerated production nodes, in the South-East and East Asian countries, are emerging as a more important mode in the globalization process of manufacturing.

Islam (1992) provide an overview of the process of transfer, dissemination and adoption of technology from FDI for small and cottage industries (SCIs) in the Asian developing region. He argues that, "....technology can get transferred to SCIs through multinationals, although the usual notion is that they operate only in the large and medium-scale industries. For example, some multinationals engage subcontractors who are often in the SCI sector and provide them with designs of products and training. Also, by creating a learning effect in the receiving country, multinationals can help the emergence of a class of entrepreneurs and skilled workers who in turn can initiate similar industries at smaller scales. Thus, even in the absence of a conscious policy of transferring technology to SCIs, the sustained operation of multinationals may create conditions conducive to such a process.

Gwari (2005) investigated the benefits of the presence of FDI for SMEs in Namibia. It shows that, on the one hand, investment liberalization attracts much FDI to flow into the country, but, on the other, it does not automatically mean that local SMEs will benefit from it. It depends on whether the local SMEs are ready to do business (such as through subcontracting systems) with MNEs.

indirect, effects on SMEs should be taken explicitly into consideration in designing a trade policy reform.

Third, the absorptive capacity of local SMEs in the host country is very important for getting significant benefits from FDI. Without adequate human resources or investments in research and development, spillover from FDI to local SMEs fails to materialize. Consequently, FDI policies in the host country need to be complemented by special programmes especially in the areas of technology, and management skills, to support local SMEs to become efficient and highly competitive local subcontractors.

B. International trade and investment policy reforms in Indonesia

When Suharto took over from Sukarno as President of Indonesia in 1966, marking the beginning of the "New Order" Government (1966-1998), he started a swift economic reform which in its first five years produced results beyond the most optimistic expectations. The main aims of the reform were to reduce inflation as a short-term objective; and to generate economic growth and improve the living standard as a means to a long-term objective. The Government was fully aware that to achieve the first objective, macroeconomic stabilization was a precondition; and to achieve the second objective, international trade reform and liberalization of the capital account, including a more favourable investment law, were the most effective strategies.

During this New Order era, fundamental changes in trade and investment policies were introduced in Indonesia. The development strategy was changed from an inward-looking import-substitution policy during the oil boom in the early 1970s to an outward-looking export promotion strategy in the mid-1980s after the end of the oil boom. The process of trade and investment reforms which were part of the economic reform from 1966 to 2006 can be divided into three phases: 1967-1980; 1985-1997 (just before the financial crisis); and 1998 (during the crisis) onwards (table 1). The first phase was a period of limited liberalization and deregulation as the Government implemented limited tariff reductions and removed quantitative restrictions (that is non-tariff barriers or NTBs) on a limited range of imported goods, especially those which were really needed for domestic consumption and industries. However, from the investment policy perspective, it was a very important period, as for the first time Indonesia introduced a national law on both foreign and domestic investment soon after 1966, marking the beginning of gradually opening certain sectors for private investment. In addition, the capital account in the country's balance of payments was also liberalized, and the Government adopted managed floating of its currency exchange rate.

The second phase was a period of extensive liberalization and deregulation, with a broad range of measures. The simple (unweighted) average tariff was cut some 26 per cent from 27 per cent in 1985 to a little under 20 per cent in 1992. NTBs as a percentage of tariff lines had declined from 32 per cent to 17 per cent by 1990 and to 5 per cent by 1992; as a percentage of imports they fell from 43 per cent in 1986 to 13 per cent by 1990 (Iqbal and Rashid, 2001). This period also witnessed a larger role for the

Table 1. Three phases of foreign trade and investment reforms in Indonesia since 1966

Period	Phase	Most important measures
1967-1980	I	- Some tariff reduction; - Removal of quantitative restrictions on limited imports ; - National law on foreign and domestic private investment was introduced; - Liberalization of capital account in the balance of payments; - Managed floating was adopted as the exchange rate system.
1985-1997	II	- Simplifying export-import procedures (including the duty drawback scheme for exporters) was improved substantially; - Limited agricultural liberalization; - Across-the-board tariff reduction; - Quantitative restrictions on some imports were removed, especially import licensing and import monopolies; - Approval procedures for foreign investment were simplified and limitations on FDI were abolished, especially for export-oriented investments (including more liberal treatment with regard to foreign ownership); - Revamping and replacing the corrupt customs service with a private Swiss surveying company (Société Générale de Surveillance, SGS); - Exemption from duties and VAT was given to export-oriented investments; - Banking system deregulation.
1998 onwards	III	- Financial restructuring programme, including the closure of 16 insolvent private banks; - Foreign trade and investment liberalization; - Elimination of all cartels in all sectors; - Agricultural liberalization, including: (a) removals of import restrictions on various commodities; (b) removal of export bans on wheat, soybeans, sugar and oil palm products; (c) the monopoly role of the logistics agency (BULOG) on rice imports, and replacement with a 30 per cent tariff; (d) removal of local content regulations for agricultural products; (e) privatization of plantations, estates and input suppliers; (f) liquidation of cooperatives and removal of land-use regulations restricting producer crop choices; (g) suspension of the value added tax (VAT) on rice and other essential commodities; (h) elimination of subsidies on wheat, sugar and fertilizer; (i) phasing out soybean subsidies; (j) eliminating import subsidies and relevant import duties for soybean meal and fishmeal; and (k) for the first time in 30 years, allowing private traders to import rice; - Removal of various import licensing schemes such as the import producer licences for iron and steel products, engine and engine parts, heavy transport equipment and electronic products; - Removal of local content requirements, reduction of tariffs on imported cars and components, and simplification of licensing procedures; - Elimination of all export restrictions and taxes; - Introduction of anticorruption and competition laws; - Approved Importer and approved sole agent licences, which were applied to various industries from food-related subsectors to lubricants; - Liberalization of market access for five services sectors, namely telecommunications, industrial services, tourism, financial services and banking; - Removal of local content regulations under the Agreement on Trade Related Investment Measures (TRIMs), with the local content requirements for motor vehicles.

Sources: Pangestu (1996), Feridhanusetyawan, and others. (2000), James (2001), Firdausy, and others (2000), Iqbal and Rashid (2001), and Magiera (2001), Also see Department of Industry and Trade <www.Deperindag.go.id>.

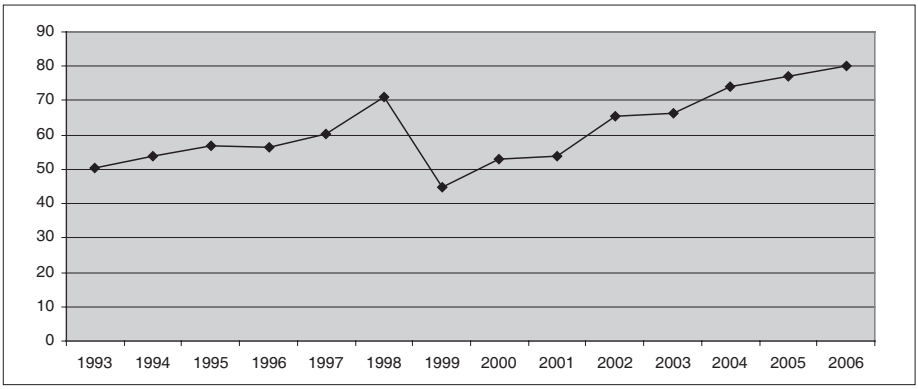
private sector, as reflected by the increase in private domestic as well as foreign investments in Indonesia, and an emphasis on exports of non-oil and gas products, especially labour-intensive manufactured products such as textile and garments, footwear, and wood products. Restrictions on FDI and ownership regulations were gradually relaxed, particularly on export-oriented investments. The number of specific investment clearances required for foreign investment fell from 24 to 10 and there was a relaxation of other investment regulations. For example, investment licenses were made valid for a period of 30 years compared with five before the liberalization. Minimum amounts of investment required were reduced and ownership restrictions on projects that exported 100 per cent of output were waived (Pangestu, 2001).

The third phase is the ongoing post-crisis broader reform started first with the IMF-sponsored deregulations under a letter of intent and continued further with Indonesia's own initiatives. One of the most heavily regulated and protected sectors of the Indonesian economy, automobiles, was also affected by these developments. The tariff on completely built-up sedans was reduced to 200 per cent in 1995 and to 90 per cent in 2003. The General Motors Corporation, absent from the Indonesian auto market since the 1930s, decided to proceed with investment in a vehicle production facility, finally introducing some western competition into the Japanese-dominated domestic automobile industry. The "national car" project which had been launched as a joint venture with the nearly bankrupt KIA Motors Corporation of the Republic of Korea before the crisis period was also eliminated.[14]

As a result of the foreign trade and investment reforms, net FDI inflows into Indonesia increased steadily in the 1980s and accelerated significantly starting in 1994. In 1998 when the crisis was at its worst, however, net FDI became negative when capital flight exceeded new FDI. The trend continued up to 2000, after which FDI inflows recovered quickly. Distribution by sector indicates that FDI in Indonesia are still concentrated in the manufacturing industry. The ratio of total trade (exports plus imports) to GDP increased steadily from the early 1990s up to 1998 when the crisis reached its climax. That was also the year when many companies, especially in the manufacturing industry, experienced financial difficulties as a consequence of the huge depreciation of the rupiah against the United States dollar. After 1999, Indonesia's external trade started to recover again (figure 1).

[14] The "national car" was a compact sedan named the "Timor" and was manufactured in the Republic of Korea and granted duty-free entry into Indonesia. It prompted a vigorous campaign of protest against the blatant discrimination by existing Japanese, European and United States automakers that ultimately was taken to the World Trade Organization.

Figure 1. Growth in Indonesian external trade, 1993-2006 (total trade as a percentage of GDP)



Sources: Asian Development Bank database (Key indicators of developing Asian and Pacific countries, various years) and BKPM (various years).

Textile, consumer electronics and automotive products are good examples of domestic industries which developed rapidly after the introduction of the national laws on foreign investment in 1966 and on domestic investment in 1967 that were aimed at liberalizing some sectors (including the manufacturing industry) and some subsectors of the manufacturing industry (including textile, electronics and automotive) products for private investment. In the textile industry, FDI from Japan was dominant in the 1970s, especially in the synthetic-fibre and modern weaving industry. This was followed by investment from firms in the Republic of Korea and Taiwan Province of China in the late 1980s. In the early 1990s, foreign firms accounted for less than 30 per cent of the share in value added in the spinning and weaving industry.

The garment industry only began focusing on export orientation in the early 1980s, as a result of the implicit export subsidy under the export-certificate scheme and the subsidized export credit mechanism. Until the mid-1980s, the sector was dominated by domestic firms, but the share of foreign firms in value added increased to 24 per cent by 1992. The number of foreign firms in the garment sector increased after 1986, as a result of the relocation of East Asian firms, especially from the Republic of Korea and Taiwan Province of China. The main reason for relocating to Indonesia was the combination of low labour costs and the improvement in the investment climate in the country.

In the consumer-electronics industry, the banning of completely-built-up (CBU) consumer electronics in the 1970s led to investments by joint ventures and domestic companies producing under license. From the 1970s up to the mid-1980s, the dominant investor was Japan. Exports from this industry only began in the mid-1980s by some firms, and accelerated in the early 1990s, after the relocation of a number of large consumer-electronics firms from Japan and the Republic of Korea. As a result, the share

of foreign consumer-electronics firms in value added increased from 58 per cent in 1986 to 71 per cent in 1992.

The automotive industry in Indonesia is still oriented toward the domestic market. The industry started to develop after the Government issued a policy to ban the import of CBU motor vehicles in the early 1970s, which was aimed at encouraging import substitution in the automotive assembly. In addition, the Government also introduced a domestic-content policy, known as the deletion programme, in 1977 and set target dates for assemblers to meet certain levels of local content. In 1993, the ban on imports of CBU vehicles was replaced by tariffs of 200 per cent for vehicles assembled domestically and 300 per cent for those not assembled domestically. Many foreign brands, especially from Japan, were produced in Indonesia through either joint ventures or production under licence. In some cases, the firms started off as domestic firms producing under licence, with the foreign principal keeping a tight control over operations. Other important foreign investors in this industry were from Germany and the United States. Considerable investment went into components and parts production, including engines. Some of the large-scale assemblers invested in backward integration, often in partnership with the suppliers of their principals, mostly Japanese. The manufacture of components and parts, however, which was a result of the domestic-content rules, comprised foreign joint ventures, domestic producers producing under licence for foreign brand-name, and many local SMEs.

The bold reforms discussed above also resulted in rapid economic growth and an extremely rapid transformation from the beginning of the 1970s to 1997. High economic growth, together with low inflation, raised per capita income more than tenfold from $70 in 1969 to $1,100 in 1997 (current prices). In 1998 the per capita income dropped significantly and from 2000 onwards it started to recover, though the process has been slow. The growth rate of per capita real GDP is still much lower than that of Thailand, another country seriously affected by the crisis (table 2).

Table 2. Growth rate of per capita real GDP in South-East Asia (per cent per year)

Country	2002	2003	2004	2005	2006
Cambodia	4.2	6.6	9.3	10.9	8.2
Indonesia	3.2	3.5	3.7	3.4	5.1
Lao People's Democratic Republic	3.1	3.2	3.5	-1.7	5.2
Malaysia	2.2	3.3	5.0	3.0	3.9
Myanmar	9.8	11.6	11.3	11.0	-
Philippines	2.4	2.8	4.0	2.8	3.2
Singapore	3.2	2.8	7.4	4.1	4.5
Thailand	4.4	6.2	4.5	4.4	3.9
Viet Nam	5.7	5.8	6.3	7.0	6.9

Source: Asian Development Bank, 2007.

The growth success during the New Order era was also matched by similar successes on the distribution side. The number of people living below the poverty line was reduced from 70 million in 1970 to 26 million in 1993. This meant a reduction by three quarters in the percentage of people living below the poverty line from 60 per cent to 14 per cent during the same period.[15]

The transformation in the Indonesian economy since 1966 has been remarkable. Even though foreign assistance is still a significant source of economic development support, this is gradually being complemented by tax revenue. Government investments, once the predominant driver of the economy, have been gradually replaced by private and foreign investments. Oil revenues, the main source of foreign exchange earnings in the 1970s, have been replaced by non-oil export earnings, amounting to about 70 per cent of total exports in the 1990s. All of this resulted in an economy more resilient to external shocks for much of the period.

Equally remarkable, structural change has also been a landmark of Indonesia's New Order. The agricultural sector, which once dominated the economy, declined from 56 per cent of GDP in 1965 to less than 15 per cent in 2007. Meanwhile, the industrial sector has grown tremendously and as a result, the share of industry in GDP, which was a mere 8 per cent in 1965, reached more than 45 per cent in 2001, 2005 and 2006.

Initially, the objective of Indonesia's more liberal foreign trade policies was to restructure the economy by diversifying the external trade sector away from its heavy dependence on oil and gas. These reform policies were highly successful in attracting foreign investment in light, labour-intensive export industries (Magiera, 2001). Until the late 1970s, manufacturing exports constituted no more than 4 per cent of total exports. By 1987 the share of manufacturing exports had surpassed the share of agricultural exports, and in 1992, overtook the share of oil and gas, minerals, and basic metal exports. As the share of agricultural and primary-product exports declined and the share of manufacturing exports increased, Indonesia became less prone to external terms of trade shocks.

In 2004, the Government established the Investment Policy Reform Initiative (IPRI), having as its objective the encouragement and facilitation of private-sector investment through reform and implementation of transparent, predictable, market-oriented policies applied equally to both foreign and domestic investors. IPRI sets forth newly adopted policies of the Government for promoting and facilitating private-sector investment in Indonesia.[16] The government is committed to the rapid elimination of the remaining restrictions on foreign and local private investment. To ensure its effectiveness, IPRI will be supplemented, if necessary, by more detailed investment guidelines.

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15 The remarkable economic development in Indonesia during the New Order Government is discussed in many publications, including Booth and McCawley (1981), Booth (1989), Hill (1996), and Tambunan (2006c).

16 An overview of IPRI, as well as a list of business fields open or closed to foreign investment under certain conditions, are presented in boxes 3 and 4, respectively, of Tambunan (2007a).

The willingness of Indonesia to liberalize its investment and external trade regimes is also related to the country's commitments to ASEAN. As a founding member of the Association of Southeast Asian Nations (ASEAN), Indonesia is committed to form a free trade area in ASEAN (AFTA), through the agreed Common Effective Preferential Tariff (CEPT) scheme. To qualify for CEPT, goods must satisfy the ASEAN local content requirement of 40 per cent. Recently, unprocessed agricultural commodities started to be included in the scheme, and, AFTA has been expanded with several non-member countries. For instance, the ASEAN-China FTA was formed in 2003, and major unprocessed agricultural products are included in the agreement, such as live animals, meat and edible meal offal, fish, dairy produce, other animal products, live trees, vegetables and edible fruits and nuts.

In addition, although there are no binding and specific liberalization commitments in APEC, Indonesia is committed to meet the Bogor Declaration[17] to liberalize trade and investment in the Asia-Pacific region through unilateral trade liberalization efforts with Governments of other member countries in the region. In this respect, considerable industrial tariff reduction has been implemented by the Indonesian Government in the last 10 years.

Besides these two regional commitments, Indonesia has commitments to international trade and investment liberalization as part of the Uruguay Round/WTO agreement. In this respect, Indonesia has been reducing its border tariffs, opening its markets and reducing other domestic distortions, especially in the industrial and agricultural sectors.[18]

C. Overview of development of SMEs in Indonesia[19]

In Indonesia, SMEs have historically been the main players in domestic economic activities, especially as a large provider of employment opportunities, and hence a generator of primary or secondary sources of income for many households. These enterprises have also been an important engine for the development of local economies and communities. However, compared with more developed economies,

17 The APEC Economic Leaders' Declaration of Common Resolve, Bogor, Indonesia, 15 November 1994 (Bogor Declaration) called upon APEC members to fully liberalize trade by 2010 for developed members and 2020 for developing members, including Indonesia.

18 Indonesia's Uruguay round market access negotiation was resolved with the decision that the country would bind substantially all tariff lines at 40 per cent, with a few exceptions.

19 Because of space limitations, only a small number of graphs and tables have been included in this article. Additional data and graphs are available in Tambunan (2007a).

Indonesian SMEs are not yet contributing significant value added to the national economy. Instead, they have been more important as the locus of employment.[20]

SMEs have also been expected to play another important role in the Indonesian economy, namely as an engine for the growth of exports, particularly in manufacturing. This expectation stems from evidence showing that the most successful cases of SMEs development in the newly industrializing economies, such as the Republic of Korea and Taiwan Province of China have been directly related to trade and the adoption of export-oriented strategies. The experiences of these countries suggest that although in general export-orientation is highly correlated with size, many (if not all) SMEs can compete effectively in both domestic and international markets (Tambunan, 2006b).

Typically, SMEs in Indonesia account for more than 90 per cent of all firms outside the agricultural sector, and thus they are the largest source of employment, providing livelihood for over 90 per cent of the country's workforce, especially women and the young. The majority of SMEs, especially the smallest units, generally called microenterprises (MIEs), are scattered widely throughout the rural areas and therefore play an important role as a starting point for the development of villagers' talents as entrepreneurs, especially those of women. MIEs are dominated by self-employment enterprises without hired workers. They are the most traditional enterprises, generally with low levels of productivity, poor quality products, and they serve small, localized markets. There is little or no technological dynamism in this group. The majority of these enterprises eke out bare subsistence. Some of them are economically viable over the long-term, but a large portion is not. Many MIEs face closure or very difficult upgrading especially with import liberalization, changing technology and the growing demand for higher quality modern products. However, the existence or growth of this type of enterprises can be seen as an early phase of entrepreneurship development.

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20 In Indonesia there are several definitions of SMEs, depending on which agency provides the definition. As this article uses data from the State Ministry of Cooperative and Small and Medium Enterprises, the Department of Industry, (MoI), and the Central Statistical Agency (BPS), only definitions of these three government agencies are relevant here. The state Ministry of Cooperatives and SMEs promulgated the Law on Small Enterprises Number 9 of 1995, which defines a small enterprise as a business unit with total initial assets of up to Rp 200 million (about US$ 20,000 at current exchange rates), not including land and buildings, or with an annual value of sales of a maximum of Rp 1 billion (US$ 100,000). A medium enterprise is defined as a business unit with an annual value of sales of more than Rp 1 billion but less than Rp 50 billion. The law does not explicitly define microenterprises. However, the Ministry's data on small enterprises include microenterprises. BPS, which regularly conducts surveys of SMEs, uses the number of workers as the basis for determining the size of an enterprise. In its definition, micro, small and medium enterprises are business units with, respectively, 1-4, 5-19, and 20-99 workers, and large enterprises (LEs) are units with 100 or more workers. The MoI defines enterprises by size in its sector also according to the BPS definition.

According to official data from the State Ministry of Cooperative and Small and Medium Enterprises, small enterprises in 1997 accounted for more than 39.7 million units, or about 99.8 per cent of the total number of enterprises in the country that year, and increased to more than 48 million units in 2006 (table 3). The table indicates that every year new entrepreneurs have been born, but does not show whether the transformation process has changed micro into small enterprises or medium to large enterprises. This transformation process of firms by size may show a better picture about long-term entrepreneurship development.

Table 3. Total number of enterprises by size category, 1997-2006 (thousands)

Size category	1997	1998	1999	2000	2001	2003	2004	2005	2006
∑SEs	39704.7	36761.7	37804.5	39705.2	39883.1	43372.9	44684.4	47006.9	48822.9
∑MEs	60.5	51.9	51.8	78.8	80.97	87.4	93.04	95.9	106.7
∑LEs	2.1	1.8	1.8	5.7	5.9	6.5	6.7	6.8	7.2
Total	39767.3	36815.4	37858.1	39789.7	39969.9	43466.8	44784.1	47109.6	48936.8

Source: Menegkop & UKM (various issues).

In the Asia-Pacific region, Indonesia is the biggest economy with respect to the total number of SMEs. A 2003 report from APEC and some official data estimates from a number of member economies show that about 50 per cent of all non-farm SMEs in the region were in Indonesia and China (table 4). When agriculture is included, this portion is much higher, since these two countries are the largest agrarian economies in the group.

The unit structure by sector indicates that SMEs form the majority of enterprises in all sectors and almost 100 per cent in agriculture. The distribution of SMEs by sector in Indonesia shows that SMEs are concentrated in agriculture, followed by trade, hotels and restaurants as the second largest and manufacturing industry as the third largest sector. In manufacturing, the SMEs are involved mainly in simple traditional manufacturing activities such as wood products and furniture, textiles, garments, footwear, and food and beverages. Only a small portion of total SMEs are engaged in production of machinery, production tools and automotive components. The latter is generally carried out through subcontracting systems with several multinational car companies, such as Toyota and Honda. This structure of industry reflects the current technological capability of Indonesian SMEs, which are not yet as strong in producing sophisticated technology-embodied products as their counterparts in economies such as Japan, the Republic of Korea and Taiwan Province of China. The Indonesian Government has been taking many initiatives to support capacity-building in SMEs, especially in technology and human resource development, ranging from training in production techniques, general management, quality systems ISO-9000 and entrepreneurship. It is also providing total quality control advice, promoting and supporting subcontracting arrangements between

SMEs and large enterprises (including FDI-based companies) and linkages between SMEs and research and development institutions and universities. It has also established Small Business Consultancy Clinics and common service facilities.

Table 4. Numbers of non-agricultural SMEs in selected economies

Country/economy	SME in non-agricultural sector			SMEs as a percentage of all enterprises in the 1990s
	1990	1996	2002	
Australia	757100	895500	1111900	97
Brunei Darussalam	3856	4085	5000	98
Canada	855840	879335	925000	98
China	8,608200	7253406	8000000	99
Hong Kong, China	277886	287904	292000	98
Indonesia	12,045600	16416020	17000000	98
Japan	6,484264	6433557	6139735	99
Malaysia	NA	NA	19000	84
New Zealand	159564	218044	192000	99
Philippines	77807	99767	817976	99
Republic of Korea	2,094637	2607710	2700000	99
Russian Federation	896000	886500	850000	86
Singapore	31468	47001	54000	91
Taiwan Province of China	791663	991881	1050000	98
Thailand	632300	NA	350000	96
United States of America	5359421	5691430	6303593	96
Viet Nam	1000	NA	200000	NA
Total	40640280	45790737	49824470	NA

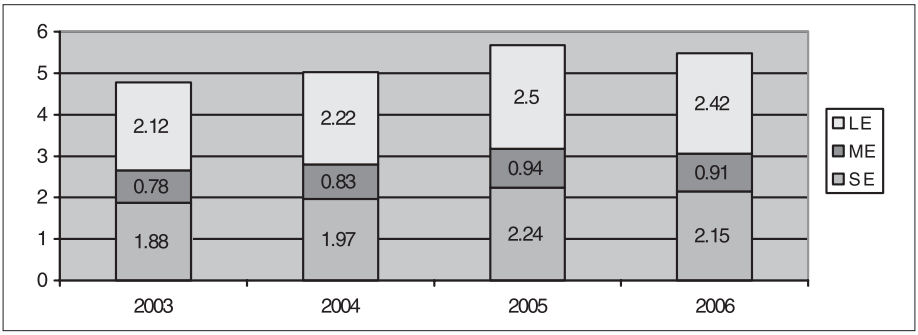
Source: APEC (2003) and other official estimated data from some individual member economies.
Notes: Figures in the columns 2 - 4 include State-owned companies in some cases (notably China).
NA: Data are not available.

The output structure by size of enterprises and sector shows that agriculture has always been the key sector for small enterprises, as they produce around 86 to 87 per cent of total output in the sector. The second important sector for this group of enterprises is trade, hotel and restaurant with their annual share ranging from 74 to 76 per cent. Medium-sized enterprises, on the other hand, have the largest output contribution in finance and rental services at around 46 to 47 per cent, followed by transportation and communications with the share ranging from 23 to 26 per cent. In manufacturing industry, both small and medium-sized enterprises are traditionally not as strong as large enterprises.

With respect to output growth, the performance of SMEs is relatively good as compared to that of large enterprises. The output growth of small and medium-sized enterprises was respectively 3.96 per cent and 4.59 per cent in 2001 and it increased to 5.38 per cent and 5.44 per cent, respectively in 2006. Output growth of large enterprises increased from 3.04 per cent to 5.60 per cent during the same period.

The contribution of SMEs to the annual GDP growth is also higher than that of large enterprises. In 2003, the GDP growth rate was 4.78 per cent, from which 2.66 per cent came from SMEs, compared with 2.12 percent from large enterprises. In 2005, the SMEs' share in GDP growth reached the highest level at 3.18 per cent before slightly declining to 3.06 per cent in 2006. Within the SME group, the contribution to the GDP growth of small enterprises is always higher than that of medium-sizes enterprises. In 2006, from the GDP growth rate of 5.5 per cent, about 2.15 per cent is from small enterprises as compared to 0.91 per cent from medium-sized enterprises (figure 2).

Figure 2. GDP growth contribution by size of firms, 2003-2006 (percentage)



Source: National Agency for Statistics.
Note: LE - Large enterprise.
ME - Medium enterprise.
SE - Small enterprise.

D. Effects of the reforms on SMEs in Indonesia

1. Growth in number of enterprises and GDP contributions

Clearly, the development of the manufacturing industry and non-oil/gas exports in Indonesia has been an important success of the era of deregulation of international trade and investment in the country. However, there are always concerns regarding the survival of SMEs in the country. A number of question remain: (a) Can local SMEs survive if imports are allowed to freely enter the domestic market? (b) Have export opportunities been more open for local SMEs since the reforms? (c) Do local SMEs have enough capacity to develop or increase their exports? and (d) How best can SMEs enhance their ability to supply foreign invested firms and thus participate more actively in regional or global production networks as subcontractors of MNEs?

With respect to the first question, the answer is positive. After a slight decline in 1998 as a consequence of the financial crisis, the number of SMEs continued to grow. As discussed in the literature survey (section A), van Dierman and others (1998) tried to

assess the impact of more aggressive trade and investment policy reforms shortly after the 1997/98 crisis related to IMF-sponsored deregulations. They concluded that the likely impact would vary by subsector or group of industry. SMEs in the pre-crisis most protected industries were expected to be more adversely affected than those in the less protected ones. Although many SMEs may have been damaged, overall the reforms have not affected SMEs negatively. Further, the structure of GDP by size of enterprises shows that the share of SMEs remains above 50 per cent, so, that the ratio of SMEs to large enterprises in GDP contribution is always above one. If the reforms before and after the crisis had been in favour of large enterprises, then the share of SMEs to GDP would have fallen to less than 50 per cent. SMEs have managed not only to survive, but also to increase their output. There is thus no evidence of the suspected negative correlation between the openness of the Indonesian economy resulting from the reforms and the existence of local SMEs.

2. Export growth

In the last few years, especially since the 1997/98 crisis, there has been much discussion about the role of SMEs in Indonesia's non-oil and gas export development, particularly in manufacturing. As in many other developing countries, large enterprises in Indonesia have historically been the dominant force not only in the domestic sector, but also in export activities. SMEs, especially the small ones, have been engaged in exporting in only a very limited way, mainly indirectly through production linkages with large enterprises or marketing linkages with trading houses/companies or independent exporters. Concern about the export potential of SMEs in Indonesia has arisen as the Government increasingly viewed export activity as a key source of foreign currencies that, together with foreign investment, can reduce the country's foreign debt. Moreover, it is generally believed that the income and job-creating potential of SMEs will not be fully exploited unless these enterprises are also involved in exporting (Tambunan, 2006a).[21]

Official data on exports from SMEs may answer the second and the third questions above, showing that not only are many SMEs able to export, but also that their exports increase on average every year. As presented in table 5, in 2000 total exports of these enterprises amounted to almost 75,000 billion rupiahs and went up by more than 50 per cent to almost 122,200 billion rupiahs in 2006. However, the share of SMEs in the country's total exports is still very small as compared with that of large enterprises. In 1990, the SMEs' contribution to total exports (including oil and gas) was 11.1 per cent, and increased to 15.7 per cent in 2006. Within the group of these enterprises, medium-sized enterprises are much stronger than small enterprises. In 1990 the medium-sized enterprises share of total exports was 8.9 per cent compared with 2.2 per cent for small enterprises, and in 2006 the ratio was 11.81 to 3.89 per cent.

21 This government effort to promote SMEs as a major player in the country's export activities is reflected by the explicitly inclusion of SME issues in many recently issued regulations on trade and investment, including the new law on investment.

Table 8 shows that the majority of SMEs' exports came from the manufacturing industry. Interestingly, the share of exports from medium-sized enterprises in manufacturing is much higher than that of small enterprises. The difference can be explained by differences in such areas as access to capital and market information, skills, promotion facilities and external networks. Naturally, medium-sized enterprises are in a better position than small enterprises in all these areas, which are crucial in determining the ability of a firm to export.

SMEs benefited nicely from the manufacturing export boom of the 1980s and 1990s. However, the share of SMEs in total exports of the manufacturing industry continues to be much smaller than that of large enterprises. In 2000, the contribution to total manufacturing export value for small enterprises was only 3.15 per cent and decreased to 3 per cent in 2006, while during the same period, the export share of medium-sized enterprises improved from was 12.53 to 14.72 per cent. Thee (2003) indicated that the export growth of SMEs in the manufacturing industry has been achieved substantially by finding niche markets and adapting costs and quality to market demand.

Further, among the nine industrial groups at the two-digit level within the manufacturing industry,[22] the exports of small enterprises are concentrated in wood products, including furniture, although recently their share has been exceeded by exports of food, beverages and tobacco and fertilizers, chemicals and goods made from rubber. SMEs do not export goods made from iron and steel. The exports from medium-sized enterprises are more or less equally distributed among the groups of industry, although the share in wood products went down constantly between 2000 and 2006.

Data from BPS on small and medium-sized enterprises in the manufacturing industry show that in 1999 from a total of 2.5 million SMEs, only 0.36 per cent of them did export, increasing to 0.79 per cent of a total of 2.8 million SMEs in 2004. The export intensity within the SMEs has increased during that period, but the ratio varied between small and micro enterprises (SEs and MIEs). In 1999, the percentages were respectively 0.46 and 0.35 for micro and small enterprises, and the ratio changed significantly in 2004 to 0.64 and 2.3, respectively (figure 3). This indicates that small enterprises are in a better position than microenterprises to capture increasing export opportunities generated by the reforms.

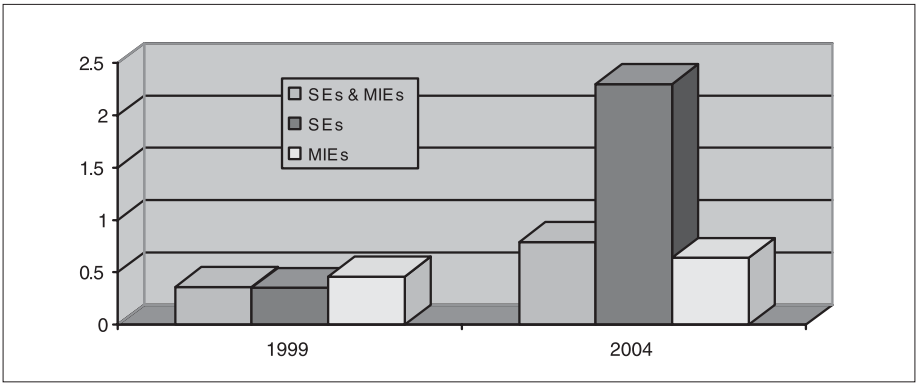
[22] The main group are: (a) food, beverages and tobacco; (b) textiles, leather and footwear; (c) wood products; (d) paper and publication; (e) fertilizer, chemicals and rubber products; (f) semen and non metal mining (g) basic metal, steel and iron; (h) transportation means, machinery and its equipments; (i) and others.

Table 5. Exports of SMEs and Large enterprises, 2000-2006
(billion rupiah)

Sector	2000		2002		2004		2006	
	Small and medium enterprises	Large enterprises	Small and medium enterprises	Large enterprises	Small and medium enterprises	Large enterprises	Small and medium enterprises	Large enterprises
(1)	8396.3	427.5	9771.6	962.2	8715.3	881.8	12662.7	1078.8
(2)	657.0	74490.8	684.7	79541.5	638.7	92822.5	1621.3	153874.3
(3)	66395.3	357135.5	76833.8	339086.3	86194.2	414953.7	107915.5	501170.5
Total	75448.6	432053.8	87290.1	419590.0	95548.2	508658.0	122199.5	656123.6

Source: State Ministry of Cooperation and Small and Medium Enterprises.
Note:
Code of sectors:
(1) = agriculture.
(2) = mining.
(3) manufacturing industry.
SME: Small and Medium enterprises.
LE: Large enterprises.

Figure 3. Percentage of total number of manufacturing small and micro enterprises involved in export, 1999 and 2004



Source: BPS.

However, not all of those involved in export activities are fully export-oriented, in the sense that many of them only export small portions of their total products. Table 6 shows that in 1999, the small and microenterprises that exported 80 per cent or more of their total production were less than 50 per cent. This increased to about 68 per cent in 2004, although the percentage varies between small and microenterprises.

Table 6. Export-oriented manufacturing small and microenterprises, by percentage of total production for export, 1999 and 2004

Category	Units	Year	Percentage of total production for export				
			<15	15-39	40-64	65-79	? 80
SEs and MIEs	9,124	1999	268	2,470	1,899	183	4,304
MIEs	1,956		62	518	379	45	952
SEs	7,168		206	1,952	1,520	138	3,352
SEs and MIEs	21,104	2004	1,472	2,013	2,786	513	14,320
MIEs	15,472		1,157	1,055	2,082	378	10,800
SEs	5,632		315	958	704	135	3,520

Source: BPS.
Note: SE: Small enterprises; MIE: Microenterprises.

Another important feature of the export-oriented SMEs in Indonesia is that the majority of those that export, do so indirectly through intermediaries such as traders, exporting companies or trading houses. Traders or trading companies usually collect products from or give orders to many producers, regularly or irregularly. For example, the share of small exporters who did direct export was only 0.19 per cent, while that of those who did indirect exports was 99.81 per cent. In terms of export value, the respective

shares were similar. Based on his field survey on SMEs in a variety of industrial groups, Urata (2000) provides, however, a rather different result. As shown in table 10, the majority of his respondents said they did export directly, while only a few of them used intermediaries.

Table 7. Export channels of Indonesian SMEs: findings from a 1999 survey (percentage)

	Total	SE	ME	Sector				
Number of respondents	522	205	317	Textile	Food	Wood	Electronic	Automotive
- direct marketing	63	62	64	52	56	80	60	55
- through sales agent	24	31	19	32	31	15	13	23
- through export trading house	8	4	11	14	10	3	7	13
- through assembly manufacturer	2	1	2	-	-	-	15	-
- through import trading house	1	-	2	2	1	1	-	3
- through buying agency	1	1	1	1	2	-	4	-
- managed by head office[a]	1	-	1	-	1	-	-	6

Source: Urata (2000), tables 4 to 11.
a: The marketing activities of Japanese subsidiaries are controlled by the head office.

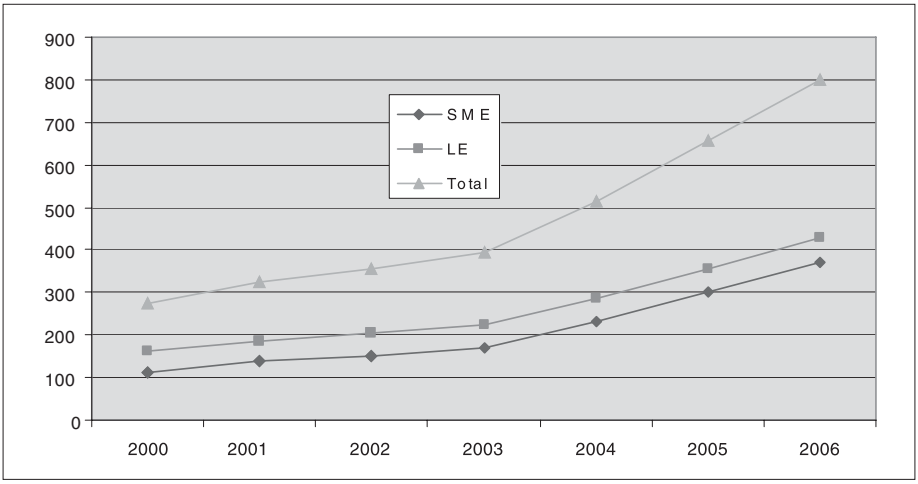
Despite these findings, there are institutional and business constraints which make it difficult for SMEs to export directly, such as: (a) limited access to information on export market opportunities and requirements; (b) inability to adjust to rapid changes in the export market; (c) high risks in payment and shipment; (d) time lag in the payment; and (e) high cost for direct export activity. Moreover, SMEs face financial problems owing to limited investment capital and lack of support from financing and guarantee institutions to SMEs (Urata, 2000; Tambunan, 2006a).

Official data on total value of trade and total number of SMEs show no indication that SMEs in Indonesia have been negatively affected by the international trade reforms. Moreover, protection instead of open-market policies that restrict certain activities to domestic SMEs may actually contribute to abuse of local market power and, by insulating firms from competition, make them less able to penetrate foreign markets or to develop improvements in technology, productivity and efficiency (Thee, 2000). However, there is also no evidence that the efficiency effects of trade liberalization resulted in an increase in average plant size among SMEs. This Indonesian case seems to be consistent with the findings by Tybout (2000) that liberalization may work against the (scale) efficiency of SMEs in the short run.

3. Investment growth

Although SMEs face many constraints (including lack of access to formal credit sources such as banks), official data on the growth of investment by SMEs show that the more open investment environment has accelerated investments of SMEs (see figure 4). The share of SMEs in total private investment increased from almost 41 per cent in 2000 to 46 percent in 2006.

Figure 4. Investment value by size of enterprises in Indonesia, 2000-2006 (billions of Rupiah)



Source: State Ministry of Cooperative and Small and Medium-sizes enterprises.

4. Subcontracting

At the beginning of the New Order era, the Government imposed local content and subcontracting rules on the engineering industry. Ministerial Decree No.307 of 1976 specified the deletion of specified parts from the imported completely knocked down (CKD) packs for commercial motor vehicles over a four-year period. This decree was followed in 1977 by a similar decree applying to motorcycles and scooters. Subcontracting regulations were first introduced in a 1981 decree on motorcycles, which specified whether each nominated component could be made "in-house" (by the assembler), or must be made "out-of-house" (by a subcontractor). By January 1985 decrees on the local content of simple types of machine tools were announced. Generally speaking, the overwhelming emphasis of the deletion programme decrees has been on local content, with subcontracting requirements forming only a minor part.

In order to strengthen the industrial structure, during the Fourth Five-Year Plan (Repelita IV), the Government issued several measures to create horizontal and vertical industrial linkages involving SMEs and large enterprises. Although the role of especially small enterprises in manufacturing industry at that time was quite insignificant as measured by total value added and volume of production, Repelita IV stipulated that the role of small enterprises within Indonesia's manufacturing industry needed to be enhanced by developing medium enterprises and large enterprises which should in turn stimulate the development of small enterprises in the industry through subcontracting linkages.

The economic rationale behind the local content policy was to create a captive market for domestic products in order to increase the economic scale of production and thereby to increase efficiency. The main aim of this policy was to encourage industrialization in the country and also to encourage a pattern of industrial development that followed the industrial pyramid model from Japan. In this model, SMEs were at the base to support large enterprises at the top of the pyramid (TAF, 2000). Unfortunately, there are no official time-series data on the total number of SMEs as subcontractors to foreign companies in Indonesia. However, many case studies indicate that industrial development in Indonesia did not follow the same pattern as in Japan and that the local content policy resulted in a vertically integrated production system within large enterprises.

The Asia Foundation (TAF, 2000) argued that the lack of success of this policy in creating strong interdependence between SMEs and large enterprises was largely due to the government's excessive interference, aimed at replacing the market mechanisms. The Government decided which products were to get priority in this policy, and introduced fiscal incentives in line with the type of priority products. The determination of priorities does not appear to always have been on economic grounds, such as SMEs' capacity for investment and absorption of technology.

Although the local content policy was largely unsuccessful in developing viable domestic supplier firms, successful private-sector-led subcontracting networks did arise in some industries, such as the case of the Japanese Toyota company, represented in Indonesia by PT International Astra, the country's largest integrated automotive company. The company was able to develop several SMEs into efficient and viable suppliers. As a result of the rigorous training which the company provided to local suppliers with potential, these suppliers were able over time to produce a wide range of parts and components for cars and motorcycles according to the strict quality standards set by the company, and also to meet its strict delivery schedules.

By the end of the 1990s the Government issued the Partnership Law (Government Regulation No. 44/1999) in order to implement Law No. 9/1995 on Small Business. The types of partnership regulated in this law are: nucleus-plasma, vendor, subcontract, franchise, general trade and many others. Since 2001, the Government has tried to develop a special Law for Subcontract Development, which has four important components: (a) creating conducive business environment for promoting subcontracting

system; (b) roles and obligations of parent companies and sub-contractors; (c) incentives to promote subcontracting system; and (d) sanctions.

It is generally expected that as a result of ongoing government efforts to attract FDI into the country after the 1997/98 economic crisis, the FDI inflow will improve at an increasing rate and the local SMEs are expected to benefit from the FDI, especially through subcontracting arrangements. Thus, the aim of this Subcontract Development Law is to encourage and facilitate such arrangements.

E. The case study of Tegal Metalworking Industry

1. Methodology

The case of the Tegal metalworking industry in Central Java was selected for this study as many SMEs in this cluster have been involved in subcontracting linkages with foreign firms, mainly from Japan, since the 1980s.

Primary data were collected from the various stakeholders, particularly from the private sector. A multimethod approach was used: in-depth interviews and focus group discussions (FGD). Since this study was exploratory, the survey was conducted according to the descriptive and hypothesis-generating approach rather than the hypothesis-testing model.[23] The respondents were selected not on the basis of pattern-matching, but on the basis of logistics and willingness to participate in the interviewing process.

In-depth interviews carried out involved a number of respondents including the following: representatives of some foreign affiliates which have subcontracting arrangements with the local SMEs; owners of local SMEs, some of which have subcontracting linkages with foreign firms; some retailers; some NGOs; and some local government representatives. These respondents were selected from four subdistricts (Adiwerna, Talang, Desa Kebasen and Desa Dampyak). The research sampling was focused on metal workshops in the automotive and shipbuilding industries. During the fieldwork, an FGD was held with workshop owners to discuss the effects of international trade and investment policy reforms on their businesses, especially with respect to subcontracting opportunities and domestic competition with imported goods. The list of survey participants and the semi-structured questions are available in Tambunan (2007a).

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23 The first approach differs from the second in that, a survey does not use a fully structured questionnaire which is specially formulated to test some determined hypothesis on relationships between variables. The main aim of this survey is to explore all possible factors that may have effects, directly or indirectly, on the phenomenon being investigated.

2. Findings

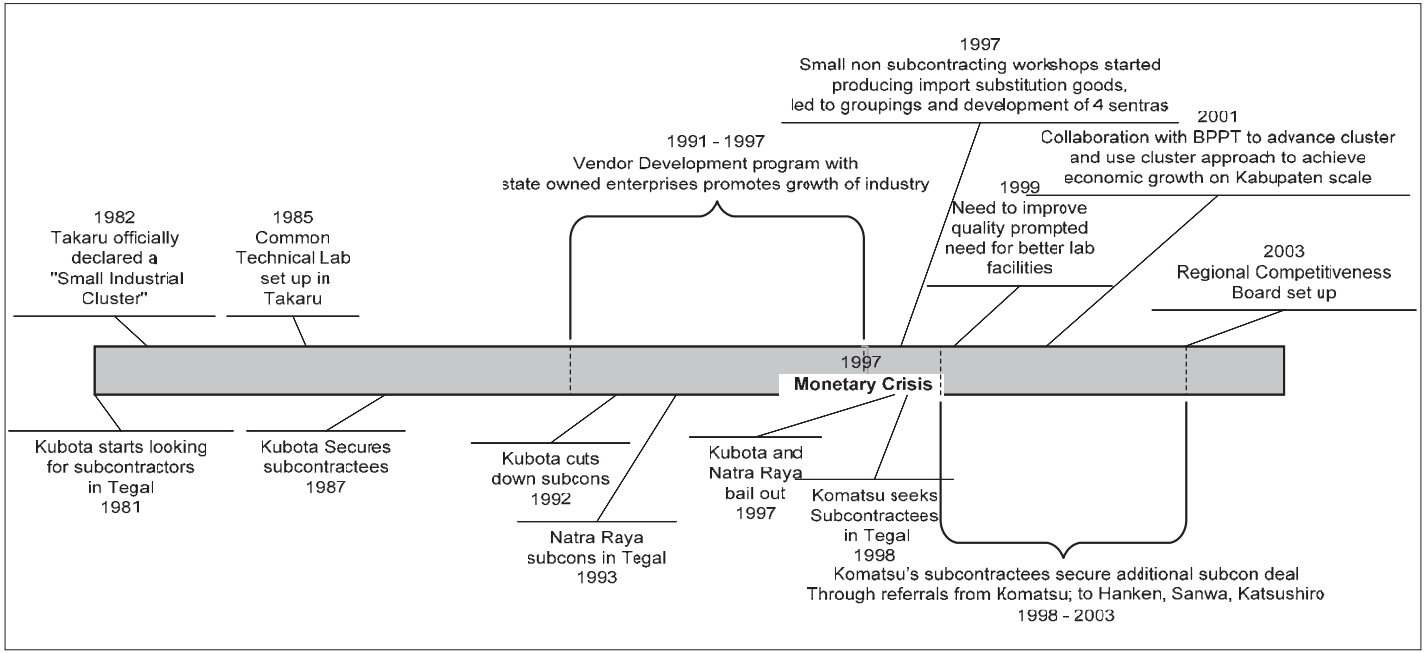
Tegal metalworking industry is a good example of the importance of FDI for the development of local SMEs through subcontracting production linkages in Indonesia. It is in the district of Tegal, which is located on the northern shore near the North coast of West Java on key trucking and rail routes. Major industries in the district include processed food (tea and tofu), textiles (batik and embroidery) and furniture (bamboo and wood). The district generates 22.09 per cent of its annual income from the industrial sector, compared with 24.24 per cent and 24.62 per cent from the trade and agriculture sectors, respectively. These three sectors are the largest contributors to the district economy. The remaining 29.05 per cent of district income comes from services (10 per cent), financial services (7 per cent), construction (4 per cent), transport (4 per cent), mining (2 per cent), water supply and electricity (1 per cent). The district has a population of more than 1.4 million people (Regional Office of Industry and Trade, Tegal).

Tegal is one of the few areas in Indonesia with a long history of development in the metalworking industry cluster. It has been a metalworking centre since the mid-1800s, when it was the locus of several sugar-processing factories and related enterprises including locomotive repair shops and metal processing factories. The industry continued, thriving particularly under the New Order's massive infrastructure and development agenda. In the beginning of the 1980s, as FDI increased in the manufacturing sector, the first subcontracting activity started between local producers and a foreign affiliate (Kubota), sparking government activity to develop the metalworking industry (figure 5).

The Tegal metalworking industry has over 30,000 workers, or about 25 per cent of almost 119,000 of the total workers employed in the district's industrial sector. Based on information from the Regional Office of Industry and Trade in Tegal, in 2006 there were over 2,800 metal workshops in the district, or about 10 per cent of the total number of local enterprises in non-farm sectors. Among those were seven groups of geographic agglomerations of metal enterprises producing the same metal products (that is, components or spare parts for ships and vehicles), including LIK Takaru. these groups have become the focus of government development strategies for SMEs in all manufacturing subsectors, including the metalworking industry. The majority of metal workshops are small, employing fewer than 20 workers, mainly male.

Pantjadarma (2004) did a study in Tegal and he reported that in that year there were 3000 firms with almost 16,600 workers in the metalworking industry in 2003. Unfortunately, there are no official time-series data on total metal workshops nor on closed and newly opened metal workshops per year in Tegal. Thus, it is hard to get insights about the long-term firm dynamics in the metalworking industry, especially following the reforms and before the 1997/98 crisis. However, when the difference in total number of metal workshops between the two studies was shown to the local government officials, they admitted that many workshops had gone out of business in recent years for different reasons. For example, they could not compete with other workshops or imported goods, they lacked cash, or faced difficulties in the procurement

Figure 5. The history of the Tegal metalworking industry from the early 1980s



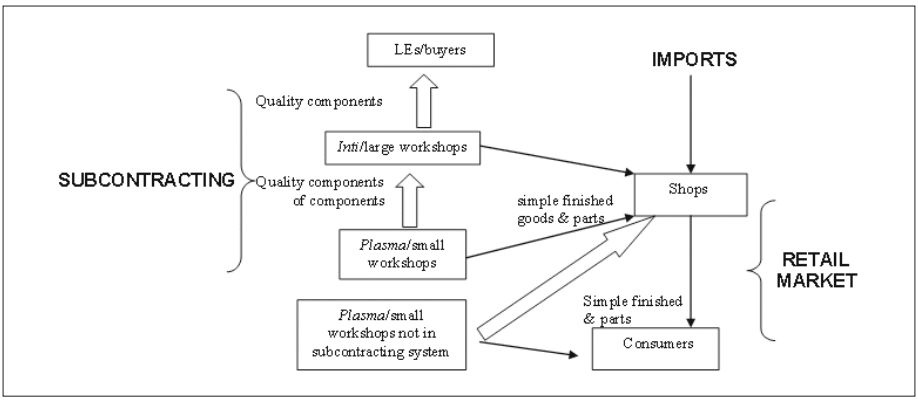
of raw materials. Those who started their businesses long ago are still in business; there are mainly from the medium-sized enterprises category and have done a lot of upgrading in technology and production. Many of them were employees in large enterprises in Tegal or outside before they started their own workshops, and some of them established subcontracting arrangements with large enterprises.

Most of Tegal's metal workshops rely on the same basic metalworking technologies, such as casting, cutting, bending, drilling or stamping and depending on the product, machining, welding and finishing (painting or electronic plating and assembly). Most of the metal products are final consumer goods, including metal kitchenware, building fixtures, furniture, accessories and agricultural tools (sickles, shovels). Industrial goods range from various small items (nuts, bolts, washers, locks, hinges, door handles, some automotive components and ship parts) to hydrant pumps, hand tractors, coffee-bean peelers and rice dryers. They have business linkages with some large enterprises through subcontracting, with wholesale distributors mainly in Jakarta, and housing developers in the region. Also, the Tegal cluster links with other metalworking SME communities in Ceper (about 180 km to the south) and furniture producers in Jepara (about 100 km to the east). Their comparative advantage has been in filling small orders for simple metal products or components. The small size of workshops gives them greater flexibility and Tegal's abundant cheap labour can outweigh the productivity advantages of more capital-intensive production. There is often intense price competition among workshops.[24]

The structure of the Tegal metalwork value chain is illustrated in figure 6. According to the size of production and level of production sophistication, there are two types of workshops in the Tegal metalworking industry: Medium and Large enterprises with a modern type of metal workshops, and small enterprises with a traditional type of workshops. In addition, there are two types of subcontractors. The first, called *inti*, are workshops that receive orders for metal components directly from big companies, such as FDI-based companies, State-owned companies or private firms outside the district. The second type are workshops which have subcontracting arrangements with the *inti* workshops; they are called *plasma*. The first type of subcontractors consists mainly of medium-sized enterprises and some large-sized enterprises, while *plasma* workshops are dominated by small-sized enterprises. In particular, large *inti* workshops, with total employees of up to 100 persons, derive a majority of their income from sub-contracting work. During the survey in 2005, there were several large foreign affiliate companies which subcontracted work to Tegal metal workshops, including PT Komatsu Indonesia Tbk, PT Daihatsu, and some divisions of the Astra Group such as PT Sanwa and PT

[24] Pantjadarma (2004) made a general assessment of the level of sophistication of the production facility that was based on a capability to utilize high-precision equipment, such as computer numerical control (CNC) machines for production, the degree of order and cleanliness of the plants. Although it is an imprecise technique, it provides some insights on the level of technological capabilities of the firms. It was observed that the majority of firms are not "modern" enough. Also, only a few had entered the export market. Nonetheless, as he concludes, these firms have sufficient technological capabilities to serve the domestic market.

Figure 6. Structure of the Tegal metalwork value chain



Katshusiro. Those companies often source metal components from several parts of the country, mostly in West Java. Among those companies, the most prominent is PT Komatsu Indonesia Tbk, which is a subsidiary of a Japanese company that has established subcontracting production linkages with Tegal metal workshops since 1998. This company produces various equipment components for construction and mining activities under the global trademark of Komatsu, such as hydraulic excavators, bulldozers, motor graders, frames and related components, steel cast products as well as off-highway dump trucks. The two most successful local *inti* subcontractors to Komatsu, which were included in the survey are, PT Prima Karya and PT Karya Paduyasa (box 3).

Plasma workshops usually hire cheap, unskilled labour or use family members (mainly men) as unpaid workers (helpers). The owner generally passes basic metalworking skills on to his employees, leaving the technical capacity of the workshop highly dependent on the technical capacity of the owner. *Inti* workshops often subcontract part of their production to *plasma* workshops.

Local workshops which have no subcontracting engagements manufacture entirely for the wholesalers and retailers or sell their products directly to local consumers, rather than through these marketing channels. Many wholesalers and retailers purchase goods from Tegal metal workshops for resale in stores in cities around the country.

It was found, however, that not all local producers/workshops can easily establish subcontracting relations with foreign companies. To become subcontractors, local firms must have attained a certain level of technical and managerial capacity. They must prove that they have the capacity to produce high-quality components and meet the stringent delivery times. An audit determines if they have the required machinery,

BOX 3. Profiles and histories of two *inti* suppliers to Komatsu Indonesia

PT Prima Karya

This company, incorporated in 1983, specializes in making parts and components for heavy equipment, having begun operations with the manufacture of spray cans and agriculture machinery, such as hand tractors. Currently, the company has 50 employees, of whom more than 50 per cent are high school graduates and two are university graduates. The company's first experience as a subcontractor started in 1985, when it won a contract with a large local conglomerate for manufacturing large quantities of "coffee peeler" machines. The contract was later terminated due to the Asian financial crisis of 1997/98. Currently, the company is one of the *inti* suppliers for Komatsu, and also succeeded in becoming one of the prime local suppliers for Natra Raya, an affiliate of Caterpillar (USA), which came to Tegal in search of potential suppliers. It has managed to expand its product lines to more than 100 items supplied to Komatsu and to Natra Raya on a regular basis. Total turnover in 1999 was Rp 650 million per year and increased continuously in recent years. The company was a manufacturer of heavy equipment parts, including engine tools, dashboards, and forklift parts. It expanded its operations to include the manufacture of pumps, agricultural equipment, parts for scales and door railings for sale to the general market. These jobs were merely incidental orders received, along with the routine work the company did for Komatsu and Natra Raya. Prospects for growth are extremely favourable. However, the company is chronically short of working capital because of the arrangement whereby payments are made only after the final products are manufactured and delivered.

The company has a great innovative capability. The fact that the company was able to advance from making relatively simple products to supplying metal components with higher grades of precision on a consistent basis demonstrates its ability to learn and increase its skills. This ability is largely attributable to the owner who has been vigilant in solving on-site technical problems. According to the owner, being accepted as a prime Komatsu supplier was his company's first milestone, which required in advance the ability to translate technical drawings to make the final product. Another prerequisite fulfilled by Prima Karya as a prime Komatsu supplier was a level of quality that ensured that no rejects were classified as fatal ones; the company was able to correct defects easily and ship the products back to Komatsu.

The company reached the second milestone when it was presented with the challenge of supplying a large complex piece associated with engine hoods. Making the first sample proved to be quite difficult using inappropriate machinery that was available at the time. Even with several days help from an expert from Komatsu, the company was still unable to produce a satisfactory sample according to specifications. After several trials driven forward by the persistence of the owner, Prime Karya finally sent the finished sample to Komatsu Indonesia at the end of the week. Approval was achieved not long afterwards.

Box 3 *(continued)*

All jigs and fixtures that allow assembly and welding on a consistent basis were built by the company itself. Much of the machinery was developed in-house, such as large bending and pressing machines, with up to 70 per cent local contents. This level of accomplishment demonstrates the experience and skills the company acquired, largely in tacit or unspoken form, as it overcame each major challenge. One of the benefits obtained by working with Komatsu was the opportunity to send employees to be trained at the company's facility in Jakarta.

PT. Karya Paduyasa

Karya Paduyasa has three plants, each with a specific production objective, namely for: (a) casting, principally hydrants and fire monitors; (b) incidental job orders, usually in small lots; and (c) a stamping process especially for large parts and automotive components. It began by making textile equipment and parts in Jakarta in the 1950s. After the company moved to Tegal, it diversified into making agriculture tools and machinery. While rapidly diversifying its product base, it improved its productive capability. Among the important achievements of the company was the development of the casting capability to produce hydrants. Hydrant manufacturing was driven by government contracts. At the peak of production, the company made around 200 units per month.

One major milestone for the company was to be selected as one of the few local prime suppliers for heavy equipment for Komatsu and Natra Raya. Furthermore, because of its ability to deliver the products in timely fashion with consistently acceptable quality, the company's product lines in the heavy equipment business expanded rapidly. However, the company manufactures fewer items than PT Prima Karya for both of the large companies.

Recently, a sign of positive growth emerged, as hydrant orders began to increase to 10-20 per month, with a similar increase in orders from Komatsu and Natra Raya. However, because of the arrangement under which payments are made only after the final products are manufactured and delivered, the company suffers from shortages of working capital, especially after the substantial layoff of workers.

The company has ample facilities for metalworking operations, which range from casting to welding to finishing. What is more impressive, however, is the company's ability to produce an increasingly complex range of products as it acquires experience over time. This ability was a key factor in being chosen as one of the regular suppliers of Komatsu and Natra Raya. The company's most recent accomplishment was its expansion into the manufacture of automobile components for an automaker. This move was soon followed by the construction of a plant dedicated to the stampingprocess. The company equipped the plant with its own dies and fixtures,

Box 3 *(continued)*

and also set up a small crane to make a large heavy bottom piece for a tractor. It manufactures many of the machines and tools it uses in this plant. Its dedication to efficiency is also demonstrated by its efforts to minimize waste from paint spraying by constructing six large fans directed at a pool of water to capture paint droplets. The stamping plant's overall facilities are well organized and maintained.

Finally, the company devotes considerable attention to skill development. It provides incentives to employees to participate in various training activities at other locations by covering their travel and accommodation expenses.

Source: Author's survey and some written information from Iman and Nagata (2002).

manpower,[25] facilities, legal standing[26] and meet ISO standards.[27] After that, they are requested to produce a sample component from the technical drawings provided. According to Komatsu's *inti* workshop owners, before an agreement is signed, KI often ask for a trial run of the mass production process, subjecting the output to quality control tests. If the workshop shows that it can produce a certain product item on a regular schedule with consistent quality, it would then be granted a licence for manufacturing different product items, thereby expanding their product lines. In the last two years, many suppliers have been tested through a few initial batch orders, but in the end, only four local enterprises were able to satisfy Komatsu (two of them were included in the sample). Larger and more modern metal workshops are more likely to adopt new technologies in their bid to become subcontracting *inti* to Large enterprises.[28]

After winning a contract, an *inti* subcontractor has access to a significant level of technical training. According to a subcontractor of PT Komatsu, trainings directly addressed the technical needs of the workshop in meeting the production requirements of Komatsu. Indonesian experts from the Jakarta Komatsu office leading the training emphasized practical applications, with 90 per cent of the training time spent on hands-on exercises. Trainers also help the workshop identify problems and means of troubleshooting.

25 They must have enough manpower to have two shifts for higher productivity.

26 Komatsu Indonesia as many other Large enterprises require their subcontractors to be a PT (limited liability company) not a CV (a limited partnership not involving a legal person, personal assets are liable for obligations).

27 Komatsu Indonesia as many other Large enterprises require the use of ISO standards even if the workshop is not officially certified.

28 Representatives of the two interviewed *inti* subcontractors, PT Prima Karya and PT Karya Padu Yasa, said that their past reputation and personal networks were also critical for their successful bid to become subcontractors. However, they have insisted that the opportunity to become subcontractors to Komatsu was open for every workshop in the cluster as long as they can prove that they have the capability to meet the quality requirements of Komatsu. The company has periodically opened competition for new inti suppliers.

During the survey, it was found that, among those who failed to become subcontractors, the most important constraints were lack of capital, limited skill, and no access to information. They do not have enough money to purchase the required machinery and to hire enough workers. They often use second-hand or homemade equipment. If they hire workers, these are often low-skilled workers with little or no experience, they must rely on the shopowner's technical knowledge.[29] Since many small owners built their expertise through working in small shops and rarely have formal academic training, they face difficulties in reading technical drawings and instead rely on copying samples, leading to less accurate output. Thus, they lack the technical ability to produce complicated components with the precision required by large enterprises. Also, due to a lack of information and skills, they are not able to meet ISO standards. They do not expect much from the Government. While the Government did give some information, the small firms need direct assistance.

Though less direct, the subcontracting system does provide some market opportunities for smaller workshops to benefit from the virtuous circle affecting *inti* capacity building. Subcontracting *plasma* gain from the incentives to produce higher quality for a higher price with technical coaching from *inti* clients in their own virtuous circle. *Inti* respondents for auto components, for instance, turn to *plasma* workshops to produce 10-15 per cent of their orders from large-sized enterprises, usually components of components or basic parts made more cheaply in small workshops while still passing the quality control requirements of large-sized enterprises. Often soft loans are provided by *inti* to *plasma* to help them acquire new machines capable of higher quality output. *Inti* and *plasma* involved in subcontracting are more likely to use government-sponsored facilities such as the technical service unit, including laboratories (UPT), especially to test the quality of materials. They are more able to offset lab usage costs through the higher price paid by large-sizes enterprises for good quality parts.

Overall, the in-depth interviews and the FGD yielded the following important findings:

A. In the last few years some workshops went out of business for different reasons. On the other hand, there were not very many new firms. Most of the firms which havebeen in business for a long time are mainly from the medium-sized category. They have done a lot of upgrading in technology and production. Many of them were former employees in large enterprises before they started their own workshops, and only a few of them established subcontracting arrangements with large enterprises. According to local government officials, it is hard to conclude that the aggressive post-crisis reforms have significant effects on the cluster. Although some producers

29 Cheap labour and relatively small, shifting job orders reduce incentives for small firms to specialize or acquire expensive machinery to increase productivity. As one seasoned metal worker explained, the strength of the *plasma* workshop is its flexibility to do smaller orders. However this flexibility becomes a liability to capacity development when workshops must fill many small orders and never develop specialization that would lead to an expanded command of technology.

have been experiencing a decline recently in their domestic market share in favour of imported goods, the cluster survives.

B. Only the workshops with good management, enough capital and skills have the capacity to produce competitive products and to subcontract with large enterprises. In the last few years, imported cheap products from China have become a serious challenge for Tegal workshops. This may suggest that the ability of the Tegal cluster to survive will depends on its capacity-building, and the latter will require direct government support.

C. FDI companies are important, as their presence gives more opportunities for backward linkages through subcontracting to local companies and thus helps the locals to upgrade their technological capabilities and to improve their performance. Examples of FDI companies currently doing extensive subcontracting with local SMEs in Indonesia include PT Astra International (in the automotive industry), PT Panasonic (in the electronics industry) and Komatsu Indonesia in the Tegal case. In the Tegal case, Komatsu is important not only for the *inti* subcontractors but also indirectly for the *plasma* workshops having subcontracting links with the *inti*.

D. However, only a few workshops are able to succeed as local subcontractors, since Komatsu and others are more likely to subcontract parts of their production to local firms which already have a certain level of technology capability, and these are mostly medium-sized. In other words, the majority of metal workshops in Tegal are still "underdeveloped" in technology and human resource from Komatsu's point of view. Currently, there are 27 companies accepted as local suppliers to Komatsu, a slight increase since liberalization.

E. In line with the global market orientation, however, FDI companies also tend to globalize their procurement and supply chain management through global or cross-sourcing strategies. Consequently, this brings local companies into severe competition with international suppliers. They argue that, unless conditions exist that enable local companies to be competitive, the liberalization policy towards FDI in Indonesia does not necessarily give better opportunities to producers in Tegal.

F. It is clear that subcontracting linkages between FDI and local SMEs in the manufacturing industry in general and the machinery industries in particular still remain low, even though Indonesia had been implementing FDI liberalization policy long before the financial crisis of 1997/98. This may be largely because of institutional coordination problems and the lack of consistency and coherence in policy. For instance, during the New Order era, the Government liberalized investment and promoted subcontracting between FDI and local SMEs through the local content policy, while at the

same time, macroeconomic policies created monopolistic or oligopolistic practices which were not in favour of SMEs. The Government also had not established special programmes to support capacity-building in SMEs to become efficient subcontractors. Even now, with respect to SME development policy in Indonesia, too much attention has been given to credit schemes, while much less attention has been devoted to technology, innovation and skills development. In addition, problems such as information asymmetry, the rent-seeking lobby and difficulties in accessing financial and technological facilities also ultimately hinder local SMEs from being more competitive as subcontractors for FDI companies.[30]

G. From the input side, the international trade liberalization has benefited the cluster mainly in the form of cheaper inputs as a consequence of lower import tariffs and elimination of quantitative constraints. However, SMEs have sometimes experienced difficulties in the procurement of scrap raw materials because export of this item has also been liberalized since the 1980s.[31]

H. From the output side, the SMEs are now facing heavier competition from imported automotive components and other products similar to their own products. Some producers even have lost a large proportion of their domestic market shares to cheaper items from China. Many of the respondents felt that since the 1997/98 financial crisis, the threat from imported Chinese goods has become more serious than ever before. Some of them argued that the Government should not take an aggressive step in liberalizing imports on finished and semi-finished products, except on raw materials or inputs. Otherwise, as they admitted, in the long-run, trade liberalization will have a negative rather than a positive effect on their business.[32]

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30 From interviews representatives of Komatsu Indonesia and some other Japanese companies in Indonesia.

31 Not only Tegal but also metalworking workshops in two other clusters (Ceper in Central Java and Pasuruan East Java) have had similar experiences many times in the 1980s and 1990s. It is even generally expected that as the export of scrap has intensified recently, mainly to China, this problem will arise in the near future.

32 The Indonesian Government's decision to reduce import barriers has led to mounting concerns about increased imports due to the lack of competitiveness of Indonesian industries, especially SMEs. Although enhancing competitiveness is indeed a valid policy goal, increased protection is not a proper policy instrument for achieving that goal since protection reduces competitiveness, rather than increases it. Furthermore, from his own observation on the effect of trade policy reform during the New Order era, Magiera (2001) states that there are no signs that the reduction of import barriers by Indonesia has had a detrimental affect on import competing sectors. However, after the crisis, and especially in the last few years, newspapers almost regularly release stories on cases of local SMEs in certain clusters facing tough competition from cheaper imported goods. The former Chairman of the Indonesian Association of Automotive Components, noted that ,since the implementation of the CEPT AFTA, domestic producers of automotive components have been under seriously pressure. Also many automotive factories have moved abroad, for instance Toyota Vios to Thailand (Bisnis Indonesia, Friday, 7 November 2003, page T12).

I. Not only the retail market, but also the subcontracting links are under pressure because of the rise of China as a regional competitor in metal manufacturing. As more assembly is done in China, it becomes more efficient to produce components closer to the place of assembly. Tegal's metal workshops stand to be disproportionately affected by this as it becomes more cost-effective to produce the remaining components in metal production centres in Jakarta, decreasing transportation costs. A representative of Komatsu Indonesia said that the company used to subcontract metal casting orders for about 10 tons of product from many locations away from Jakarta, including Tegal. The order has since been reduced to 300 kg and has moved to Jakarta.

J. SMEs are more concerned about trade liberalization than investment liberalization for three main reasons. First, foreign trade reform directly affects their procurement of raw materials. Although after the 1997/98 crisis the competition from imported automotive components and other similar items became heavier, most of the suppliers believe that they can compete as long as distortions in the inputs market are reduced through eliminating tariffs and other barriers on their imported materials. Although only a small portion of the producers in the cluster are using imported inputs, the domestic/local market prices for such inputs has declined for metalworking producers. Second, they do not see the direct effects of investment liberalization. As they admitted in interviews, they do not see the difference between the current investment environment and, say, that of 20 years ago. Also, most of them are not aware of the Government's efforts (including the new investment law) to liberalize investment in the country. For them, the serious threats come from imported products, not from FDI companies producing similar items. Third, only those which are subcontractors for Komatsu may see some benefits from investment liberalization. The chance to become suppliers to Komatsu is fully determined by a company's readiness to become qualified subcontractors (as explained in the case study), not by investment liberalization. Unfortunately, many producers in the cluster could not meet the requirements. They argue, therefore, that for them investment liberalization without related Government support to improve their capability to become subcontractors will not have any benefit at all.

K. The SMEs have close contacts with the regional office of the Ministry of Trade and the Ministry of Industry, and they are often consulted on current changes in import regulations and domestic market competitions, but not so much on current changes in investment policies. Thus, they have no views on how well foreign trade and investment liberalization have been coordinated. Their cooperation with the regional offices is usually related to training and assistance provided by the offices to improve their technology, production and management capabilities in order to be able to compete in domestic and export markets.

L. For most of the producers, public interventions give more direct benefits than trade and investment policies. These include development of

infrastructure, easy access to bank credits, monetary stability (that is, low inflation and interest rates and stable exchange rates), and bureaucratic reform, especially in dealing with business permits, and direct support such as for training and market information. As they argued, they need trade and investment reforms accompanied by such public interventions and direct supports.

M. Although the companies are not really aware of all trade and investment policies in the country, they have one important experience related to the case of PT Kubota Indonesia, which shows the uncoordinated state of investment and trade policies. PT Kubota Indonesia, a subsidiary of the Japanese firm, was among many other FDI-based companies which came to Indonesia as a result of the investment liberalization efforts during the New Order era. It was also among 30 large companies in Indonesia which were the pioneers in subcontracting work to local SMEs through the so-called "Foster Parent" programme, which attempted to create productive linkages between large and small firms. By the end of the 1970s the Government started to regulate subcontracting activities in the engineering sector as part of the "local content" programmes. In 1981 PT Kubota started looking for subcontractors in Tegal, and many local metalworking industries were involved in subcontracting with the company by the end of the 1980s. The company also had many subcontractors in the Semarang (where the company is located) and Klaten areas of Central Java. The company assembled small Kubota diesel engines competitive with the Mitsubishi and Yanmar products. By the last quarter of the 1980s, the Indonesian Government allowed built-up diesel engines from China (Dong Feng) to enter the Indonesian market. As a direct consequence of this trade policy, with the market price of the imports only about 50 to 60 per cent of the domestically-assembled Kubota diesel engines, PT Kubota saw a significant decline in its domestic market share in the first few years, which negatively affected it and hence its subcontractors in Tegal.[33]

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33 In fact this experience was also similar to the experience of Timor Putra Nasional, the national car manufacturer which had a joint venture with the nearly bankrupt KIA Motors Corporation of the Republic of Korea during the last few years of the New Order era. In the early 1970s, imports of completely-build-up (CBU) motor vehicles were banned, to encourage import substitution in automotive assembly, and a local-content policy, known as the deletion programme, was introduced in 1977 and set target dates for assemblers to meet certain levels of local content. Many foreign brands, especially Japanese ones, were produced in Indonesia through either joint ventures or production under licence. In some cases, the firms started off as domestic firms producing under licence, with the foreign principal keeping a tight control over operations. Although the target dates for the deletion programme were never fully met, a lot of investment went into components and parts production, including engines. Some of the large-scale assemblers invested in backward integration, often in partnership with the suppliers of their principal. In 1993, the ban on imports of CBU vehicles was replaced by tariffs of 200 per cent for vehicles assembled domestically and 300 per cent for those not assembled domestically. Suddenly, in the mid. 1990s the government took a controversial decision by allowing import of a built-up car with zero import tariff from the Republic of Korea.

F. Concluding remarks and policy recommendations

The rapid economic growth and the rapid transformation of the Indonesian economy in the New Order era may be significantly attributed to the trade and investment reforms undertaken during that period. After the in 1997/98 crisis, the more aggressive reforms also started to show some results, as in 1999 the country's GDP started to grow again and it has kept growing at an accelerating rate. For the recently introduced new investment law, it may take some time to show some results.

The official data shown in this study suggests that, overall, the reforms have not affected SMEs negatively. However, given the fact that the majority of SMEs (especially small and microenterprises) in Indonesia are not ready yet to compete due to their weaknesses in many areas, the Government should take concrete actions to make local SMEs more competitive in the long run in the following areas:

1) Trade and investment liberalization should be accompanied by specially designed SME development schemes to support long-term capacity-building in the enterprises. The schemes should focus on six major areas: (i) access to credit and market information; (ii) human resources development; (iii) technology development and innovation; (iv) global networks in both inputs and output markets; (v) subcontracting; and (vi) development of infrastructure that provides more access for local SMEs to broader markets.

2) Trade reform policies should be carefully designed to prevent liberalizing the export of unprocessed commodities which are the key raw materials for SMEs. This leads to shortages of these items in the local market which reduce the production capacity of SMEs.

3) To assist local SMEs to benefit from investment liberalization through subcontracting, the Government should focus on three areas: (i) improving SME's capacity for investment in absorption of advanced technology; (ii) creating a friendly business environment by eliminating market distortions, such as information asymmetry and wrong price signals and difficulties in accessing financial and technology facilities and other necessary inputs; and (iii) improving institutional coordination, both among different departments representing different sectors such as industry, mining, agriculture, construction and banking, and among each of those sectors and the BKPM and the Ministry of Finance, which would contribute to consistency and coherence in policy.

4) Investment liberalization should also give opportunities to local SMEs to integrate into the global production network. Subcontracting is one way to facilitate this. To develop into highly competitive supporting industries or vendors supplying certain parts of global products is another way. The Government has a very important role to play to support this development, not only

through specially designed schemes, but also indirectly through creating a conducive business environment.

5) Although the coordination between the Government and private sector in the preparation and formulation of economic policies or business regulations has significantly improved since the economic and political reforms in 1999, it is still taking place mainly at the national level between the ministries and large enterprises or business associations which mostly represents the business interests of large enterprises. At the local level, such coordination between local governments and clusters of SMEs needs to be improved significantly.

6) The Government should be more aggressive in outreach to SMEs through many channels (that is, electronic, newspapers, press releases and public gatherings) to publicize new policies or regulations in advance of their implementation. At the same time, the Government should give appropriate incentives to local SMEs in particular sectors to minimize the negative effects or to maximize the positive effects of such new policies or regulations. In addition, SMEs represented by associations or NGOs should be more actively involved in the preparation and formulation of trade and investment policies that will affect them directly or indirectly.

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VI. TRADE AND INVESTMENT LINKAGES IN HIGHER EDUCATION SERVICES IN MALAYSIA

*By Tham Siew Yean and Andrew Kam Jia Yi**

Introduction

The service sector of Malaysia has grown considerably over time. In 1980, it contributed 44.7 per cent towards GDP and 46 per cent of the total employment of the country. By 2005, its contribution had grown to 60.8 per cent of GDP and 58 per cent of total employment (Government of Malaysia, 2006). Its importance to the country in terms of complementing growth in manufacturing was recognized in the Second Industrial Master Plan, 1996-2005, which first introduced the idea of developing supporting services under its "Manufacturing ++", or the cluster-based development strategy. However, no specific service subsectors were targeted for development.

In contrast, the Third Industrial Master Plan (IMP3), 2006-2020 not only reiterates the status of the service sector as an important intermediary for supporting the development of businesses and trade in all sectors, but it also targets eight service subsectors for development: business and professional services; distributive trade; construction; education and training; health-care services; tourism services; ICT services; and logistics. The contribution of these subsectors as new sources of growth for the country includes their potential to provide linkages and spillovers between sectors. Nevertheless, given the limited size of the domestic market and the importance of trade to the Malaysian economy, the potential of these sectors as new sources of growth for the country is inevitably dependent on their export potential.

Although Malaysia has not offered to open up education services under its current commitment to the General Agreement on Trade in Services, the Government has progressively opened up the sector to private and foreign participation. As noted in the IMP3, there are currently 16 private universities in the country, of which 11 are Malaysian-owned; the remaining five are branch campuses of foreign countries (Government of Malaysia, 2006). At the same time, Malaysian higher education institutions are also establishing campuses abroad. The number of foreign students enrolled in institutions of higher education in Malaysia is also increasing. In 2005, 40,525 foreign students were reported to have enrolled in these institutions, with 84 per cent in private institutions of higher education (Ministry of Higher Education, 2006a). This has contributed towards export revenue and the reduction of the perennial services deficit in the country.

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Malaysia has also recognized the potential contribution of private higher education institutions towards economic growth. This is evident from a report by the Ministry of Higher Education (2006b), which recommended that private higher education institutions could be considered a subsector that could generate economic growth in addition to increasing access and equity. In fact, Malaysia has aimed not only at becoming a regional centre for higher education but also at becoming a global education hub by 2010.

In view of the above developments, this chapter explores the trade and investment links in private higher education in Malaysia. Specifically, it assesses whether, and if so, how trade and investment policies in general, and in the education sector in particular, are coordinated at the national level. Barriers to trade and investment in private higher education are also examined in order to provide policy input for the liberalization of trade and investment in private higher education, focusing in particular on the need for trade and investment policy coordination at the national and regional levels.

A. Evolution of private higher education in Malaysia

1. Historical overview

Private higher education is not a new phenomenon in Malaysia; rather, this sector has been in existence since the 1980s (Tan, 2002). Affirmative action undertaken under the New Economic Policy, which was promulgated in 1970 after the politicized racial riots in 1969, led to the use of a quota system that restricted the admission of *non-Bumiputeras*[1] in Malaysian public institutions of higher learning. Consequently, private higher education institutions emerged as an alternative to meet this excess demand, especially during the economic recession in 1985 when an overseas education became too expensive. In particular, the imposition of full fees on overseas students by British universities led to increased demand for private higher education in Malaysia.

Economic recovery and the subsequent buoyant growth of the economy in the second half of the 1980s intensified corporate presence in this sector, thereby facilitating the rapid growth of private higher education. Malaysian companies, be it individually, as a consortium of companies or public listed companies, or as government corporations, have viewed private higher education as an alternative source of revenue as well as a means of enhancing the property values of corporations that were involved in the development of new townships (Tan, 2002). The rapid development of this sector did not just serve to reduce foreign exchange losses by providing an alternative pathway to an overseas education for domestic students. Rather, the Government envisaged the development of this sector into a regional education hub that would also enable Malaysia

[1] The term *Bumiputera* refers to thrive Malays and indigenous ethnic groups in Malaysia.

to shift from being a net importer to become a net exporter of higher education by 2020 (McBurnie and Ziguras, 2001). At the same time, it was seen as complementing the Government's efforts in meeting the human resource needs of the country.

By 1995, 127,423 of the total number of higher education students (or 34.7 per cent) were enrolled in private institutions while 51.5 per cent were enrolled in local public institutions of higher learning (Lee, 1999). The remainders were studying overseas. The number of private higher education institutions grew from 156 in 1995 to 354 in 1996. In response to the rapid growth in private higher education, the Private Higher Educational Institutions Act and the National Accreditation Board Act were passed in 1996 to enhance the development of such institutions by enabling the private sector, for the first time, to establish degree-granting institutions as well as allow foreign universities to set up branch campuses in the country. The Private Higher Educational Institutions Act also defined the Government's regulatory control over all private higher education institutions while the National Accreditation Board[2] was established to ensure that minimum standards as determined by the Board were met by those institutions. In addition, the Board also awards certificates of accreditation for the certificates, diplomas and degrees conferred by the institutions. Subsequently, the recession in 1998 due to the advent of the Asian financial crisis in 1997 contributed towards the accelerated implementation of these acts and a further push to develop private higher education institutions.

In 2004, the Ministry of Higher Education was established to oversee the development of both public and private higher education. By 2005, 258,825 students were enrolled in private institutions of higher education or 45 per cent of the total number of students enrolled in the institutes of higher education in Malaysia (Ministry of Higher Education, 2006a). The number of foreign students enrolled also increased from 13,472 in 2001 to 33,903 in 2005. In 2005, these foreign students comprised 13 per cent of the total number of students enrolled in private higher education institutions.

2. Nature of private education activity: major players and types of provisions

Five types of private higher education institutions are currently operating in Malaysia (table 1). As of 2005, 11 of them had university status, of which three were universities that were set up by the three public corporations in telecommunications, electricity and petroleum (Tan, 2002). Of the three, Universiti Multimedia (Multimedia University) was the first to be established in 1999.[3] The public corporations were privatized first before they expanded their operations into the education sector. Although they were initially set up to produce engineers, the programmes offered have since been expanded beyond engineering.

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2 See website <www.lan.gov.my> (accessed on 19 June 2007) for more information.

3 A list of the private higher educational institutions in Malaysia considered in this study is available in annex I of Yean and Yi (2007).

Table 1. Number of private universities/colleges, 2005

Category of private institutions	Number of private institutions
Private universities	11
University colleges	11
Foreign university branch campuses	5
Colleges	532
Total	559

Source: Ministry of Higher Education, 2006a.

Apart from government corporations, the State of Selangor was the first State in the country to establish its own private higher education institutions, the Universiti Industry Selangor.[4] Its curriculum and extra-curricular courses are industry-centred as they are intended to meet the industrial needs of the country.

Two virtual universities were set up. Universiti Terbuka Malaysia (Malaysian Open University) was established as an open university, based on the Open University of the United Kingdom, to deliver distance education. It is managed by a consortium of public universities in the country. The second university, which also provides distance-learning programmes, is the privately owned University Tun Razak.

The International Medical University was initially a college that was later upgraded to university status in 2001. It was the first private higher education to offer a medical programme (in 1993) and a pharmacy course (in 1996) (Tan, 2002). It continues to offer a single discipline, i.e., medicine and allied health sciences.

Of the other three universities, the Malaysian University of Science and Technology was established initially in collaboration with the Massachusetts Institute of Technology for post-graduate studies. Universiti Tunku Abdul Rahman, which was established by a political party, is one of the most recent private universities to be set up. The other is Universiti Kuala Lumpur.

The Government also invited four foreign universities to set up branch campuses in Malaysia: Monash University and Curtin University of Australia and Nottingham University and De Monfort University of the United Kingdom.

Although private colleges were initially not allowed to confer degrees, this prohibition was subsequently relaxed for a selected number of private colleges, beginning with the International Medical University. By 2005, 11 private colleges were allowed to confer degrees when they were upgraded to college-universities. However, there are also 532 other private colleges in Malaysia that are still not allowed to confer degrees. It should be noted that of these 532 private higher education institutions, only 200 are allowed to recruit international students for specific programmes within each institution (Challenger, 2006a; and interview, Ministry of Higher Education, 3 July 2007).

4 Malaysia has 14 states.

Private higher education institutions offer a variety of programmes due to their historical development and their funding constraints. Although some of these institutions do offer their own internally developed programmes, most offer foreign-linked programmes. Historically, when the institutions first emerged in the 1980s, they had to forge different types of linkages with foreign universities in order to offer different types of degree programmes and professional qualifications because they were not allowed to confer degrees (Lee, 2004). Thus, numerous foreign-linked programmes or transnational programmes (table 2) have evolved: (a) foreign university programmes completed wholly in Malaysia, be it at branch campuses or at private colleges throughfranchise programmes; (b) twinning degree programmes; (c) credit transfer

Table 2. Types of transnational programmes conducted by private institutions of higher education in Malaysia

Programme	Description of programme
3+0 foreign university degree programmes completed in Malaysia	Private higher education institutions are permitted by their foreign university partner to conduct the entire degree programme in Malaysia for the foreign university partner. A degree is awarded by the foreign university partner.
Foreign university external degree programme leading to degree qualifications	Students register as an "external student" with a foreign university and study through the tutorials conducted by the local private college. The syllabi, entry requirements and examinations are determined by the foreign university. The degree awarded is no different from the degree awarded to the "internal" students.
Split degree programmes	This enables the partial completion of the degree programme in local private colleges but the final part has to be completed at the twinning partner overseas. The degree is awarded by the twinning partner overseas. There are several options: • Twinning degree option: The student attends part of the course locally and the balance at the twinning university; • American degree transfer/credit degree transfer: The student collects sufficient credit through a local private college and then completes the remaining credits in the foreign university; • Advanced standing entry option: The courses offered by the local private colleges are validated and moderated with "advanced standing" entry status by a group of overseas universities for advanced entry into the final part of their degree programmes.
Distance-Learning Programme Arrangement	This is similar to the external degree programme in which the students are admitted directly into the university, with local private college providing the tuition classes and administrative support. Self-study materials are provided and the electronic media such as the Internet, video-conferencing, satellite, video cassettes and audio-visual teaching aids, are used as the teaching media; private colleges provide face-to-face meetings with tutors in a classroom setting. Evaluation may include a local component, unlike the external degree programmes.

Source: Challenger, 2006b.

programmes; (d) external degree programmes; and (e) distance-learning programmes. Institutional linkages with local public universities have also emerged with some of the private colleges carrying their programmes.

Since tuition fees are the main source of revenue for most of the institutions, their programmes have to be tailored to market demand. Although some corporate-linked private higher education institutions did receive some financial subsidies from their parent company in their initial years, these subsidies have often been withdrawn over time and those institutions have had to become financially self-sufficient. Consequently, the institutions tend to offer programmes that do not require a large capital outlay in disciplines such as accountancy, business studies and computer studies.

Table 3 shows that of the 101,395 students enrolled in private higher education institutions in 2005 for degree programmes, 61,724 were in the arts. Within the disciplines of science and technology, 21,282 out of 29,252 are enrolled in computer and technology studies.

Table 3. Student enrolment in private institutions of higher education for bachelor's degrees, by field of study, 2001-2005

Field of study	2001	2002	2003	2004	2005
Literature					
Arts, design and music	590	1 215	1 111	1 663	4 521
Business and administration	29 246	25 995	36 220	44 895	35 934
Education	475	3 715	7 281	8 813	12 610
Humanity	1 555	837	931	1 072	777
Law	1 313	1 209	1 158	1 115	1 504
Services sector	100	94	171	244	243
Social science	149	949	1 254	1 642	6 039
Languages	237	11	159	199	96
Total	33 665	34 025	48 285	59 643	61 724
Science and technology					
Agriculture	-	-	-	-	272
Computer and technology	13 883	18 617	25 754	25 466	21 282
Health and welfare	-	-	-	-	753
Medicine	2 381	2 469	3 886	4 724	4 916
Science and mathematics	260	1 360	412	600	2 029
Total	16 524	22 446	30 052	30 790	29 252
Technical and vocational					
Engineering and technical skills	9 289	10 058	11 801	14 229	10 047
Air and maritime	75	153	72	130	-
Manufacturing and construction	412	380	421	533	372
Total	9 776	10 591	12 294	14 892	10 419
Grand total	59 965	67 062	90 631	105 325	101 395

Source: Ministry of Higher Education, 2006a.

3. Trade and investment linkages

(a) Overall coordination of trade and investment policies in Malaysia

In Malaysia, the New Economic Policy guides all national socio-economic planning through its two objectives of growth and redistribution. The latter objective includes the redistribution of ownership wealth to ensure an equitable distribution among the country's various ethnic groups. In order to achieve this objective, the following quantitative targets were set: (a) by 1990, the Bumiputeras were to hold 30 per cent of the corporate equity; and (b) the non-Bumiputeras and foreigners were to hold 40 per cent and 30 per cent, respectively. In addition, 30 per cent of employment is also reserved for Bumiputeras. The Policy enforcement mechanism is a licensing system that was set up under the Industrial Coordination Act of 1975. This Act empowered the Minister of International Trade and Industry to impose any condition (including compliance with Policy targets) on the issuance and renewal of licences. The Malaysian Industrial Authority, under the Ministry of International Trade and Industry, is the agency in charge of promotion and approval of foreign direct investment in manufacturing activities as well as the provision of incentives.

To ensure that the policy goals are met, investment approval for non-manufacturing activities that are not under the jurisdiction of any ministries or agencies has to be requested from the Foreign Investment Committee, which was established in 1974 as a unit within the Economic Planning Unit. Approval for foreign investment, including licences, is under the purview of the respective regulatory body for service activities that come within the jurisdiction of a specific government agency or ministry. For example, the central bank is the regulator of the banking industry, and its approval is required for foreign investment in banking. The central bank also awards the necessary banking licence for the foreign service provider.

The Ministry of International Trade and Industry is the coordinating agency for services. However, the collection of data and information related to services is under the jurisdiction of the various ministries and agencies that oversee the different services subsectors. The formulation of trade policies is facilitated through a consultative process with the relevant industries, interested groups and ministries. A national working group on services and several sectoral working groups have been established to work out Malaysia's national position for negotiations on the liberalization of services (ESCAP, 2002). The working group on services is made up of representatives from key ministries, agencies and regulators that are directly involved with trade in services, while each of the sectoral working groups has representatives from the related professional bodies and industry associations for technical participation and consultations. The main function of the sectoral working groups is to respond to issues in relation to the liberalization of trade in services, such as emergency safeguard measures, most favoured nation treatment, requests for market access from Malaysia's trade partners and the preparation

of Malaysia's offers, and feedback as to whether or not a particular subsector is ready for liberalization. Liberalization of services under the different modes is also formulated through this consultative process.

The Malaysian Services Industry Development Council was established in 2006 in response to the policy suggestion outlined in the IMP3 for promoting the development of the six targeted sectors of distribution, tourism, education, health and selected business and professional services. The relevant sectoral working groups have been placed under the Council. Currently, the Council has 33 members, 16 of whom are from the private sector, 13 from the public sector and 4 from academia. The private sector plays an important role in the Council as private sector representatives are expected to put forward recommendations for accelerating the growth of the selected subsectors. While the regulatory functions remain with the relevant ministries and agencies, the Council plays an important role in terms of the coordination and implementation of policies and programmes, covering areas such as institutional support, infrastructure, rules and regulations, and liberalization initiatives (Ahmad, 2007).

(b) Trade and investment policies on private higher education in Malaysia

After the Ministry of Higher Education was established in 2004, the Department of Private Education was renamed the Private Higher Education Management Sector (Challenger, 2006b); its primary function was in formulating policies and setting the direction for developing private institutions of higher education in Malaysia. Specifically, this sector processes applications for the establishment of such institutions, sets standards, enforces and regulates laws, manages the collection of fees, supplies services such as providing people with advice, guidance, counselling and consultation, and collects data and information about this sector.

There are four stages for gaining approval to conduct courses and programmes in Malaysia. Private institutions of higher education must first apply to the Ministry of Higher Education (Ministry of Education prior to 2004) for approval to establish such an institution (McBurnie and Ziguras, 2001). In the case of private universities and branch campuses of foreign universities, they are identified by the Ministry of Higher Education and are invited to apply. All providers have to incorporate a company locally. After approval to establish has been granted, the institution has to apply to the Private Higher Education Management Sector of the Ministry for registration. Upon registration, that institution must apply to the Ministry for permission to conduct each course or training programme. The National Accreditation Board assesses their applications and determines whether the courses meet the minimum required standards before making its recommendation to the Minister. Provisional accreditation was introduced in 2006 to facilitate students' application for government loans, while full accreditation requires a more detailed appraisal of the quality of the courses carried out by a panel of assessors. Assessment for full accreditation can only commence after the first cohort of students is in its final year.

The Ministry of Higher Education thus determines the trade and investment policies in higher education since it facilitates, approves and regulates all providers and programmes in private higher education. The Ministry, in consultation with the relevant stakeholders and agencies, also formulates the country's offers to WTO as well as bilateral agreements. Enforcement is also under the jurisdiction of the Ministry. The implementation of these policies, however, requires coordination among the Ministry, the Board as the regulatory body in charge of standards and quality of there institution, and the Immigration Department for the issuance of student visas, work permits and visas for foreign lecturers. Registering a private higher education institution also requires the applicant to fulfill the requirements of local authorities such as fire safety and health in addition to the requirements of the Ministry, which also oversees the issuance and extensions of permits to teach.

(c) Trade and investment links in private higher education in Malaysia

(i) Cross-border supply

As noted by the WTO Council for Trade in Services in 1998, the bulk of the trade in this sector takes place through consumption abroad rather than in the form of cross-border supply. In the case of Malaysia, McBurnie and Ziguras (2001) noted that students preference for traditional modes of learning based on face-to-face contact with lecturers as well as the unreliability of dial-up Internet connections, which are prone to drop-outs and low bandwidth, have led to the relatively slow development of distance learning in the country. Case studies by McBurnie and Ziguras showed, for example, that although the Australian campuses of Monash University were rapidly adopting technology in course delivery, the Malaysian campus was still offering the traditional face-to-face approach in their teaching and learning. In another case study, Universiti Tun Abdul Razak, which is supposed to be Malaysia's first "virtual" university, also had to adjust its university model to accommodate the local preference by having some hours of face-to-face lectures and a network of local learning centres for students to attend classes, interact with other students, sit for examinations, and access computers and support staff.

(ii) Consumption abroad

Malaysia started out as an importer of higher education during to the limited higher education facilities in the country, the perceived advantages of obtaining a foreign degree and the desire to study solely in another language, usually English[5] (The Observatory on Borderless Higher Education, 2006). There are no available time series

5 From 1974, the medium of instruction in education at the tertiary level was changed from English to the national language, Bahasa Malaysia.

data on the export and import of educational services, much less on the different levels of education. In 1990, the number of Malaysian students studying overseas was reported to be 73,000 (Tan, 2002). Imported education was reported to be worth M$ 2 billion in 1990, accounting for 15.9 per cent of the total service deficit (Sieh and others, 2000). This figure increased to M$ 2.2 billion in 1996, before falling slightly to M$ 2 billion in 2000 (Government of Malaysia, 2006). In 2005, imports totalling M$ 3.6 billion were reported. Despite the increase in import value, the number of students fell substantially from 117,297 in 2000 to 56,609 in 2005 (table 4). It is possible that the increase in import value was due to increases in fees. Data from the Institute of International Education show that the majority of the students studying in the United States are at the undergraduate level (67 per cent), followed by post-graduate level (25 per cent). Other levels of education constitute a mere 8 per cent.[6]

Although there are no data available for earlier years, the depreciation of the Malaysian ringgit during the Asian financial crisis in 1997 dampened significantly the demand for overseas education. Import-substitution accelerated as the ringgit fell from an average of M$ 2.5 to US$ 1 before the crisis to M$ 3.8 to US$ 1 in 1998. It was not only a fall in terms of outward-bound private students; government-sponsored students were also affected as the Government reduced the number of scholarships for overseas study. In 1997, the Government sponsored 30 per cent of Malaysian students studying overseas. The number of students studying in the United Kingdom fell by 41 per cent from 1996/97 to 1999/2000 and decreased further by 3 per cent between 2003/04 and 2004/05 (from 11,800 to 11,475 students) (The Observatory on Borderless Higher Education, 2006). In the United States, the number of Malaysian students fell by almost 50 per cent between 1997/98 and 2000/01 and by an additional 27 per cent between 2000/01 and 2004/05 (from 7,795 to 6,142). Apart from the foreign exchange problem, developments in the United States post-11 September may have been another contributory factor as well as the emergence of regional competitors such as Singapore.

Table 4. Number of Malaysian students overseas, 2000-2005

Country	2000	2001	2002	2003	2004	2005
United States	31 360	28 700	7 395	7 611	5 519	6 411
Saudi Arabia	-	-	127	125	125	132
Australia	16 491	15 121	15 700	15 448	15 434	15 909
Canada	1 194	1 130	231	231	196	230
Indonesia	1 720	1 616	1 337	1 225	1 607	2 444
Jordan	3 350	1 512	361	361	310	444
Egypt	7 369	7 068	4 664	4 330	5 768	6 256
New Zealand	1 407	1 214	995	918	1 011	1 338
United Kingdom and Ireland	54 406	47 365	11 970	11 860	11 041	15 189
Other countries	-	-	-	-	2 268	8 256
Total	117 297	103 726	42 780	42 109	43 279	56 609

Source: Ministry of Higher Education, 2006a.

6 <www.atlas.iienetwork.org> (accessed on 3 December 2006) for further information.

In contrast, the total enrolment in private higher institutions of education more than doubled from 127,423 in 1995 to 261,043 in 2000.[7] This grew further to 258,825 in 2005. While it cannot be ascertained as to how many of this number substituted a local education for an overseas education, the development of private higher education institutions has certainly widened access in higher education in Malaysia. In the mid-1980s, only 12 per cent of persons in the age group 17-23 years had access to higher education in Malaysia; this increased to 23 per cent in 2000 and to 29.9 per cent by the end of 2006 (Ismail, 2007). The Government aims to increase this figure to 40 per cent by 2010.

The rapid expansion of private institutions of higher education in Malaysia as well as the growth in student enrolment led to increased emphasis on the promotion of Malaysia as a centre of educational excellence for foreign students. In turn, the number of foreign students enrolled in private higher education institutions grew from 13,472 in 2001 to 52,000 in 2006/07, the majority of whom were from China, South-East Asia (especially Indonesia and the Middle East) (New Sunday Times, 17 June 2007). The Government is aiming at having at least 100,000 foreign students in Malaysia by 2010.

Relevance, cost and quality are the key drivers of demand. The demand for relevance has, for example, pressured private higher education institutions to be responsive to the needs of their prospective students. INTI International University College, for example, has offered new programmes that provide internship as well the inclusion of an employability skills workshop in their programmes to enhance the employability of their graduates, given the increasingly competitive job market and the number of unemployed graduates in Malaysia (New Sunday Times, 17 June 2007).

A three-year degree programme in Malaysia is estimated to have cost between M$ 60,000 and M$ 90,000 in 2005, including tuition fees and living expenses (Challenger, 2006b). Completion of a three-year programme in Malaysia under the 3+0 foreign degree programme can save a student between A$ 15,000 and A$ 94,500, depending on the field of study (table 5). A foreign branch campus administrator estimated that the cost of living in Malaysia was 30 to 40 per cent lower than at the mother campus while the fees could be 20 to 40 per cent lower, depending on the exchange rates as fees were stipulated in ringgit for the Malaysian campus (interview, 14 June 2007). Completing a degree in an Australian branch campus in Malaysia can cost US$ 31,770 compared with US$ 87,189 at the Australian mother campus (Challenger, 2006a).

(iii) Establishing a commercial presence: *Foreign equity vs. transnational programmes*

In the education sector, commercial presence can either take place in the form of institution mobility or programme mobility. In the case of the former, foreign equity is

[7] These figures include students registered at the certificate and diploma levels, and cannot be compared with the data in table 3.

restricted to 49 per cent under the New Economic Policy (interview, the Ministry of Higher Education, 3 July 2007). Based on the responses of the branch campuses of two foreign universities in Malaysia, this is not deemed a restrictive factor to trade. One of the branch campuses even mentioned that the foreign partner would prefer to hold less equity as there would be less risk for the foreign partner. Since the foreign partner holds the brand name of the university, academic control in running the academic programmes of the branch campus remains in the hands of the foreign partner.

Table 5. Tuition fees, bachelor's degree programmes

Areas of study	Paths of study			
	Entire bachelor's degree in Malaysia			Split-degree arrangement
	Path (i) Private college 3+0 foreign degree programme	Path (ii) Foreign university branch campus degree programme	Path (iii) Malaysian private university degree programme	Path (iv) Private college twinning degree programme (e.g., 2 years in Malaysia + 1 year in Australia)
Business	M$ 35 000-45 000 (3 years)	M$ 51 000-76 000 (3 years)	M$ 30 000-39 000 (3 years)	M$ 36 000 + A$ 15 000 (2+1 years)
Engineering	M$ 45 000-46 500 (British degree, 3 years)	M$ 80 000-104 000 (Australian degree, 4 years; British degree, 3 years)	M$ 46 000-64 000 (Malaysian degree, 4 years)	M$ 46 500 + A$ 17 000 (3+1 years)
Information Technology	M$ 33 000-50 000 (3 years)	M$ 72 000-82 000 (3 years)	M$ 33 000-43 000 (3 years)	M$ 40 000 + A$ 17 000 (2+1 years)
Medicine	-	M$ 325 000 (5 years)	M$ 228,000- 270,000 (5 years)	M$ 120 000 + A$ 94 500 (2.5 + 3 years)
Hospitality and tourism	M$ 68 000 (3 years)	-	M$ 30 000-48 000 (3 years)	M$ 36 000 + A$ 15 000 (2 + 1 years)
Music	M$ 54 000 (3 years)	-	M$ 72 000 (3 years)	M$ 32 000 + US$ 36 500 (2+2 years in the United States)

Source: Challenger, 2006b.

Basic standards and the criteria for quality are developed by the Board, based on international and national best practices, and in consultation with the stakeholders and the related professional bodies. Before 2005/06, all programmes and courses taught in private higher education institutions, including branch campuses, had to be assessed by the Board, with the exception of the University of Nottingham. In December 2005, the Government adopted the Malaysian Quality Framework as the platform for quality assurance in Malaysia. The Framework is a description of the national education system, including all qualifications and learning achievement in higher education, and it facilitates the articulation of equivalency among those qualifications. In July 2007, the Cabinet approved the Malaysian Qualifications Agency that will merge the Board with the Quality Assurance Division of the Ministry of Higher Education for public providers, and will manage and approve qualifications awarded to all Malaysian institutions.

The availability of quality assurance in the form of Board accreditation has enabled local private universities to sell their own, homegrown programmes to foreign students, especially as the programmes are taught in English and studying in Malaysia offers significant cost savings. For example, the Multimedia University, which is selling its own homegrown programmes, reported a student population of 21,000 in 2007, of whom 3,800 were foreign (Interview, 11 June 2007).

Other forms of institutional arrangements, through which commercial presence takes place, encompass the whole range of programme mobility that has emerged in Malaysia (table 2). With the range of programme mobility that is available, import-substitution and export promotion can still occur when a private higher education institutions has no foreign equity, as the private colleges may be completely owned by local corporations.

One of the main attractions for both local and foreign students is the use of English in a foreign-linked programme, as this enables them to obtain a foreign degree in a lower-cost environment. It also provides students with an alternative means of entering a foreign country (in the case of the twinning programmes) or work opportunities (Tan, 2002). The investment of private higher education institutions in foreign-linked programmes is therefore closely related to the demand among local and foreign students for an affordable foreign degree, leading to both import substitution as well as export promotion.

Since 2002, colleges that have been upgraded to university status have been mandated to develop their own programmes, as they are now able to confer their own degrees. University College Sedaya International is the first university college to have phased out its foreign-linked programmes and replaced them with their own programmes that have been developed together with foreign consultants (Interview, 20 June 2007). The Ministry of Higher Education has extended the original five-year time frame to 10 years to enable other university colleges to do the same. As more university colleges rise to this challenge, the international recognition of locally-developed programmes will determine the future inflows of foreign students into the country.

(iv) Movement of natural persons

The rapid growth in private higher education institutions has created a high demand for academic staff, especially those with PhD qualifications. The bulk of the staff, be they Malaysian or foreign, hired by private higher education institutions have a first and second degree while fewer have PhDs (table 6). It is interesting to note that the development of private institutions of higher education has not caused a substantial shift of staff from the public universities to the private universities, indicating that the pay structure in private institutions of higher education and the working hours may be no better than that offered by the public universities. Private institutions have to minimize staff costs, as their main source of revenue (i.e., tuition fees) has to be approved by the

Ministry of Higher Education. It appears that the same level of salary is offered to local and foreign academic staff, although certain highly specialized fields may offer relatively higher remuneration due to the lack of local experts. Branch campuses can afford to pay more as they charge higher fees than do their local counterparts. Thus, while private institutions of higher education may have to depend on foreign expertise for some fields, local staff may be more cost-efficient for them.

While hiring foreign staff was more problematic in the early days, when the private operators had to prove that local expertise was not available, it appears that this has recently become less of a problem. Nevertheless, although the number of foreign staff increased from 519 in 2001 to 1,011 in 2005 (table 6), the percentage of foreign staff to total academic staff in private institutions of higher education remains at between 6 and 8 per cent.

Table 6. Academic staff at private institutions of higher education, by qualification

Qualification	2001	2002	2003	2004	2005
Malaysians					
Doctorate	235	540	589	679	1 059
Masters	2 016	3 551	4 241	5 268	4 830
Bachelor	5 108	6 974	6 868	6 592	5 684
Diploma	1 050	2 211	1 525	1 051	852
Total	8 409	13 276	13 223	13 590	12 425
Foreign staff					
Doctorate	127	227	279	351	279
Masters	273	368	503	690	514
Bachelor	102	257	162	161	203
Diploma	17	264	14	19	15
Total	519	1 116	958	1 221	1 011
Percentage of total academic staff	6	8	7	8	8

Source: Ministry of Higher Education, 2006a.

B. Literature review

While higher education normally refers to post-secondary education at subdegree and university degree levels, this literature review is confined to the degree and university levels, following the focus of the study.

The growth in international trade in the education sector was highlighted in WTO (1998), with the global market value of this sector estimated to be US$ 27 billion in 1995. A broad typology of the modes of international service delivery in education services is given in table 7. Of the four modes of supply, the modes with the most data are consumption abroad and commercial presence, while those with the least information are cross-border supply of services and the presence of natural persons.

Table 7. Modes of trade in education services

Modes of trade	Education services
Cross-border trade	Distance education, e-learning, virtual universities
Consumption abroad	Students travelling abroad to study
Commercial presence	Foreign campuses or foreigners partnering with local providers in the provision of twinning/franchise programmes
Presence of natural persons	Lecturers/researchers travelling temporarily abroad to teach or to conduct research

Source: World Trade Organization, 1998.

Commitments by education services in GATS show that although most countries have a more open trade environment than suggested by their GATS schedules, quite a number are unwilling to bind their policies. Only 44 WTO members have made commitments to education, and only 21 of those have included commitments to higher education (see for example WTO 1998; Knight, 2002; and Calderon and Tangas, 2004). Malaysia has not made any education services commitments in the Uruguay round. The current requests and offers will become solid commitments only at the end of the Doha Round. Negotiations are also taking place outside of the GATS framework, in bilateral agreements or in current negotiations.

In general, the nature of barriers in services differs from barriers in goods. Since services are often delivered face-to-face and the transaction typically occurs behind the border, the relevant trade restrictions are behind-the-door, non-price regulatory restrictions that do not necessarily apply to foreign service suppliers alone (Dee, 2004). For services, there are two types of trade restrictions, i.e., restrictions on market access and derogations from national treatment. The former refers to measures that restrict competition and activity without discriminating between domestic and foreign suppliers, while the latter refers to measures that treat foreigners less favourably than domestic service providers. It should be noted that measures that restrict trade in services might be part of a broader domestic regulatory regime that is designed to address market failures or meet legitimate social policy objectives. Hence, not all measures that restrict trade are protective in nature, especially in education where measures such as quality assurance and accreditation are essential to protecting the interests of the consumer and the integrity of the respective sector. Inefficiencies in the implementation of rules, regulations and procedures may also hinder trade and investment as is shown, for example, by the time needed for visa applications as well as policy coordination between the government agencies that are involved in the regulation of a particular sector.

The regulation of transnational education and the motives behind the regulations are explored in McBurnie and Ziguras (2001). The motivations differ in the case of the three countries studied. While Hong Kong, China emphasizes consumer protection, Australian regulations focus on the protection of the local system and, by extension, the reputation of Australian higher education (which affects Australia's exports in this sector). Malaysian regulations, on the other hand, try to maintain a balance between the country's trade needs and nation-building agenda by including specific issues in the curriculum

content. Moreover, Lee (2004) asserted that, contrary to the global trend towards a gradual reduction in the role of the State, Malaysia had expanded the role of the State in higher education. Reforms in higher education (both public and private) in Malaysia, including changes in its regulatory structure, are instead part of the Government's efforts to be a provider, regulator and protector of higher education.

Table 8. Barriers to trade by mode of supply

Modes of trade	Barriers
Cross-border trade	• Inappropriate restrictions on electronic transmission of course materials • Economic needs test for suppliers of these services • A lack of opportunity to qualify as a degree-granting institution • Required use of local partners • Denial of permission to enter into, and exit from, joint ventures with local or non-local partners on a voluntary basis • Excessive fees/taxes imposed on licensing or royalty payments • New barriers, electronic or legal, on the use of the Internet to deliver education services • Restrictions on the use/import of educational materials
Consumption abroad	• Visa requirements and related costs • Foreign currency and exchange requirements • Recognition of prior qualifications from other countries • Quotas on the number of international students in total and at a particular institution • Restrictions on employment while studying • Recognition of new qualifications by other countries
Commercial presence	• Inability to obtain national licences to grant qualification • Limit on direct investment by education providers (equity ceilings) • Nationality requirements • Restrictions on the recruitment of foreign teachers • Government monopolies • High subsidization of local institutions • Difficulty in obtaining authorization to establish facilities • Economic needs test for suppliers of these services • Prohibition of higher education, adult education and training services offered by foreign entities • Measures requiring the use of local partner • Difficulty in gaining permission to enter into, and exit from, joint ventures with local or non-local partners on a voluntary basis • Tax treatment that discriminates against foreign suppliers • Foreign partners are treated less favourably than other organizations • Excessive fees/taxes are imposed on licensing or royalty payments • Rules for twinning arrangements
Presence of natural persons	• Immigration requirements • Nationality or residence requirements • Needs test • Recognition credentials • Disproportionately high minimum requirements for local hiring • Personnel experience difficulty in obtaining authorization to enter or leave the country • Quotas on the number of temporary staff • Repatriation of earnings subject to excessively costly fees and/or taxes for currency conversion • Employment rules • Restrictions on use/import of educational materials to be used by foreign teachers/ scholars

Source: Knight, 2002.

Based on the negotiation proposals of Australia, New Zealand and the United States, reports of non-governmental organizations, intergovernmental bodies and WTO, Knight (2002) identified key barriers to trade by the mode of supply (table 8). Since the list includes some measures that are used for consumer protection, such as accreditation and recognition credentials, it is not surprising that the listed barriers are seen by some as key elements of a public education system that needs to be maintained, while others view them as impediments, as noted by Knight. Furthermore, the list does not distinguish between measures that are restrictions on market access or derogations from national treatment.

In terms of empirical work, the APEC Group on Services conducted a survey in July 2000 on the measures that inhibited trade and investment in education in the APEC economies. The study covered all four sectors in education services as defined in the United States classification, i.e., primary, secondary and higher education, and other education and training services, and four modes of supply. The policy measures covered included measures that inhibited trade and investment, measures that promoted trade and investment, quality assurance and transparency. Interestingly, the survey was directed at the government officials of member economies who were the regulators of education services, but not at the service providers. Table 9 summarizes the key measures inhibiting trade and investment by modes of supply used in the study.

Table 9. Summary of barriers in APEC economies

Modes of trade	Barriers
Cross-border trade	• Requirement for payments of fees for education services to be authorized. • Measures affecting: - Imports or exports of educational material - Imports or exports of distance-learning material - Access to the provision of services via electronic media
Consumption abroad	• From the perspective of the host economy: - Visa entry requirements and costs - Quotas on international students - Rules on sectors in which foreign students are not allowed to enroll - Rules on student access to employment in the host economy - Foreign currency requirements for foreign students - Extent of recognition of prior educational qualifications - Recognition of qualifications issued in other economies • From the perspective of the home economy: - Requirement for students to obtain exit visas from the home economy - Home economy rules on access to foreign exchange
Commercial presence	• Requirements for foreign providers to satisfy an economic needs test • Limits on foreign equity • Requirements concerning forms of commercial relationships • Measures specifying the legal structure of providers • Nationality or residence requirements for permanent staff • Special tax obligations
Presence of natural persons	• Quotas on the number of temporary staff • Other measures affecting entry or stay of foreign staff • Labour-market measures applied to visiting staff • Nationality or residence requirements

Source: APEC, 2000.

The survey findings reveal that higher education is affected mainly by measures applying to distance or electronic delivery in mode 1, the imposition of visa requirements, access to employment and foreign exchange requirements in Mode 2, foreign equity limits and required forms of relationships in mode 3, and visa requirements for staff under mode 4.

In Malaysia, Sieh and others (2000) studied the impact of changes brought about by GATS on three service subsectors, i.e., education and training, transportation, and professional and business services. Based on their survey of 12 institutions of higher education, 10 technical and training institutions, and 10 professional associations and regulators, they found that higher institutions of education were concerned with liberalization, as they were worried that intense competition with liberalization would retard their growth, given that they were still developing their competitive advantage at that time. Tan (2002), on the other hand, focused on how globalization and privatization had affected the development of private higher education in the country, again based on interviews with selected key players in this sector, including students. Her book also outlined the shift of private education away from meeting excess domestic demand towards increasing exports from the early 1980s to the latter part of the 1990s.

While these two studies discuss the trend towards increasing exports in private institutions of higher education, the link between trade and investment barriers and exports has yet to be explored. Issues pertaining to policy coordination are also not covered in either of the two empirical studies. Therefore, a research gap exists that needs to be explored as trade and investment links in the service sector, especially in higher transnational education, are not the same as those in the goods sector.

C. Methodology

Owing the paucity of published data, this study conducted both structured and semi-structured interviews with the private service suppliers in Malaysia. Private providers were targeted for three main reasons.

First, existing data show that foreign students are found predominantly in private institutions of higher education rather than public higher education institutions. In 2002, the proportion of foreign students in private institutions of higher education was 82 per cent, while 18 per cent were found in public higher education institutions (Government of Malaysia, 2003). Furthermore, foreign students in public institutions of higher education are sometimes admitted under government-to-government arrangements.

Second, it follows then that the target in the export of education services will be led by the private providers while public providers have to fulfill Malaysia's agenda on nation- building through education.

Third, in the recently concluded Trade in Services Agreement under the Framework Agreement on Comprehensive Economic Partnership between China and ASEAN, other higher education services provided by privately funded higher education institutions - excluding those private higher education institutions with government equity or those that receive government assistance - are offered in this package of commitments.[8] Identifying the trade and investment barriers as well as policy coordination problems will assist in the liberalization of this sector.

Apart from the private service providers, officers from the Ministry of Higher Education and the industry association in Malaysia were also interviewed in order to seek their views on these issues.

1. Questionnaire design

The structured questionnaire[9] was designed by checking the regulations in Malaysia against the barriers shown in tables 2 and 3 as well as the literature surveyed. The acts used included the following:

(a) Lembaga Akreditasi Negara Act (Act 556), 1996;

(b) Private Higher Educational Institution Act, 1996;

(c) Universities and University Colleges Act, 1971, (Act 30); and

(d) For laws on immigration, the website at <www.imi.gov.my/> was used (accessed on 22 March 2007)

2. Sample of respondents

The list of private institutions of higher education in Malaysia that are allowed to confer degrees was obtained from the Ministry of Higher Education. It was decided to survey only these institutions[10], as they are more likely to attract genuine students. Since there are only 27 such institutions in the whole of Malaysia, the questionnaire was sent by e-mail to all of them, and followed up by telephone calls. Semi-structured interviews were also conducted with the Ministry of Higher Education, the industry association as well as five private higher education institutions in the sector. Of the 27 private higher education institutions only eight (30 per cent) responded to the survey; the responses

8 For further information, see ASEAN-China Agreement on Trade in Services: Malaysia, Schedule of Specific Commitments (for the first package of commitments), annex 1/SC1, undated, ASEAN Secretariat.

9 The questionnaire is available in annex III of Yean and Yi (2007).

10 The list of private institutions of higher education in Malaysia considered in this study is available in annex I of Yean and Yi (2007).

are discussed in the following section. Some of the providers were unwilling to respond as they had few international students (for example, Universiti Tunku Abdul Rahman) or they were afraid that it would adversely affect their licence, or were just unwilling to spend time responding.

3. Study limitations

Owing to the lack of secondary data, this study was very much exploratory in nature. As noted in the section above, the chosen sample was very small compared with the number of private institutions of higher education with a licence to recruit foreign students (more than 200 in 2005). The sample was also non-random and purposive in nature. Further, the number of actual respondents was only 8 out of the 27 institutions sampled. The findings reported in the following section therefore face the aforementioned constraints.

D. Results of survey and interviews

This section reports the findings of the survey response as well as the semi-structured interviews.

1. Cross-border supply

The survey questionnaire as well as the findings from the interviews indicates that regulation of the course materials does not restrict trade and investment in education services.[11] Private institutions of higher education can create their own distance-learning and e-learning programmes, subject to the infrastructure capacity of the universities (access to e-portals, Internet connectivity throughout the campus, etc.).

Distance education providers conduct courses using a mixture of face-to-face methods and e-learning portals. Students are required to meet a certain number of face-to-face contact hours for some tutorials. Examinations are also conducted face-to-face at a proposed venue. Thus, the distance-learning systems are able to attract students only within proximity of the main campus. International students therefore have to be in Malaysia for the duration of their programmes, because financially it is not feasible for them to fly in and out of Malaysia just to attend a few hours of classes each week (Interview, Multimedia University, 21 June 2007).

The education resources as well as electronic media were not deemed to be barriers as most private colleges have their physical (and virtual) resource centres, such as the library, on the main campus and the Government allows all forms of media usage, provided that the contents are legal.

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[11] A summary of the survey responses received is available in annex IV of Yean and Yi (2007).

The main regulatory barrier is the optional establishment of regional centers, as this would incur considerable financial costs to the providers. One solution to this problem is to establish partnerships with foreign universities. For example, the Multimedia University is in the process of establishing a partnership with the Syrian Virtual University.

However, non-regulatory problems faced by operators appear to be more pressing, i.e., infrastructure support in terms of broadband speed. The Malaysian server is congested and it is beyond the jurisdiction of private institutions to improve the server. This is a notable barrier to trade because the course presentation mode is limited, as the Internet server does not support live audio or video streaming, making distance learning less interactive (Interview, Multimedia University, 21 June 2007). The second barrier related to the maturity of the students who have no working experience. Students who are fresh from school are unused to independence in learning and hence prefer the traditional mode of learning through face-to-face classes. They are unprepared for the more independent form of learning through the Internet. These findings concur with those of Ziguras (2001).

2. Consumption abroad

Restrictions on employment while studying are not a trade barrier in private higher education institutions. Foreign students are allowed to work only 20 hours per week during school holidays and they have limited employment opportunities.[12] Private institutions of higher education generally discourage their students from working part-time as they may find difficulty in balancing the time between their studies and work. The long process that they have to go through before being allowed to work also deters them from trying to seek employment. The survey found that 75 per cent of the respondents believed that this regulation did not hinder foreign students from seeking higher education in Malaysia.

Consumption abroad inevitably involves the immigration department of the home country. In Malaysia, students are required to obtain a student visa before being able to commence their studies. According to 50 per cent of the respondents, the requirement for a student visa does not restrict trade and investment. MMU did raise the special case of problems encountered in getting visas for spouses of foreign undergraduate students who may be married at a younger age than in other countries (Interview, Multimedia University, 11 June 2007). Overall, the rules and regulations are well defined and foreign students generally are supported by the assistance of the private colleges in managing their visa applications and in the issuance of their student passes. While the regulation does not discourage foreign students from pursuing studies in Malaysia, the barrier lies in the time taken to obtain a visa. The actual process has steadily improved as it now takes an average of only two to four weeks to obtain a visa (Interview, Sunway University

12 Students are allowed to work in menial jobs (such as petrol kiosk attendants) but not as cashiers or entertainers.

College, 21 May 2007). Nevertheless, this still is considerably longer than the four days reported for processing a student's visa for Singapore.

However, the implementation of the e-pass system announced in April 2007 by the Ministry of Higher Education, which is aimed at establishing a database of foreign students in Malaysia, has added another administrative hurdle for private higher education institutions. Previously, those institutions had to complete a form and liaise with the Immigration Department only for students' visas. Now they have to complete the form (hard copy) and then key in the same details into the e-pass system while waiting for the Ministry's consent before getting approval from the Immigration Department. The time taken for the entire process has lengthened from two to four weeks to more than two months (Interview, Sunway University College, 21 May 2007). The system was created to facilitate the entry of foreign students into the country as well as to ensure that only genuine students could obtain visas, thereby curbing any potential visa abuse. However, the lengthening of the time taken to obtain a visa is deemed a barrier to trade as time is the essence for these students.

Respondents, however, commended the efforts taken by the Government in promoting higher education in Malaysia. With regard to the government, 75 per cent of them agreed that the initiatives taken to promote higher education in Malaysia were effective. Of those who agreed, almost 40 per cent mentioned some caveats as mitigating factors. For example, although incentives such as the Malaysia External Trade Development Corporation incentives and other allowances were awarded to private colleges during education fairs, 62.5 per cent of the respondents considered the amount awarded to be insufficient. The move by the Government to introduce education promotion officers[13] is another example of the initiatives taken to promote Malaysian education. However, it is unclear if those officers are well versed in the relative strengths of private institutions of higher education in Malaysia (Interview, MAPCU, 20 June 2007). The entry of public universities into the market for international undergraduate students[14] has caused uneasiness on the part of the private operators, who fear that public universities may be promoted over the private operators.

The most important barrier to trade is a non-regulatory issue. The survey results showed that 62.5 per cent of the respondents noted that recognition of a Malaysian degree was still lacking. Hence, there is room for improvement in enhancing the recognition of Malaysian degrees if Malaysia is to become an education hub by 2010. This will be even more important when the university colleges shift from conferring degrees from foreign universities to conferring their own degrees. Some private higher education

13 Malaysia currently has four EPOs in Beijing, Hanoi, Dubai and Indonesia. The function of the EPOs is to promote the pursuit of higher education in Malaysia.

14 One of the oldest public universities in the country, the University of Malaya was reported to have started recruiting international undergraduate students in an effort to boost its image on a global scale (The Star, 2 July 2007).

institutions have taken the route of awarding joint degrees as a means of overcoming the problem of recognition.[15]

Apart from the reputation of the degree/certificate offered, the reputation of the country also plays a vital role in attracting foreign students. A bad reputation may deter international students from selecting Malaysia as their choice for higher education. Through interviews conducted during this research, it was found that one of the most important criteria for international students was their safety. Foreign students gather information not only through university websites but also often through their alumni and newspapers at home. A good recommendation from former graduates will slowly result in a snowballing of the influx of foreign students from that particular country. Hence, reports of harassment by members of the People's Volunteer Corps and the Immigration Department when international students were mistaken for illegal foreign workers negatively affected the image of Malaysia as preferred destination for higher education (*New Straits Times*, 24 May 2007). Nevertheless, this problem was resolved in April 2007 when the Government introduced the identity card system for foreign students. This move has been applauded by private institutions of higher education as it facilitates the mobility of students outside their respective campuses (Interview, MAPCU, 20 June 2007).

3. Foreign investment (commercial presence)

Private higher education institutions establish a foreign presence in the country through their foreign-linked programmes or through the establishment of branch campuses. With the exception of Nottingham University of the United Kingdom, branch campuses also had to have their programmes accredited by the National Accreditation Board prior to 2005/06. Since then, branch campuses accredited by their home Quality Assurance Agency for Higher Education, and which are offering the same accredited programmes in Malaysia, are exempted from accreditation by the Board (Interview, Ministry of Higher Education, 3 July 2007). However, foreign-linked programmes as well as programmes developed in Malaysia still have to go through the process of programme approval, including accreditation by the Board.

The survey results show that the regulations affecting this process were not deemed to be barriers by the majority of the respondents, with the exception of the procedure for registering an institution as well as accreditation by the Board. Registering a private higher education institution requires that the institution comply with the requirements of a few agencies in addition to the Ministry of Higher Education. A total of 62.5 per cent of the respondents found that following all the necessary requirements was a barrier to investment.

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[15] Sunway University College, for example, is offering Joint Honors Degrees with Lancaster University of the United Kingdom.

In the case of accreditation by the Board, the main problem faced by private institutions is the duration of the accreditation process, which depends on the following:

(a) The type of course offered. The accreditation process might take longer if the course requires highly specialized expertise that is not readily available as, under the Board requirement, approval from experts is required for assessing courses and programmes. Finding the necessary experts to form the assessment panel takes time in these instances (Interview, MAPCU, 20 June 2007).

(b) The reputation of the institutions. Once the institutions have established their credibility, the process may be faster. It can be as fast as three months (Interview, Multimedia University, 11 June 2007). Established universities have a department to deal with the requirements.

(c) The duration for gaining full accreditation. Full accreditation can commence only after the first cohort of students is in its final year. This means that for a three-year degree, the accreditation process starts only in the second year. Therefore, to complete the full accreditation process may take a few years.

A lengthy accreditation process constitutes a high opportunity cost for private higher education institutions.Since accreditation by the Board is a form of quality assurance by the Government, the courses offered without accreditation are not attractive in terms of international recognition. International students (especially government-sponsored students) will not enroll in the non-accredited programmes. Those institutions face difficulties in promoting new programmes among international students, because it will be accredited only after two years of their coursework. It is financially irrational for a student to pay a large amount of money only to get a non-accredited degree.

In terms of incentives, 62.5 per cent of the respondents believed that more incentives should be provided in order to increase their competitiveness with regard to other countries. In fact, apart from Board accreditation, the one common complaint was the inadequacy of financial support from the Government, especially when compared with the financial support provided for public universities. Although incentives are provided by the Government (see the annex table), it is unclear how many private institutions of higher education are aware of these incentives and know how to gain access to them, as no data are available on the number of private higher education institutions that have applied nor on the number that have been awarded these incentives.

4. Movement of natural persons

Obtaining a permit to teach in Private higher institutions of education is not a problem according to the results of the survey. A total of 87.5 per cent of the respondents

did not find this regulation to be a barrier. The number of foreign staff has increased, as shown in table 6, even in cases where employment requires an economic needs test. Half of the respondents agreed that economic needs tests were conducted not only to assess the need for expertise, but also for financial purposes.

The regulation of work permits was also not seen as a trade barrier. The main impeding factor was the processing time, which the respondents felt should be made faster by the Government. However, most respondents did not have any quotas on the hiring of foreign academics. Therefore, as opposed to the problems faced by operators in the early days when they had to prove the lack of local expertise, the market is now more open for foreign expertise.

Apart from a faster processing time for issuing teaching and work permits, one of the problems faced by private operators is the provision of an attractive salary package for foreign experts. While foreign and local staff receive the same salary, extra incentives and benefits are offered (such as housing and transportation allowances) to foreign staff. These practices incur additional costs for private operators; thus, with the exception of branch campuses, foreign staff are not necessarily desired unless local expertise is unavailable. In this case, the mother campus determines the criteria for hiring as well as the salary schemes.

E. Conclusion

Shortages in supply and the emergence of both programme and institutional mobility in private higher education have encouraged private higher education institutions to expand in Malaysia. Since various ministries and agencies in the country govern the service sector, the development of the different subsectors in services is under the jurisdiction of the respective ministries or agencies, including their trade and investment policies. Consequently, in Malaysia, trade and investment policies in private higher education are formulated, facilitated, regulated and enforced by the Ministry of Higher Education. These policies are formulated in consultation with the relevant stakeholders, taking into consideration international best practices. At the policy level, coordination within the Ministry appears to be less of a problem since a consultative process is in place.

However, inter-ministerial problems may emerge. In mode 1, it was found that the main barrier to trade concerned non-regulatory issues such as the preference of students for the more traditional mode of learning. Policy coordination problems have emerged as distance learning and e-learning are dependent on policy decisions by other ministries, e.g., the Ministry of Energy, Water and Communication on improving the infrastructural support that is needed to support distance learning and e-learning.

Nevertheless, the implementation of private higher education institutions policies may also encounter several problems in coordination, despite the consultative process

followed in the formulation of policies. As shown by the survey responses, the main problem encountered in mode 2 is that of student visas, which also serves to illustrate the type of coordination problems that can emerge. Prior to the implementation of the e-pass system, Private higher education institutions forward their offers to the Immigration Department for the issuance of visas. The Immigration Department would then check with the Ministry of Higher Education to verify whether the foreign students have been offered an approved programme from an approved institution that has permission to recruit foreign students.

The emergence of visa abuse due to the lack of coordination between the Immigration Department and the Ministry led to the establishment of the e-pass system, which appears to have slowed down the processing time. Better coordination is needed to ensure that the processing time is shortened in order to facilitate the entry of foreign students into the country. Problems of coordination between the Ministry and the Immigration Department have also affected the Malaysian Edu-Tourism (METOUR) project. This project was conceived with the objective of enabling foreign students to enter the country as tourists and participate in some short courses at private higher education institutions. It was hoped that the exposure to such institutions in Malaysia would serve to attract more student tourists. However, unresolved visa problems have discouraged Private higher education institutions from further participation in this project (Interview, MAPCU, 20 June 2007).

To a certain extent, some of the implementation problems are due to a shortage of staff on the enforcement side of the private higher education management sector. Since there are only approximately 40 officers to oversee more than 500 private higher education institutions, the effectiveness of enforcement is highly constrained. The choices are therefore to increase the number of officers and/or encourage the industry to rationalize.

In the case of mode 3, the study found that unlike the case of goods, investment in education services was less dependent on foreign equity. Instead, the mobility of programmes has led to the emergence of a large variety of foreign-linked programmes in Malaysia that have no links with foreign equity investment. Foreign equity thus plays a less important role in trade in education services. The accreditation problems encountered may be attributed to the large number of players as well as the variety of programmes and institutional capabilities of different players, as not all private higher education institutions are equally equipped to meet the demands of the Board. For example, foreign branches have the quality assurance of their home institution, while established private universities such as MMU have a department that attends to the accreditation needs. Small players that are not conferring degrees may have less capacity to meet the accreditation measures of the Board. As of December 2006, 839 programmes had been fully accredited while 5,865 had been awarded provisional accreditation. However, another 1,600 programmes were still unaccredited (Sunday Star, 6 May 2007). Although the reasons for the large number of unaccredited programmes are not known, the system of accreditation clearly needs further improvement.

While it is hoped that some of the current problems encountered in accreditation by the Board will be resolved with the implementation of the Malaysian Quality Framework and the establishment of the Malaysian Qualifications Agency, it remains to be seen whether this will be the case. The replacement of foreign-linked degrees with homegrown degrees by the private colleges that have been conferred university status adds to the pressure for having internationally recognized qualifications, if Malaysia is to attain its vision of becoming an educational hub.

The main mode 4 problem appears similar to that of student visas, i.e., the processing time required to obtain visas and work permits. Shortening the entry time will facilitate the entry of foreign lecturers, although cost considerations may be a more natural barrier to trade in this mode.

Ultimately, the potential of Malaysia to become an educational hub will depend on the growth of most private higher education institutions from mere teaching institutions to world-class universities that have high-calibre faculty members who are also researchers.[16] Although the Government has progressively opened up research grants for private institutions, increasing access to research facilities and the provision of more time for research will contribute towards the further development of such institutions in this area.

[16] It should be noted that research might be less of a problem for those branch campuses, such as Monash and Nottingham which follow the same criteria as their mother campuses for promotion purposes.

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Annex. Incentives for private higher education institutions

	Eligibility	Tax incentives
1.	Institutions that provide technical or vocational courses and science courses in selected fields of: (a) Biotechnology (b) Medical and health sciences (c) Molecular biology (d) Material sciences and technology (e) Food sciences and technology Existing institutions providing the above courses that undertake new investments to upgrade their training equipment or expand their training capacities also qualify for this incentive.	Investment Tax Allowance of 100 per cent for 10 years offset against 70 per cent of statutory income for each year of assessment.
2.	Multimedia faculties in institutions of higher learning: Tax incentives accorded to MSC companies extended to multimedia faculties that provide courses in media, computers, information technology, telecommunications, communications and contents-related to data, voice, graphics and images.	Pioneer status with 100 per cent tax exemption for 10 years or investment tax allowance of 100 per cent for five years offset against 100 per cent of statutory income for each year of assessment.
3.	Companies involved in the export of educational services.	(a) Tax exemption on income equivalent to 50 per cent of the value of the increased export of higher education; (b) Double deduction for expanses incurred in the promotion of the export of higher education.
4.	Any person who owns buildings used for industrial, technical or vocational training approved by the Minister of Finance. Any company that owns buildings used for a school or an educational institution approved by the Minister of Education.	Expenses incurred in constructing or purchasing such buildings are eligible for industrial building allowance of 10 per cent for 10 years.

1. Tax incentives for private higher education institutions

	Subject	Tax incentives
1.	Computers and information technology assets including software acquired by institutions.	Expenses incurred eligible for accelerated capital allowance, i.e., initial allowance of 20 per cent and annual allowance of 40 per cent.
2.	Institutions, approved technical and vocational training institutions, private language centres.	Exemption of import duty, sales tax and excise duty on all educational equipment, including laboratory, workshop, studio and language - laboratory equipment.
3.	Non-resident franchisers providing franchised education programmes approved by the Ministry of Education.	Tax exemption on income from royalties paid by educational institutions to non-resident franchisers.
4.	Incentive for lecturers providing accreditation of franchised education programmes	Fees or honoraria received from the National Accreditation Board by lecturers/experts who provide services in the validation, moderation or accreditation process to ensure franchised education programmes are the same quality as those of franchiser institutions, are exempted from income tax.
5.	Companies that do not contribute to the HRDF, but provide training for their employees.	Companies that incur expenses for approved training of its employees are eligible for double deduction. The training should be at approved training institutions.
6.	Deduction for pre-employment training.	Training expenses incurred before the commencement of business qualify for single deduction. The institution must prove that it will employ the trainees.
7.	Deduction for non-employee training.	Expenses incurred in providing practical training to residents who are non-employees of the institution and qualify for a single deduction.
8.	Institution that has incurred expenses for the development and compliance of new courses.	Expenses incurred for the development and compliance of new courses qualify for a single deduction amortized for three years.

2. Tax incentives for contributors to education sector

	Subject	Incentive
1.	A company or an individual incurring expenditure in the provision of services, public amenities and contributions to a charity or community project pertaining to education approved by the Minister of Finance. [Sec. 34(6)(h) ITA 1967]	A single deduction is given for the expenses incurred. No further deduction of the same amount to be allowed under Sec 44(6) ITA.
2.	Library A company or an individual incurring expenditure in the: (a) Provision of library facilities that are accessible by the public; (b) Contributions to public libraries and libraries of schools and institutions of higher education. [Sec. 34(6)(g) ITA 1967]	A single deduction is given for the expenses incurred. Amount allowed cannot exceed M$ 100,000 per year of assessment.
3.	Scholarship A company incurring expenditure in the provision of a scholarship to a student for a diploma or degree course, or the equivalent of a diploma or degree programme, undertaken at a recognized higher educational institution in Malaysia [Sec. 34(1) ITA 1967]	Single deduction is given for the expenses incurred, provided that: (f) The student is in full-time education; (g) The student has no financial means of his/her own; (c) The total monthly income of the student's parents/guardian does not exceed M$ 5,000.
4.	Research A company or individual contributing in cash to an approved research institution. [Sec. 34(1) ITA 1967]	Double deduction for expenses incurred, provided that no deduction of the same amount is claimed under Sec. 33, 34 and 34A ITA 1967.
5.	Research - payment made for the use of services of: (a) An approved research institute or approved research company, and which is approved by a Minister; (b) A research and development company, or a contract research and development company that is defined under section 2 PIA 1986. [Sec. 34B(1) ITA 1967]	Double deduction for expenses incurred, provided that no deduction of the same amount is claimed under Sec. 33, 34 and 34A ITA 1967.

3. General incentives

No.	Incentives
1.	**Investment tax allowance** Companies that establish technical or vocational training institutions are eligible for an investment tax allowance of 100 per cent for 10 years. This allowance can be offset against 70 per cent of statutory income for each year assessment. (Application should be submitted to MIDA)
2.	**Special industrial building allowance** Companies that incur expenditure on buildings used for approved industrial, technical or vocational training can claim a special annual industrial building allowance of 10 per cent for 10 years. (Claims should be submitted to the Inland Revenue Board)
3.	**Tax exemption on educational equipment** Approved private higher education institutions are eligible for exemptions from import duty, sales tax and excise duty on educational equipment including laboratory equipment, workshop equipment, studio and language laboratory. Private higher education institutions can enjoy full exemption from the following: (a) Import duty and sales tax on imported items; (b) Sales tax on local items. (Application should be submitted to MIDA)

Source: Ministry of Higher Education.

VII. DRIVERS OF OUTWARD FOREIGN DIRECT INVESTMENT FROM ASIAN DEVELOPING ECONOMIES

*By Rashmi Banga**

Introduction

Outward foreign direct investment (FDI) from the very beginning has been a phenomenon of the developed countries. Until the 1980s, more than 90 per cent of global outward FDI originated from the developed countries (World Investment Report 2005). However, since the early 1990s, developing countries and especially the Asian developing countries, have seen a rapid growth in their outward investments. The share of South, East and South-East Asia in global outward FDI increased from less than 1 per cent in 1980 to almost 10 per cent in 2004. South-South FDI now accounts for one third of all FDI going to developing countries and territories. Further, there is a new trend of rising outward FDI from South to North. This brings forth two important questions: (a) What triggers outward FDI from the developing countries and territories; (b) Can the existing theories of FDI explain this emergence of outward FDI from the developing countries and territories?

One of the distinct features of the rising outward FDI from the developing countries and territories is the complete lack of, or minimal, targeted polices to boost and direct outward FDI flows from those "home" countries. In contrast, in the developed countries, a large number of home country measures (HCMs) have been offered by the Governments to encourage outward FDI flows, particularly into developing economies. The rationale for offering HCMs is that FDI is good for development, but there are market and coordination failures that deter investments and increase the costs of FDI. HCMs overcome such market and coordination failures, encourage FDI flows and also increase their social benefits. Some of the HCMs adopted by developed countries to improve outward FDI into developing countries and territories include the following: providing fiscal and financial incentives to encourage outward FDI; improving the economic fundamentals of recipient countries and territories to encourage sustainable development, for example, through developing human resources, building institutional capacity and evolving a responsible business community, which respects human rights; improving market access in the home countries to facilitate export flows from developing countries; and committing to transfer technology to the host countries. HCMs have therefore acted as important drivers of outward FDI from the developed countries to the developing countries and territories.

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Unlike the home countries of the developed world, however, developing countries and territories have been slow to appreciate the benefits of outward FDI, and policies on outward investment have been traditionally seen as a screening device to restrict the outflow of capital. It is only in the last few years that targeted policies with respect to outward FDI have emerged. It can therefore be said that the drivers of outward FDI from developing countries and territories are largely economic factors with little role played by policy measures.

Among the existing theories that explain the occurrence of FDI, Dunning's eclectic theory on international production has been by far the most comprehensive approach (Dunning, 1993). According to Dunning, FDI emerges due to ownership, locational and internalization advantages (OLI). However, OLI theory may fall short in explaining the current wave of outward FDI from developing countries and territories, especially into developed economies. Firms in developing countries may not possess the traditional ownership advantages, such as brand names and better quality/better technology over the firms of developed countries. Given high labour and manufacturing costs in the developed countries as compared with the developing economies, and low tariff barriers with increasing integration of markets, locational advantages and internalization of transaction costs may also seem to be less plausible explanations for outward FDI from the developing economies.

Apart from OLI advantages, what may explain outward FDI from the developing countries are the trade-related advantages, which have surfaced in the globalized world. For a long time, the theory of international trade and the theory of foreign direct investment have been relatively disjointed. Studies have in general argued that FDI may affect trade. FDI has been found to either substitute trade (in the case of tariff-hopping investment) or complement trade (in the case of intrafirm trade). However, in the WTO regime the relationship between trade and FDI has become far more complex. There are now reasons to believe that trade can cause outward FDI.

Along with the rising flows of outward FDI from the Asian developing countries, the most striking feature of the decade of 1990s was the growing volumes of trade, especially between the developing and the developed economies. The tradable component of GDP in Asia reached almost 70 per cent in 2005, and the region particularly stands out for its performance in exports. The volume of exports has increased annually by 8.5 per cent since the second half of the 1990s. The region now accounts for around 27 per cent of global exports and around 23 per cent of global imports in value terms (WTO, 2004). The trade dynamism of the region has been fuelled to a large extent by regional and bilateral trading links. Along with the unilateral and the multilateral efforts for reducing tariffs, there has been a rapid rise in regional trade agreements that has been accompanied by a large increase in bilateral free trade agreements and bilateral investment treaties.

This growing volume of trade and investment agreements in the developing economies may have plausibly triggered outward FDI from developing countries in two

ways. First, increased exports may assure the producers of existing markets and therefore lower the uncertainties and risks attached to investments, thereby encouraging outward FDI. This effect is stronger if exports are targeted towards a region with trade and investment agreements, which ensures access to larger integrated markets and the possibility of cross-border vertical integration and smooth operations of affiliates. These agreements may also facilitate investments if they include local content requirements within the rules of origin. Such outward FDI are undertaken mainly with the motive of expansion. Second, increased imports into the country may have a displacement effect on investments, which may then be channeled outward into economies with lower manufacturing costs and greater access to larger markets. Such investments are undertaken mainly with the motive of relocation. In the case of both higher export and imports levels, trade encourages outward FDI, especially from developing economies. A large number of trade and investment agreements can therefore be a potential factor that would trigger outward FDI from the developing economies.

The main objective of this article is to identify the drivers of outward FDI from South, East and South-East Asian developing economies. In particular, the article examines the impact of trade on outward FDI. It attempts to provide a conceptual framework for explaining outward FDI from those economies, highlighting their differences from those of the developed countries. Using data for 13 developing economies for the period 1980-2002, an empirical analysis was conducted to examine the factors that drive outward FDI.

The article is organized as follows: section A highlights the major trends in outward FDI from South, East and South-East Asia; section B presents the theoretical framework and a brief review of literature; section C discusses the model specification and the methodology used; section D presents the empirical results; and section E is the conclusion.

A. Trends in outward FDI from developing countries

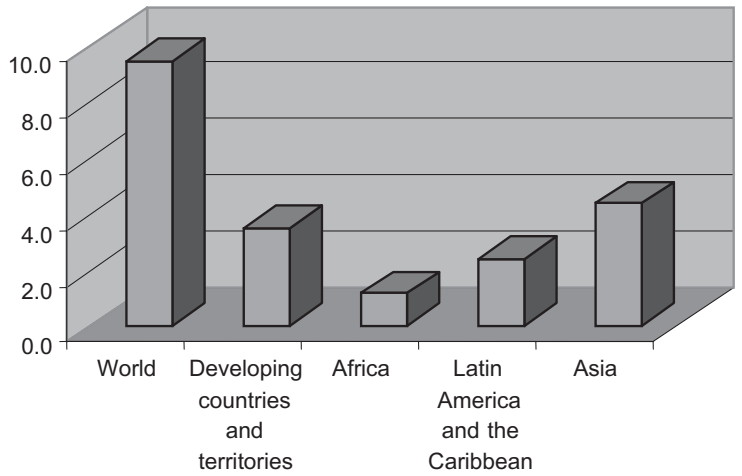
Outward FDI from developing economies has not been a widespread phenomenon and has originated from only a few of them. The share of developing economies in global outward FDI has fluctuated between 4 per cent and 18 per cent in the period 1980 to 2005, and in 2005, the share reached 17 percent (WIR, 2006).

Though the stock of outward FDI from developing economies has been increasing rapidly since the late 1990s, the 10 largest developing economies account for more than 85 per cent of the investments. In some years during the 1990s, FDI flows from Hong Kong, China were as large, or almost as large, as the flows from all other developing and transition economies combined. In 1990, only six economies reported outward FDI stocks of more than $5 billion. By 2005, this threshold had been exceeded by 25 developing and transition economies.

Over the years, the geographical composition of FDI has also remained highly concentrated with respect to both the recipients as well as the donors. In general, the bulk of FDI has continued to originate from the industrialized countries[1]. In fact, almost half of all outward FDI in 2004 originated from three major sources: the United States, the United Kingdom and Luxembourg, in that order (WIR, 2005). While FDI outflows from the European Union declined by 25 per cent to US$ 280 billion in 2004 (a seven year low), most other developed countries increased their investments abroad.

Among the developing regions, we find that Asia that is, South, East and South-East Asia experienced the highest average OFDI as a percentage of gross fixed capital formation in the period 1994-2004 (figure 1). The share of the region in world OFDI has increased from 1 percent to almost 10 percent in the last 24 years.

Figure 1. Average outward FDI as a percentage of gross fixed capital formation, 1994-2004



Within the region, we find that the share of East Asia in total outward FDI from the region almost doubled between 1980 and 2004, while that of South-East Asia fell drastically. However, South Asia has gradually improved its share (figure 2). On average, the outward FDI as a percentage of gross fixed capital formation in this period has been highest for South-East Asia (7.1 per cent), followed by East Asia (5.4 per cent) and then South Asia (0.4 per cent). But the improvement in the shares of East Asia and South Asia in total OFDI from this region requires further investigation.

1 The United States, the European Union and Japan accounted for 75 per cent of all inflows and 85 per cent of all outflows during the period 1998 - 2000. Similarly, for stocks these countries accounted for 59 per cent of inward and 78 per cent of outward investment. See UNCTAD (2001), p. 9.

Figure 2. Share of subregions in outward FDI, 1980 - 2005

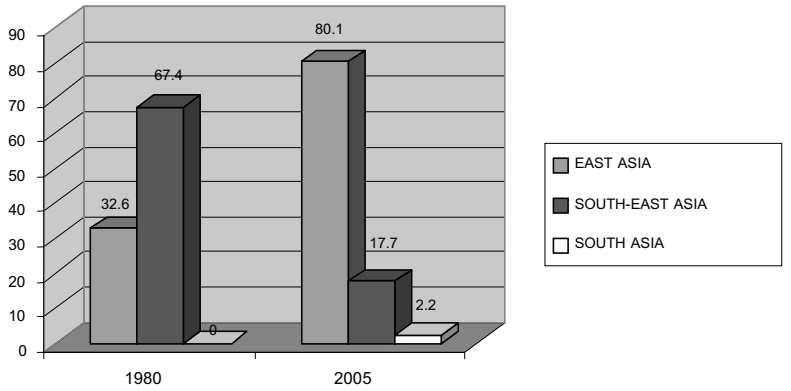


Figure 3. Share in outward FDI from Asia of top six economies,1980

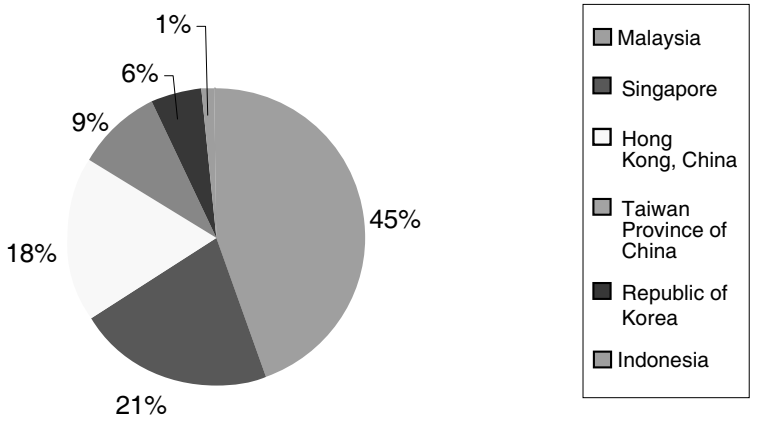
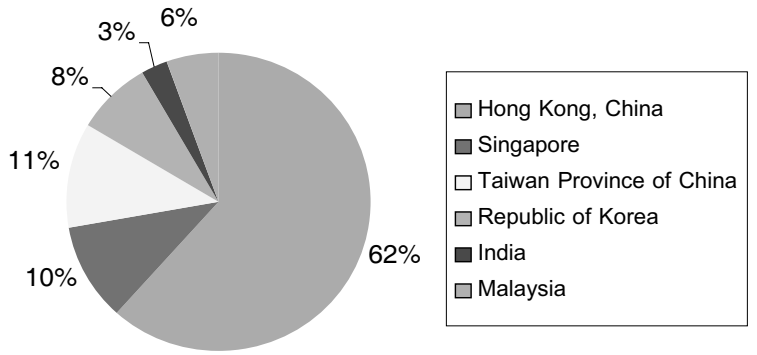


Figure 4. Share in outward FDI from Asia of top six economies, 2005



An analysis of outward FDI by economy over time shows that the top six economies in 1980, in terms of their share in total outward FDI from the region, still remain at the top, an important exception being Indonesia, which has now been replaced by India. The share of Malaysia has drastically fallen in the last 24 years, while the share of Hong Kong, China has significantly improved (figures 3 and 4).

India, in fact, is an interesting case. Outward FDI was almost negligible until it picked up rapidly in 1995 and India emerged as one of the top five outward FDI economies in Asia. Since 2000, India has witnessed the highest increase in outward FDI, both in terms of FDI stock as a percentage of GDP and FDI flow as a percentage of gross fixed capital formation.

The emergence of East Asia as an important source of outward FDI rests mainly on the huge outward FDI undertaken by Hong Kong, China (mainly into China). The share of Hong Kong, China increased from 18 to 62 per cent of total outward FDI from the region. The Republic of Korea, and Taiwan Province of China also improved their shares slightly.

In South-East Asia, most of the countries witnessed a decline in their shares of outward FDI in the region. There has been a drastic fall in the shares of Malaysia (from 45 in 1980 to 6 per cent in 2005), Singapore (from 21 per cent in 1980 to 10 per cent in 2005) and Indonesia (from 1.3 per cent in 1980 to 0.15 per cent in 2004). Thailand has more or less maintained its share, while the Philippines has improved its share somewhat.

B. Theoretical framework and review of the literature

The emergence of FDI, which had mainly been a phenomenon of the developed countries until the early 1990s, has been extensively explained in the literature. Early studies on FDI traced its roots to international trade theory and identified the comparative advantage of the host countries as the most important determinant of FDI. This view successfully explained "resource-seeking" FDI. However, in the 1960s and 1970s the relative importance of this approach declined, as it could not to explain why countries chose FDI and not trade. Alternatively, market access was put forward as an explanation for FDI. The market imperfection hypothesis postulated that FDI was the direct result of an imperfect global market environment (Hymer, 1976). This view successfully explained the "tariff-jumping" FDI, which was most prevalent in the import-substituting industrialization wave of the 1970s. However, with the rising integration of the global markets in the 1980s, there arose a need to explain the FDI that occurred despite greater access to integrated markets. An alternative explanation came forth in the stream of thought that proposed the internalization theory (Rugman, 1986). This theory explained FDI in terms of a need to internalize transaction costs so as to improve profitability and explained the emergence of "efficiency-seeking" FDI.

However, the above theories were unable to explain why FDI tended to exploit relevant assets in some countries but not in others. In this regard, Dunning's approach to international production gave locational issues explicit importance by combining them with firm-specific advantages and transaction costs elements (Dunning, 1993). According to Dunning, FDI takes place owing to ownership, internalization and locational advantages. Ownership advantages are firm-specific competitive advantages (tangible and intangible) which an investing firm possesses over local firms in serving particular markets. These include unique assets relating to technological know how, marketing expertise and managerial skills. These skills must be combined with some of the location-specific advantages of the host countries such as natural resources cheap inputs, large markets and so forth. To minimize transaction costs and increase profitability, investing firms must exploit their ownership and location advantages through "internalization" rather than arms length transactions.

Although the OLI theory explains to a large extent outward FDI emerging from developed countries and going into developing economies, it may not be an exhaustive framework to explain in particular outward FDI emerging from the developing economies and going into the developed countries. To explain such a phenomenon, we use three sets of factors: (a) trade-related drivers; (b) capability-related drivers; and (c) domestic drivers.

1. Trade-related drivers

Exports and outward direct investment have traditionally been characterized as alternative strategies. It was argued that firms can either produce at home and export, or produce abroad and substitute local sales of foreign affiliates for exports. The growing complexities in the relationship between trade and FDI in the globalized era have led to a corresponding new stream of thought. Some studies indicate that FDI is used to preserve markets that were previously established by exports (Grosse and Trevino, 1996) while others suggest that FDI follows exports (Eaton and Tamura, 1994).

The relationship between FDI and trade has now become far more complex in the current WTO regime, wherein several developing countries have initiated import liberalization that has drastically reduced trading costs and encouraged trade associated with cross-border vertical integration (in terms of inter-industry trade) and intra-industry trade (both horizontal and vertical in nature).[2] Though a large number of studies have been undertaken on the impact of FDI on trade,[3] the impact of trade on FDI flows has received relatively less attention. There are reasons to expect that different kinds of

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2 Horizontal intra-industry trade is trade in final products which are differentiated by attributes, while vertical intra-industry trade is trade in final products which are differentiated by quality.

3 There exists an extensive literature on the impact of FDI on trade. Following Mundell (1957), it was long thought that FDI substituted trade. This proposition was challenged by Agmon (1979), and subsequently a number of studies emphasized potential complementarities between FDI and trade. This literature has been reviewed by Ethier (1994, 1996) and Markusen (1995).

trade influence FDI flows differently. While trade associated with cross-border vertical integration may boost the outflow of FDI by providing incentives of cost reduction, intra-industry trade may discourage FDI that is seeking economies of scale (Goldar and Banga, 2005).

Further, there have been some studies that have explored the relationship between FDI and trade by taking a unified approach, which postulates simultaneous determination of the two flows (Markusen and Maskus, 2002). These studies can be divided into three categories: First, some researchers argue that the determinants of FDI and trade are similar and therefore the factors that determine trade also determines FDI flows (Ekholm, 2002). Second, others postulate econometric models in which FDI, exports and imports are determined simultaneously. They argue that all three are endogenous variables and therefore their interactions should be taken into account (Hejazi and Safarian, 2003). Third, others are studying the impact of trade agreements on FDI inflows.

Some of the studies found that openness to trade and regional trade and investment agreements were an important determinant of FDI in the decade of the 1990s (see Binh and Haughton, 2002; Worth 2002; and Banga, 2004). Banga, (2004) shows that regional trade agreements such as AFTA and APEC increase the size of the market in those regions and therefore encourage FDI into the region.

Studies have also estimated the impact of bilateral investment treaties (BITs) on inward FDI and argue that BITs encourage FDI as the risks associated with investments decline with greater commitments. Globerman and Shapiro (1999) found that the Canada-United States Free Trade Agreement (CUFTA) and the North American Free Trade Agreement (NAFTA) increased both inward and outward FDI. Blomstrom and Kokko (1998) separated the effects of regional trade agreements along two dimensions: the indirect effect on FDI through trade liberalization; and the direct effects from changes in investment rules connected with the regional trade agreements. According to them, lowering interregional tariffs can lead to expanded markets and increased FDI, but lowering external tariffs can reduce FDI to the region if the FDI is tariff jumping.

Although these studies show a relationship between trade and inward FDI, very few studies have estimated the impact of exports and imports separately on outward FDI, especially from developing economies. The current wave of outward FDI from developing economies may have been triggered by trade-related drivers, which facilitate and necessitate outward FDI.

As discussed above, trade may have two potential effects on outward FDI from developing economies. First, higher levels of exports may assure the producers of access to existing markets and therefore lower the uncertainties and risks attached to investments, these encouraging outward FDI. Low tariff barriers and trade agreements further increase the access to integrated large markets and the probability of undertaking

vertical FDI. Trade agreements in many cases may also necessitate investments if they include rules of origin and "local content requirements". Thus, important drivers of outward FDI from developing economies, which are mainly undertaken with the motive of expansion, are: access to integrated large markets; low risk of investments; and the possibility of cross-border vertical integration.

Second, higher imports into the economy may in turn have a displacement effect on investments, that is, higher competition from imported goods may reduce the share of domestic producers in the domestic market. Investors may then look outward to economies with lower manufacturing costs and better access to larger markets. Such investments are undertaken mainly with the motive of relocation. Thus, in the case of both higher exports and higher imports, outward FDI is encouraged from developing economies.

2. Capability-related drivers

Though trade-related drivers may provide opportunities for developing countries to undertake outward FDI, the existence of trade-related drivers might not be sufficient for outward FDI to occur. The economy must have the capability of undertaking outward investments, as outward FDI requires knowledge and information of the host, managerial, marketing and entrepreneurial skills and cutting-edge technology. The capability-related drivers therefore relate to the necessary skills, technology, information and capital, which are required to undertake outward FDI.

In the absence of home country measures (HCMs) in developing economies, inward FDI flows may be a potential factor that may influence the capability of domestic investors to undertake outward FDI. FDI is expected to improve the technological standards, efficiency and competitiveness of domestic industry. FDI is also associated with bringing in "relatively" more up-to-date technology into the industry since markets for technology are imperfect. With a number of studies indicating productivity spillovers from FDI (Caves, 1996; Globerman, 1979; Blomstrom and Wolf, 1994; Djankov and Hoekman, 2000; and Banga, 2004), the higher the inflow of FDI, the higher will be the capability of domestic investors to undertake investments abroad. Outward FDI from developing economies to the developed countries may also take place in an effort to seek technology. Though existing FDI stock as a determinant of inward FDI flows has been used in many studies, none of the studies have as yet estimated the impact of inward FDI on outward FDI.

3. Domestic drivers

Apart from the opportunities available and the capabilities to undertake outward FDI, domestic constraints may be important determinants of outward FDI. These domestic constraints mainly correspond to costs and returns on investments. Poor infrastructure in the home country, rigid labour laws, expensive capital, costly skilled labour, and small markets can all be important drivers of outward FDI. With low tariff barriers and integrated

markets, competition has increased considerably. For investments to be competitive and efficient, low-cost factors of production are necessary. Lack of these can lead to outward FDI from the developing economies.

The literature on outward FDI from the developing economies is limited. Although studies have examined the trends in outward FDI from the developing countries and analyzed the drivers, few studies have empirically estimated the impact of these drivers on outward FDI, especially from the developing countries. This article adds to the existing literature by estimating the impact of exports and imports, inward FDI and other domestic factors on OFDI from 13 developing economies of South, East and South-East Asia for the period 1980 to 2002.

C. Methodology and data sources

Drivers of outward FDI from the developing economies can be categorized into three broad sets: (a) trade-related factors; (b) capability-related factors; and (c) domestic factors. Accordingly, we estimate the model as follows:

$OFDI_{it} = f$ [(trade-related factors)$_{it}$, (capability-related factors)$_{it}$, (domestic factors)$_{it}$]

where i stands for the developing economy and t stands for the time period (1980-2002).

Trade related factors included in the model are:

a. Exports as a percentage of GDP
b. Imports as a percentage of GDP
c. Whether the home country is a member of any regional trading agreement, e.g., AFTA, SAFTA or APEC.
d. Number of bilateral investment agreements signed by the home country

Capability-related factors included in the model are:

a. Inflow of FDI (FDI)
b. Skill levels, captured by secondary enrolment ratio or education (EDU)
c. Availability of cheap capital, captured by lending rates (KCOST)

Domestic factors included in the model are:

a. Market size, that is, log of GDP (MKTSIZE)
b. Cost of skilled labour, that is, efficiency wage (EFFWAGE) and real wages (REALWG) and productivity of labour, defined as output per employee (LABPDTY)
c. Rigidity of labour laws, i.e., that is, number of strikes and layouts or rate of unionization (UNION)
d. Infrastructure availability, for example, ratio of transport and communication to GDP (INFRA) and electricity consumed to GDP (ELECT)
e. Taxes on profits (TAX)

1. Trade-related drivers

As discussed above, both higher exports and higher imports may lead to higher outward FDI though the motive for undertaking outward investments in the two situations may differ.

With regard to the regional trade agreements, we find that an increasing number of trade agreements of the home country will likely shift the production units into the site with the lower costs of production since access to home as well as host-country markets becomes available. Further, many regional trade agreements not only improve market access but also improve the investment environment to make it more conducive to a free flow of FDI. One such agreement reached among the member States of the Association of Southeast Asian Nations (ASEAN) is the ASEAN Free Trade Agreement (AFTA) and the related ASEAN Investment Area (AIA) in 1999. Through these, all the member countries are committed to open up industries and grant national treatment to all ASEAN investors, except in some industries of national interest. This study examines the impact of ASEAN membership on FDI outflows from those countries, expecting it to have a positive impact. A dummy variable is used to capture the impact.

There has also been a substantial increase in the number of bilateral BITs that have been signed and brought into force in the last two decades and particularly in the 1990s.[4] In general, BITs deal exclusively with investments and lay down specific standards of investment protection and transfer of funds. They contain provisions for the settlement of disputes both between the treaty partners and between investors and the host State. BITs also cover a number of other areas, in particular, non-discrimination in the treatment and, in some cases, the entry of foreign-controlled enterprises, and other related fields. An important characteristic of BITs is the considerable uniformity in the broad principles underlying the agreements (UNCTAD 1999), coupled with numerous variations in the specific formulations employed. BITs generally recognize the effect of national law on FDI and accept the right of Governments to regulate entry of FDI. By providing protection, BITs are expected to reduce the risks of investment and promote outward FDI.

BITs were initially signed exclusively between developed and developing countries, mainly because developed countries were the major source of investments. However, the decade of the 1990s witnessed an increasing number of BITs between developing countries themselves. By facilitating the operations of foreign firms in the host countries, BITs may favourably impact outward FDI from developing economies. We find that many countries, such as China, Indonesia, Malaysia, the Philippines and Viet Nam have signed a large number of bilateral investment treaties since 1995 (table1). The impact of the cumulative investment agreements signed with regard to outward FDI flows from these economies is estimated.

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4 According to UNCTAD (1999) by the end of 1998 more than 1,700 BITs had been concluded, nearly four fifths of them after 1990.

Table 1. Number of bilateral investment treaties

Economy	1980	1985	1990	1995	2000	2002	2004
Bangladesh	1	1	8	8	12	16	17
China	0	7	22	57	70	75	79
Hong Kong, China	0	0	0	6	14	15	15
Taiwan Province of China	0	0	1	9	11	13	13
India	0	0	0	1	13	24	32
Indonesia	7	7	8	19	30	32	33
Malaysia	5	6	13	22	32	33	34
Nepal	0	1	2	3	3	3	3
Pakistan	2	4	7	10	15	17	18
Philippines	1	2	3	9	21	24	25
Republic of Korea	0	0	0	0	0	52	60
Singapore	6	6	9	13	19	21	21
Sri Lanka	4	13	16	17	20	20	21
Thailand	3	4	6	12	19	25	29
Viet Nam	0	0	0	17	25	27	31
Total	29	51	95	203	304	397	431

Source: UNCTAD 2006.
Note: Year of entry into force of the treaty has been considered.

2. Capability-related drivers

With respect to capability-related drivers, an important potential driver is inward FDI into the home country, as it may lead to spillover effects and improve the capability of domestic investors to undertake outward FDI in developing countries. We find that FDI outflows from developing countries as a percentage of total outward FDI flows almost doubled in the 1990s, though it is still a very small percentage of global FDI (table 2).

Other control variables used in the analysis which indicate the capability of undertaking investments are the availability of capital, which is estimated by lending rates (that is, real domestic interest rates), and the existing level of education in the economy (that is, secondary enrollment ratio).

3. Domestic drivers

The most important factors that may affect the FDI flows, as recognized in the literature, are the domestic market-related variables. Both current market size and potential market size can have a significant influence on outward FDI. Small market size and potential risk of losing market share may act as push factors for outward FDI. We use the log and growth rate of GDP to capture the impact of these variables and expect them to have a negative impact on outward FDI.

Table 2. Percentage of global FDI inflows and outflows, 1980-2004

Year	FDI inflows into		FDI outflows from	
	Developed countries	Developing economies	Developed countries	Developing economies
1980	84.68	15.25	93.79	6.21
1981	66.04	33.91	96.28	3.72
1982	54.04	45.93	90.06	9.94
1983	65.4	34.53	95.32	4.68
1984	69.44	30.53	95.47	4.53
1985	74.13	25.82	93.12	6.88
1986	81.04	18.97	94.81	5.19
1987	83.37	16.62	95.32	4.68
1988	81.4	18.57	93.22	6.78
1989	84.49	15.26	91.51	8.49
Average	***74.4***	***25.54***	***93.89***	***6.11***
1990	81.16	18.53	94.66	5.32
1991	70.6	27.71	93.16	6.84
1992	62.67	34.6	87.78	11.44
1993	60.28	36.61	83.34	16.23
1994	55.71	41.86	83.12	16.76
1995	61.51	34.05	85.03	14.79
1996	56.95	39.54	83.75	16.01
1997	56.05	39.96	82.59	16.70
1998	69.73	27.02	92.03	7.75
1999	76.98	20.69	91.78	7.98
2000	82.27	15.95	88.19	11.56
2001	68.44	27.86	89.07	10.57
2002	76.49	21.71	91.98	7.33
2003	69.89	26.29	93.58	4.70
2004	58.63	35.98	87.28	11.39
Average	***67.16***	***29.89***	***88.49***	***11.03***

Source: UNCTAD 2006.
Note: Total FDI flows are divided between developed countries, developing economies and Central and Eastern Europe.

Other domestic drivers of outward FDI are those that cause investment cost differentials across countries. These include costs of labour, capital and infrastructure. Cost factors may significantly influence the choice of an investment location for the resource-seeking and efficiency-seeking FDI. To capture the cost of labour and availability of skilled labour, we use real wage rates and efficiency wage rates, which take into account labour productivity. We expect higher real wages and efficiency wages in the home country to increase outward FDI. The availability of skilled labour is also captured by the productivity of labour, where the productivity of labour is defined as value added per unit of labour.

It is expected that the lower the availability of infrastructure, the higher will be the infrastructure costs and the higher will be the outward FDI. Different studies have used different measures to capture the availability and cost of infrastructure. Some of the variables used are land and property rents, fuel costs, index of infrastructure, transport costs and share of transport and communication to GDP. The author uses two variables: transport and communication as a ratio of GDP; and electricity consumed as a ratio of GDP. Electricity consumed reflects both the availability and cost of electricity in the home countries.

Domestic policies with respect to taxes can also influence the cost of investments across economies. The author used tax on profits as an indicator of restrictive domestic policies. The higher the tax, the higher will be outward FDI. The impact of the corporate profit tax rate is captured in the model by the ratio of tax revenue from profits and capital gains to GDP.

A favourable labour environment, which is influenced by flexible labour laws also influences the decisions to invest. The impact of the unionization rate, which is indicated by the number of strikes and layouts in the home country, is estimated. The more rigid the labour laws, the higher will be the incentive to invest abroad.

Table 3 gives the details of sources used for each variable and its expected sign as postulated below.

D. Empirical results

In order to identify the important drivers of outward FDI from developing economies, the author used a panel data of 13 developing economies[5] of South, East and South-East Asia for the period 1980/81 to 2001/02. The author estimated the random effect as well as the fixed effect models.[6] The results of the random effects model is

5 Bangladesh; China; Hong Kong China; India; Indonesia; Malaysia; Pakistan; Philippines; Republic of Korea; Singapore; Sri Lanka; Thailand and Viet Nam.

6 The models have been tested for auto-correlation and hetroscedasticity. To avoid the problem of simultaneity between the explanatory variables and the dependent variable (Log OFDI), economic fundamentals are lagged by one year. Deletion from the list is undertaken in the case of missing data.

Table 3. Variables used, data sources, definitions and expected signs

Variables	Abbreviation	Definition	Expected Sign	Source of Data
Log of OFDI	OFDI	Log of Foreign Direct Investment Outflows	-	World Investment Directory, United Nations, Vol VII, Part I&II: Asia and the Pacific and UNCTAD's Division on Investment, Technology and Enterprise Development compiles world wide statistics on foreign direct investment (FDI).
Log of Inward FDI	FDI	Log of Foreign Direct Investment Inflows	+	World Investment Directory, United Nations, Vol VII, Part I&II: Asia and the Pacific and UNCTAD's Division on Investment, Technology and Enterprise Development compiles world wide statistics on foreign direct investment (FDI).
Market Size	MKTSIZE	Log of real gross domestic product	_	World Development indicators, 2005 and Key Indicators of developing Asian and Pacific Countries, ADB, Various issues
Potential Market Size	GRTHMKT	Growth rate of real GDP	_	World Development indicators, 2005 and Key Indicators of developing Asian and Pacific Countries, ADB, Various issues
Export to GDP ratio	EXPORTS	Log of exports to GDP ratio	+	World Development Indicators 2005
Imports to GDP ratio	IMPORTS	Log of imports to GDP ratio	+	World Development Indicators 2005
Real Wages	REALWG	Log Real Wage rate, i.e., Log of non-agriculture sector daily wage rate	+	ILO, Geneva, Yearbook of Labour Statistics, various issues, UNIDO CD-ROM versions of UNIDO's Industrial Statistics Database at the 3 and 4 digit level of the ISIC classifications.and ASI, GOI for wages in India.
Labour Productivity	LABPDTY	Log of (GVA/Employee)	_	Estimated for manufacturing sector from UNIDO CD-ROM versions of UNIDO's Industrial Statistics Database at the 3 and 4 digit level of the ISIC classifications
Efficiency Wage Rate	EFFWAGE	Labour Cost / Labour Productivity	+	UNIDO CD-ROM versions of UNIDO's Industrial Statistics Database at the 3 and 4 digit level of the ISIC classifications
Education	EDU	Log of secondary enrolment ratio	+	World Development indicators, 2005
Infrastructure Cost	INFRA	Log of Transport & Communication/ GDP	_	World Development Indicators, World Bank
Electricity Consumed	ELECT	Electricity Consumed/GDP	_	Key Indicators of developing Asian and Pacific Countries, ADB
Capital Cost.	KCOST	Log Real domestic interest rates	+	Global Development Finance
Taxes on Profits	TAX	Log of corporate profit tax	+	IFS
Rate of Unionisation	UNION	No. of strikes and layouts	+	GDN Database

Note: The above variables are collected from various sources. The main sources of data are UNCTAD (ITED division), World Development Indicators and Key indicators of Asian Development Bank.

presented, since it is found to be more suitable by the Hausman test.[7] The estimates are presented in table 4, using variables that are not highly correlated.

7 It should be noted that in most of the cases the results do not differ qualitatively between fixed effects model and random effects model.

Table 4. Drivers of outward FDI from Asian developing economies, 1980-2002

Dependent Variable: Outward FDI (Log OFDI)

Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
EXPORTS	0.04*	0.11***	0.05*	0.07**	0.81**	-
	(1.71)	(2.44)	(1.72)	(2.07)	(2.17)	
IMPORTS	0.24***	0.14**	0.24***	0.26***	0.24***	-
	(6.44)	(2.00)	(5.49)	(5.27)	(4.75)	
FDI	14.79***	8.79**	13.86***	-	-	10.58**
	(3.19)	(2.49)	(2.97)			(2.08)
MKTSIZE	-14.93***	16.81***	1.29	4.84	5.29	3.43**
	(-3.45)	(3.65)	(0.91)	(0.30)	(0.31)	(2.59)
EDU	1.24**	-	1.52**	2.09***	2.43***	-
	(1.87)		(2.27)	(3.10)	(3.21)	
LABPDTY	-0.24	-	-	-	-	-
	(-0.30)					
ELECT	0.01	0.08	0.44	-	0.03	0.23
	(0.31)	(1.59)	(0.94)		(0.75)	(0.49)
UNION	0.03**	0.03	0.04**	0.02	0.02	0.49**
	(1.94)	(1.12)	(2.22)	(1.08)	(0.94)	(2.34)
	-	-15.3**	-15.5**	-8.34**	-9.49	-13.2***
INFRA		(-2.12)	(-1.87)	(-1.93)	(-1.56)	(-4.40)
		-10.53***	-	-	-	1.70*
REALWG		(2.78)				(1.70)
EFFWAGE			17.5**	9.81	-	-
			(2.00)	(1.01)		
KCOST			0.05	-	-	-
			(-1.49)			
BIT				1.82**	2.10**	-
				(1.88)	(2.09)	
Tax				0.49*	0.49*	0.14
				(1.64)	(1.65)	(0.61)
ASEAN						8.53***
						(3.28)
Constant	210.72**	-33.4	-17.8	-22.0	-27.7	10.10***
	(2.24)	(-0.19)	(-0.52)	(-0.57)	(-0.67)	(3.10)
No. of observations	286	286	286	286	286	286
Fixed vs random (Hausman test)	5.51	8.87	6.54	2.94	7.45	5.63

Notes: 1. Figures in parentheses are t-statistic.
2. Results are corrected for autocorrelation and hetroscedasticity.
3. Missing values have been deleted from the list.
4. The Hausman test supports the random effect model.
*** denotes significance at 1 per cent, ** at 5 per cent and * at 10 per cent.

The results of the analysis show that, with respect to the trade-related drivers, both the exports-to-GDP and imports-to-GDP ratios are significant drivers of outward FDI from the developing countries. As postulated, exports can positively influence outward FDI, as they ensure markets and encourage vertical FDI. Higher imports lead to higher domestic competition and may lead to relocation of units to low-cost destinations. It was found that imports were the more significant driver of the two, with a higher coefficient

and significance level. Developing economies may therefore differ from developed countries in terms of motivation to invest outside. Traditional theories on FDI have focused mainly on the expansionary motivation for undertaking FDI, but in developing economies, higher domestic competition may be a more important driver than motivation to expand. The results with respect to both exports and imports are found to be robust across different equations.

Apart from the exports and the imports, other trade-related factors that have been estimated which encourage outward FDI are BITs and regional free trade agreements, particularly the ASEAN FTA. BITs facilitate the operations of foreign firms in the host economies and give confidence about that economy's policies towards FDI. Therefore they are expected to influence positively outward FDI, especially from the developing economies. The impact of BITs is presented in a separate equation, as it is highly correlated with the inward FDI flows. The results (columns 4 and 5) corroborate the arguments and we find that the number of BITs signed by the home economies has a statistically significant impact on its outward FDI.

ASEAN as a regional FTA has a strong impact on the outward FDI of its member countries. Access to a larger market and lower trade costs may lead to relocation of investments. It may also lead to economies of scale and therefore higher capability to undertake outward FDI. Thus, the results show that trade-related variables have a strong influence on outward FDI from developing economies of this region.

Apart from trade-related advantages, which appear to be important drivers of the outflow of FDI from the developing economies, inward FDI flows also significantly influence outward FDI (table 4, columns 1, 2 3 and 6). The result is robust across different specifications. FDI brings with it more up-to-date technology, skills and information regarding the home economies. Spillovers from FDI improve the capability of the domestic firms to undertake outward FDI.

Apart from FDI, the other variables that indicate the capability of the domestic firms to undertake investments abroad are education levels and availability of capital. The results show that, although the education level (secondary enrolment ratio) has a significant positive impact on outward FDI, cost of capital, which also indicates its availability, is not a restricting factor on outward FDI from the developing economies. Thus, among developing economies, those which have higher levels of education undertake higher investments abroad. Increasingly, outward FDI is now emerging from the services sector, which may require higher levels of education. With respect to the cost of capital being an insignificant variable, the increasingly integrated capital markets may have considerably lowered the differences in the cost of capital across economies.

Domestic factors can be important push factors for outward FDI. Studies in the literature have found that the market size of the host economies is the most important variable which attracts FDI. Thus, we estimated the impact of the home economy's market size on outward FDI. This may to some extent reflect the "market-seeking"

motivation of outward FDI. The results show that this variable, captured by Log GDP, is not robust. The sign of the variable also changes across different columns. The size of the domestic market of the home economy may not indicate the probability of undertaking outward FDI. This may seem plausible given that India and China, in spite of having large domestic markets, have emerged as major sources of outward FDI in this region. The size of the home market therefore may not influence outward FDI, since other markets become available due to higher integration. However, a sectoral analysis of outward FDI may be required to strengthen this result.

Apart from the domestic market, other push factors which may operate with respect to outward FDI are labour-related. The results show that, although labour productivity is not a significant variable, existing real wages and efficiency wages in the home economy have significant positive impact on outward FDI (columns 2,3,4 and 6). Low costs of production appear to be an important motivation for outward FDI from developing countries.

To capture the flexibility of labour policies, we used the unionization rates across countries. This may be a weak indicator of labour policies. The postulated relationship was that the higher in the unionization rate, the higher will be the outward FDI. The results show that the sign of the variable is as expected, but it is not robust.

Another domestic push factor with respect to outward FDI in developing countries is the existing infrastructure, which may influence the cost of production. The results with respect to transport and communication as a ratio of GDP are robust (columns 2, 3, 4 5 and 6) and show that the lower availability of infrastructure leads to higher outward FDI in the developing countries. Low levels of infrastructure can have a large bearing on cost of production and, given the increasing competition in the global markets, a lower cost of infrastructure is a requisite for raising the competitiveness of FDI. However, the results with respect to electricity consumed as a ratio of GDP are not statistically significant.

To capture the effect of domestic policies with respect to taxes, we used the variable corporate profit tax rate in different countries. The results presented in columns 4, 5, and 6 show that a higher corporate tax rate has a positive impact on outward FDI but, while the impact is robust, it is not very strong.

To sum up, the results of the analysis indicate that trade has acted as a strong driver of outward FDI in the developing economies of South, East and South-East Asia. The rising volumes of exports from these subregions reflect the increasing competitiveness of these economies. However, exports have not been substituted, but have been complemented by outward FDI, since the rising number of free trade agreements has made possible access to larger markets and large-scale production. Increasing competition by imports in domestic markets has further fuelled this phenomenon, and bilateral investment agreements have facilitated the outward flows. The capability of undertaking outward FDI has also improved due to higher FDI inflows and rising imports of technology. The higher is the education level, the higher is the

capability of the economy to undertake investments. High costs of labour and poor infrastructure are also important domestic drivers of outward FDI from developing economies. Domestic polices with respect labour and taxes also play a role.

E. Summary and conclusions

Outward FDI from developing economies is a relatively new phenomenon, especially when these investments go to developed countries. The article attempts to identify the drivers of outward FDI from 13 developing economies of East, South and South-East Asia in the period 1980-2002. An empirical analysis is undertaken using panel data techniques. An attempt is made to conceptualize the process of outward FDI from developing economies using three sets of drivers: trade-related drivers; capability-related drivers; and domestic drivers.

The results of the analysis show that the phenomenon of outward FDI from developing economies has been greatly facilitated by trade. Greater integration of markets has made outward FDI and exports complementary in nature, as larger markets increase the possibility of vertically integrated outward FDI. Higher levels imports, on the other hand, have increased domestic competition and driven investments to other countries and areas. Trade and investment agreements have further fuelled this spurt in outward FDI by lowering the risks of investment abroad. Trade agreements that incorporate rules of origin have necessitated outward FDI into low-cost and large-market locations.

However, trade in itself may not be able to boost outward FDI if the domestic investors lack the capability to invest abroad. Inward FDI flows have been identified as one of the drivers of outward FDI, which improve the capabilities to undertake outward FDI. Better technology, better skills and information regarding the home economies of inward FDI are all necessary ingredients for enhancing domestic competitiveness.

Push factors in terms of domestic constraints have also been identified as significant drivers of outward FDI. Low availability of infrastructure, high cost of skilled labour, rigid labour laws and high tax rates, all contribute in driving outward FDI.

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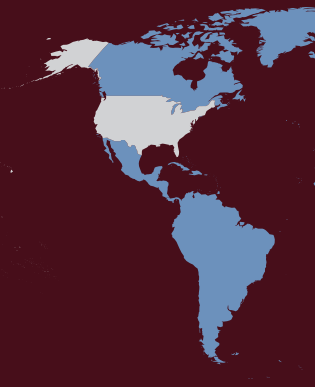

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