APEC 2014 THE SECOND SENIOR OFFICIALS' MEETING (SOM 2) AND RELATED MEETINGS

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Asia-Pacific Economic Cooperation







SHARING NEW OPPOTUNITIES THROUGH ASIA-PACIFIC PARTNERSHIP



Hosted By APEC Study Centre Nankai University People's Republic of China



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SESSION I

New Trend of Asia-Pacific Economic Integration



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2014/ASCCC/1.1

PATHWAYS TO EFFECTIVE ASIAN/PACIFIC

ECONOMIC INTEGRATION

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APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014 Pathways to effective Asian/Pacific economic integration

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Desire for integration – Asia; Asia/Pacific

The desire is clear from proposals over the last decade for regional agreements:

- Comprehensive East Asian Economic Partnership (EA FTA)
- Free Trade Area of Asia & Pacific (FTAAP)
- Regional Comprehensive Economic Partnership (RCEP)
- Trans Pacific Partnership (TPP)

Drivers – economic and geo-political

Global Factors driving integration

Presence of dynamics for change

- Growth in Asia Pacific
- Growing economic interdependence
- Recognition of need for economic reform

Contrast with regional failures

- Europe economically stalled
- Africa economically immature, Latin America mixed

Criteria for successful regional integration agreements

- Common desire for economic growth
- Acceptance of binding economic governance
- Recognition of importance of regulatory reform
- Economic confidence
- Strong trade and investment patterns
- Leadership by major economies
- Belief in tangible benefits

Drivers – economic and geo-political

Why do some regional economic integration initiatives stall?

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- Leading examples Free Trade Agreement of the Americas, East African Economic Community, Mercursor
 - driver is politics not economics
 - leadership unwilling to lead or unable to secure domestic support for reform
- The ASEAN Economic Community faces the same risk.

Rating Prospects for regional Free Trade Areas

Key success criteria	FTAAP	RCEP	EA FTA	TPP
Common desire for economic growth	+	+	+	+
Acceptance of binding economic governance	-	-	?	+
Concern for regulatory reform	-	-	?	+
Economic confidence	-	-	+	+
Strong trade and investment patterns	+	+	+	+
Leadership by major economies	+?	-	+?	++
Belief in tangible benefits	+	?	?	+
Optimum economic gain	-	-	-	-

TPP has momentum, but it does not offer optimal economic benefits to parties

- 1. Interest in joining is rising:
 - ROK (Republic of Korea)
 - Philippines
 - Chinese Taipei
- 2. Major economies not participating
 - China (has not indicated formal interest)
 - Russia, Indonesia, Thailand (no indication of interest)

3. Securing optimal benefit requires participation of all major economies

TPP parties face two major challenges

- Ensuring pathways are built that enable key regional economies, especially the biggest and economically the most important in the long run – China, Russia and Indonesia – to see clear routes to accession.
- 2. Making conscious effort to ensure a TPP agreement with wider coverage enhances, not undermines, the integrity and authority of the WTO.

Addressing Regional Expansion

1. Parties should expect China will join TPP at some point

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- Equal access to Asian Pacific markets is important (e.g. manufacturing supply chains & investment).
- China will need time basic problems in the finance sector and national economic priorities need to be addressed.
- A TPP agreement should recognize this.
- 2. Observer status in the TPP governing body should be created for APEC non-TPP economies
 - consistent with agreement to work towards an FTAAP agreement among APEC economies
- 3. Mechanisms to recognize voluntary adherence to some TPP provisions by non-parties should be included

Preserving the integrity and authority of the WTO

- An FTAAP threatens the authority of the WTO, unless it expressly protects it.
 - -If China joins covers 40 percent of world trade.
 - Protection can be secured by adherence to WTO's rules of jurisprudence and findings on adjudication of disputes over compliance
- Similarly, the TTP should recognize as binding scheduled commitments to reduce tariffs and commitments in all other WTO agreements relating to trade in goods (except where significant exceptions exist, such as in agriculture) and services.

Protecting the capacity of trade agreements to promote growth

 The premise on which WTO agreements rest is that free exchange of goods expands growth

- this under challenge in the EU where now trade agreements must be accompanied by political commitments on human rights and other non-trade considerations such as environment measures

- the EU/US FTA is likely to flounder over this.
- The global yardstick in the GATT and the WTO that non-trade measures should have least influence on regulation of trade needs to be restated
- An expanded TPP (or FTAAP agreement based on it) should consolidate adherence to that principle

Realizing APEC's mission

- The decision to create APEC in 1988 was shaped by fear the Maastricht Treaty meant an economic "Fortress Europe" when the EU Single Market was announced in the late '80's
- Instead of a Trans Pacific trade 'fortress," APEC was formed to foster open markets
- Not until China (and Chinese Taipei) joined WTO (2001) was institutionalizing the concept feasible. The driver was China's economic growth and economic reform
- TPP and its extension, including to FTAAP is only feasible if the integrity of the global trading system regulated by WTO rules is maintained.

APEC offers a wider mission

- Growth among APEC economies also requires policies to improve economic efficiency in national markets
- Institutions to foster this are required.
- Institutions such as the OECD which provided this role for western economies are not suitable
 - they are increasingly weighed down with the clumsy efforts to build a pan European entity
- FTAAP and other regional agreements should be limited to fostering open markets.
- In parallel, regional institutions to foster economic efficiency and open internal markets should be developed.



2014/ASCCC/1.2

THE PACIFIC ALLIANCE AND LATIN

AMERICA-EAST ASIA INTEGRATION

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APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

The Pacific Alliance and Latin America-East Asia Integration

Barbara Stallings APEC Studies Centers Annual Meeting Qingdao, China; May 12-13, 2014



- Introduction
- Historical background
- Characteristics of Pacific Alliance (PA)
- Pacific Alliance relations with East Asia
- Pacific Alliance, TPP, and FTAAP
- Conclusion: future potential

Introduction

- The Pacific Alliance should be considered the most important grouping of countries in Latin America from the East Asian perspective
- The four members Chile, Colombia, Mexico, and Peru – are the most open of the major Latin American countries and have the greatest interest in Asia
- In addition, all have FTAs with US and Canada, so could be a useful building bloc for FTAAP

Historical background

- LA's regional integration attempts have never been very successful; intraregional trade and investment are low; conflicts exist within and between regional organizations
- Traditionally the region has been fairly closed although reforms in 1980s and 1990s began an opening process; the main exceptions are Chile, Peru, and Mexico that have sought strong links with US, Europe, and Asia

Historical background

- In April 2011, the three joined forces with Colombia to form a new integration group – the Pacific Alliance (PA)
- Three goals: achieve deep integration (flows of capital and people as well as trade); promote growth and social inclusion; increase integration with the world especially East Asia
- Relations with East Asia are central to the PA approach, but within a broader context including the Transpacific Partnership (TPP)

PA characteristics

PA countries have population of 216 mn; they represent 36% of LA's GDP, but account for 50% of its exports, and receive 41% of its FDI

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- Chile, Mexico, and Peru are members of APEC;
 Colombia has applied several times
- All have FTAs with Asian economies, although Chile and Peru lead in this respect
- Costa Rica and Panama are candidate members of PA; also many observer countries

PA relations with East Asia

- Asian economies are the main trading partners for Chile and Peru; less important for Mexican and Colombian exports though not for imports
- Main products are raw materials from LA to Asia and industrial goods from Asia to LA
- One interest of PA is to broaden its export basket to Asia to include more industrial products, especially high-tech goods

PA relations with East Asia

- Investment links between PA countries and East Asia are also important
- Investment from Japan has traditionally been most important Asian source for PA countries; Korean investment is still minimal
- Investment from China is recent with many conflicts; most Chinese investment has gone to other LA countries (Brazil, Argentina, Venezuela)

FTAs between PA and Asia

	Chile	Peru	Mexico	Colombia
With Asia	China	China	Japan	Korea (signed)
	Japan	Japan	Korea (on	Japan (in process)
	Korea	Korea	hold)	
	Malaysia	Singapore		
	Singapore	Thailand		
	Vietnam			
Others	USA	USA	USA	USA
	Canada	Canada	Canada	Canada
	EU	EU	EU	EU
	EFTA	EFTA	EFTA	EFTA
	Turkey	LAC	Israel	LAC
	LAC		LAC	

Trade flows from PA to EA

	Exports 2007		Exports 2011		Imports 2007		Imports 2011	
	Sbn	%	\$bn	%	\$bn	%	\$bn	%
Chile	27.1	40	38.8	48	11.1	23	21.4	29
Colombia	1.6	5	4.1	7	7.0	21	13.6	29
Mexico	7.5	3	14.7	4	79.2	28	106.1	30
Peru	7.1	25	12.2	27	4.8	24	11.4	30
PA	43.2	11	69.8	13	102.0	27	252.5	29

Products traded by PA and EA

Type of good	Exports from	Share of	Imports to PA	Share of
	PA to EA (\$bn)	total (%)	from EA (\$bn)	total (%)
Primary	50.8	88.8	1.8	1.4
Industrial	6.4	11.2	126.3	98.6
Traditional	0.3	0.5	0.0	0.0
Intermediate	2.3	4.0	24.6	19.2
Capital	3.3	5.8	82.8	64.6
Other	0.3	0.5	18.3	14.3
Total	57.2	100.0	128.1	100.0

Investment flows from EA to LA (\$bn)

	USA	Spain	Canada	Holland	Japan	China	Other	Total	Asia %
Chile	7.1	10.0	5.3	3.3	4.7	0.0	0.0	30.4	15.5
Colombia	1.3	0.8	0.0	1.0	0.0	0.0	5.2	8.3	0.0
Mexico	23.5	3.9	3.4	11.1	3.1	0.1	2.5	47.6	6.7
Peru	na	na	na	na	na	na	na	na	na

PA, TTP, and FTAAP

- PA countries are enthusiastic promoters of integration among Latin America, North America, and East Asia
- They have been among the most active members of APEC (except Colombia)
- Chile, Peru, and Mexico have among the largest number of FTAs of any economies
- Chile was a founding member of the P-4, which has now turned into the incipient TPP

PA, TTP, and FTAAP

- Looking forward, the PA could be a possible bridge for Asia-Pacific integration, bringing together economies on both sides of the Pacific
- It could work together with several Asian economies that are also open and active in negotiating FTAs; Singapore and Korea are probably the best examples
- In addition, ASEAN as an organization could be a possible partner

PA, TTP, and FTAAP

- If TTP fails to reach successful negotiation, the PA should consider an FTA with ASEAN
- PA links with US and Canada together with ASEAN links with Japan, Korea, and China – could form a critical mass to constitute a different path to FTAAP
- Such a move would be consistent with role ASEAN has played in integration within Asia

Conclusions

- The Pacific Alliance is an important new player in the Asia Pacific
- If it can hold together and it has many critics in LA as well as internal asymmetries – it could improve the "quality" of LA-EA economic relations
- It could also help provide an organizational bridge, or even a trampoline, to further integration of the Asia Pacific



2014/ASCCC/1.3

THE TPP AND TRADE RELATIONS BETWEEN

EAST ASIA AND LATIN AMERICA

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THE TPP AND TRADE RELATIONS BETWEEN EAST ASIA AND LATIN AMERICA

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APEC Study Centers Consortium Meeting 2014, Qingdao, May 11-12, 2014

EARLY HISTORY OF THE TPP

2003: initial talks between Chile, New Zealand and Singapore (the P3)

2005: formal creation of the P4 or Trans Pacific Strategic Economic Partnership (TPSEP), including Brunei as a founding member

Open door character and intentions to encompass as many Asia
Pacific economies as possible

THE UNITED STATES ENTERS THE SCENE

- 2008: President George W. Bush, close to the end of his Administration, signals interest in the P4, opening the start of negotiations on a Trans Pacific Partnership (TPP) agreement
- 2008: Australia, Peru and Vietnam join in the TPP negotiations
- 2009: After review by Obama Administration, the US commitment to TPP is renewed
- 2010: First formal meeting of negotiating nations (Canberra, March)
- Malaysia joins the negotiations (October 2010)
- The race to Honolulu (November 2011): after nine rounds of negotiation, a "broad outline of an agreement" is announced in the fringes of the APEC Leaders Meeting

RECENT EVENTS ON TPP PROCESS

Canada and Mexico joined the TPP negotiating process in October 2012

Japan joined TPP process in March 2013

China showed interest in joining TPP process in May 2013, but was informally rebuffed by US authorities

Most recent TPP Leaders statement (October 2013) does not show much progress form those of 2011 and 2012 (other than the expansion from 9 to 12 members)

TPP AND OTHER TRADE AGREEMENTS WITHIN APEC

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TPSEP

FTAAP

- RCEP
- Other ASEAN initiatives
- Pacific Alliance
- Plus a host of bilateral agreements

Pathways to FTAAP (Leaders' Declaration, Yokohama, November 2010)

We believe that an FTAAP should be pursued as a comprehensive free trade agreement by developing and building on ongoing regional undertakings, such as ASEAN+3, ASEAN+6, and the Trans-Pacific Partnership, among others. To this end, APEC will make an important and meaningful contribution as an incubator of an FTAAP by providing leadership and intellectual input into the process of its development, and by playing a critical role in defining, shaping and addressing the "next generation" trade and investment issues that an FTAAP should contain.

HOW TPP IS DIFFERENT?

- US is at its center and seems to control the process
- TPP is widely perceived as the economic component of US recent strategy (2011) of "rebalancing" or "pivot" to the Pacific
- In particular, although there is no implicit statement on this, TPP is perceived as excluding China
- The TPP appears as an alternative to the FTAAP
- Negotiation process is conducted under uncommon secrecy conditions

IMPLICATIONS FOR APEC

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- The three pillars of APEC: trade liberalization, trade facilitation, economic and technical cooperation
- Traditional strength of APEC has been on the "C": cooperation, based on action by consensus
- So far APEC, with a strong backing from ASEAN, has been successful in bringing together competing views and interests from the Asia Pacific region
- The emergence of TPP and its divisive potential for Asia Pacific constitute a powerful argument for strengthening APEC and enhancing its role as a promoter of regional cooperation in all its dimensions

CONCLUDING REMARKS

- One of the important accomplishments of the creation, 25 years ago, of APEC was to bring together two conflicting views about the future of the region
- The rise of new world powers, especially China, has naturally led to new tensions and to the development of competing visions of the future. APEC, again with the support of ASEAN, has played a positive role in managing these tensions
- In that context, the appearance of TPP, although welcome in what respects to its contribution to trade liberalization, has not so far been helpful in regard to building a consensus vision of a peaceful Asia Pacific
- On the other hand, the lack of Trade Promotion Authority granted to the US Administration by the US Congress, and the great complexity of TPP negotiations, do not ensure that these negotiations will be concluded in the short term
- Given that possible scenario, APEC would be well advised to renew its commitment to negotiating a comprehensive FTAAP



2014/ASCCC/1.4

INTER-BLOC COMMUNICATION

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Topic I New Trend of Asia-Pacific Economic Integration

INTER-BLOC COMMUNICATION

Abstract:

Asia-Pacific is one of the world's most dynamic regions, not only being the engine of global growth, but also developing an active platform for regional integration and cooperation. Numerous existing and emerging regional initiatives on trade liberalization, socio-economic and infrastructure cooperation have become increasingly intertwined, interdependent and crosscutting. Older integration initiatives are deepening the level of cooperation. New initiatives, including mega-blocs, such as Trans-Pacific Partnership and Regional Comprehensive Economic Partnership, are coming into being. At the same time, the economies of Asia-Pacific are being involved into interregional cooperation. Multilateral and regional systems are interconnected; and the multilateral trading system has to provide incentives to enhance cooperation among trade blocs, including not only the existing ones, but also those being under negotiation. Transparency and information sharing about the ongoing processes on bloc-by-bloc basis may help the economies to facilitate productive cooperation within the multilateral trading system. This paper examines the ways to elaborate an APEC-wide initiative for inter-bloc communication mechanism, which would facilitate communication and exchange of information among all the existing and potential trade liberalization agreements. The novelty of this paper resides in an attempt to overcome the obstacles of institutional arrangements of the forming trade blocs, and to include them into region-wide communication system.

Key words: regional economic integration, preferential trade liberalization, Asia-Pacific Economic Cooperation.

I. Introduction

Since 1990s the value of trade between the members of preferential trade agreements (PTAs) has been growing faster than the world average (WTO, 2011). As a result, the share of preferential intra-PTA trade has increased almost twofold – from 28% in 1990 to 50.8% in 2008 (excluding EC/EU the figures are correspondingly 17.8% and 34.5%).¹ The concept of "regionalism", while still very strong with regards to preferential liberalization, is being supplemented by the notion of cross-regionalism.² A broader perspective on international trade also involves considering the formation of the "mega-blocs", such as Trans-Pacific Partnership, Regional Comprehensive Economic Partnership and Transatlantic Trade and Investment Partnership. Table 1 shows the shares of different trade blocs in the world indicators. The data reveals significance of some trade blocs in the world GDP, population, trade and FDI.

Indicator (share in the world, 2012 (%)	CES	EU	NAFTA	ASEAN	ТРР	TTIP	ASEAN +3	ASEAN +6	Pacific Alliance	WTO
GDP (by PPP, current prices)	4,4	19,8	22,3	4,2	34,5	38,7	25,4	32,2	3,8	96,5
Population	2,4	7,2	6,7	8,6	12,3	11,7	30,5	48,4	3,1	92,7
Exports of goods and services, inc.	3,2	33,7	13,9	6,8	29,0	43,5	23,9	27,4	2,7	97,3
goods	3,6	31,6	13,2	7,0	28,8	40,1	25,8	29,0	3,1	96,9
services	1,6	42,5	16,9	5,8	29,5	57,5	16,1	20,8	0,9	99,1
Imports of goods and services, inc.	2,3	32,6	16,8	6,8	31,9	44,9	23,7	28,1	2,8	97,5
goods	2,2	31,5	17,4	6,8	32,6	44,1	24,4	28,6	3,1	97,3
services	3,0	37,5	14,1	6,7	28,8	48,4	20,6	25,6	1,4	98,7
Cumulative FDI	2,8	34,2	21,4	5,8	31,4	51,5	11,0	15,0	3,1	95,7

 Table 1 – Shares of Trade Blocs in the World Indicators (2012)

Sources: WDI (World Bank), WEO (IMF), ITC TradeMap, UNCTADStat

Besides growing in absolute and relative numbers, preferential trade has been constantly evolving content-wise. Twenty-first century FTAs go beyond the notion of traditional market

¹ WTO World Trade Report 2011, p. 64

² East Asian countries tend to actively pursue trans- or cross-regional agreements. For example, South Korea concluded FTAs with Chile, EFTA, the United States, India, the European Union and others. China has actively negotiated with Nigeria, Pakistan, Australia, the Gulf Cooperation Council, Peru, Iceland, Norway, and Costa Rica. Japan signed FTAs with Mexico, and Chile, and is negotiating FTAs with India, Australia and Switzerland.

access preferentialism, focusing on the elimination of behind-the-border barriers and creation of disciplines underpinning international supply chains. These substantial changes in the pattern of international trade have been fueling debates over various aspects, including welfare effects of PTAs (Krugman, 1991, et al.), the "spaghetti bowl" effect (Bhagwati, 1995, et al.), "multilateralising regionalism" (Baldwin, 2006), etc. Nowadays we are already living in the world where numerous existing and emerging regional initiatives on trade liberalization, socio-economic and infrastructure cooperation have become increasingly intertwined, interdependent and cross-cutting. The main focus of the discussions has been shifting towards seeking a way for an increased cooperation of existing and emerging regional and cross-regional blocs.

Therefore, it is crucial to facilitate communication among trade blocs, including not only the existing ones, but those being under negotiation. This paper examines the ways to elaborate an APEC-wide initiative for inter-bloc communication mechanism, which would facilitate communication and exchange of information among all the existing and potential trade liberalization agreements. The novelty of this paper resides in an attempt to overcome the obstacles of institutional arrangements of the forming trade blocs, and to include them into region-wide communication system.

II. Communication and Information Sharing

As of January 2014, 583 regional trade agreements (counting goods, services and accessions separately) have been notified within the GATT/WTO. Of these, 377 are currently in force.³ Within the WTO framework, there are three sets of rules to guide and monitor regional trade agreements (RTAs) – provisions of the GATT, GATS and Enabling Clause. In 2006 the WTO General Council established a provisional application of a new Transparency Mechanism for RTAs, which provides for early announcement of any RTA and its notification in the WTO. In 2011 the Negotiating Group on Rules started the review of the WTO transparency mechanism with the view of two proposals: for consideration of all RTAs in a single WTO Committee,⁴ and for procedural adjustments to the mechanism.

However, both the provisions regarding RTAs and transparency mechanism do not prove to be highly effective, because of the WTO's practical inability to come to a consensus on the compatibility of RTAs with the multilateral rules. Indeed, considering the absence of definition

³ WTO RTA Database. URL: http://www.wto.org/english/tratop_e/region_e/region_e.htm

⁴ The Committee on Regional Trade Agreements will consider RTAs falling under Article XXIV of General

Agreement on Tariffs and Trade (GATT) and Article V of the General Agreement on Trade in Services (GATS).

The Committee on Trade and Development will consider RTAs falling under the Enabling Clause (trade arrangements between developing countries).

for "substantial" coverage, WTO Committee for Regional Trade Agreements recognized only few RTAs as being WTO-compliant (see Picture 1 below).



The gap between the expectations for the WTO role in guiding RTAs and its actual capabilities, led to the creation of other mechanisms to accelerate communication, information-sharing and transparency in regard to RTAs. At the same time, considering the difficulties faced by the economies during the Doha-round negotiations, the rise of regionalism seems to be a current global trend. However, multilateral and regional systems are still interconnected; and the growing importance of regional integration processes makes it evident that the multilateral trading system has to provide incentives to enhance cooperation, in order to eliminate increasing diversity in the global economy, and to be flexible enough to accommodate new trends in the world trade.

Asia Pacific Economic Cooperation, while being a regional forum, has a strong voice of supporting the multilateral trading system. Besides, some of the APEC trade liberalization agenda, such as implementation of environmental goods and services list, is currently discussed in the WTO. APEC covers a significant share of the world trade and has a vast membership. As all member economies are involved into integration processes within the region and beyond, APEC may become a good platform for inter-bloc communication with the aim to ensure transparency, cooperation and capacity building activities.

Regional economic integration traditionally is one of the priorities in APEC. Moreover, information sharing and transparency are considered to be the key issues. Thus, in 2012 APEC Model Chapter, intended to build best practices for RTAs/FTAs in the area of transparency

standards has been developed.⁵ As it was stressed in the Leaders Declaration 2013, "APEC has an important role to play in coordinating information sharing, transparency, and capacity building, and will hold a policy dialogue on regional RTAs/FTAs". Leaders agreed as well "to enhance communication among regional RTAs/FTAs, as well as increase the capacity of APEC economies to engage in substantive negotiations"⁶. Development and implementation of the APEC Framework of Strengthening Regional Economic Integration (REI) might be one of the most significant achievements during China's presidency in APEC in 2014.

In the light of this, the proposal to establish APEC Committee on Trade and Investment level Friends of the Chair (CTI FoTC) group, aimed "to strengthen the communication and interaction between various regional architectures; …refocus initiatives in specific sectors, including at, across and behind-the-border initiatives, and maximize the trade and economic benefits of regional economic integration"⁷ is a milestone in the process of a Free Trade Area of the Asia Pacific (FTAAP).

III. Institutional Arrangements

However, there are still a number of issues, which have to be addressed. The first challenge the economies may face is the problem of representation, - whether the key interests and positions should be formulated and expressed by an economy's representative, or on behalf of a regional bloc?

Undoubtedly, each economy has its own sensitive areas both in the global economic system and within regional blocs. At the same time, some APEC economies currently are members of different regional integration processes. Hence, economy-by-economy representation may lead to the new complex and entangled "bowl" of interests and positions, where consensus will be still impossible to reach. Conversely, a bloc-by-bloc representation may allow members to summarize the economies' preferences into a common policy and accommodate the diversity of their interests with the aim to reach a consensus.

At the same time, "new generation" comprehensive integration blocs include not only traditional areas of trade liberalization, but such new cross-cutting issues as services, intellectual property rights, information technology etc., which are crucial for multilateral negotiations as well. Thus, transparency and information sharing about the ongoing processes on the regional level will help the economies to facilitate productive cooperation within the multilateral trading system.

⁵ 2012 APEC Ministerial Statement, Annex A "APEC Model Chapter on Transparency for RTAs/FTAs".

⁶ 2013 APEC Leaders' Declaration.

⁷ China's 2014 Proposal "APEC Framework of Strengthening Regional Economic Integration".

As for the overall APEC goal to establish FTAAP in the near future, there are several possible pathways, but the most realistic one has not been defined yet. What is clear is that economies' possible policy options depend not only on specific internal interests, but their obligations to their partners within a regional integration system. Bloc-by-bloc representation and inter-bloc cooperation might be a better way to reach the APEC goals.

However, the institutional arrangements of the emerging and existing trade blocs will prevent them from efficient region-wide communication. Only several regional blocs currently have permanent Secretariats, liable to present the integration regional body (see Table 2 below).

Trade Bloc	Legal Body				
ASEAN	ASEAN Secretariat				
Pacific Alliance	Presidency Pro Tempore of the Alliance is exercised by each of the				
Tachic Amance	member countries, in alphabetical order, for annual periods.				
	The NAFTA Secretariat is a unique organization established pursuant to				
	Article 2002 of the North American Free Trade Agreement (NAFTA). It				
NAFTA	administers the mechanisms specified under the NAFTA to resolve trade				
	disputes between national industries and/or governments in a timely and				
	impartial manner.				
Customs Union	Eurasian Economic Commission				
	The "ASEAN Plus Three (APT) Framework" does not constitute a formal				
ASEAN+3	organization, operating mostly in ASEAN+1 format. The "+3" refers to				
	the level where China, Japan and Korea hold meetings.				
ТТР	Comprehensive, living agreement cannot be managed without a robust				
111	secretariat dedicated to supervising the TTP membership (Elms, 2013).				
RCEP	Comprehensive, living agreement cannot be managed without a robust				
KCLI	secretariat dedicated to supervising the RCEP membership.				
	The future institutional framework may encompass: 1) a body with				
TTIP	regulatory competences (Regulatory Cooperation Committee); 2) a body				
	with a decision-making power; and 3) a dispute settlement mechanism.				

Table 2 – Trade Blocs Institutional Structure

Source: official web-sites of regional groupings and member economies.

The institutional organization of such blocs as ASEAN, NAFTA and CES technically allows them to participate in the communication and information-sharing platforms on behalf of a single bloc, while ASEAN+3, TPP, RCEP and TTIP - the negotiations on which are still ongoing - do not have a legal body, which is able to represent a grouping. However, it is possible

to create an official representation on a non-permanent basis. In Pacific Alliance, for example, representation is exercised by each of the member countries, in alphabetical order, for annual periods. There is also a prominent example of self-organization of groups of countries within a WTO framework – regional and issue-based informal coalitions. Broadly defined, a coalition is "a set of governments that defend a common position in a negotiation through explicit coordination" (Odell, 2006). In the WTO negotiations, these groups of countries (which are about 30) often speak with one voice and use a single coordinating team.⁸ Although WTO coalitions are informal and have no legally binding structure, they serve as an instrument to communicate group's position with an increased bargaining power (Narlikar, 2003, et al.)

As it is crucial to facilitate inter-bloc communication, the example of rotating representation and WTO coalitions can be useful in overcoming the obstacles put forward by institutional arrangements. Particularly, economies forming future TPP, RCEP and TTIP can coordinate a common position to be articulated to other blocs in order not to create excessive trade and investment barriers to the countries outside of a bloc. Building an APEC-wide initiative which involves inter-bloc communication, where all the existing and emerging blocs are represented, will ensure stable and predictable development of the world trade.

IV. Conclusions

The dynamics of international trade system has been evolving in various dimensions, including creating and following a multilateral set of rules, and progressing in terms of regional economic integration. Rising regionalism requires guidance and coordination within the multilateral trading system, although the WTO mechanisms did not prove to be highly efficient. Multilateral transparency tools should be supplemented by efforts taken by regional groupings themselves. Along with economy-by-economy dialogue, international communication should be realized by the means of inter-bloc cooperation. However, institutional arrangements may hamper such communication. Considering vast diversity of institutional frameworks and the absence of a single mechanism, different approaches to address this issue can be developed. While some groupings can be represented by permanent institutional bodies (like Secretariat or Commission), others can elect a speaker to articulate common positions. This approach will ensure transparency and level playing field for the formation of the future global trade rules.

⁸ Some coalitions have Group leaders, like Brazil in G-20 (agriculture coalition) or Australia in the Cairns Group.

Bibliography

Amrita Narlikar, "Bargaining over the Doha Development Agenda: Coalitions in the World Trade Organization", Serie LATN Papers N 34.

Deborah Kay Elms (2013) "The Trans-Pacific Partnership Agreement: Looking Ahead to the Next Steps", ADBI Working Paper Series N447.

Gavin, Brigid (2013) "Regional representation in the WTO: A new role for regional trade clubs?" UNU-CRIS Working Papers W-2007/13.

Odell J.S (ed) (2006) "Negotiating Trade: Developing Countries in the WTO and NAFTA", Cambridge: Cambridge University Press.

WTO World Trade Report 2011.



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PROMOTING FOREIGN INVESTMENT

WITHIN APEC

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PROMOTING FOREIGN INVESTMENT WITHINAPEC

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PROMOTING FOREIGN INVESTMENT WITHINAPEC

Executive Summary

Expanded international trade in goods and services has bolstered economic growth in Asia-Pacific economies since the 1994 APEC Bogor declaration. Yet considerably less policy attention has been paid to the growth-enhancing potential of increased foreign investment flows within the region. This paper examines the benefits of international investment for APEC members and the mechanisms by which increased foreign investment can promote economic growth into the future.

At the industry level, foreign investment and multinationals directly and indirectly generate economic gains through the transfer of technology and product development. Furthermore, the presence of new entrants in domestic goods and services markets introduces better management practices, stimulates imitative behaviour and spurs greater competition.

At the macroeconomic level, increased foreign investment contributes to higher living standards by enabling saving and capital to flow to areas where it is used most productively. In theory, national income can grow faster if the productivity of foreign capital exceeds its external servicing cost. The paper also argues that,by boosting domestic asset values, foreign acquisition of equities and property generates higher wealth in host economies than otherwise, with favourable macroeconomic consequences for economic growth.

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PROMOTING FOREIGN INVESTMENT WITHINAPEC

1. Introduction

Economists have argued for centuries that free trade in goods and services improves economic welfare, a view reflected in the APEC motto "Advancing Free Trade for Asia-Pacific Prosperity." A corollary is that trade restrictions, especially in the form of tariffs and quotas on imports, reduce economic welfare because they impose additional direct costs on consumers and indirect costs on exporters.Foreign investment is also a form of international trade – in assets and saving. However, promotion of increased foreign investment within APEC is not nearly as strong as advocacy of freer trade in goods and services.

A likely reasonfor this is that, historically, there has been more attention devoted to the theoretical gains from liberalising international trade in goods and services in the international economics literaturethan to the benefits of liberalisingforeign investment flows.¹ Yet increased foreign investment can conceivably play as important a role in economic development within APEC as increased international trade in goods and services does since unfettered foreign investment enables capital to move to places where it can be used most productively.²

With reference to Figure 1 which schematically depicts domestic and international exchanges of goods, services and assets, more focus has been on linkages on the left side of the diagram than those on the right. Relatedly, greater emphasis has been given to liberalising trade flows recorded on the current account of the external accounts than to

^{1.} This is reflected in the emphasis on the theory of trade in standard international economics textbooks. Seefor instance Gerber (2011) and Krugman and Obstfeld (2014).

^{2.} International empirical evidence on the gains from foreign investment flows is provided by Carkovicand Levine (2005) and Chandra (2005) and Haveman, Lei and Netz (2001).

asset exchange and international investment flows recorded in the capital and financial account.



Figure 1 - APEC Trade and Investment Linkages

The remainder of this paper first examines the nature of foreign investment and broad trends in APEC, before canvassing its micro- and macroeconomic benefits. It then concludes that greater promotion of foreign investment within APEC would bolster economic growth in the region.

2. The Nature of Foreign Investment

Analysts of the impact of foreign investment on host economies usually make an important distinction between direct and portfolio foreign investment. Within APEC, regulations limiting cross-border investment flows generally apply to both direct and indirect foreign investment. For measurement reasons, foreign investment is classified as 'direct' if at least 10 per cent of a firm's equities are owned by foreign shareholders, since this share is judged to confer a significant degree of foreign management control over the routine operations of the enterprise. It also includes real estate acquired by foreigners.

'Portfolio' foreign investment, in contrast, does not have management control implications and covers foreign purchases of the equities of local firms or debt instruments issued by local entities for portfolio investment purposes.Direct foreign investment is often the predominant component of total foreign investment in APEC economies via the establishment of subsidiaries of MNCs. In generalwhen non-resident entities fund expansion of the domestic capital stock, irrespective of whether it is direct or portfolio investment, the rise in external liabilities recorded as part of the economy's foreigninvestment position in its external accounts must be matched by a rise in the level of productive plant, equipment and buildings recorded in the national capital stock data of the national accounts.

'Official' foreign investment consists of foreign purchases of financial liabilities of the government sector, excluding government business enterprises, as well as changes in the central bank's official reserve asset position. This includes government bonds purchased by foreign entities, including sovereign and non-sovereign wealth funds, a significant form of foreign investment in recent years in some developed APEC economies, such as Australia and the United States, arising from their sizeable budget deficits.

The different forms of foreign investment in can be depicted schematically thus:



Figure 2 - Forms of Foreign Investment

The main focus in what follows will be on foreign direct investment (FDI) flows.

3. Foreign Direct Investment in APEC: Recent Trends

Developing and developed APEC members account for around half of global FDI inflows flows, with developing members as to be expected accounting for a slightly larger share. See Figure 3.³ Since 2011 FDI inflows to the region have however fallen in \$US terms, mainly due to a fall in inward FDI to industrialised members as shown in Figure 4. In the meantime, FDI outflows have also fallen, again reflecting lower outflows from industrial economies as shown in Figure 5.

³ Figures 3 to 6 are sourced from APEC (2013).



Figure 3 – Global FDI Inflows, 1990 – 2012



Figure 4 – FDI Inflows to APEC Region



Figure 5 - FDI Outflows from APEC Region

An important feature of FDI flows is that while most APEC economies simultaneously experience both significant FDI inflows and outflows, many are characteristically either net capital importers, such as Australia, China, Singapore, Peru and Chile, or net capital exporters, for example, the United States. Interestingly several economies which have been significant net capital importers since 1990 have more recently become net capital exporters, notably Malaysia, Mexico and Korea. See Figure 6 which shows net FDI for select member economies.

Another notable feature of foreign investment that distinguishes it from international trade flows is its volatility due in part to the 'lumpy' nature of large scale foreign investment projects and to sizeable one-time mergers or acquisitions of domestic firms.

























4. The Economic Case for Foreign Investment

There are microeconomic and macroeconomic arguments in favour of foreign investment. The impact of direct foreign investment and multinationals (MNCs) is best considered at the enterprise or industry level. Multinational corporations can directly and indirectly generate productivity benefits through the transfer of technology and through product development. Furthermore, domestic employees of foreign-owned firms are exposed to international management practices and the presence of new entrants in domestic markets stimulates imitative behaviour and acts as a spur to greater competition.⁴

It is of course possible that foreign dominance of certain industries could result from foreign merger and acquisition activity which in turn could limit domestic competition in those industries. However, this then becomes a matter for the home economy's competition authorities who should treat foreign owned firms no differently from domestically owned firms. Similarly there could be problems with transfer pricing by multinational firms. But this too need not be an issue for foreign investment policy *per se*, but a matter for the taxation authorities.

With direct investment, MNCs often take real investment and funding decisions together. Thus, increased imports of capital goods recorded on the nation's trade account may be matched simultaneously by financial capital inflow from abroad recorded on the nation's international capital account to directly fund their purchase. However, MNCs sometimes fund the accumulation of capital through domestic borrowings.

⁴See Caves (1971), Hymer (1976), Dunning (1988) and Markusen (1995) for more formal treatment of the theory of direct foreign investment.

Concerns about foreign direct investment often relate to the loss of management control of established domestic firms through foreign takeovers or the loss of domestic ownership of real estate. Yet when foreigners buy existing domestic assets at higher prices than resident bidders would be willing to pay, the resident entities that sell such assets to foreigners make capital gains they otherwise would not have made. The proceeds of the sale of domestic assets to foreign interests may then be used by resident entities to create new domestic assets, be spent on consumption, or ever be used to acquire new foreign assets.

At the macroeconomic level, total inward foreign investment in all forms, net of investment abroad by domestic enterprises, is reflected in the host economy's capitalaccount balance which equates to the host nation's current account and domestic saving - investment imbalance.Other things equal, the more foreign investment an economy attracts, the higher itssaving - investment imbalance and external liabilities are likely to be.⁵

Household Saving			
Corporate Saving	Gross National Saving		
Public Saving		Gross Investment	
	Direct Foreign Investment		
	Indirect Foreign Investment		

Figure 7 - Domestic Saving, Investment and Foreign Investment

⁵ See Makin (2004).

4.1 The National Income Gains from Increasing Foreign Investment within APEC

Foreign capital inflow in aggregate can also improve an economy's economic welfare to the extent that it frees it from the constraint of its own saving level. The amount of additional economic activity in a range of domestic activities would not be as great and overall GDP growth would be lower without the benefit of net foreign investment.

The macroeconomic gains from further liberalising foreign investment within APEC can be demonstrated with reference to straightforward economic theory⁶, as conveyed in Figure 8. Here for illustrative purposes it is assumed that APEC developing economies experience net capital inflow, which is sourced from industrialised APEC members, which experience net capital outflow.



Figure 8- National income gains from increased foreign investment

⁶See McDougall (1960) and Makin (2004).

The figure depicts the combined real capital stock of APEC member economies as OO^* , the length of the bottom axis of the figure, with developing APEC economies being net capital importers, and industrialised APEC economies being net capital exporters. Of the total capital stock, OK_0 is initially located in developing APEC economies (DE) and the remainder located in industrialised APEC economies (IE). Note that values on the horizontal axis are read from left to right for DE and from right to left for IE.

The *FI* and *F*I** schedules reflect the respective marginal products of real capital in DE and in IE. For instance, the marginal product of real capital in DE is r_0 when DE capital stock is OK^0 . It is r_0^* in IE when IE capital stock is O^*K_0 . In the absence of international capital movements, the total area under the FI schedule (area OK_0QF) is the value of DE output or GDP. Of this, OK_0Qr_0 is the income of the owners of capital, whereas the rest (r_0QF) is the income of the other main factor of production, labour. In IE, under capital autarky conditions, the return on capital is lower than in the DE ($r_0^* < r_0$). Combined GDP is $O^*K_0TF^*$ of which $O^*K_0Tr_0^*$ is the share of national income accruing to owners of capital, whereas the remainder of national income is ($TF^*r_0^*$) earned by workers.

Now assume that international capital flows between DE and IE are liberalised as a result of the abolition of barriers impeding foreign investment within APEC. Since the real return on DE capital as measured by its marginal product is higher than the corresponding return in IE $(r_0>r_0^*)$, real capital will flow into DE from IE.This trade in real capital continues until there is equality between the two rates of return on capital $(r_1=r_1^*)$. At that point, the DE real capital stock is OK_1 , higher than the original capital stock of OK_0 . GDP for DE is also now higher at OK_1SF . Out of this amount however, area K_0K_1SN is paid to IE investors for the use

of their capital. The same rectangular measure represents the sum of income paid abroad, which must then be subtracted from DE *GDP* to give DE *GNP*.

The overall net gain in DE national income is the triangular amount *NSQ* in Figure 12.3. In IE national income rises in net terms by *NST* as the income received from the investment in IE is added to IE's *GDP* (now area $O^*K_1SF^*$). From the perspective of APEC as a whole, the international movement of capital therefore benefits both developing and industrialised APEC economies. In short, promoting greater foreign investment flows improves APEC members' combined income.

4.2 Estimates of National Income Gains

To the extent that, in aggregate, the productivity of the extra physical capital funded through foreign capital inflow exceeds the servicing costs on that foreign investment, then national income can grow faster than otherwise. In Australia's case, inward foreign investment has been a feature of its development for more than two centuries. As a percentage of Australia's Gross Domestic Product, foreign investment flows were proportionately greater in earlier times, such as the late 19th century compared to the experience since 2000.⁷

Estimates of national income gains attributable to foreign investment confirm that these have indeed been positive and significantin the case of Australia and the United States. Based on an economic growth accounting method (see Appendix 1 for a derivation), and using national accounts data to compare the productivity of foreign capital with its cost, estimates for these economies show that extra real national income stemming from foreign-

⁷ McLean (1989) and Oxelheim (1993) further examine historical trends.
funded investment has been significant in the vicinity of 5 % of GDP.⁸ The estimates are however likely to understate the income gains since they do not account for the extra productivity benefits that come with the direct foreign investment component of capital inflow, such as technology transfer.

5. Sovereign Wealth Funds: A Qualification

Heavily managed exchange rates and persistently large trade and current account surpluses have enabled East Asian central banks and Middle Eastern oil exporters to accumulate huge foreign exchange reserves that have reached multi-trillion dollar levels. No longer simply invested in US and other government bonds that helped keep world interest rates low, these massive money holdings are now directed elsewhere, via sovereign wealth funds established by these economies to amass a wider portfolio of higher yielding assets worldwide.

With inflexible exchange rates and controls over private capital outflows, the more these economies accumulate foreign reserves, the more this signifies their currencies are undervalued. Hence the capacity of such economies to invest abroad reflects their managed exchange rate policies. Quite simply, if currencies to find their own level in the absence of further capital account liberalisation, they would appreciate quickly and strongly. So in effect, accumulating foreign reserves and mushrooming sovereign wealth are indicative of congealed currency undervaluation.

⁸For estimates of the national income gains, see Makin (2006) for Australia and Makin and Narayan (2009) for the United States.

This does not suggest that foreign investment by sovereign wealth funds should necessarily be discouraged, just that its lineage is quite different to capital inflow from more traditional sources. If sovereign wealth fund investment raises domestic asset values and induces more domestic investment it should in principle be welcomed.

6. Conclusion

Greater foreign investment within APEC should be welcome because it delivers productivity gains via technology transfer, international management practices and product development, while spurring greater domestic competition and imitative behaviour by locally-owned firms. In general, foreign investment improves economic welfare to the extent that it frees economies from the constraint of their own saving levels. At the same time, foreign outward investment enables economies to earn a higher return on capital in use abroad than at home.

Consistent with the 1994 APEC Bogor declaration which advocated "free and open investment in the region" foreign investment should be treated no differently to domestic investment.What could be better recognised in APEC members' policies toward foreigninvestment is that capital inflow, irrespective of whether it creates new assets or is used to purchase existing ones, including residential real estate, facilitates extra economic activity to the extent it raises asset values thereby inducing more investment.It is therefore in APEC members' economic interest to further liberalise foreign investment controls that restrict foreign acquisition of domestically owned financial and real assets as a means for improving levels of national income and wealth within the region.

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Appendix 1 Foreign Investment as a Source of Economic Growth

A macroeconomic production function may be specified as

$$\mathbf{Y} = \mathbf{f}(\mathbf{A}, \mathbf{K}^{\mathsf{d}}, \mathbf{K}^{*}, \ell) \tag{1}$$

where K^{d} is that part of the total domestic capital stock that has been funded by domestic saving and K^{*} is that part of the total domestic capital stock has been foreign-financed (Makin 2009).

By totally differentiating this open economy production function, the sources of increased gross domestic product in the short run are shown to be

$$dY = f_{A} dA + f_{K} dK + f_{K^{*}} dK^{*} + f_{\ell} d\ell$$
 (2)

where $\boldsymbol{f}_{_{A,K,K^{^{\ast}},\ell}}$ denotes the derivative of Y with respect to $\,A,K,\,K^{^{\ast}},\,\ell\,.$

For economies that are net recipients of foreign investment, national output and national disposable income diverge to the extent of net income paid abroad. Hence,

$$\mathbf{Y}^{n} = \mathbf{Y} - \mathbf{r}^{*}\mathbf{K}^{*} \tag{3}$$

where Y^n is national disposable income and r^* is the effective servicing cost of foreign capital (inclusive of dividends) on external liabilities. So,

$$dy_{n} = dY - (r^{*} dK^{*} + dr^{*} K^{*}).$$
(4)

The effective income paid abroad may vary from interval to interval as world interest rates fluctuate or as any risk premium varies through time.

From (2) and (4), the sources of national income growth can therefore be shown as

$$dY^{n} = \{f_{A}dA + f_{L}d\ell + f_{K}dK\} + \{f_{K^{*}}dK^{*} - (r^{*}dK^{*} + dr^{*}K^{*})\}$$
(5)

The first set of braces captures the domestic sources of growth whereas the second set includes the foreign sources of central interest. Hence, national income gains can be attributed to domestic sources and foreign sources, such that

National Income Growth= Domestic Contribution + Foreign Contribution

References

- Baldwin, R. (2004) "Openness and Growth: What's the Empirical Relationship?" in R.
 Baldwin and L. Winters (eds) *Challenges to Globalization: Analyzing the Economics*University of Chicago Press, Chicago.
- Carkovic, M. and Levine, R. (2005) "Does Foreign Direct Investment Accelerate Economic Growth?" in T. Moran, E. Graham and M. Blomstrom (eds) *Does Foreign Investment Promote Development?* Institute for International Economics, Washington.
- Caves, R. (1971), 'International Corporations: The Industrial Economics of Foreign Investment', *Economica*38: 1.27.
- Chandra, A. (2005) "The Influence of Capital Controls on Long Run Growth: Where and How Much?" *Journal of Development Economics*, 77, 441-466.
- Dunning, J. (1988), 'The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions', *Journal of International Business Studies* 19: 1-31.
- Gerber, J. (2011) International Economics, 5thed, Pearson, New York.
- Grubel, H.G. (1987) 'Foreign Investment', in J. Eatwell, M. Milgate and P. Newman (eds) *The New Palgrave Dictionary of Economics*, vol. 2, Macmillan, London, 403-6.
- Haveman, J. Lei, V. and Netz, J. (2001) "International Integration and Growth: A Survey and Empirical Investigation" *Review of Development Economics*, 5 (2), 289-311.
- Hymer, S. (1976), The International Operations of National Firms: A Study of Direct Foreign Investment, MIT Press, Boston.
- Klein, M. and Olivei, P. (2005) "Capital Account Liberalisation, Institutional Quality and Economic Growth: Theory and Evidence" NBER Working Paper 1112, NBER Massachusetts.
- Krugman, P. and Obstfeld, M. (2014) *International Economics: Theory and Policy*, 10thed, Pearson, New York.
- MacDougall, G. (1960) "The Benefits and Costs of Private Investment from Abroad" *The Economic Record,* Special Issue, May.
- Makin, A. (2013) "Should We Take Anything Foreigners Offer?" in Carli, C., Collits, P. and Wilson, T. (eds) *Turning Left or Right?* Connor Court, Ballarat.
- Makin, A. (2006) "Has Foreign Capital Made Us Richer?" Agenda 13(2), 225-237.
- Makin, A. (2004) Global Finance and the Macroeconomy, Palgrave Macmillan, New York.

Makin, A. (1996) "Liberalising Foreign Investment Policy" Agenda, 3(2), 135-142.

- Makin, A. and Narayan, P. (2009) "Has International Trade in Saving Improved US Economic Welfare?" *Economic Record* 85, 2-9.
- Markusen, J. (1995), 'The Boundaries of Multinational Enterprises and the Theory of International Trade', *Journal of Economic Perspectives* 9: 169-89.
- McLean, I. (1989), 'Growth in a Small Open Economy: An Historical View', in B. Chapman (ed), *Australian Economic Growth*, Macmillan, Melbourne.
- Oxelheim, L. (ed) (1993), The Global Race for Foreign Direct Investment, Springer Verlag, Berlin.
- Ruffin, R.J. (1984) "International Factor Movements", in P.B. Kenen and R.W. Jones (eds.) Handbook of International Economics, vol. 1, North-Holland, Amsterdam, Ch. 5, 237-88.



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MAPPING OUT THE CONTOURS OF

ASIA-PACIFIC INTEGRATION

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Mapping Out the Contours of Asia-Pacific Integration

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Opinions expressed within are solely those of the author and do not necessarily represent the views of the Institute he comes from.

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Mapping Out the Contours of Asia-Pacific Integration

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Introduction

Within the last one-fourth century since the APEC established and the China's access for twenty three years, the Asia Pacific region gained extraordinary achievements in quick growth and poverty reduction. Meanwhile, with the backdrop of global multilateral trade impasse, regional trade agreements (RTAs) and Free Trade Agreements (FTAs) have become increasingly prevalent in the Asia Pacific. China's rapid growth has been coincident with its following up the East Asia miracle and running the parallel with the wave of new regionalism. Ever since the end of last century, the number of FTAs involving at least one economy from the APEC region has increased dramatically. The current situation is obviously drawing the attention and naturally touching us on the trend of regional integration. This draft paper tries to

analyze major trends that are shaping the ongoing regional integration and their influence on APEC members' decision making circles and their possible choices.

Trend One: The proliferation of RTAs/FTAs

With the new regionalism rising in other regions, the wave of regional trade arrangements and free trade agreements has been surging in the APEC region ever since it established. By the end of 1990s, three blocs including NAFTA, AFTA and CER were considered as a subset of APEC as well as other bilateral arrangements. As of 31 January 2014, out of 377 global RTAs/FTAs in force were around 119 closely relative to APEC members.⁽¹⁾ Table One indicates that 70%, or 83 of those 119 agreements have been signed and been in effect since the new century. The common character that many of those agreements have is they are conventional. Probably except for the TPP and its previous P4 and other few cases, most provisions in those texts of new agreements must have tariff reduction, rules of origin and others, which are relative to the liberalization of trade in goods and some provisions imposed on subjects such as trade in services, and even sensitive issues. What is the trend, particularly at the background of high tension in politics and security in the region?

With the approach of international political economy being used to analyze the dynamics of politics, economics, and society, contentious political factor should have deterred further exchanging in trade. In Asia Pacific, however, a special phenomenon

⁽¹⁾ http://www.wto.org/english/tratop_e/region_e/region_e.htm

is that such exchange not only keeps carrying on, but also increasing. For instance, China, instead of the U.S. becomes the first trade partner for Japan. China and ASEAN members are working assiduously to increase their bilateral trade to the new level, the first target is from now at USD420b to reach the level of USD 500b in 2015 and then to USD1000b in 2020. The closely weaving trade relationship is a momentum from various angles and particularly the cooperation at both the bilateral and multilateral levels, which will continue in the coming years. This is one point for the trend that is partly borne of generally increased connectivity due to trade. The second is multilateral impasse that will continue spurring FTAs and new blocs such as TPP, RCEP, CJKFTA although Doha negotiation in Bali had a breakthrough.⁽¹⁾ The data of WTO regional trade agreements (RTAs) show that as of 31 January 2014, some 583 notifications of RTAs had reported to the GATT/WTO. Except for 377 cases in effect, the remaining announced ones are still large. Looking closely at that table, APEC members categorized in the announcement should not be a small number. The list should continue to increase. In a word, while RCEP and TPP and other sub-regional FTAs are in some ways growing but seemingly becoming contentious, the Asia-Pacific is also seeing an unprecedented level of regional trade and investment cooperation at both the bilateral and multilateral levels. The proliferation of FTAs cannot subside but continue in the coming years.

⁽¹⁾ The latest one is the Australia-Japan Economic Partnership Agreement (EPA). The deal was announced at April 7, 2014.

Trend Two: TPP under the framework of U.S. rebalance strategy

TPP (Trans Pacific Strategic Partnership) comes from an earlier agreement between Chile, New Zealand, Singapore and Brunei Darussalam, the original one is referred as The Trans-Pacific Strategic Economic Partnership (TPSEP). TPP began its first round talk in March 2010 and now is still in negotiation with the latest meeting of Chief Negotiators ended in Singapore in February 2014. No one may deny that TPP is a high quality FTA based on some official texts and terms revealed and the original TPSEP text. The Obama administration at very early time of its first term announced to join in TPSEP but that action was built on efforts begun during George Bush's presidency. In addition to the objective to increase American export and create jobs, the U.S. is felt to use the TPP as a "hedging strategy" against China to overcome some shortcomings such as the U.S. little weight to the foreign policy and security dimension. $^{\odot}$ Chinese academia then argued that this was a containment strategy. Now, there are at least three different views on TPP. One is to object TPP for it aims at limiting China's economic rise. The second is not-rush in for TPP for it cannot fulfill its mission or complete the regional integration. It is hard for TPP negotiators to adjust themselves to the other demand. Furthermore, TPP cannot be regarded as a successful FTA in Asia Pacific without China's participation because almost every TPP member has been deep involvement of the relations with China's economy. The

⁽¹⁾ C. Fred Bergsten and Jeffrey J. Schott, Peterson Institute for International Economics: Speeches, Testimony, Papers Submission to the USTR in Support of a Trans-Pacific Partnership Agreement, January 25, 2010, available at http://www.iie.com/publications/papers/paper.cfm?ResearchID=1482.

third is increasingly an argument that this is like the WTO in the 1990s. Joining could help accelerate the second round reform launched by President Xi. Among senior officials' observations, what is impressive is Primer Li Keqiang's recent remark at 2014 Boao Forum that "China takes an open position towards the Trans-Pacific Partnership (TPP). As long as the TPP is conducive to the development of global trade and the fostering of an equitable and open trading environment, China is happy to see its conclusion."^① International comments believe that China seems positively adjusting its attitude to TPP. Any judgment, however, should be cautiously made over whether China will quickly apply for TPP access.

One may envision the TPP as a growing phase for regional economic integration and acknowledge TPP as FTA's benchmark but Beijing seems supportive but has some reason not to partake in. Obviously from the starting point, the U.S. did not consider the TPP membership for China. The approach from the discipline of political economy indicates that bilateralism and regionalism have opened the door to an explicit introduction of political criteria. Richard Feinberg put it (2003) that "aware of the asymmetries of market power and issue salience that enhance US bargaining leverage, the US has been aggressively pursuing a variety of commercial and diplomatic interests, both tactical and strategic, that include bolstering local democratic institutions and processes of economic reform, strengthening US security ties, accelerating region-wide commercial liberalization by allying with a regional

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[®] Full text of Li Keqiang's speech at opening ceremony of Boao Forum, "People's Daily", April 11, 2014, P2.

leader, establishing new precedents to use as bench markets in future trade negotiations, and otherwise using free trade accords to advance its comprehensive global trade policy agenda."^① It seems that Feinberg's argument is not incorrect and deserves consideration.

TPP must be a matter of vital importance to the Obama Administration in refocusing of U.S. strategic priorities to Asia from his first term. It was initially so-called "pivot" and at the end of 2011 re-termed the rebalancing strategy. It contains at least three core components including security, economy and freedoms, among which TPP is a principal thrust of "our (U.S.) rebalancing effort in Asia." ² Most leading Asia Pacific perspectives make the region aware that the U.S. strategic rebalancing is to prevent China from rising to be an actor with a capacity and capability to shaping Asia according to its own terms and rules.³ The Obama Administration intended to conclude TPP as soon as possible and does not want to demonstrate the comprehensive strategy any otherwise than military shift to Asia. With that said, TPP in Chinese mind must have been a pending agreement full of intolerable thorns political-economic and geostrategic. Li Keqiang is excellent in his remarks exposing his Administration's determination for further reform and opening through recognizing TPP as a market-oriented liberalization on multiple fronts.

⁽¹⁾ Richard Feinberg, *The Political Economy of United States' Free Trade Arrangements*, paper prepared for a PECC conference held on April 22-23, 2003 Washington DC, USA.

[©] The White House: Press Briefing By National Security Advisor Tom Donilon, June 08, 2013, available at http://www.whitehouse.gov/the-press-office/2013/06/08/press-briefing-national-security-advisor-tom-donilon, accessed at June 9, 2013.

^③ Roundtable: Regional Perspectives on U.S. Strategic Rebalancing, *Asia Policy*, Number 15, January 2013. The National Bureau of Asian Research, Seattle, Washington.

Borrowing some high standards from TPP, China is now emphasizing the reform program including state-owned enterprises, intellectual property, service liberalization and its testing program as Shanghai Free Trade Zone. Primer Li seems cautious but very smart for his speech did not touch on the issue whether China prepares an application or not for TPP access. While a trade accord like TPP as drastic as U.S. with its partners actively pushing is not unlike, given Japan and others' core interests, future rounds of negotiations could not ensure a smooth wrap up. On the other hand, if the United States and its partners can work with China to shape an inclusive, rules-based system but separate the TPP from the strategy balancing, the future of TPP will be different. But TPP talks with non-participation China may continue and move forward. The conclusion is not easily to wrap up and even finally a TPP agreement is reached but it is unlike to be an ambitious one the US wanted in 2010.

Trend Three: RCEP

Regional Comprehensive Economic Partnership (RCEP) was endorsed at the 19th ASEAN Summit at 17 November 2011, launched at the 21st ASEAN Summit in November 2012⁽¹⁾ and started its first round of negotiations in May 2013. It composes of sixteen initial members and also referred to ASEAN++. RCEP is drawing the

⁽¹⁾ The 21st ASEAN Summit "Joint Declaration on the Launch of Negotiations for the Regional Comprehensive Economic Partnership", available at

http://www.asean.org/images/2012/documents/PS21Sum%2013%200%20ASEAN%20JD%20(FINAL%2031.10.1 2).pdf

regional attention for it is another major FTA talks in the region since the TPP talks launched but was felt by the U.S. that it poses competition for TPP.^①

RCEP is to be established upon and around ASEAN and its existing economic linkages and therefore the ASEAN centrality seems essential. Its goal is to "Achieve a modern, comprehensive, high-quality and mutually beneficial economic partnership agreement establishing an open trade and investment environment in the region to facilitate the expansion of regional trade and investment and contribute to global economic growth and development".⁽²⁾ It seems that RCEP reflects some feature of developing, rising Asia but one seems hard to expect it to be combined on the same track with TPP. By comparison with the TPP⁽³⁾, RCEP negotiations as stated in "Guiding Principles" cover eight areas including trade in goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, dispute settlement, among others.⁴ ASEAN++ Summits repeated the expectation to complete the RCEP by the end of 2015 and if successfully done as designed, RCEP is likely to generate a around GDP and trade volume reaching 30% of the world total, and have nearly 50% of the global population. It has now (as of the end of April 2014) carried out four round negotiations but the seventh round has been scheduled to

⁽¹⁾ In the first term of Obama Administration, the US Trade Representative Ron Kirk appeared to acknowledge that RCEP poses competition for TPP. Quoted from *Inside U.S. Trade*, SECTION: Vol. 30 No. 49, December 14, 2012.

[©] Also see the website at: www.asean.org/images/2012/documents/PS21Sum%2013%200%20ASEAN% 20JD%20(FINAL%2031.10.12).pdf.

[®] TPP negotiation issues cover free trade in goods, services, investment and some horizontal and cross-cutting issues such as intellectual property rights, environmental protection, labor, free flow of internet information and other regulatory issue (WTO+ issues).

^(a) ASEAN+6 Economic Ministers: "Guiding Principles and Objectives for Negotiating the Regional Comprehensive Economic Partnership", Siem Reap, Cambodia, 30 August 2012.

conduct in February in 2015. With those already finished talks, seven working groups were established including in trade in goods (RCEP-WGTIG), trade in services (RCEP WGTIS), investment (RCEP-WGI), economic and technical cooperation, intellectual property rights, competition policy and dispute settlement, and other two working groups of rules of origin and customs procedures and trade facilitation were established for the trade in goods. In terms of Chinese officials from Commerce Department, RCEP negotiations on market access liberalization and text of related sectors have entered the stage of substantive progress, and all parties have reached a preliminary agreement in such areas as tariff reduction mode, rules of origin, customs procedures, trade facilitation and establishing rules and mechanisms.[©]

Despite some progress in previous rounds, RCEP Negotiations are facing challenges. Firstly, RCEP members face a realistic challenge over how to deal with developmental stages. Inside RCEP, there are countries in different economic levels and accordingly differences in their pursuits, which directly affect individual policies and negotiation postures. As Iman Pambagyo put it, "Countries may have different ideas on how to reduce tariffs and to what extent to make concessions. Partner countries find it hard to agree fair tariff concessions between themselves." [@]

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⁽¹⁾ Wang Shouwen Addresses at The Opening Ceremony of The 4th Round Of Negotiations On RCEP, available http://www.mofcom.gov.cn/article/ae/ai/201403/20140300534349.shtml 2014.3.31.

[®] Xinhua Insight: Latest round of RCEP talks faces challenges, Xinhua General News Service, Nanning, April 4, 2014. Iman Pambagyo is the Association of Southeast Asian Nations (ASEAN) chairman of the RCEP negotiation committee.

Secondly, internal politics can have a strong influence on RCEP negotiation. No one can assure such kind of the resistance the US and Japan have taken within TPP will not take place in RCEP. If that happens, RCEP negotiations should be extended beyond 2015. Thirdly, ASEAN's capability to pilot the grouping on the track to Asia Pacific regional integration is somewhat questioned. Politically, Northeast Asian economies all make the statements that ASEAN should be the driver and almost each individual joint statement of ASEAN+1 Summits (with China, with Korea and with Japan) would have rhetoric of ASEAN's central role. But academic analysis tends to explain the weaker capacity and capability, in particular, ASEAN grouping hard to be regarded as a strongest power. The basic factors of hard power ASEAN should have cannot be compared with China, Japan and U.S. and its mechanism is far less coherent than the establishment of European Union. The fourth challenge is modality. RCEP needs to link relative regionalist groups into a unified one but one has to admit that the current FTAs vary considerably from each other and its modality therefore needs to consider as early as possible. The fifth comes from the US. As mentioned, RCEP is viewed as a competitor at least the U.S. is not involved in. TPP is itself a competitor to RCEP and also a challenge to ASEAN centrality. The future of RCEP will be surely affected by the U.S. because at least four ASEAN fellow members Brunei, Malaysia, Singapore and Vietnam have already been in the TPP negotiations. Actually, the United States will maintain a strategic interest in a new regional architecture so as to ensure its leadership. Building TPP can allow the U.S. to limit increasing China's role and keep pressure on ASEAN to a certain extent. The sixth one is of the unpredictable diplomacy of Sino-Japan dispute, which is very critical for RCEP to conclude as schedule. It is because of the history and islands disputes in the East China Sea that the second and the third largest economies have their diplomatic relations down to be a lowest level and both have lack of political trust. There has not been a possibility for China and Japan to hold a summit meeting. This grim reality is a very negative signal for RCEP to reach an agreement before S Abe's Administration ends in 2016.

Trend Four: FTAAP, a path to Asia Pacific Economic Integration?

Quickly and continuously growing inside APEC, RTAs and FTAs could not have been a new phenomenon but trade creating and diverting effects have aroused more and more attentions. An APEC early research reported that under certain conditions, the dynamic trade-creating and investment-inducing impacts of RTAs outweigh the trade diversion effects. The "certain conditions" are mainly linked with the open regionalism adopted by APEC and compliance with the provisions of Article XXIV.[®] It seems at that time the evidence of trade-diversion effects was not expected and some recent study, however, argues that trade-diversion effects exist, particularly with TPP and RCEP talks coincidently occurred according to time and space. Some Chinese scholars also presented their perspectives that more small FTAs and

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⁽¹⁾ APEC Economic Committee: **2000** APEC Economic Outlook, Chapter 2: The New Regionalism: Is it a Building Block for Multilateralism? Published by the APEC Secretariat, Singapore, November 2000, P44.

sub-regional agreements are pursued after, more diverting effects with more noodles will be generated. $^{\odot}$

Then the question is how to address the issue. The ADB research group advanced two proposals to disentangle the Asian noodle bowl: consolidation—which creates a regional FTA to harmonize bilateral FTAs; and multilateralization—which grants nondiscriminatory preferences to nonmembers, eliminating preference discrepancies.[®] Preferably, consolidation is a good approach to harmonize various FTAs into one, a broader regional trade bloc, Free Trade Area of the Asia Pacific (FTAAP).

The FTAAP idea was actively initiated by APEC's Business Advisory Council in 2004 and the proposal was then regarded as the only means by which APEC could achieve Bogor goal adopted in 1994 with the target "free and open trade and investment in the region." Then in the APEC Summit meetings at Hanoi (2006) former President Bush again proposed it. Although an analytical study by officials generates some positive suggestions, challenges do exist in creating the FTAAP (2008 ALEM Lima Declaration), for instance, FTAAP should be a legal binding mechanism but APEC's approach is voluntary, consensus-based decision making system. One observed that there is a set of 15 completed chapters for Regional Trade Agreements

 ^① The recent study result comes from Mattew P. Goodman's presentation to CNCPEC Seminar on New Development and Trend of Asia Pacific Economic Integration, Beijing, November 14-15, 2013. Some Chinese perspectives presented to the China-Australia Regional Symposium, Shanghai Institutes for International Studies (SIIS) and East Asia Bureau of Economic Research (EABER), ANU, Shanghai,14-15 April 2014.
 ^② Iwan J. Azis, Head, Office of Regional Economic Integration (OREI): *Regional Cooperation and Integration*

[®] Iwan J. Azis, Head, Office of Regional Economic Integration (OREI): *Regional Cooperation and Integration in a Changing World*, Mandaluyong City, Philippines: Asian Development Bank, 2013, pp16-7.

(RTAs) and Free Trade Agreements (FTAs) that will promote high-quality RTAs/FTAs and greater consistency and coherence among these agreements in the region (Bosan and Ha Noi Declarations).

Academically, FTAAP was initiated by Robert Schollay in 2003 but a later project (2006) suggested that a successful FTAAP should depend on political feasibility in the near term.⁽¹⁾ Now seven years passed and FTAAP is well supported in line of economic benefits, for instance, Peter Petri's proposal resulted from his TPP research. His two-track model can be divided into US-led TPP and China-led Asia track. If each track works individually, either side participants may have gains but the economic benefits will be gaining more on the condition the two groups to be combined. **Table Two** indicates that the combination of TPP and RCEP into FTAAP will create larger income gains in 2025 not only for those countries in Asia Pacific but other region and even the whole world.

Obviously, FTAAP can be explained as a better plan for the regional integration in economics although different arguments exist. This author would take side with the Peter's simulation result but also want to use the political economy approach to see if FTAAP is feasible because the integration is hard to get purely a reasonable explanation by considering trade and investment, particularly in Asia Pacific. Theoretically, the approach of international political economy could be more complex

⁽¹⁾ Charles E.Morrison and Eduardo Pedrosa edited: *An APEC Agenda? The Political Economy of a Free Trade of the Asia Pacific*, PECC, 2007, P7.

and evaluate the integration process through three essential dimensions of international political economy including political and security, economic cooperation and social-cultural or people to people exchange. Harmonizing TPP, RCEP and others can be realized through APEC connectivity, a part of this year's theme but needs to continue with steps to reach the goal in a long term. Connectivity is a key and systematic engineering to weave the whole region into a network. Therefore, only embodiment of those factors such social, cultural, people and political and even military can we find out appropriate path.

FTAAP in 2025 reveals a huge benefits and income gains for the APEC members through the way to reduce and eventually eliminate barriers to trade and investment at the borders, cross the borders, and behind the borders. Political willingness is a key to the objective not only for economic gains but with the aim of achieving peace and prosperity with a sense of community as well. The key is on the U.S., and China, who should take responsibility to link others to launch or resume and renew FTAAP.

Conclusion: Implications for APEC Policymakers

The past twenty-five years have seen a dramatic transformation in Asia Pacific, which had never been imagined at the time that APEC was proposed in the end of 1980s. Since its establishment, APEC and Asia Pacific have become a fast growing part of the global economy. Asia is rising to a level impacting Asia Pacific and the Indian Ocean region and the world history is writing from here. Within APEC, the number of RTAs/FTAs has grown to a historical record but the excessive FTAs cause a fragmenting phenomenon that may lead to inefficient production systems or networks and even disrupt value chains. Value chains and the code of value chains are relative to trade, transportation, service, investment, internet technology, all impelling regional integration.

In the information era, a fast-moving world, a long-term vision in the eyes of some policymakers tend to concede to short term opportunities and challenges for many reasons but one is sure that achieving a long-term vision is a cumulative, incremental process. Asia Pacific integration should not be an easy way to talk but durable strategy, which needs a longer-term framework for a changing Asia-Pacific. The trends identified above maybe roughly describe some fundamental contours along which APEC's environment to Bogor goal and integration will develop. APEC policymakers can make concerted effort and do more to overcome the fragmentation and eliminate confusion about the integration future in the region, "taking concrete steps toward realization of a Free Trade Area of the Asia-Pacific (FTAAP), which is a major instrument to further APEC's regional economic integration agenda".⁽⁰⁾

^① 2010 Leaders' Declaration: "THE YOKOHAMA VISION - BOGOR AND BEYOND", The 18th APEC ECONOMIC LEADERS' MEETING, Yokohama, Japan, 13-14 November 2010.

Table One: RTAs/FTAs in APEC

ASEAN - Australia - New Zealand	Goods & Services	FTA & EIA	8-Apr-10	GATT Art. XXIV & GATS Art. V	1-Jan-10	In Force
ASEAN - China	Goods & Services	FTA & EIA	21-Sep-2005(G) / 26-Jun-2008(S)	Enabling Clause & GATS Art. V	01-Jan-2005(G) / 01-Jul-2007(S)	In Force
ASEAN - India	Goods	FTA	19-Aug-10	Enabling Clause	1-Jan-10	In Force
ASEAN - Japan	Goods	FTA	23-Nov-09	GATT Art. XXIV	1-Dec-08	In Force
ASEAN - Korea, Republic of	Goods & Services	FTA & EIA			01-Jan-2010(G) / 01-May-2009(S)	In Force
ASEAN Free Trade Area (AFTA)	Goods	FTA	30-Oct-92	Enabling Clause	28-Jan-92	In Force
Asia Pacific Trade Agreement (APTA)	Goods	PSA	2-Nov-76	Enabling Clause	17-Jun-76	In Force
Asia Pacific Trade Agreement (APTA) - Accession of China	Goods	PSA	30-Apr-04	Enabling Clause	1-Jan-02	In Force
Australia - Chile	Goods & Services	FTA & EIA	3-Mar-09	GATT Art. XXIV & GATS Art. V	6-Mar-09	In Force
Australia - New Zealand (ANZCERTA)	Goods & Services	FTA & EIA	14-Apr-1983(G) / 22-Nov-1995(S)	GATT Art. XXIV & GATS Art. V	01-Jan-1983(G) / 01-Jan-1989(S)	In Force
Australia - Papua New Guinea (PATCRA)	Goods	FTA	20-Dec-76	GATT Art. XXIV	1-Feb-77	In Force
Brunei	Goods &	FTA	31-Jul-08	GATT Art.	31-Jul-08	In

Darussalam - Japan	Services	& EIA		XXIV & GATS Art. V		Force
Canada - Chile	Goods & Services	FTA & EIA	30-Jul-97	GATT Art. XXIV & GATS Art. V	5-Jul-97	In Force
Canada - Colombia	Goods & Services	FTA & EIA	7-Oct-11	GATT Art. XXIV & GATS Art. V	15-Aug-11	In Force
Canada - Costa Rica	Goods	FTA	13-Jan-03	GATT Art. XXIV	1-Nov-02	In Force
Canada - Israel	Goods	FTA	15-Jan-97	GATT Art. XXIV	1-Jan-97	In Force
Canada - Jordan	Goods	FTA	10-Apr-13	GATT Art. XXIV	1-Oct-12	In Force
Canada - Panama	Goods & Services	FTA & EIA	10-Apr-13	GATT Art. XXIV & GATS Art. V	1-Apr-13	In Force
Canada - Peru	Goods & Services	FTA & EIA	31-Jul-09	GATT Art. XXIV & GATS Art. V	1-Aug-09	In Force
Chile - China	Goods & Services	FTA & EIA	20-Jun-2007(G) / 18-Nov-2010(S)	GATT Art. XXIV & GATS Art. V	01-Oct-2006(G) / 01-Aug-2010(S)	In Force
Chile - Colombia	Goods & Services	FTA & EIA	14-Aug-09	GATT Art. XXIV & GATS Art. V	8-May-09	In Force
Chile - Costa Rica (Chile - Central America)	Goods & Services	FTA & EIA	16-Apr-02	GATT Art. XXIV & GATS Art. V	15-Feb-02	In Force
Chile - El Salvador (Chile - Central America)	Goods & Services	FTA & EIA	29-Jan-2004(G) / 05-Feb-2004(S)	GATT Art. XXIV & GATS Art. V	1-Jun-02	In Force
Chile - Guatemala	Goods & Services	FTA &	30-Mar-12	GATT Art. XXIV &	23-Mar-10	In Force

(Chile - Central America)		EIA		GATS Art. V		
Chile - Honduras (Chile - Central America)	Goods & Services	FTA & EIA	28-Nov-11	GATT Art. XXIV & GATS Art. V	19-Jul-08	In Force
Chile - India	Goods	PSA	13-Jan-09	Enabling Clause	17-Aug-07	In Force
Chile - Japan	Goods & Services	FTA & EIA	24-Aug-07	GATT Art. XXIV & GATS Art. V	3-Sep-07	In Force
Chile - Malaysia	Goods	FTA	12-Feb-13	GATT Art. XXIV	25-Feb-12	In Force
Chile - Mexico	Goods & Services	FTA & EIA	27-Feb-01	GATT Art. XXIV & GATS Art. V	1-Aug-99	In Force
Chile - Nicaragua (Chile - Central America)	Goods & Services	FTA & EIA	14-Jun-13	GATT Art. XXIV & GATS Art. V	19-Oct-12	In Force
China - Costa Rica	Goods & Services	FTA & EIA	27-Feb-12	GATT Art. XXIV & GATS Art. V	1-Aug-11	In Force
China - Hong Kong, China	Goods & Services	FTA & EIA	27-Dec-03	GATT Art. XXIV & GATS Art. V	29-Jun-03	In Force
China - Macao, China	Goods & Services	FTA & EIA	27-Dec-03	GATT Art. XXIV & GATS Art. V	17-Oct-03	In Force
China - New Zealand	Goods & Services	FTA & EIA	21-Apr-09	GATT Art. XXIV & GATS Art. V	1-Oct-08	In Force
China - Singapore	Goods & Services	FTA & EIA	2-Mar-09	GATT Art. XXIV & GATS Art.	1-Jan-09	In Force

				V		
Colombia - Mexico	Goods & Services	FTA & EIA	13-Sep-10	GATT Art. XXIV & GATS Art. V	1-Jan-95	In Force
Costa Rica - Peru	Goods & Services	FTA & EIA	5-Jun-13	GATT Art. XXIV & GATS Art. V	1-Jun-13	
Costa Rica - Singapore	Goods & Services	FTA & EIA	16-Sep-13	GATT Art. XXIV & GATS Art. V	1-Jul-13	
EFTA - Egypt	Goods	FTA	17-Jul-07	GATT Art. XXIV	1-Aug-07	
EFTA - Former Yugoslav Republic of Macedonia	Goods	FTA	11-Dec-00	GATT Art. XXIV	1-May-02	
EFTA - Hong Kong, China	Goods & Services	FTA & EIA	27-Sep-12	GATT Art. XXIV & GATS Art. V	1-Oct-12	
EFTA - Korea, Republic of	Goods & Services	FTA & EIA	23-Aug-06	GATT Art. XXIV & GATS Art. V	1-Sep-06	In Force
EFTA - Mexico	Goods & Services	FTA & EIA	25-Jul-01	GATT Art. XXIV & GATS Art. V	1-Jul-01	In Force
EFTA - Singapore	Goods & Services	FTA & EIA	14-Jan-03	GATT Art. XXIV & GATS Art. V	1-Jan-03	In Force
EU - Korea, Republic of	Goods & Services	FTA & EIA	7-Jul-11	GATT Art. XXIV & GATS Art. V	1-Jul-11	In Force
Guatemala - Chinese Taipei	Goods & Services	FTA & EIA	11-Jul-11	GATT Art. XXIV & GATS Art. V	1-Jul-06	In Force

Hong Kong, China - New Zealand	Goods & Services	FTA & EIA	3-Jan-11	GATT Art. XXIV & GATS Art. V	1-Jan-11	In Force
India - Bhutan	Goods	FTA	30-Jun-08	Enabling Clause	29-Jul-06	In Force
India - Japan	Goods & Services	FTA & EIA	14-Sep-11	GATT Art. XXIV & GATS Art. V	1-Aug-11	In Force
India - Malaysia	Goods & Services	FTA & EIA	6-Sep-11	Enabling Clause & GATS Art. V	1-Jul-11	In Force
India - Singapore	Goods & Services	FTA & EIA	3-May-07	GATT Art. XXIV & GATS Art. V	1-Aug-05	In Force
Israel - Mexico	Goods	FTA	22-Feb-01	GATT Art. XXIV	1-Jul-00	In Force
Japan - Indonesia	Goods & Services	FTA & EIA	27-Jun-08	GATT Art. XXIV & GATS Art. V	1-Jul-08	In Force
Japan - Malaysia	Goods & Services	FTA & EIA	12-Jul-06	GATT Art. XXIV & GATS Art. V	13-Jul-06	In Force
Japan - Mexico	Goods & Services	FTA & EIA	31-Mar-05	GATT Art. XXIV & GATS Art. V	1-Apr-05	In Force
Japan - Peru	Goods & Services	FTA & EIA	24-Feb-12	GATT Art. XXIV & GATS Art. V	1-Mar-12	In Force
Japan - Philippines	Goods & Services	FTA & EIA	11-Dec-08	GATT Art. XXIV & GATS Art. V	11-Dec-08	In Force
Japan - Singapore	Goods & Services	FTA & EIA	8-Nov-02	GATT Art. XXIV & GATS Art. V	30-Nov-02	In Force

Japan - Switzerland	Goods & Services	FTA & EIA	1-Sep-09	GATT Art. XXIV & GATS Art. V	1-Sep-09	In Force
Japan - Thailand	Goods & Services	FTA & EIA	25-Oct-07	GATT Art. XXIV & GATS Art. V	1-Nov-07	In Force
Japan - Viet Nam	Goods & Services	FTA & EIA	1-Oct-09	GATT Art. XXIV & GATS Art. V	1-Oct-09	In Force
Jordan - Singapore	Goods & Services	FTA & EIA	7-Jul-06	GATT Art. XXIV & GATS Art. V	22-Aug-05	In Force
Korea, Republic of - Chile	Goods & Services	FTA & EIA	8-Apr-04	GATT Art. XXIV & GATS Art. V	1-Apr-04	In Force
Korea, Republic of - India	Goods & Services	FTA & EIA			1-Jan-10	In Force
Korea, Republic of - Singapore	Goods & Services	FTA & EIA	21-Feb-06	GATT Art. XXIV & GATS Art. V	2-Mar-06	In Force
Korea, Republic of - Turkey	Goods	FTA	30-Apr-13	GATT Art. XXIV	1-May-13	In Force
Korea, Republic of - US	Goods & Services	FTA & EIA	15-Mar-12	GATT Art. XXIV & GATS Art. V	15-Mar-12	In Force
Kyrgyz Republic - Russian Federation	Goods	FTA	15-Jun-99	GATT Art. XXIV	24-Apr-93	In Force
Lao People's Democratic Republic - Thailand	Goods	PSA	26-Nov-91	Enabling Clause	20-Jun-91	In Force
Malaysia - Australia	Goods & Services	FTA &	13-May-13	GATT Art. XXIV &	1-Jan-13	In Force

		EIA		GATS Art. V		
Melanesian Spearhead Group (MSG)	Goods	PSA	3-Aug-99	Enabling Clause	1-Jan-94	In Force
MERCOSUR - India	Goods	PSA	23-Feb-10	Enabling Clause	1-Jun-09	In Force
Mexico - Central America	Goods & Services	FTA & EIA	20-Jan-14	GATT Art. XXIV & GATS Art. V	1-Sep-12	In Force
Mexico - Uruguay	Goods & Services	FTA & EIA	28-Jun-13	GATT Art. XXIV & GATS Art. V	15-Jul-04	In Force
New Zealand - Chinese Taipei	Goods & Services	FTA & EIA	25-Nov-13	GATT Art. XXIV & GATS Art. V	1-Dec-13	In Force
New Zealand - Malaysia	Goods & Services	FTA & EIA	7-Feb-12	GATT Art. XXIV & GATS Art. V	1-Aug-10	In Force
New Zealand - Singapore	Goods & Services	FTA & EIA	4-Sep-01	GATT Art. XXIV & GATS Art. V	1-Jan-01	In Force
Nicaragua - Chinese Taipei	Goods & Services	FTA & EIA	9-Jul-09	GATT Art. XXIV & GATS Art. V	1-Jan-08	In Force
North American Free Trade Agreement (NAFTA)	Goods & Services	FTA & EIA	29-Jan-1993(G) / 01-Mar-1995(S)	GATT Art. XXIV & GATS Art. V	1-Jan-94	In Force
Pakistan - China	Goods & Services	FTA & EIA	18-Jan-2008(G) / 20-May-2010(S)	GATT Art. XXIV & GATS Art. V	01-Jul-2007(G) / 10-Oct-2009(S)	In Force
Pakistan - Malaysia	Goods & Services	FTA & EIA	19-Feb-08	Enabling Clause & GATS Art. V	1-Jan-08	In Force

Panama - Chile	Goods & Services	FTA & EIA	17-Apr-08	GATT Art. XXIV & GATS Art. V	7-Mar-08	In Force
Panama - Chinese Taipei	Goods & Services	FTA & EIA	28-Jul-09	GATT Art. XXIV & GATS Art. V	1-Jan-04	In Force
Panama - Peru	Goods & Services	FTA & EIA	23-Apr-12	GATT Art. XXIV & GATS Art. V	1-May-12	In Force
Panama - Singapore	Goods & Services	FTA & EIA	4-Apr-07	GATT Art. XXIV & GATS Art. V	24-Jul-06	In Force
Peru - Chile	Goods & Services	FTA & EIA	29-Nov-11	GATT Art. XXIV & GATS Art. V	1-Mar-09	In Force
Peru - China	Goods & Services	FTA & EIA	3-Mar-10	GATT Art. XXIV & GATS Art. V	1-Mar-10	In Force
Peru - Korea, Republic of	Goods & Services	FTA & EIA	9-Aug-11	GATT Art. XXIV & GATS Art. V	1-Aug-11	In Force
Peru - Mexico	Goods & Services	FTA & EIA	22-Feb-12	GATT Art. XXIV & GATS Art. V	1-Feb-12	In Force
Peru - Singapore	Goods & Services	FTA & EIA	30-Jul-09	GATT Art. XXIV & GATS Art. V	1-Aug-09	In Force
Russian Federation - Azerbaijan	Goods	FTA	13-Sep-12	GATT Art. XXIV	17-Feb-93	In Force
Russian Federation - Belarus	Goods	FTA	13-Sep-12	GATT Art. XXIV	20-Apr-93	In Force
Russian Federation -	Goods	CU	21-Dec-12	GATT Art. XXIV	3-Dec-97	In Force

Belarus -	I	1		I		
Kazakhstan						
Russian						
Federation -	Goods	FTA	13-Sep-12	GATT Art.	7-Jun-93	In
Kazakhstan	Goods	ГIА	15-Sep-12	XXIV	7-Juli-93	Force
Russian						
Federation -				GATT Art.		In
	Goods	FTA	13-Sep-12		30-Mar-93	
Republic of				XXIV		Force
Moldova						
Russian		FT 4		GATT Art.	2.1.06	In
Federation -	Goods	FTA	21-Dec-12	XXIV	3-Jun-06	Force
Serbia						
Russian				GATT Art.		In
Federation -	Goods	FTA	13-Sep-12	XXIV	8-Apr-93	Force
Tajikistan						
Russian				GATT Art.		In
Federation -	Goods	FTA	18-Jan-13	XXIV	6-Apr-93	Force
Turkmenistan						Toree
Russian				GATT Art.		In
Federation -	Goods	FTA	18-Jan-13	XXIV	25-Mar-93	Force
Uzbekistan				ΛΛΙΥ		Force
		ETA		GATT Art.		
Singapore -	Goods &	FTA	25.6 02	XXIV &	29.1.1.02	In
Australia	Services	&	25-Sep-03	GATS Art.	28-Jul-03	Force
		EIA		v		
				GATT Art.		
Thailand -	Goods &	FTA		XXIV &		In
Australia	Services	&	27-Dec-04	GATS Art.	1-Jan-05	Force
		EIA		v		
				GATT Art.		
Thailand -	Goods &	FTA		XXIV &		In
New Zealand	Services	&	1-Dec-05	GATS Art.	1-Jul-05	Force
		EIA		V		
Trans-Pacific				GATT Art.		
Strategic	Goods &	FTA		XXIV &		In
Economic	Services	&	18-May-07	GATS Art.	28-May-06	Force
Partnership	501 11008	EIA		V		Force
raimersnip				V GATT Art.		In
	Goods	FTA	6-Jun-13		20-Sep-12	
				XXIV		Force
Turkey - Chile	Goods	FTA	25-Feb-11	GATT Art.	1-Mar-11	In
				XXIV		Force
APEC	Goods &	FTA	22-Dec-04	GATT Art.	1-Jan-05	In

regional+A1	Services	& EIA		XXIV & GATS Art. V		Force
US - Bahrain	Goods & Services	FTA & EIA	8-Sep-06	GATT Art. XXIV & GATS Art. V	1-Aug-06	In Force
US - Chile	Goods & Services	FTA & EIA	16-Dec-03	GATT Art. XXIV & GATS Art. V	1-Jan-04	In Force
US - Colombia	Goods & Services	FTA & EIA	8-May-12	GATT Art. XXIV & GATS Art. V	15-May-12	In Force
US - Israel	Goods	FTA	13-Sep-85	GATT Art. XXIV	19-Aug-85	In Force
US - Jordan	Goods & Services	FTA & EIA	15-Jan-02	GATT Art. XXIV & GATS Art. V	17-Dec-01	In Force
US - Morocco	Goods & Services	FTA & EIA	30-Dec-05	GATT Art. XXIV & GATS Art. V	1-Jan-06	In Force
US - Oman	Goods & Services	FTA & EIA	30-Jan-09	GATT Art. XXIV & GATS Art. V	1-Jan-09	In Force
US - Panama	Goods & Services	FTA & EIA	29-Oct-12	GATT Art. XXIV & GATS Art. V	31-Oct-12	In Force
US - Peru	Goods & Services	FTA & EIA	3-Feb-09	GATT Art. XXIV & GATS Art. V	1-Feb-09	In Force
US - Singapore	Goods & Services	FTA & EIA	17-Dec-03	GATT Art. XXIV & GATS Art. V	1-Jan-04	In Force

Source: Author's compilation in term of WTO RTA data available at <u>http://www.wto.org/english/tratop_e/region_e/region_e.htm</u>

(USD billion)					
	2025 (GDP)	TPP 11	TPP16	RCEP	FTAAP
United States	20,273	24	108	0	267
China	17,655	-21	-84	297	678
Japan	5,338	-1	129	96	228
Korea	2,117	0	50	82	129
India	5,233	-1	-7	91	-30
ASEAN	3,635	50	218	76	210
others	48,972	24	36	3	440
World	103,223	74	451	644	1,922

Table	Two:	Country	Income	Gains,	2025
(LICD	1.:11: -)			

Source: Peter A. Petri1, Michael G. Plummer, and Fan Zhai: The Trans-Pacific Partnership and Asia-Pacific Integration: a Quantitative Assessment, East-West Center, Johns Hopkins University, Peterson Institute December 2012, available at www.asiapacifictrade.org.



APEC Study Centre Consortium (ASCC) Conference 2014 QINGDAO, CHINA 11-12 MAY 2014



SESSION II

Feasibility and Pathways towards FTAAP



Economic Cooperation

2014/ASCCC/2.1

THE FTAAP AND CONTESTED ISSUES IN

REGIONAL ECONOMIC INTEGRATION

Robert Scollay

New Zealand



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

The FTAAP and Contested Issues in Regional Economic Integration

Robert Scollay New Zealand APEC Study Centre presented at APEC Study Center Consortium Conference 2014 11-12 May, Qingdao, China
Outline

Three contested issues:

• Investor State Dispute Settlement

- Intellectual Property
- State-Owned Enterprises

How might they be tackled in the FTAAP?

Investor-State Dispute Settlement ISDS

- A key "flashpoint" for public opposition to trade agreements such as TPP and FTAAP
- Typically citing high profile cases with strong emotive content e.g. challenges to
 - Plain packaging for cigarettes
 - Environmental Policies
- Australia's Productivity Commission advised Australian Government against including ISDS in FTAs, citing numerous concerns
 - Little evidence that ISDS provisions increase FDI
 - Potential for "regulatory chill"
 - Issues can be addressed in domestic courts in a well-functioning legal system
 - ISDS advantages foreign over local investors → inefficient investment
 - Investors can address relevant risks in other ways e.g. political risk insurance, investor-state contracting

ISDS – Key Features

- ISDS provisions are found in BITS and relevant chapters of FTAs
- Provide for using international arbitration to resolve investorstate disputes over governments' alleged breached of treaty provisions on investment

(distinct from international arbitration of commercial disputes

- Most commonly under ICSID, also tribunals set up under rules of UNCITRAL, some others
- Governed by
 - Relevant treaty provisions (in BITs, FTAs etc)
 - **Rules of ICSID, UNCITRAL or other independent bodies**
 - Established principals
- Average costs US\$8 million per case, but can exceed US\$30 million

ISDS: Some Facts

- 93% of BITS and many FTAs contains ISDS provisions (UNCTAD)
- 514 claims since 1993
- 58 new claims 2012
 - Claimants: 37 developed economies
 - Respondents: 38 developing economies 15 developed economies
- investor claims accepted (at least partially) in 70% of decisions

APEC Members in ISDS Claims (2012)

Respondent	Claimant
USA	Canada
Canada	USA
Indonesia	Australia
Indonesia	UK
Korea	Luxembourg
Mexico	Spain
Peru	Spain

Features of ISDS Provisions and Their Interpretation

- Small but important variations often found in ISDS provisions
- Provisions often loosely drafted and imprecise about application of rules to specific situations
- Deference to ICSID or UNCITRAL rules is common
- Result is wide areas of discretion left to tribunals
- Tribunals can and sometimes do interpret similar provisions differently or reach different conclusions on the same issue
 - Consistency issues compound concerns over performance of tribunals
- Incentives for "forum shopping"

Sources of Controversial Outcomes in ISDS Cases

Common provisions central to outcomes generating controversy over ISDS include:

- Fair and equitable treatment (FET)
- Definition of indirect expropriation
- Relation of the above to provisions on right to regulate in the public interest
- "Umbrella Clauses" bringing "any matters relevant to state obligations to the investor" within scope of actions over treaty violations
- MFN clauses
- Requirements for prior recourse to domestic courts

Areas for Improvement in ISDS

- Greater care in drafting provisions in order to exclude unsatisfactory or unacceptable outcomes and increase predictability
- Address areas of concern over ISDS administration
 - Costs
 - Appointment and performance of arbitrators
 - Remedies
 - Enforcement
 - Third party funding

• Suggested implications for approach to ISDS in FTAAP

• Identify causes of major concerns over ISDS and develop approaches and provisions to address them

Intellectual Property

- The most controversial and complex issue in the TPP negotiations
- Wide-ranging agenda with many controversial issues
 - extension of patents, copyrights
 - copyright limitations and exemptions (fair use etc)
 - drug patents and access to test data
 - internet retransmissions of TV signals
 - geographic indications
 - trademarks
- Role of benchmarks: TRIPs, WIPO Conventions, "May 10th Agreement", KORUS FTA
 - divided views on updating to incorporate "digital economy" issues
- Background of failure of ACTA and domestic contestation in US (SOPA)
 - issues remain contested both internationally and domestically

Intellectual Property: Paradigm Issues

• Potential costs and benefits are very large but analytical support is weak

- basic analytical foundation is well understood (trade-off between monopoly costs and innovation/creativity)
- applications to specific cases sometimes involve plausible assertions weakly supported by detailed analysis and empirical evidence on incidence of costs and benefits

(contrast to extensive analytical and empirical support for DDA agriculture and NAMA negotiations)

Need to a robust paradigm recognising

- Welfare maximisation as the objective
- Crucial difference between trade liberalisation and intellectual property protection
 - Trade liberalisation: more liberalisation generally improves welfare
 - IP: welfare is maximised by optimising level of IPR protection
 - Too little reduces welfare → insufficient innovation
 - Too much reduces welfare → excessive capture of monopoly rents

 \rightarrow limits on access to ideas, information

Need to develop

- Paradigm based on optimisation rather than maximisation of IP protection
- Empirical resources to allow quantification of effects of competing proposals

Intellectual Property: Copyright

- Copyright in the internet age: many controversial issues with concerns over cost, impact on dissemination of knowledge, education and research collaboration, business efficiency etc e.g.
 - internet re-transmissions
 - liability of ISPs
 - "fair use" exemptions
 - criminalisation of breaches
- Some of these issues also responsible for failure of Anti-Counterfeiting Trade Agreement (ACTA) and domestic Stop Online Piracy Act (SOPA) in the US (i.e. controversial domestically as well as internationally)
 - issues are arguably fundamental to development of national and global society
 - civil society a major stakeholder

Intellectual Property: Patents

• conflicting positions on extending patent protection

- viewed by opponents as large cost imposition on IP users with dubious offsetting benefit in terms of increased innovation, knowledge and technology, foreign investment
- elusive optimum balance between benefits and costs
 - optimum balance differs between IP-importing and IP-exporting economies
 - Lack of analytical or empirical basis for quantification
- excessive patent protection can be very costly to IP-importing economies
 - risk of creating a "win-lose" outcome instead of traditional "win-win" rationale for trade agreements
 - potentially offsetting or even nullifying gains from other aspects of the agreement

Public Health-Related Intellectual Property Issues

- "Access to Medicines"
 - importing economies demand for affordable medicines versus pharmaceutical industry pressure for extended protection
 - very large cost/profit implications
 - issues contested domestically as well as internationally
 - resistance to provisions aimed at delaying introduction of generic medicines as long as possible
 - data exclusivity, patent linkage, patent extensions
 - no consensus on conceptual framework
- Tobacco related health measures e.g. plain packaging
 - trademark infringement v. human health
 - Controversy over "safe harbour" provision for such measures

State-Owned Enterprises

Highly contentious

- Agreement on a workable approach a prerequisite for FTAAP
- **The Problem**
- High priority issue for business
- Impossibility of gaining acceptance for
 - "one size fits all" approach
 - approach based on presumption of eventual universal privatisation
 - approach perceived as targeted at the practices of specific economies
- Need consensus around an analytical approach focused on unfair competitive advantage

Source of Leverage

- SOE Reform a priority issue in several APEC economies
 - look for synergies with these reform efforts

State-Owned₁₂Enterprises: Alternative Approaches

- behaviour-based approach unlikely to command consensus
- outcomes-focused approach based on competition principles as alternative to US behavior-based approach
- pragmatic approach: develop provisions that "fill the gaps" in existing international trade rules
 - "regulatory favouritism" should be addressed by national treatment
 - gap: national treatment does not apply in WTO to non-scheduled services or services lacking national treatment commitments
 - government financial support should be addressed by subsidy rules
 - gap: subsidy rules do not apply to services in WTO
 - case for supporting subsidy rules by transparency provisions in SOE case
 - GPA has the only WTO provisions addressing discrimination in government procurement
 - gap: many TPP participants are not members of GPA
 - case for considering how GP rules should apply to SOEs

Conclusion

- Important and contentious issues for a future FTAAP negotiation suffer from lack of
 - Consensus on analytical framework
 - Empirical support
- Contrast role of analytical frameworks and empirical support in conventional trade negotiations
- Role for the research community?

Thank you!

谢谢 ありがとう 감사합니다

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Maraming salamat

Tenkyu tru

спасибо



Economic Cooperation

2014/ASCCC/2.2

INDENTIFYING THE PRIORITY AREAS OF

REALIZING AN FTAAP

Sheng Bin

China



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014 APEC STUDY CENTER CONSORTIUM (ASCC) CONFERENCE 2014 11-12 May 2014, Qingdao, China

Indentifying the Priority Areas of Realizing an FTAAP

Sheng Bin

China APEC Academy The Institute of International Economics, Nankai University

Why to launch an FTAAP?

- Injecting a fresh impetus into the growth of Asia-Pacific economy
- Promoting regional economic integration in the framework of APEC
- Setting a new target in the post Bogor Goals era
- Providing a platform of fostering regional value chain development and cooperation
- Converging mega FTAs in the East Asian and Asia-Pacific tracks
- Deepening comprehensive trade and investment liberalization with higher quality and standard



Roadmap to realization of an FTAAP



Priority areas of an FTAAP agenda

- Accelerating trade liberalization "at the border"
- Facilitating regional connectivity "across the border"
- Enhancing business environment "behind the border"

Accelerating trade liberalization "at the border"

Priority areas 1: lowering average tariff and tariff peaks

Table 1: Product Tariff Rates of Major APEC Economies (%, 2012)

	Simple Average		Coefficient of Variation			Simple	Average	Coefficient of Variation	
	Bound	MFN Applied	Bound	MFN Applied		Bound	MFN Applied	Bound	MFN Applied
Brunei	25.4	2.5	142	217	Korea	16.6	13.3	320	402
Indonesia	37.1	7.0	35	147	United States	3.3	3.2	149	145
Malaysia	23.0	6.5	330	296	Australia	10.0	2.7	111	102
Philippines	25.7	6.2	49	110	New Zealand	10.2	2.0	115	130
Singapore	10.2	0.2	472	5864	Canada	6.9	4.3	338	473
Thailand	27.8	9.8	78	131	Chile	25.1	6.0	9	7
Vietnam	11.4	9.5	116	121	Mexico	36.1	7.8	45	237
China	10.0	9.6	76	80	Peru	29.3	3.7	24	126
Japan	5.2	4.6	432	395	India	48.6	13.7	82	124

Source: WTO, World Tariff Profiles, 2013.

Priority areas 2: reducing non-tariff barriers, SPS and quantity control in particular

> Figure 1: Frequency Ratios and Coverage Ratios of NTBs by selected regions (2012)



Source: UNCTAD, Non-tariff Measures to Trade: Economic and Policy Issues for Developing Countries, 2012.

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Figure 2: Frequency Ratios and Coverage Ratios of NTBs by selected APEC Economies (2012)



Source: UNCTAD, Non-tariff Measures to Trade: Economic and Policy Issues for Developing Countries, 2012.

Priority areas 3: reducing service¹³² professional and telecommunication sectors

	ASEAN	China	Japan	Korea	U. S.	TPP	RCEP	FTAAP
Financial	34.81	31.46	0.00	0.00	25.00	24.35	27.82	27.52
Banking	37.50	25.00	0.00	0.00	25.00	25.00	29.17	28.13
Insurance	30.56	41.67	0.00	0.00	25.00	23.33	25.69	26.56
Telecommunications	37.50	50.00	25.00	50.00	0.00	27.50	38.54	34.38
Retail	33.33	25.00	25.00	0.00	0.00	12.50	27.08	17.19
Transportation	51.55	22.22	22.92	20.83	16.67	29.51	38.45	32.42
Professional	60.83	70.00	50.00	60.00	50.00	29.00	55.83	41.88
Accounting and Auditing	62.50	50.00	50.00	25.00	50.00	25.00	50.00	35.94
Legal	59.72	83.33	50.00	83.33	50.00	31.67	59.72	45.83

Table 2: Service Trade Restrictions of Major APEC Economies (2008)

Note: "0" as completely open and "100" as completely closed. The statistics of Singapore, Brunei, Papua New Guinea, Hong Kong, China and Taipei, China are not available. The survey of China was conducted in 2011.

Source: World Bank, Services Trade Restrictions Database.

Facilitating regional connectivity "across the border"

Priority areas 1: promoting trade facilitation, particularly legal framework, intellectual property protection and customs procedures

Table 3: Trade Facilitation Indicators of all APEC Economies (2013)

	Mean	Std. Dev.	Min.	Min. Economy	Max	Max. Economy
Property Rights	4.860	0.946	3	Russia	6.3	Singapore
Intellectual property protection	4.425	1.113	2.8	Peru	6.1	Singapore
Efficiency of legal framework in settling disputes	4.420	0.924	3	Russia	6.1	Singapore
Transparency of government policymaking	4.660	0.866	3.4	Korea	6.1	Singapore; Canada
Strength of investor protection	6.705	1.875	3	Vietnam	9.7	New Zealand
Quality of port infrastructure	4.920	0.933	3.4	Philippines	6.8	Singapore
Quality of air transport infrastructure	5.205	0.914	3.5	Philippines	6.8	Singapore
Prevalence of foreign ownership	5.020	0.701	3.4	Russia	6.1	Singapore; Hong Kong, China
Business impact of rules on FDI	4.940	0.609	3.6	Russia	6.3	Singapore
Burden of customs procedures	4.625	0.869	3.2	Philippines	6.2	Singapore

Source: Author's own calculations based on World Economic Forum (WEF), The Global Competitiveness Report, 2013-2014.

	ASEAN	China	Japan	Korea	U.S.	TPP	RCEP	FTAAP
Property Rights	4.21	4.6	5.8	4.5	5.2	5.06	4.53	4.86
Intellectual property protection	3.85	3.9	5.7	4	5.2	4.68	4.19	4.43
Efficiency of legal framework in settling disputes	3.83	4.2	4.7	3.5	4.7	4.68	4.06	4.42
Transparency of government policymaking	4.14	4.4	5.2	3.4	4.4	4.86	4.31	4.66
Strength of investor protection	5.07	5	7	6	8.3	7.09	5.63	6.71
Quality of port infrastructure	4.16	4.5	5.2	5.5	5.7	5.07	4.47	4.92
Quality of air transport infrastructure	4.55	4.5	5.4	5.8	5.9	5.36	4.85	5.21
Prevalence of foreign ownership	4.57	4.4	5	4.2	5	5.25	4.70	5.02
Business impact of rules on FDI	4.86	4.8	4.8	4.4	4.7	5.03	4.79	4.94
Burden of customs procedures	4.15	4.2	5	4.4	4.8	4.84	4.38	4.63

Table 4: Trade Facilitation Indicators of selected APEC Economies (2013)

Source: World Economic Forum (WEF), The Global Competitiveness Report, 2013-2014.

Priority areas 2: reducing tariff rates of intermediate goods to promote APEC economies more involved in global and regional value chain

> Figure 3: Tariffs of Intermediate Goods and GVC Participation Index of Major APEC Economies (2013)



Source: World Bank, WITS Database; OECD, Global Value Chains Indicators, 2013.

Enhancing business

environment "behind the border"

Priority areas 1: shifting from traditional trade issues of market access to next (or new) generation of trade and investment issues focusing on regulatory coherence

Table 5: Classification of WTO+ and WTO–X areas: HMS Method

	Areas Covered
WTO+ (14)	FTA Ind., FTA Agr., Customs administration, Export taxes, SPS,TBT, STE, Antidumping (AD), Countervailing (CVM), State aid, Public procurement, TRIMS, GATS, TRIPS
WTO–X (38)	Competition policy, Movement of capital, Investment, Environmental laws, IPR, Labor market regulations, Consumer Protection, Data protection, Agriculture, Audio Visual, Mining, Anti–corruption, Civil protection, Cultural cooperation, Approximation of legislation, Innovation policies, Economic policy dialogue, Education and training, Energy, Financial Assistance, Health, Human rights, Illegal immigration, Illicit drugs, Money laundering, Nuclear safety, Political dialogue, Industrial cooperation, Information society, Public Administration, Regional cooperation, Research and technology, Small and medium enterprise, Social matters, Statistics, Taxation, Terrorism, Visa and asylum

Source: WTO, World Trade Report 2011.

Priority areas 2: starting from the new topics and provisions commonly covered or legally enforced in sub-FTAs, such as most WTO+rovisions, IPRs, competition, investment, E-commerce, etc.

 Table 5: Comparison of FTAs Provisions Signed by Major APEC Economies

		Asia-P	acific	Ch	ina	U.	S.	Jap	oan	Ko	rea	ASE	EAN
		AC	LE	AC	LE	AC	LE	AC	LE	AC	LE	AC	LE
	FTA Ind.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	FTA Agr.	98%	98%	100%	100%	83%	100%	100%	100%	100%	100%	100%	100%
	Customs	93%	98%	80%	75%	100%	100%	100%	100%	100%	80%	80%	75%
	Export taxes	27%	75%	0%	_	67%	75%	27%	100%	60%	67%	20%	0%
	SPS	82%	100%	100%	100%	100%	100%	55%	100%	100%	100%	100%	100%
	TBT	78%	100%	80%	100%	100%	100%	73%	100%	100%	100%	60%	100%
WTO	STE	31%	50%	20%	100%	50%	100%	18%	0%	40%	50%	0%	_
+	AD	91%	93%	100%	100%	100%	100%	64%	86%	100%	80%	100%	100%
	CVM	91%	95%	100%	100%	100%	100%	64%	100%	100%	80%	100%	100%
	State aid	33%	67%	0%	_	50%	100%	18%	0%	40%	100%	0%	_
	Public proc.	71%	72%	0%	—	100%	100%	82%	44%	80%	100%	20%	0%
	TRIMS	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%
	GATS	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	100%
	TRIPS	84%	95%	80%	100%	100%	100%	100%	82%	100%	100%	60%	100%
	Total	76%	93%	69%	98%	89%	99%	71%	89%	87%	92%	63%	93%

AC: Area Covered; LE: Legally Enforceable

		Asia-	Pacific	Ch	ina	U.	S.	Jap	oan	Ko	orea	ASI	EAN
		AC	LE	AC	LE	AC	LE	AC	LE	AC	LE	AC	LE
	Competition	82%	70%	20%	100%	100%	83%	91%	40%	100%	80%	60%	0%
	Capital mov.	42%	32%	20%	0%	17%	100%	73%	25%	80%	25%	20%	0%
	Investment	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%
	Environment	58%	35%	20%	0%	100%	83%	82%	0%	100%	40%	40%	0%
	IPRs	78%	89%	60%	100%	100%	100%	91%	80%	100%	60%	60%	67%
	Labor market	36%	63%	0%	_	100%	83%	36%	0%	40%	100%	0%	_
	E-commerce	38%	65%	0%	_	83%	80%	9%	0%	60%	67%	20%	100%
	Energy	40%	17%	20%	0%	33%	100%	82%	0%	80%	25%	40%	0%
	Regulations	76%	76%	0%	—	100%	83%	91%	50%	100%	100%	60%	67%
WTO	Financial ass.	89%	80%	100%	80%	100%	100%	91%	80%	100%	80%	60%	67%
- X	Education	58%	27%	80%	0%	17%	100%	73%	50%	80%	0%	80%	25%
Λ	Nuclear	27%	0%	0%	_	33%	0%	55%	0%	60%	0%	40%	0%
	Health	44%	20%	0%	_	33%	0%	73%	38%	80%	0%	0%	_
	Mining	31%	7%	0%	_	17%	0%	55%	0%	40%	0%	20%	0%
	Audio Visual	29%	23%	0%	_	33%	50%	45%	20%	40%	0%	0%	_
	Information	64%	59%	60%	0%	67%	50%	82%	33%	80%	100%	20%	0%
	R&D	60%	22%	40%	0%	50%	0%	91%	40%	100%	0%	20%	0%
	SME	44%	10%	60%	0%	33%	0%	45%	0%	60%	33%	80%	25%
	Social matters	38%	0%	0%	_	33%	0%	64%	0%	60%	0%	20%	0%
	Visa	36%	31%	20%	100%	0%	_	64%	14%	40%	50%	20%	100%
	Consumer pro.	29%	38%	20%	0%	50%	67%	0%	_	80%	25%	20%	0%
	Total	32%	48%	21%	38%	37%	64%	37%	35%	47%	45%	23%	34%

Table 5 (continued): Comparison of FTAs Parovisions Signed by Major APEC Economies

Note: "-" as not applicable. This table doesn't show the provisions of which the coverage rate is less than 20%, including: legislation, industrial cooperation, fiscal policies, anti-corruption, political dialogue, human rights, taxation, innovation policies, illicit drugs, money laundering, public administration, regional cooperation, data protection, statistics and illegal immigration.

Source: Author's calculation based on WTO RTAs/FTAs database

> Priority areas 3: converging with mega-regionals in new trade and investment issues

Table 6: Comparisons amo	ng Mega Regional	Integration Initiatives
		0

Areas	TPP	TTIP	RCEP	WTO/Doha Round
Agriculture	v	V	V	V
Non-agriculture Market Access (NAMA)	v	V	V	V
Rules of Origin	v	V	V	V
WTO Rules as AD, CVM and Subsidies	v	V	V	V
SDT				V
SPS	v	V	V	V
TBT	v	V	V	\checkmark
Services	v	V	V	V
Investment	v	V	V	V
Customs Administration	v	V	V	
TRIPs	v	V	V	V
IPR beyond TRIPs	v	V		V
Dispute Settlement	v	V	v	V
STEs	v	V		
Trade Facilitation	v	V	v	V
Competition	v	V	v	V
Government Procurement	v	V		V
Environment	v	V		V
Labor Market	v	V		
E-commerce	v	V		V
Transparency	v	V		
Regulatory Coherence	v	V		
Technical Cooperation and Capacity Building	V		V	V
Financial Services	V			
Culture	V			
Telecoms	V	V		
SMEs	V	V		
Anti-Corruption	V	V		
Small Economies				V
Trade, Debt and Finance				V
Trade and Transfer of Technology				V
LDCs				V
Energy and Raw Materials.		V		
Regional Cooperation			v	
RTAs Rules Coherence				V

Thank you!



Economic Cooperation

2014/ASCCC/2.3

FTAAP: A DREAM OR REALITY?

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Indonesia



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014
FTAAP: a Dream or Reality?



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HIGHLIGHTS: APEC's GDP

- The APEC economies are very diverse with respect to the size of GDPs and level of economic development.
- In 2012, with USD 16,224 Billion the GDP of the USA is the largest one among other economies, followed by PRC and Japan, recorded at USD 8,227Billion and USD 5,959 Billion respectively.
- On the contrary, Papua New guinea's GDP was recorded at USD 15 Billion in 2012, the lowest among other economies.
- Besides, the level of economic growth also varied considerably among APEC economies.

GDP Current Prices

(US\$ Billion)

Economy	2008	2009	2010	2011	2012	2013*
Australia	1,034	976	1,245	1,492	1,532	1,488
Brunei Darussalam	14	11	12	16	17	17
Canada	1,543	1,369	1,616	1,781	1,821	1,825
Chile	180	172	217	251	269	282
China	4,520	4,991	5,930	7,322	8,227	8,939
Hong Kong, China	219	214	229	249	263	280
Indonesia	511	539	710	846	878	867
Japan	4,849	5,035	5,495	5,897	5,959	5,007
Korea, Rep.	931	834	1,015	1,116	1,129	1,198
Malaysia	231	202	247	288	305	312
Mexico	1,094	883	1,034	1,158	1,178	1,327
New Zealand	133	119	142	162	167	181
Papua New Guinea	8	8	10	13	15	16
Peru	127	127	154	179	203	210
The Philippines	174	169	200	225	250	272
Russian Federation	1,661	1,223	1,525	1,899	2,014	2,118
Singapore	191	189	232	266	274	287
Chinese Taipei	400	378	428	464	474	485
Thailand	273	264	319	346	365	401
United States	14,292	13,974	14,499	15,076	16,244	16,724
Vietnam	90	93	104	123	155	170

*Forecast IMF/EIU Source: IMF World Economic Outlook Database October 2013

HIGHLIGHTS: APEC's GDP

- APEC economies in Latin America have seen a rapid slowing in growth. The Mexico's expansion rate of 1.1% registered in 2013 is a marked slowdown from the 3.8% growth in 2012. In Chile, economic growth fell from 5.6% in 2012 to 4.1% in 2013. (APEC, 2014).
- The same trend was observed in some APEC emerging and developing economies in Southeast Asia, with the Philippines being the notable exception.
- The Philippines' economy continued to perform strongly in 2012 with GDP growing by 6.6%. The economy expanded by 7.2% in 2013, notwithstanding the adverse effects fron Typhoon Haiyan in November that partly reined in the expansion of capital formation and consumer spending (APEC, 2014).

GDP Growth (%)

Economy	2008	2009	2010	2011	2012	2013
Australia	2.4	1.5	2.6	2.4	3.4	2.4
Brunei Darussalam	-1.9	-1.8	2.6	2.2	2.1	1.4
Canada	1.1	-2.8	3.2	2.5	1.7	2.0
Chile	3.1	-0.9	5.8	5.9	5.6	4.1
China	9.6	9.2	10.4	9.3	7.8	7.7
Hong Kong, China	2.1	-2.5	6.8	4.9	1.5	2.9
Indonesia	6	4.6	5.2	6.5	6.2	5.7
Japan	-1	-5.5	4.7	-0.6	1.9	1.5
Korea, Rep.	2.3	0.3	6.3	3.6	2	3.0
Malaysia	4.8	-1.5	7.2	5.1	5.6	4.7
Mexico	1.2	-6	5.3	3.9	3.8	1.1
New Zealand	-0.8	-1.6	1.8	1.4	2.9	2.5
Papua New Guinea	6.6	6.1	7.6	11.1	8	5.4
Peru	9.8	0.9	8.8	6.9	6.3	5.6
The Philippines	4.2	1.1	7.6	3.9	6.6	7.2
Russian Federation	5.2	-7.8	4.5	4.3	3.4	1.3
Singapore	1.7	-0.8	14.8	5.2	1.3	4.0
Chinese Taipei	0.7	-1.8	10.8	4.1	1.3	2.1
Thailand	2.5	-2.3	7.8	0.1	6.5	2.9
United States	-0.3	-3.1	2.4	1.8	2.8	1.9
S <mark>Victor Blop</mark> mberg	6.3	5.3	6.8	5.9	5.2	5.4

Inflation (y-o-y, %)

Economy	2008	2009	2010	2011	2012	2013	2014*
Australia	3.6	2.2	2.6	3.0	2.2	2.6	2.46
Brunei							
Darussalam	2.1	1.0	0.4	2.0	0.5	0.4	n/a
Canada	2.3	0.3	1.8	2.9	1.5	0.9	1.64
Chile	8.7	1.6	1.4	3.2	2.9	1.8	3.00
China	5.9	-0.7	3.3	5.4	2.7	2.6	2.97
Hong Kong, China	4.3	0.5	2.4	5.3	4.1	4.3	3.50
Indonesia	9.8	4.8	5.1	5.4	4.3	7.0	7.54
Japan	1.4	-1.3	-0.7	-0.3	0.0	0.4	2.85
Korea	4.7	2.8	3.0	4.0	2.2	1.3	2.26
Malaysia	5.4	0.6	1.7	3.2	1.7	2.1	2.60
Mexico	5.1	5.3	4.2	3.4	4.1	3.8	2.96
New Zealand	4.0	2.1	2.3	4.4	0.9	0.9	2.12
Papua New Guinea	10.8	6.9	6.0	8.4	2.2	7.9*	n/a
Peru	5.8	2.9	1.5	3.4	3.7	3.8	2.51
The Philippines	8.3	4.1	3.9	4.6	3.2	3.0	4.40
Russia	14.1	11.7	6.9	8.4	5.1	9.0	5.71
Singapore	6.5	0.6	2.8	5.3	4.5	2.4	2.70
Chinese Taipei	3.52	-0.86	0.96	1.42	1.93	0.79	2.00
Thailand	5.5	-0.8	3.3	3.8	3.0	2.2	2.13
United States	3.8	-0.4	1.6	3.2	2.1	1.5	1.51
Viet Nam	23.1	7.1	8.9	18.7	9.1	6.6	7.36

* = IMF forecast

Source: IMF, CEIC, Bloomberg, CANSIM, Australian Bureau of Statistics

HIGHLIGHTS: APEC'S EXPORT AND IMPORT

- Goods and services exported by APEC members to the world have increased from USD 1.547billion in 1989 to USD 10.295 billion in 2012. Similarly, Merchandise goods imported by APEC members have risen from USD 1.599 billion in 1989 to USD 10.799 billion in 2012.
- Intra regional merchandise exports and imports amongst APEC economies have been robust, growing at an average of 8.1% and 8.2% per annum respectively since 1992.
- In 2012, intra regional merchandise exports accounted for 69.1% of APEC's total merchandise exports while intra regional merchandise imports accounted for 68.5%.

APEC'S EXPORT : GOODS AND SERVICES

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Sources: Department of Foreign Affairs and Trade Government of Australia, The APEC Region Trade and Investment (2013); Global Trade Atlas; UN comtrade database; ABS trade data on DFAT STARS database (ABS catalogue 5368.0) and International Monetary Fund - *Direction of Trade Statistics & Balance of Payments.*

APEC'S Import: Good and Services



Sources: Department of Foreign Affairs and Trade Government of Australia, The APEC Region Trade and Investment (2013); Global Trade Atlas; UN comtrade database; ABS trade data on DFAT STARS database (ABS catalogue 5368.0) and International Monetary Fund - Direction of Trade Statistics & Balance of Payments.

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Goods and Services Exports, by APEC Members (US\$ million, [a])

							% share	% growth
			Ex	ports			world	trend (e)
	1989	1996	2002	2006	2011	2012	total	92 to 12
Australia	48,616	84,992	100,872	167,903	320,527	307,310	1.4	8.6
Brunei (g)	1,882	4,272	3,866	7,774	12,398	11,663	0.1	6.9
Canada	139,031	231,536	292,892	448,651	532,203	533,911	2.3	6.1
Chile	9,853	19,105	21,817	63,714	93,898	89,417	0.4	11.5
China	57,518	171,649	365,387	1,061,330	2,075,703	2,241,539	9.2	18.2
Hong Kong, China	89,670	217,429	246,769	395,405	573,786	616,827	2.5	6.8
Indonesia	27,087	56,414	63,822	112,319	224,187	213,175	1.0	8.1
Japan	368,023	478,526	482,844	763,778	969,051	943,950	4.3	4.3
Malaysia	27,922	93,358	108,938	182,516	264,149	265,233	1.2	8.4
Mexico	30,256	106,727	173,271	265,752	364,866	386,908	1.6	9.3
New Zealand	11,294	19,017	19,916	30,571	47,831	47,345	0.2	6.6
Papua New Guinea	1,602	3,544	2,832	6,856	12,458	12,310	0.1	8.3
Peru	4,324	7,378	9,120	26,425	50,000	43,737	0.2	13.5
Philippines	10,980	33,528	38,513	53,854	65,765	70,482	0.3	6.8
Republic of Korea	71,796	153,932	193,028	382,307	650,662	658,724	2.9	10.3
Russian Federation	na	97,529	89,095	257,626	433,915	411,711	1.9	12.6
Singapore	54,355	151,970	156,053	338,192	518,378	520,864	2.3	9.3
Chinese Taipei	73,462	131,902	152,189	242,276	337,374	333,476	1.5	6.5
Thailand	25,647	80,185	83,985	155,189	261,946	277,634	1.2	8.8
United States	491,025	862,318	978,757	1,447,499	2,088,033	2,186,030	9.2	5.9
Vietnam (f)	2,472	9,706	19,654	44,928	105,597	123,142	0.5	18.4
Total APEC (b)	1,546,816	3,015,017	3,603,617	6,454,866	10,002,728	10,295,388	44.2	8.2
Other countries (c)	2,250,884	3,695,783	4,524,583	8,579,734	12,649,872	12,531,412	55.8	8.9
Total World	3,797,700	6,710,800	8,128,200	15,034,600	22,652,600	22,826,800	100.0	8.6

Notes:

(a) Goods on recorded trade basis, services on a balance of payments basis.

(b) Includes all APEC members as at 2012, except the Russian Federation from 1989 to 1991.

(c) Includes the Russian Federation from 1989 to 1991.

(d) f.o.b. basis.

(e) Trend growth has been calculated from 1992 to 2012 as the Russian Federation cannot be included under APEC

for 1989 to 1991.

(f) Goods only for 1989 (services data not available)

(g) Goods only for 2012 (services data not available)

Goods and Services Imports, by APEC Members (US\$ million, [a])

							% share	% growth
			Im	ports			world	trend (e)
	1989	1996	2002	2006	2011	2012	total	92 to 12
Australia (d)	58,040	86,168	103,981	175,816	293,702	312,898	1.3	8.3
Brunei (g)	859	4,072	2,504	3,111	7,782	6,456	0.0	2.7
Canada	149,026	206,491	267,318	423,005	557,168	568,702	2.5	6.4
Chile	8,979	21,594	19,369	43,212	81,918	85,627	0.4	9.4
China	63,053	161,418	341,831	892,627	1,979,498	2,098,548	8.7	17.4
Hong Kong, China	82,999	223,085	234,330	372,815	567,710	611,609	2.5	6.5
Indonesia	22,883	58,068	48,334	82,459	208,759	225,603	0.9	7.9
Japan	303,540	476,850	444,160	714,335	1,023,626	1,062,468	4.5	5.3
Malaysia	27,383	96,047	96,208	154,162	225,645	238,996	1.0	6.9
Mexico	30,683	100,287	185,926	278,173	380,247	399,940	1.7	8.7
New Zealand (d)	11,983	18,515	19,009	32,669	46,193	47,450	0.2	6.9
Papua New Guinea (d)	1,876	2,490	1,920	3,743	9,450	11,772	0.0	7.2
Peru	3,434	10,637	9,943	18,712	44,244	45,328	0.2	10.0
Philippines	12,735	41,407	44,667	58,081	72,511	76,104	0.3	5.8
Republic of Korea	70,162	179,938	189,125	379,557	625,482	627,762	2.8	9.8
Russian Federation	na	63,878	64,251	172,867	368,104	396,712	1.6	12.9
Singapore	56,584	153,898	150,065	304,024	480,694	497,884	2.1	8.6
Chinese Taipei	66,027	126,860	137,533	234,853	323,092	313,420	1.4	6.2
Thailand	29,883	99,792	81,334	161,234	281,436	304,457	1.2	7.7
United States (d)	595,867	943,868	1,389,966	2,193,068	2,637,266	2,717,024	11.6	7.5
Vietnam (f)	3,032	13,589	23,444	50,022	118,609	150,510	0.5	18.4
Total APEC (b)	1,599,027	3,088,953	3,855,217	6,748,545	10,333,134	10,799,269	45.6	8.4
Other countries (c)	2,336,573	3,769,447	4,511,483	8,477,555	12,335,166	12,075,731	54.4	8.5
Total World	3,935,600	6,858,400	8,366,700	15,226,100	22,668,300	22,875,000	100.0	8.5

Notes:

(a) Goods on recorded trade basis, services on a balance of payments basis.

(b) Includes all APEC members as at 2012, except the Russian Federation from 1989 to 1991.

(c) Includes the Russian Federation from 1989 to 1991.

(d) f.o.b. basis.

(e) Trend growth has been calculated from 1992 to 2012 as the Russian Federation cannot be included under APEC

for 1989 to 1991.

(f) Goods only for 1989 (services data not available)

(g) Goods only for 2012 (services data not available)

Intra-APEC Merchandise Exports (US\$ million, [a])

							% share	% growth
		AF	PEC's export	s to			world	trend (e)
Destination	1989	1996	2002	2006	2011	2012	total	92 to 12
Australia	27,077	38,375	47,915	90,648	154,987	167,376	2.0	9.3
Brunei	774	2,837	1,347	1,468	4,132	4,349	0.1	2.5
Canada	93,599	150,526	186,751	279,374	351,393	366,256	4.3	5.8
Chile	2,909	8,643	6,148	16,598	38,946	43,504	0.5	10.4
China	42,017	129,005	212,069	526,502	1,019,011	1,048,157	12.3	14.9
Hong Kong, China	60,183	136,587	165,329	315,180	499,507	555,795	6.5	8.7
Indonesia	10,262	29,347	28,203	68,817	148,423	160,101	1.9	11.6
Japan	126,973	221,247	212,351	339,420	508,361	512,424	6.0	6.0
Malaysia	17,994	63,810	65,721	105,602	161,832	172,351	2.0	7.5
Mexico	29,081	64,842	114,505	171,606	262,677	281,040	3.3	8.9
New Zealand	5,658	10,006	10,422	18,444	24,728	25,625	0.3	7.1
Papua New Guinea	1,305	1,613	1,007	2,015	6,037	7,359	0.1	7.8
Peru	1,044	3,392	3,392	6,982	20,768	22,687	0.3	12.0
Philippines	9,187	27,904	33,014	47,319	73,180	78,254	0.9	7.8
Republic of Korea	44,130	91,704	100,458	189,086	315,560	308,054	3.6	9.4
Russian Federation	na	10,638	9,501	37,578	80,849	91,080	1.1	14.1
Singapore	36,195	92,666	84,679	143,852	214,226	221,255	2.6	6.1
Chinese Taipei	36,333	71,501	83,972	140,222	195,194	184,232	2.2	6.4
Thailand	17,999	48,825	42,626	82,480	141,094	154,935	1.8	7.9
United States	321,745	547,415	740,917	1,137,054	1,336,133	1,396,827	16.3	6.2
Vietnam	526	9,303	15,035	36,711	99,511	107,764	1.3	18.1
Total APEC (b)	884,980	1,760,185	2,165,554	3,758,874	5,656,548	5,909,423	69.1	8.1
European Union	240,109	397,695	462,531	921,102	1,292,528	1,215,928	14.2	7.9
Other countries (c) (d)	152,657	280,175	299,525	742,446	1,401,958	1,425,275	16.7	10.7
Total World	1,277,745	2,438,055	2,927,440	5,358,143	8,351,034	8,550,626	100.0	8.4

Notes:

(a) Goods on recorded trade basis.

(b) Includes all APEC members as at 2012, except the Russian Federation from 1989 to 1991.

(c) Includes the Russian Federation from 1989 to 1991.

(d) Includes confidential items of trade.

(e) Trend growth has been calculated from 1992 to 2012 as the Russian Federation cannot be included under APEC

for 1989 to 1991.

Intra-APEC Merchandise ¹⁵⁴ [mports (US\$ million, [a])

							% share	% growth
		APE	EC's imports	from			world	trend (e)
Source	1989	1996	2002	2006	2011	2012	total	92 to 12
Australia	28,586	47,548	49,956	97,454	224,479	222,172	1.9	9.5
Brunei	1,820	2,450	3,628	7,456	11,634	11,823	0.1	2.5
Canada	105,397	181,305	231,913	339,890	382,434	390,945	4.2	5.8
Chile	4,408	9,410	11,128	34,267	55,468	54,481	0.5	10.5
China	57,340	198,302	354,249	801,036	1,297,540	1,393,104	12.2	15.1
Hong Kong, China	33,205	34,593	35,604	39,694	42,403	51,704	6.4	8.8
Indonesia	22,623	42,824	51,837	94,783	167,253	163,749	1.8	11.7
Japan	204,719	337,339	346,463	532,120	684,988	689,766	5.9	6.1
Malaysia	24,174	72,688	93,191	159,109	241,438	242,362	2.0	7.6
Mexico	32,064	82,820	148,454	223,379	315,362	332,032	3.2	8.9
New Zealand	6,551	10,919	10,914	15,718	27,350	27,524	0.3	7.2
Papua New Guinea	1,036	2,131	1,420	3,477	6,766	6,342	0.1	7.8
Peru	1,943	3,149	4,176	15,255	27,171	26,721	0.3	12.1
Philippines	7,308	19,436	37,777	59,809	64,671	65,840	0.9	8.0
Republic of Korea	47,890	88,729	128,057	260,179	414,767	431,376	3.6	9.6
Russian Federation	na	18,411	25,061	56,707	124,081	127,155	1.0	14.9
Singapore	27,195	73,586	67,803	122,777	180,722	188,673	2.6	6.4
Chinese Taipei	54,661	112,295	130,763	231,792	313,872	324,378	2.1	6.5
Thailand	13,915	43,578	54,820	105,434	171,286	173,863	1.8	8.1
United States	226,050	429,404	452,398	624,054	851,972	887,978	16.2	6.5
Vietnam	772	4,717	10,910	29,316	67,078	87,624	1.2	18.3
Total APEC (b)	901,668	1,815,633	2,250,380	3,853,879	5,672,734	5,899,614	68.5	8.2
European Union	214,949	402,712	492,384	791,282	1,152,423	1,189,353	14.5	8.1
Other countries (c) (d)	186,805	299,828	416,238	1,034,767	1,892,111	1,987,414	17.0	10.8
Total World	1,303,422	2,518,173	3,159,146	5,673,582	8,717,268	9,076,382	100.0	8.6

Notes:

(a) Goods on recorded trade basis.

(b) Includes all APEC members as at 2012, except the Russian Federation from 1989 to 1991.

(c) Includes the Russian Federation from 1989 to 1991.

(d) Includes confidential items of trade.

(e) Trend growth has been calculated from 1992 to 2012 as the Russian Federation cannot be included under APEC for 1989 to 1991.

HIGHLIGHTS Inward FDI Flows: APEC vs WORLD

- In the years between 2000 and 2012, APEC's inward FDI flows generally followed the same trend that of the world as a whole.
- However, the degree of the rise and fall of FDI to the destinations differ.
- APEC and the world as a whole experienced decreases in inward FDI flow in 2009 and 2012, but the decrease in APEC FDI flow in 2012 was less drastic than the world as a whole.
- This can be generalized further : APEC's inward FDI flow are less volatile than the world as a whole.
- Between 2005 and 2008, other global regions attracted more FDI than APEC economies. Since the Global Financial Crisis, APEC has been increasingly a more favorable FDI destination compared to the rest of the world.

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Inward FDI Flows: APEC vs WORLD 2000-2012 (in USD Billion)

YEAR	WORLD	APEC
TEAN	(USD BILLION)	(USD BILLION)
2000	1413.17	257.56
2001	836.01	183.48
2002	626.08	164.37
2003	601.25	159.53
2004	734.15	246.22
2005	989.62	210.14
2006	1480.59	343.08
2007	2002.69	522.54
2008	1816.40	487.73
2009	1216.47	334.73
2010	1408.54	434.18
2011	1651.51	505.70
2012	1350.93	529.62



HIGHLIGHTS Inward FDI Stocks: APEC vs WORLD

- The world's inward FDO stock has grown steadily with the exception of 2008, when it had a significant drop due to the Global Financial Crisis.
- APEC's inward FDI stock follow a similar pattern as global inward FDI stock.

Inward FDI Stocks: APEC vs WORLD 2000-2012 (in USD Billion)

YEAR	WORLD	APEC
TEAK	(USD BILLION)	(USD BILLION)
2000	7511.31	4382.44
2001	7555.74	4222.77
2002	7597.67	3741.74
2003	9510.76	4490.23
2004	11232.85	5081.34
2005	11673.85	5470.04
2006	14405.34	6540.58
2007	18038.04	8012.93
2008	15586.25	6217.47
2009	18311.54	7562.49
2010	20380.27	8856.50
2011	20873.50	9203.76
2012	22812.68	10323.03



Source: USC and ABAC (2013)

Foreign Direct Investments in APEC Members by Sources (US\$ billion)



Source: UNCTAD, OECD Statistic

- In 2012, FDI inflows to APEC members 10.34% lower than previous year.
- In line with that, FDI inflows intra-APEC members are decreasing 5.7% (y-o-y) to USD 140.7 billion in 2012.

Portfolio Investments in APEC Members by Sources (US\$ trillion)

Non-APEC Intra-APEC



Source: IMF (accessed through http://statistics.apec.org/)

- Portfolio investments in APEC from non-APEC are always higher than from the intra-APEC since 2005.
- Between 2005-2012, the highest value of portfolio investments from Non-APEC members and from Intra-APEC members are US\$ 8.80 trillion and US\$ 6.65 trillion, respectively, which both occurred in year of 2012.

HIGHLIGHTS: TOURISM SECTOR WITHIN APEC REGION

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- Tourism has over the years become one of the most dynamic economic sectors in the world.
- Members of APEC are committed to improving their policies on facilitating travel within the region, by easing visa procedures for accessibility, convenience and efficiency.
- Under this initiative, APEC economies will take further actions to promote fast and secure travel within the region, by working at the national level, as well as establishing partnerships among the economies to ease visa procedures and leverage new technology.
- Consequently, international tourist arrival within APEC economies between 2006 and 2011 has increased and more likely to give contibution to new jobs as well as more foreign exchange earnings.

Tourism Arrival (Person)

Economy	2006	2007	2008	2009	2010	2011
Australia	5.532.000	5.644.000	5.586.000	5.584.000	5.885.000	5.875.000
Brunei Darussalam	158.000	179.000	226.000	157.000	214.000	242.000
Canada	18.265.000	17.935.000	17.142.000	15.737.000	16.097.000	16.014.000
Chile	2.253.000	2.507.000	2.699.000	2.750.000	2.766.000	3.070.000
China	49.913.000	54.720.000	53.049.000	50.875.000	55.664.000	57.581.000
Hong Kong, China	15.821.000	17.154.000	17.319.000	16.926.000	20.085.000	22.316.000
Indonesia	4.871.000	5.506.000	6.234.000	6.324.000	7.003.000	7.650.000
Japan	7.334.000	8.347.000	8.351.000	6.790.000	8.611.000	6.219.000
Korea	6.155.000	6.448.000	6.891.000	7.818.000	8.798.000	9.795.000
Malaysia	17.547.000	20.973.000	22.052.000	23.646.000	24.577.000	24.714.000
Mexico	21.353.000	21.606.000	22.931.000	22.346.000	23.290.000	23.403.000
New Zealand	2.390.000	2.434.000	2.411.000	2.422.000	2.492.000	2.572.000
Papua New Guinea	78.000	104.000	114.000	126.000	146.000	165.000
Peru	1.721.000	1.916.000	2.058.000	2.140.000	2.299.000	2.598.000
The Philippines	2.843.000	3.092.000	3.139.000	3.017.000	3.520.000	3.917.000
Russia	22.486.000	22.909.000	23.676.000	21.339.000	22.281.000	24.932.000
Singapore	7.588.000	7.957.000	7.778.000	7.489.000	9.161.000	10.390.000
Chinese Taipei	3.519.800	3.716.100	3.845.200	4.395.000	5.567.300	6.087.500
Thailand	13.822.000	14.464.000	14.584.000	14.150.000	15.936.000	19.230.000
United States	50.977.000	55.978.000	57.942.000	54.962.000	59.796.000	62.711.000
Viet Nam	3.583.000	4.229.000	4.236.000	3.747.000	5.050.000	6.014.000

Source: World Bank and Chinese Taipei's Ministry of Transportation and Communications

APEC: Direct Contribution of Travel & Tourism to GDP



Source: World Travel & Tourism Council Report for APEC Region (2014)

• The direct contribution of Travel & Tourism to GDP is predicted to increased by 4.7% from USD1,163.6 billion (2.7% of GDP) at 2013 to USD1,217.9 billion at 2014.

•By 2024, it is predicted to rise by 4.6% per year to USD1,914.7 billion (3.0% of GDP)

APEC: Direct Contribution of Travel & Tourism to Employment





Source: World Travel & Tourism Council Report for APEC Region (2014)

•Travel & Tourism sector directly created 46,400,500 jobs in 2013 or equal with 3.2% of total employment.

• This is predicted to rise by 1.5% in 2014 to 47,109,000 (3.2% of total employment) and 1.8% per year to 56,337,000 jobs for the next decade.

APEC: Visitor Exports and International Tourist Arrivals



Source: World Travel & Tourism Council Report for APEC Region (2014)

•APEC region produced USD529.9 billion from visitor exports at 2013.

• In 2014, It is estimated to grow by 4.0%. The region is also predicted to attract 369,219,000 international tourist arrivals in the same year.

•By the next ten years, international tourist arrivals is estimated to 649,326,000 and generates expenditure of USD868.6 billion. The rate of growth is 4.7% per year.

HIGHLIGHTS : APEC COMPETITIVENESS

- The business and economic environment also varies markedly across the APEC region.
- The ranking of APEC economies in cross-economy studies of the business and economic environment ranges from second to seventy out of 148 economies in terms of global competitiveness index and first to one-hundred-andtwenty out of 189 economies in the ease of doing business.

Global Competitiveness Index

Economy	2009-2010 (Out of 133)	2010-2011 (Out of 139)	2011-2012 (Out of 142)	2012-2013 (Out of 144)	2013-2014 (Out of 148)
Australia	15	16	20	20	21
Brunei Darussalam	32	28	28	28	26
Canada	9	10	12	14	14
Chile	30	30	31	33	34
China	29	27	26	29	29
Hong Kong, China	11	11	11	9	7
Indonesia	54	44	46	50	38
Japan	8	6	9	10	9
Korea	19	22	24	19	25
Malaysia	24	26	21	25	24
Mexico	60	66	58	53	55
New Zealand	20	23	25	23	18
Papua New Guinea	n.a.	n.a.	n.a.	n.a.	n.a.
Peru	78	73	67	61	61
Philippines	87	85	75	65	59
Russia	63	63	66	67	64
Singapore	3	3	2	2	2
Chinese Taipei	12	13	13	13	12
Thailand	36	38	39	3	37
United States	2	4	5	7	5
Viet Nam	75	59	65	75	70

Source: World Economic Forum Report (Several Years)

Ease of Doing Business

Economy		R	ank on the	ease of do	ing busines	SS	
Economy	2008	2009	2010	2011	2012	2013	2014
Australia	9	9	9	11	15	10	11
Brunei Darussalam	88	94	96	86	83	79	59
Canada	8	8	8	12	13	17	19
Chile	40	40	49	41	39	37	34
China	83	86	89	87	91	91	96
Hong Kong, China	4	3	3	2	2	2	2
Indonesia	129	129	122	126	129	128	120
Japan	64	13	15	20	20	24	27
Korea	23	23	19	15	8	8	7
Malaysia	20	21	23	23	18	12	6
Mexico	56	55	51	54	53	48	53
New Zealand	2	2	2	3	3	3	3
Papua New Guinea	95	95	102	97	100	104	113
Peru	62	65	56	39	41	43	42
The Philippines	140	141	144	134	136	138	108
Russia	120	118	120	124	120	112	92
Singapore	1	1	1	1	1	1	1
Chinese Taipei	61	61	46	24	25	16	16
Thailand	13	12	12	16	17	18	18
United States	3	4	4	4	4	4	4
Viet Nam	92	91	93	90	98	99	99

Source: Doing Business Report, World Bank (several years)

APEC Facts:

- Growing economies
- Competitive economies
- Economic cooperation is high (trade, Investment, tourism)
- Center of world economic growth

Economic Integration

 Economic Integration can take several forms (Balassa, 1965):

- Free Trade Area (FTA) = tariff (and quantitative restrictions) between the participating economies are abolished but each economy retains its own tariffs against non members
- Custom Union (CU) = besides the suppression of discrimination in the field of commodity movements within the union, the equalization of tariffs in trade with non-member economies
- Common Market (CM) = not only trade restrictions but also restrictions on factor movements are abolished
- Economic Union (EU) = combines the suppression of restrictions on commodity and factor movements with some degree of harmonization of national economic policies, in order to remove discrimination that was due to disparities in these policies
- Complete Economic Integration (CEI) = the unification of monetary, fiscal, social and countercyclical policies and requires the setting-up of a supranational authority whose decisions are binding for the member states.

Regional economic cooperation in the Asia Pacific region is at a crossroads:

- The Trans-Pacific Partnership Agreement (TPP)
- Regional Comprehensive Economic Partnership (RCEP)
- The Free Trade Agreement of the Asia Pacific (FTAAP)

FTAAP versus APEC

- The FTAAP naturally possesses the main characteristics of an FTA (legally binding commitments and discriminate against non members)
- FTAAP is contradictory to the basic nature of the APEC (voluntary, non binding and open regionalism)
- The pursuit of FTAAP could be detrimental to APEC's unique and fundamental characteristics
- FTAAP would have a huge impact upon non APEC members and the multilateral trade system
- APEC leaders are fully aware of the difficulties of the successful conclusion of FTAAP negotiation

Progress of Discussion of FTAAP

In 2010, APEC's Declaration attached Pathways to FTAAP as an appendix and explained relevant issues.

→ FTAAP is defined as a comprehensive, high quality mechanism that incorporates and addresses "next generation" trade and investment issues.

→ ASEAN+3, ASEAN+6 and TPP are seen as the foundation of the FTAAP.

→ APEC will act as an incubator for the FTAAP by providing leadership and intellectual input.

- In 2012, APEC's Declaration emphasized the importance of transparency in FTA negotiations and pointed out that more transparency will pave the way for the FTAAP.
- In 2013, APEC's Declaration proposed enhancing policy dialogues and communication among FTAs. It also attempted to strengthen APEC members' large-scale negotiation capabilities in order to reach an FTAAP agreement.

FTAAP pathway differ across academia.

•Some believe that the FTAAP should be attained through the TPP, and that an expanded TPP will be able to coordinate free trade arrangements within Asia. If China enters the TPP, then the TPP will become the major pathway to the FTAAP. They argue that the TPP "gold standard" will be fine-tuned to meet the concerns of the agricultural and development sectors. The FTAAP will thus have to be a "hybrid."

Source: Jeffrey J. Schott, "Roadmap for the FTAAP: Take the TPP Turnpike,"

December, 2009, http://www.iie.com/publications/papers/schott1209ppt.pdf; Jeffery Schott, "Getting to the FTAAP via the TPP Turnpike," October 2010, http://www.iie.com/publications/papers/schott20101025ppt.pdf; Jeffrey Schott, "An APEC Action Agenda to Support Regional Economic Integration and the World Trading System," December 9, 2013.

FTAAP pathway differ across academia.

Others believe that while the TPP will lay the foundation for the FTAAP, the FTAAP will have to be achieved through the RCEP. They believe this because the TPP denies ASEAN's centrality and excludes some ASEAN members, as well as China and India.

Source: Masahiro Kawai and Ganeshan Wignaraja, "Asian FTAs: Trends, Prospects, and Challenges, ADB Economics," Working Paper Series, No. 226, October 2010, http://www.un.org/esa/ffd/msc/regionalcooperation/ADB_WPs.pdf; Masahiro Kawai and Ganeshan Wignaraja, "Asian Free Trade Agreements: Trends, Prospects and Challenges," Geneva, March 11-12, 2013, http://www.wto.org/english/res_e/reser_e/wts_future2013_e/Kawai_Wignaraja.pdf.

- Alternative pathways: The RCEP can either merge with the TPP or be taken over by the TPP and become the FTAAP.
- The outcome will depend on the political will of Asia Pacific economies.

A Free Trade Area of the Asia Pacific (FTAAP): Is It Desirable?

By Kim, et al. (2013)

Show that FTAAP beneficial for APEC...in term of higher economic growth and welfare of the societies
Conclusion

FTAAP is not a dream... but to be a reality APEC should formulate FTAAP framework that clearly defines the goals, principles, standards and content of the agreement... and needs to consider the diversity of the Asia Pacific economies ... beneficial to all member economies...and politically accepted by all member economies.

Thank You



Economic Cooperation

2014/ASCCC/2.4

ADVANCING AN APEC FRAMEWORK FOR

REALIZING FTAAP

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1. Introduction

APEC has begun to seriously consider the importance of realizing a Free Trade Area of the Asia-Pacific (FTAAP). The FTAAP goal can be considered to be more comprehensive and ambitious than the Bogor Goals. The reason is that an FTAAP could imply the inclusion of non-members of APEC that are linked to the Asia-Pacific region. It also indicates that APEC seeks to enhance regional economic integration (REI) through deeper trade and investment liberalization and facilitation as well as economic and technical cooperation.

Most importantly, APEC has regarded RCEP, TPP and other regional undertakings to be pathways to an FTAAP. This development shows that APEC would like to place an FTAAP at a higher level of REI than the Bogor Goals. There is also the possibility that an FTAAP could be achieved through the signing of a free trade agreement (FTA) among APEC members. Since APEC is still working on achieving the Bogor Goals, the realization of an FTAAP remains a long-term APEC goal without a deadline. Therefore, APEC has not exerted the greatest efforts to develop a framework for an FTAAP. In response, ABAC has incessantly called on APEC to generate an FTAAP plan. The 2014 APEC host, China, has raised the issue of building an FTAAP framework (APEC SOM1 2014). In sum, the idea of creating an FTAAP is receiving more focused attention and necessitates greater consideration.

The main purpose of the paper is to construct an APEC conceptual framework for attaining an FTAAP in a systematic manner based on APEC principles. As a first step, a literature review of the FTAAP idea will be conducted. The paper will also examine the relationship between the Bogor Goals and the FTAAP. Additionally, the major pathways to FTAAP, such as TPP, RCEP and the Pacific Alliance will be analyzed for their linkage with FTAAP. Finally, suggestions for APEC will be provided to accelerate the achievement of an FTAAP.

2. Literature Review

In the "2004 ABAC Report to Leaders," ABAC suggested the development of an FTAAP. ABAC called for APEC Leaders to show strong political commitment to negotiate a region-wide agreement that would bring economic benefits to members. An FTAAP would accelerate the achievement of the Bogor Goals and minimize the negative effects from the proliferation of complex web of FTAs (ABAC 2004).

Subsequently, the views of APEC on the creation of an FTAAP were stated in the various annual APEC Leaders' Declarations. The 2004 Leaders' Declaration mentioned that ABAC had presented a relevant proposal regarding the need to study the feasibility of an FTAAP (APEC 2004). In 2006, the Leaders' Declaration said that difficulties in negotiating an FTAAP existed but APEC should undertake studies on

ways to promote REI and FTAAP. The creation of an FTAAP will be a long-term prospect (APEC 2006). By 2008, Leaders had mentioned in the Declaration that an FTAAP could bring economic benefit to the region but challenges existed. The Leaders called on Ministers to examine the prospects of an FTAAP through analyzing the economic impact of an FTAAP as well as discussing the capacity requirements that would be needed for negotiations in the future (APEC 2008).

The most important milestone for the FTAAP idea was reached in 2010 when the APEC Leaders stated in their Declaration that APEC will take concrete steps to realize an FTAAP. The Leaders further said that an FTAAP should be a comprehensive free trade agreement that will build on regional undertakings, such as ASEAN+3, ASEAN+6 and the Trans-Pacific Partnership. In addition, APEC will serve as an incubator of an FTAAP through the provision of leadership and intellectual input into its development (APEC 2010).

Afterwards, the support for attaining an FTAAP seems to lose momentum without mentioning a free trade agreement. In the 2012 Leaders' Declaration, Leaders mentioned that they recognized FTAAP to be an important instrument to advance APEC's REI. In addition, they noted that the various regional undertakings could serve as a way towards an FTAAP. The Leaders also maintained that APEC will continue to be an incubator of an FTAAP and will also provide leadership and intellectual input (APEC 2012). APEC Leaders mentioned in the 2013 Declaration that they reaffirmed their commitment to realize an FTAAP. APEC will continue to offer leadership and intellectual input into the REI process (APEC 2013).

With China as the 2014 APEC host, the APEC's work towards achieving an FTAAP is showing signs of renewed vigor. One of the priorities for APEC in 2014 is: "Advancing Regional Economic Integration." Specifically, APEC will pursue the realization of an FTAAP through the creation of favorable conditions for FTAAP (APEC ISOM 2013).

During the 2014 SOM1 Meeting in Ningbo, China presented a proposal titled "APEC Framework of Strengthening Regional Economic Integration." The proposal seeks to enhance the realization of an FTAAP. The framework consists of four elements: 1) Enhance transparency of RTAs/FTAs; 2) Strengthen capacity building activities to achieve an FTAAP; 3) Formulate a work plan to realize an FTAAP; and 4) Launch an FTAAP feasibility study (APEC SOM1 2014).

Most importantly, the proposal calls for the development of a work plan or roadmap. Essentially, the roadmap will identify the steps toward an FTAAP. In addition, the roadmap will clarify major principles focusing on the relationship between the pathways and an FTAAP as well as the relation between an FTAAP and the Bogor Goals. Furthermore, the proposal suggests the year 2025 to be the deadline

to realize an FTAAP (APEC SOM1 2014).

3. Analyzing the FTAAP Idea

3.1 Open Regionalism: Bogor Goals to FTAAP

In order to clarify the FTAAP idea, it will be necessary to comprehend the relationship between the Bogor Goals and an FTAAP. Since the coming into existence of the Bogor Goals, APEC principles relating to the Bogor Goals have been developed to guide the attainment of the Bogor Goals. The APEC principles will also be useful for guiding the realization of an FTAAP.

According to the 1994 APEC Leaders' Declaration or Bogor Declaration, APEC's strengthening of economic cooperation will be based on equal partnership, shared responsibility, mutual respect, common interest, and common benefit. APEC will also advance the multilateral trading system, trade and investment liberalization in the Asia-Pacific region, and Asia-Pacific development cooperation. Furthermore, since the open multilateral trading system had been the source of APEC's economic growth, APEC will take the lead in enhancing the multilateral trading system (Ho 2013).

APEC Leaders had also stated in their 1994 Declaration that they were against the building of a trading bloc that was inward-looking and that inhibited global free trade. APEC will support the Bogor Goals in a way that advanced global trade and investment liberalization. Thus the outcome of trade and investment liberalization in the Asia-Pacific region will reduce barriers in APEC and also between APEC economies and non-APEC economies. APEC will ensure that non-APEC developing economies will also obtain benefits from APEC's trade and investment liberalization. In addition, APEC's trade and investment liberalization efforts will conform to GATT/WTO rules (Ho 2013).

The important point that can be inferred from the 1994 APEC Leaders' Declaration is that APEC promotes open regionalism which entails supporting the multilateral trading system and the Bogor Goals. Most significantly, APEC is advancing open regionalism through strengthening APEC REI and making sure that non-APEC members will benefit from APEC's trade and investment liberalization and facilitation. Therefore, the open regionalism idea that has guided the achievement of the Bogor Goals will remain valid for directing the attainment of an FTAAP. It also means that APEC Leaders want to ensure that the achievement of an FTAAP does not impede the advancement of the WTO.

3.2 Bogor Goals and FTAAP Prioritization

It has been mentioned in the literature review that the 2004 ABAC Report to Leaders stated that an FTAAP would hasten the attainment of the Bogor Goals. This point clearly shows that ABAC in 2004 was seeking to achieve an FTAAP before the realization of the Bogor Goals. However, APEC has taken a cautious approach in advancing the FTAAP issue. Therefore, it is most likely that the Bogor Goals will be achieved first.

There exists, however, an important issue that should be considered regarding the deadline for completing an FTAAP. In China's proposal on REI framework aforementioned, it is suggested that the year 2025 could be the deadline for realizing an FTAAP. With regard to this suggestion, it can be said that there is high degree of validity. The stating of a deadline will put pressure on APEC to exert greater efforts to reach an FTAAP.

3.3 FTAAP Definition: Free Trade Area and Membership

Another related issue is about the meaning of an FTAAP. In the literature review, it was mentioned that ABAC had called for negotiating a region-wide agreement in the 2004 ABAC Report to Leaders. In addition, APEC Leaders had stated the need to negotiate a comprehensive free trade agreement in the 2010 Leaders' Declaration. However, the idea of an FTAAP to be derived from a negotiated agreement does not seem to be evident in recent years. There exists the possibility to define an FTAAP to be different from a free trade agreement. For example, an FTAAP could be an expanded form of the Bogor Goals in which the achievement of an FTAAP would mean the further advancement of free and open trade and investment in the Asia-Pacific region.

Furthermore, it is possible to state that the number of APEC members promoting the Bogor Goals would be different from the number of members joining an FTAAP. There is the possibility that APEC would increase the number of APEC members in the future, so as to strengthen the development of an FTAAP. Since the FTAAP idea comes from APEC, there is certainly the need to ensure that members of FTAAP are also APEC members. In the 2013 APEC Leaders' Declaration, Leaders called for the achievement of a seamlessly and comprehensively connected and integrated Asia-Pacific region to be part of APEC's work to realize the Bogor Goals and the Yokohama Vision of "Bogor and Beyond" (APEC 2013). Therefore, the enlargement of APEC's membership would strengthen the advancement of a seamless regional economy and generate greater benefits from an expanded FTAAP.

3.4 Regional Undertakings-FTAAP Relationship

The APEC Leaders' support for ensuring that an FTAAP will be built on regional undertakings was clearly stated in the 2010 Declaration, as mentioned in the literature review. In the 2013 APEC MRT Meeting Statement, Ministers agreed that APEC will analyze the convergence of TPP, RCEP and other FTA/RTA initiatives within the APEC framework (APEC MRT 2013). Specifically, there is a need to study ways to converge TPP, RCEP and Pacific Alliance (PA) with an FTAAP.

In theory, one way to enhance the convergence of TPP, RCEP and the Pacific Alliance with an FTAAP would be to ensure that the rules of the TPP, RCEP and the Pacific Alliance are as similar as possible. After doing so, APEC could state that the three FTAs have led to the realization of an FTAAP, if an FTAAP is considered to be a free trade area with loose meaning and not an agreement. In addition, if an FTAAP is regarded to be a formal free trade agreement, an FTAAP agreement could be composed of rules from the TPP, RCEP and PA. The first way of convergence could be difficult to realize, since the three FTAs have diverse members with different interests. The second way would not be possible at the moment because it is unclear that an FTAAP will be a formal agreement.

If an FTAAP is an idea and not a formal agreement, another way to converge the three major FTAs in the Asia-Pacific region would be the enabling of open membership for APEC members. This way can be called membership convergence. From a technical standpoint, this method is feasible in that the three FTAs can develop their own rules. The APEC members will be able to join the three FTAs, as long as they are willing to accept the rules. At the same time, the members of the three FTAs will become APEC members. Thus the TPP, RCEP and PA are linked with an FTAAP through membership convergence. The benefit is that businesses in the Asia-Pacific region will be able to choose the FTA that satisfies their needs the most.

Recently, there is growing interest among APEC economies to develop free economic zones (FEZs). The FEZs can be seen as another way to assist with the advancement of the Bogor Goals and an FTAAP. The main purpose of FEZs is to promote economic liberalization within them. Essentially, a FEZ serves as a model for economic liberalization in which an economy could later seek full scale adoption of the liberalizing measures. For example, China has created the Shanghai Free Trade Zone. Korea has established the Incheon Free Economic Zone. Chinese Taipei has developed the Free Economic Pilot Zones (FEPZs). In addition, Japan is also promoting special economic zones.

One could say that an important feature of the FEZs is that it is designed by each economy with minimal pressure from other economies. On the other hand, FTAs are the result of negotiations among members, so that some rules are included but may not be fully supported. Thus the rising interests in FEZs are a positive development because they lead to economic liberalization. Moreover, the FEZs are assisting with the realization of the Bogor Goals and an FTAAP, as free trade is being advanced. From APEC's standpoint, the FEZs are truly in line with APEC's principle of voluntarism, since economies are creating their own FEZs. Therefore, APEC should begin to promote FEZs to a greater extent.

4. Suggestions: FTAAP Conceptual Framework

The development of an FTAAP conceptual framework necessitates the inclusion of ideas that will follow APEC principles of voluntarism and consensus building. The APEC approach of making decisions in a cautious and evolutionary manner will continue to guide the building of an FTAAP. In addition, APEC also recognizes the importance of abiding by views that have been presented previously, so that this tradition should be respected. Therefore, the suggestions presented in the following paragraphs are considered to be able to satisfy APEC beliefs.

The first suggestion is that APEC continues to support the open regionalism idea. This means that the realization of an FTAAP will also promote the WTO and ensure that non-APEC members are not discriminated. In doing so, APEC can serve as an outstanding example for the world that the creation of a free trade area can also benefit non-APEC members.

The second suggestion is that the achievement of the Bogor Goals should come first before the attainment of an FTAAP. If APEC members would like to hasten the realization of an FTAAP, they could seek to reach the Bogor Goals before the final 2020 deadline. The important point is that the meaning of Bogor Goals' free and open trade and investment should be clear and achievable. Furthermore, the setting of the year 2025 to be a potential deadline for realizing an FTAAP will be a positive development because it will exert pressure on APEC. Most importantly, APEC must have an FTAAP conceptual framework to accompany any FTAAP deadline.

The third suggestion is that APEC membership in the future should be enlarged to enhance the advancement of an FTAAP. The expansion of APEC membership would increase the size of an FTAAP. This means economies that touch the Pacific Ocean should be able to join APEC. Furthermore, economies that border the economies touching the Pacific Ocean should also become APEC members. The result is the building of a seamless regional economy and the generation of greater benefits from an enlarged FTAAP.

The fourth suggestion is that APEC should promote open membership to link the TPP, RCEP and PA with an FTAAP. Specifically, APEC members will be allowed to become members of the three aforementioned FTAs, as long as they can adhere to the

rules. Additionally, members of the three FTAs can become APEC members. In doing so, the difference in the rules of the FTAs will have less negative impact. Moreover, businesses can choose the FTAs that satisfy their needs in terms of less transaction costs.

The fifth suggestion is that APEC should support the development of free economic zones (FEZs) and create an APEC Free Economic Zones Network (AFEZN). The FEZs is an effective way to advance the achievement of the Bogor Goals and an FTAAP through the implementation of economic liberalization measures. A FEZ is a model for economic liberalization within an economy and subsequent full scale adoption of the economic liberalization measures is possible. The AFEZN will serve as a platform for the sharing of experience and the strengthening of linkages.

References:

ABAC. 2004. "2004 ABAC Report to Leaders." Manila: ABAC Secretariat.

APEC. 2004. "2004 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC. 2006. "2006 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC. 2008. "2008 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC. 2010. "2010 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC. 2012. "2012 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC. 2013. "2013 APEC Leaders' Declaration. Singapore: APEC Secretariat.

APEC ISOM. 2013. "Theme and Priorities of APEC 2014." Singapore: APEC Secretariat.

APEC MRT. 2013. "2013 APEC MRT Meeting Statement." Singapore: APEC Secretariat.

APEC SOM1. 2014. "APEC Framework of Strengthening Regional Economic Integration." Singapore: APEC Secretariat.

Ho, Chen-Sheng. 2013. "Advancing the Attainment of the Bogor Goals: The APEC Way." Paper presented at the 2013 ASCC Conference in Jakarta, Indonesia.



Economic Cooperation

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RCEP AND TPP: POSSIBILITY OF

CONVERGENCE FOR A FTAAP?

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RCEP and TPP: Possibility of Convergence for a FTAAP?

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Abstract

The idea of an FTAAP was first floated in 2004 by the APEC Business Advisory Council (ABAC), during the 12th APEC Economic Leaders' Meeting. However, at that time, it did not get much attention from the APEC Leaders. Nevertheless, during the 14th APEC Economic Leaders Meeting in 2006, a decision was formed to undertake a feasibility study on FTAAP. This got strong support from the U.S, which was viewed as U.S.' strategy to be part of East Asia's regionalism initiatives. Since 2006, APEC has been examining the feasibility and desirability of an FTAAP as a long-term vision for both APEC economies and the world economy. There has been no concrete decision on what pathways to use to achieve an FTAAP and the timing of such an arrangement. As APEC is not geared for a negotiation anytime soon, the pathways at this point in time are running outside of APEC. This was observed with the emergence of RCEP and TPP, and in the 2010 APEC Leader's Summit, it was announced that an FTAAP should be pursued as a comprehensive free trade agreement by developing and building on ongoing regional undertakings, such as ASEAN+3, ASEAN+6 (now combined as RCEP), and the TPP. Given this background, the paper discusses the possibility of convergence of RCEP and TPP for an FTAAP.

Introduction

Over the last two years, two mega- regional trade agreements (RTAs) – the Regional Comprehensive Economic Partnership (RCEP) and the Trans Pacific Partnership (TPP) - are getting negotiated to generalise the bilaterals and smaller regionals into more coherent region-wide or cross-regional arrangements. While RCEP negotiations involve sixteen economies (ten ASEAN member economies, China, Japan, Korea, India, Australia and New Zealand) with the objective to attain a comprehensive and mutually beneficial economic partnership agreement that will entail deeper engagement between ASEAN and its FTA

¹ The paper is written for the APEC Study Centre Consortium Conference scheduled to be on 11-12 May 2014 in Qingdao, China. The paper is for session 2 of the agenda on: Feasibility and Pathways towards FTAAP. A longer version of the paper with details on proliferation of FTAs in Southeast Asia, RCEP and TPP is likely to be published by ISEAS in 2014.

partners², TPP negotiations involve twelve economies (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam) that aims to liberalise trade in goods and services, encourage investments, promote innovation, economic growth and development and support job creation and retention. The negotiations for both RCEP and TPP are currently facing complex challenges and are encountering difficulties to conclude. While the TPP has missed its December 2013 deadline, after twenty rounds of negotiation, RCEP has began its journey in May 2013, with likelihood of completion by end-2015. It is difficult to predict how fast or how extensively these agreements will liberalise trade and investment in the vast Asia-Pacific region.

However, in the meantime, there are increasing discussions that an enlarged TPP and/ or an enlarged RCEP will lead to the creation of a free trade area for Asia-Pacific (FTAAP) that is expected to be comprehensive and high-quality in nature and will harmonise rules of integration of other small-scale FTAs in the region. In this context, the paper would like to examine the possibility of converging the mega-RTAs, RCEP and TPP, for a FTAAP.

APEC and FTAAP

The idea of an FTAAP was first floated in 2004 by the APEC Business Advisory Council (ABAC), during the 12th APEC Economic Leaders' Meeting. The FTAAP proposal for ABAC members was a way 'to accelerate progress toward achievement of the Bogor Goals and full global liberalisation in the WTO' and to minimise 'the possible ill effects associated with the increasingly complex web of RTAs/ FTAs in the APEC region'³. Academics like Bergsten, argued that the FTAAP (i) will create positive gains from free trade induced by the largest single trade bloc, (ii) become a stepping stone towards global free trade by inducing the WTO and excluded non-members like E.U. to resume the multilateral Doha Development Agenda (DDA) negotiations, (iii) become the best available "Plan B" alternative to the DDA, (iv) prevent competitive liberalizations in the Asia-Pacific region and mitigate the negative effects of the proliferating hub-and-spoke type of overlapping RTAs by consolidating the sub-regional trade blocs into a large umbrella, (v) revitalize APEC, (vi) ameliorate the China-

² China, India, Japan, South Korea, Australia and New Zealand are ASEAN's FTA partners.

³ APEC Business Advisory Council (ABAC), 2004. 'Bridging the Pacific: Coping with the Challenges of Globalisation', Report to APEC Economic Leaders, Santiago, Chile.

US economic conflict, caused mainly by trade imbalance between the two nations, and (vii) maintain US engagement in Asia⁴.

However, at that time, it did not get much attention from the APEC Leaders. This was not unnatural as the FTAAP possesses regular characteristics of FTAs, i.e. they are legally binding and have high chances of discrimination against non-members. But this very nature also contradicts APEC's unique feature – voluntary, non-binding and open regionalism. Hence, the pursuit of an FTAAP could be detrimental to APEC's fundamental nature. Moreover, there were doubts in successful completion of an APEC FTAAP. It was difficult for the U.S. and China to mutually agree on a high-quality FTA. The same was true for Japan, China and Korea, whose broader economic cooperation was constantly mired by historical conflicts and unsettled territorial disputes. In a 2006 joint study by the Pacific Economic Cooperation Council (PECC) and the ABAC, it was even reported that 'the FTAAP is not politically feasible at the present time or in the near term'.⁵

Nevertheless, during the 14th APEC Economic Leaders Meeting in 2006, a decision was formed to undertake a feasibility study on FTAAP, which got strong support from the U.S and was viewed as U.S.' strategy to be part of East Asia's regionalism initiatives. Around that time, the East Asian economic integration was picking up momentum. In addition to rapid proliferation of FTAs in East Asia, the first East Asia Summit was held in Malaysia in December 2005, moving towards a community among the nations of East Asia. There were also regular discussions on establishing an East Asia Free Trade Agreement (EAFTA), promoted by China and Comprehensive Economic Partnership for East Asia (CEPEA), advocated by Japan.

Since 2006, APEC has been examining the feasibility and desirability of an FTAAP as a long-term vision for both APEC economies and the world economy. There has been no concrete decision on what pathways to use to achieve an FTAAP and the timing of such an arrangement. As APEC is not geared for a negotiation anytime soon, the pathways at this point in time are running outside of APEC. This was observed with the emergence of RCEP

⁴ Bergsten, C. F. (2007). 'A Free Trade Area of the Asia-Pacific in the Wake of the Faltering Doha Round: Trade Policy Alternatives for APEC', in by Charles E Morrison and Eduardo Pedrosa (ed) An *APEC Trade Agenda?: The Political Economy of a Free Trade Area of the Asia-Pacific*, A Joint Study by ABAC and PECC, Singapore: Institute of Southeast Asian Studies.

⁵ The Pacific Economic Cooperation Council and the APEC Business Advisory Council, 2006. 'An APEC Trade Agenda?: The political Economy of a Free Trade Area of a Asia- Pacific'

and TPP, and in the 2010 APEC Leader's Summit, it was announced that an FTAAP should be pursued as a comprehensive free trade agreement by developing and building on ongoing regional undertakings, such as ASEAN+3, ASEAN+6 (now combined as RCEP), and the TPP. But how far is that feasible?

Challenges for an FTAAP

An FTAAP, using either of the TPP or the RCEP pathways, would be possible, if it is endorsed by the big powers like the U.S., Japan and China. The most heard criticism of FTAAP is that it would never happen because of the political conflict. Moreover, in their current forms, membership and nature varies significantly. The TPP does not include major powers like China or India. For other ASEAN members, Thailand and the Philippines are considering whether to join. Indonesia views TPP as too complex with its inclusion of labor and environmental issues and a range of difficult issues for Indonesian domestic economy. In contrast, Indonesia is a member of RCEP and is leading the negotiation process for the agreement. However, the US is not a part of the RCEP negotiations.

The second challenge for an FTAAP using the RCEP or the TPP as pathways is the differences in development stages (*Table 1*) and accordingly differences in interest among the negotiating partners. Currently, while TPP has been declared as a 21st century, high-standard, comprehensive FTA, deepening economic integration process, RCEP is advocated as more in line with the requirement of developing economies.

Low	Income	Lower Middle-Income	Upper Middle Income	High Income
Economies	(US\$1,035		Economies (US\$4,086-	Economies
or less)		US\$4,085)	US\$12,615)	(US\$12,616 and more)
~			~	
Cambodia	and	Indonesia, India, Laos,	China, Malaysia,	Australia, Brunei,
Myanmar		Philippines, Vietnam	Thailand, Mexico, Peru	Japan, Korea, Rep.,
				New Zealand,
				Singapore, Canada,
				Chile, United States

Table 1: Varying Levels of Development

Note: Economies are divided among income groups according to 2012 gross national income (GNI) per capita

Source: Author's compilation from World Bank (economy classification data)

Third, both negotiations face complex challenges and are difficult to conclude. The TPP, although is said to be in its final stages, is facing difficulty as the partner economies are reluctant to close the talks without assurance that the deal with the U.S. will stick and will not face any roadblocks from the Congress, especially on issues like intellectual property rights, labour and environmental standards. The negotiating economies want the U.S. administration to secure the Trade Promotion Authority (TPA), a 'fast track' procedure that pre-commits the Congress to implement legislation, without amendment and within a specified time frame. However, the short-term prospects for U.S. trade liberalization both at the global and the regional level have been dimmed by the expiration of TPA or fast-track negotiating authority in 2008⁶. Given the increasingly fractious U.S. trade politics, it is highly unlikely that in the absence of such procedures, trade accords with major partners could be successfully concluded and enacted. Similarly, the RCEP negotiations are not without complications, especially keeping in mind the dynamics between China, Korea and Japan. The deadline of 2015 looks too optimistic.⁷

Opportunities from an FTAAP

However, economically, an FTAAP under certain conditions can deliver on maximum trade creation effect and minimum trade diversion effect, terms coined by Jacob Viner in 1950⁸. The conditions for an economically beneficial FTAAP are outlined as below⁹:

- Market size of the RTA: larger the better
- Pre-RTA intra-regional tariff: higher the better
- Pre-RTA extra-regional tariff: lower the better
- Pre-RTA intra-regional trade volume: deeper the better
- Competitive pre-RTA industrial structure: tougher the better

⁶Bergsten, C. Fred; Noland, Marcus and Schott, Jeffrey J. (2011). 'The Free Trade Area Of The Asia- Pacific: A Constructive Approach To Multilateralizing Asian Regionalism', *ADBI Working Paper Series*, No. 336 ⁷ Zhiming, Xin. "North Asia free-trade area agreement enormously beneficial but years away," *China Daily*, September 1, 2011.

⁸ Trade creation is the phenomenon of displacing the less efficient domestic production to more efficient partner economy production. This leads to economic gain as now the economy's resources are more efficiently utilised. However, it is also possible that preferential treatment is extended to a partner economy that replaces a more efficient non-FTA partner. In that case, there will be trade diversion: the importing economy is using a less efficiently produced import. Viner, J. (1950) *The Customs Union Issue*, New York: Carnegie Endowment for International Peace.

⁹ Kim, Sangkyom; Park, Innwon and Park, Soonchan, (2013), 'A Free Trade Area of the Asia Pacific (FTAAP): Is It Desirable?', *Journal of East Asian Economic Integration* Vol. 17, No. 1, pp.3-25

- Complementary post-RTA industrial structure: stronger the better
- Pre-RTA level of economic development gap: narrower the better
- Geographical proximity: closer the better

Most of the member economies that are currently negotiating TPP or RCEP are satisfying most of the above conditions. Looking at the individual conditions, first, *table 2* shows that the consolidated market size for both TPP and RCEP (55.6 per cent of the world population and 56.5 per cent of the world GDP) is large enough to create a positive trade creation effect. In other words, in general, there is net trade creation effect from large markets as it offers economies of scale. Second, while pre-RTA tariff structure is a debatable factor, lower tariff rates of the RCEP and TPP economies (6.4 per cent and 6.9 per cent for RCEP and 3.9 per cent and 4.4 per cent for TPP members) than that of the world as a whole (6.9 per cent and 9.4 per cent) may generate net trade creation effect as TPP or RCEP successfully launches its regional economic cooperation. Third, the higher ratio of intra-regional trade among RCEP and TPP members of over 40 per cent and 38 per cent respectively is a promising factor in expecting a large trade creation effect (*Table 3*).

		CDD		Circula Maran	Circula Maran
		GDP		Simple Mean	Simple Mean
	Population	(nominal,	Per Capita GDP	Applied Tariff	MFN Applied
	(million)	US\$ billion)	(nominal, US\$)	Rate (%)	Tariff Rate (%)
Australia	22.906	1,541.70	67,304.47	2.84 ^d	2.70
Brunei	0.4	16.952	42,402.38	3.77 ^c	2.50
Cambodia	15.254	14.118	925.516	12.36 ^a	10.90
Canada	34.827	1,821.45	52,299.76	2.92 ^c	4.30
Chile	17.403	268.177	15,410.12	4.85 [°]	6.00
China	1,354.04	8,221.02	6,071.47	7.93 ^d	9.60
Hong Kong	7.178	263.259	36,676.30	-	-
India	1,227.19	1,841.72	1,500.76	11.46 ^b	13.70
Indonesia	244.468	878.536	3,593.67	5.02 ^d	7.00
Japan	127.611	5,960.27	46,706.72	2.48^{d}	4.60
Korea	50.004	1,129.54	22,588.92	10.33 ^c	13.30
Laos	6.646	9.171	1,379.90	9.25 ^a	N.A.
Malaysia	29.457	304.726	10,344.87	6.75	6.50
Mexico	117.055	1,177.40	10,058.50	7.42 ^b	7.80
Myanmar	63.672	55.273	868.086	4.03 ^a	5.60
New Zealand	4.44	169.831	38,254.62	2.48 ^c	2.00
Papua New					
Guinea	6.826	15.134	2,217.11	4.40°	N.A
Peru	30.474	198.851	6,525.36	3.17 ^d	3.70
The					
Philippines	95.8	250.182	2,611.50	5.31 ^c	6.20

Table 2: Key Economic Indicators of RCEP, TPP and APEC Economies, 2012

Russia	141.924	2,029.81	14,302.09	7.48 ^d	10.00
Singapore	5.312	276.52	52,051.81	0.0°	0.20
Taiwan	23.316	474.149	20,335.92	N.A	6.10
Thailand	67.892	365.966	5,390.41	11.22 ^b	9.80
The U.S.	314.184	16,244.58	51,703.95	2.84 ^d	3.40
Vietnam	88.762	155.565	1,752.62	7.13 ^c	9.50
RCEP (A)	3,403.86	21,191.08	18,984.23	6.40	6.94
TPP (B)	792.83	28,136.01	32,901.26	3.89	4.43
APEC (C)	2,784.28	41,763.60	24,219.17	4.92	5.76
World (D)	7,046.37	72,440.45	10,280.54	6.95	9.45
A+B	3,917.80	40,901.52	20,940.26	5.88	6.47
(A+B)/D (%)	55.6	56.5	203.69	84.66	68.41
A/D (%)	48.31	29.25	184.66	92.05	73.44
B/D (%)	11.25	38.84	320.03	55.94	46.91
C/D (%)	39.51	57.65	235.58	70.75	60.95

Note: a – *data is for 2008; b* – *data is for 2009; c* – *data is for 2010; d* – *data is for 2011*

Source: World Bank Database, World Trade Organization

	2000	2005	2010	2011
ASEAN	22.7	24.9	24.6	24.1
CJK	20.3	23.7	22.1	21.3
RCEP	40.6	43.0	44.1	43.8
TPP	48.1	43.5	39.0	38.6
APEC	72.2	69.5	67.1	66.1

Table 3: Intraregional Trade Share: 2000-2011 (%)

Source: author's estimate using IMF statistics and The Apec Region Trade and Investment Report, 2012

For the other condition of pre-RTA competitive industrial structure, with a large number of members (total members when TPP and RCEP are consolidated are 21), competition between the industries is inevitable. However, with liberalisation of sectors, this may introduce competition, thereby generating efficiency gains and benefiting the entire nation. For the last two conditions, development gap among members and geographic proximity, the expected welfare effect is difficult to estimate and most likely will not be positive. While both the mega-RTAs have diverse nature of membership, the geographic proximity leading to lower transaction cost is more feasible under RCEP rather than TPP.

There are studies that have quantified the likely welfare effect of these RTAs. One such study by Petri, Plummer and Zhai¹⁰ surmises that while TPP¹¹ offers benefits of around US\$451

¹⁰ Petri, Peter A., Michael G. Plummer and Fan Zhai. (2012). 'The Trans-Pacific Partnership and Asia-Pacific Integration: A Quantitative Assessment'. *Policy Analysis in International Economics No. 98*. Washington: Peterson Institute for International Economics and East-West Center. See also the website: asiapacifictrade.org. ¹¹ TPP in the study involves 16 members i.e. the current 12 negotiating economies and Indonesia, Korea, the Philippines and Thailand.

billion, RCEP (termed as Asian-track in the study) offers US\$644 billion. Benefits increase with the scale of the integration project. The study further mentions that China and the U.S. would gain substantially from an inclusive FTAAP agreement compared to that of sub-regional tracks as they will have access to each other's markets. It estimated that global FTAAP benefits were at US\$2.4 trillion under the TPP template, US\$1.3 trillion under the RCEP template, and US\$1.9 under a template that averages the two.

Two Scenarios for a FTAAP

From the above, one might say that while the formation of an FTAAP is a challenge, it offers opportunities too. However, currently, there are two possible scenarios:

- a) RCEP and TPP will merge to form the Asia-Pacific region-wide FTAAP and
- b) RCEP and TPP will remain separate and the U.S. and China will not have dual membership (*Table 4*).

Member economies, especially the ones with dual membership, will favor merging RCEP and TPP in order to avoid inefficiency from coexistence of the two RTAs. Moreover, as enlarging an FTA entails a larger trade-creation effect for the member economies vis-à-vis a trade diversion effect, there is a higher possibility of combining the RTAs. However, the member economies of both RCEP and TPP are in different level of economic development. This will lead to varied negotiating interest, resulting in a dual-track approach. RCEP, driven by ASEAN, will continue to follow a more accommodative approach and will position RCEP as an extension of AEC. Also, the political rivalry between the U.S. and China encompassing discussion on containment and hegemony in the Asia-Pacific region will make it difficult to combine the two mega-RTAs.

a) RCEP and TPP will merge to form an	b) RCEP and TPP will remain separate
FTAAP	Overtime
If inefficiency from coexistence of two RTAs	As the development gap between members
are high	remains or widens
If economies with dual membership put	As RCEP economies have interest in
efforts to harmonize the rules and regulations	liberalizing manufacturing sector and TPP
across the agreements	economies are more keen on liberalizing
	services, investment and establish rules of

Table 4: Possible Scenarios for FTAAP

	IPR, competition policy, labour laws etc.
If economies acknowledges that merging the	As each member economies have to carve out
two will generate economies of scale and	the sensitive sectors to satisfy the domestic
hence trade creation effect	constituencies. Like Japan is protective for its
	farming sector, whereas the U.S. favors its
	automobile industry.
	As the U.S. and China continue with their
	international political rivalry
	As the advanced economies see no benefit
	from joining RCEP and the developing
	economies finds it difficult to comply with
	the rules under TPP.

Source: author's compilation

Taken the factors together, there are more chances for the RCEP and TPP to remain separate rather than to merge. This may also gain support among the Asian economies as while they want the U.S. presence in the region, they would also like to keep the U.S. distant from certain regional matters, such as the ASEAN+3 cooperation that involves the ten ASEAN economies and China, Korea and Japan.

Conclusion

Although RCEP and TPP are currently getting negotiated as trade agreements that may shape up the future regional trading architecture leading to an FTAAP, challenges remain. The positive gains from a larger free trade bloc exist. However, at the same time, the trade and investment liberalization through RCEP and TPP encounter obstacles due to diversified interests of member economies. Prospects of combining RCEP and TPP for a future FTAAP gets dim by lack of political will and problems of compatibility with each other. Considering the pros and cons, it is more likely for the RCEP and TPP to remain separate for an FTAAP.

That said, it is too early to say anything for definitive on FTAAP. There are already discussions on Chinese consideration of joining TPP and the US' interests in RCEP developments. Moreover, as RCEP and TPP are still getting negotiated and there is no clarity on the form of FTAAP, it remains to be seen whether the much-hyped FTAAP can be a best practice for a region-wide RTA in future.

Asia-Pacific Economic Cooperation APEC 2014 THE SECOND SENIOR OFFICIALS' MEETING (SOM 2) AND RELATED MEETINGS

APEC Study Centre Consortium (ASCC) Conference 2014 QINGDAO, CHINA 11-12 MAY 2014



SESSION III

Comprehensive Connectivity and Infrastructure Development



2014/ASCCC/3.1

DIVERSIFICATION OF APEC TRANSPORTATION ROUTES BY DEVELOPMENT OF THE NORTHERN SEA ROUTE

Gleb A. Ivashentsov

Russia



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

Ambassador Gleb A.Ivashentsov, Dy Director, Russian APEC Study Center Address to ASCCC-2014, Quindao

Diversification of APEC transportation routes by development of the Northern Sea Route

The efficient and safe transportation of goods and people is key to APEC's goal of free and open trade in the Asia-Pacific region. Reliability and safety of transportation chains is an utter important precondition for sustainable development, economic, energy, food and ecology security in the region and the world.

Improvement of transportation chains includes diversification of transportation routes. Russia came up with such an initiative during its APEC chairmanship in 2012. There is no doubt that diversification of transportation routes can produce a weighty economic effect by cutting transportation and transaction costs which means lower prices for final consumers on the one side and an extra motivation for related industries including creation of new jobs on the other.

The diversification of transportation routes could surely include the use of Russia's transit facilities, in particular those of the Northern Sea Route(NSR), in addition to traditional overburdened routes via the Malacca Straight and the Suez Canal.

For a long period that route was blocked with ice. But during the last decades of the 20th century and the first decade of the 21st century, the Arctic has experienced some of the most rapid temperature increases on Earth. On average, the mean annual air temperature has increased at approximately twice the rate of the rest of the world. Reductions in sea ice extent, particularly in summer, decreased ice thickness, melting glaciers, thawing permafrost, and rising sea levels are all indications of warming in the region over the last three decades.

All this may open up new opportunities for economic activity. Increased melting of Arctic sea ice may lead to a longer navigation season, improved accessibility for shipping, and extended use of the shipping routes along the Northern Sea Route. The Russian Academy of Science Oceanology Institute named after P.P.Shirshov, affirms that the area of the polar ice-cap in summer seasons of 2011-2013 was one third less than ten years before, while some experts are of the opinion that year-round navigation via the NSR can become possible by 2020-2025.

Substantial change of climatic conditions prompt different economies to plan their participation of the exploitation of the NSR. APEC partners of Russia have positively reacted to Russia's initiative on diversification of maritime routes. These are first of all China, Japan, South Korea and Singapore, whose foreign trade is based on maritime shipping. In 2013 these states along with Italy and India got status of observers with the Arctic Council.

The NSR which may be used by all states and all shipping companies, can reduce travel distance between Europe and the North Pacific Region by more than 40% compared with current sea

routes by cutting transit time by 10-15 days. Furthermore, with the expected increase in demand for energy, combined with a decrease in production in mature petroleum provinces, in the coming period there will be an increasing pressure to develop oil and gas resources in the Arctic region. Continued melting of Arctic sea ice will result in easier access to these resources and may open up for more exploration and production activity, as well as increased ship transport of hydrocarbons and other raw materials from mineral deposits of the Russian Arctic.

Compared with the traditional sea routes, transiting the Arctic will always be associated with higher hazard levels (e.g. sea ice and harsh weather), a higher risk of reduced service reliability, and higher costs per unit of distance travelled (ice strengthening, ice breaker support etc). For shippers to choose the Arctic route, the benefits must be substantial and clearly outweigh the disadvantages. These benefits may be found in less travel distance, which can substantially reduce fuel cost, and shorter travel time, which may translate into higher income due to lower inventory-holding costs and increased productivity. There is no queue in comparison to the Suez Canal. There is no risk of pirates' attacks. There are no limits to the ship's dimensions while the Suez Canal cannot receive ships with over 20.1 m draught.

Foreign shippers seem to have taken all this into account. While in 2009 there was just a single foreign transit ship that used the NSR to transport cargo of 20 Thousand tons, in 2010 the transit cargo rose to 110 Thousand tons. The summer navigation of 2012 saw 25 transit ships with 1.2 mln. tons cargo, and summer navigation of 2013 - 71 ships, including 25 foreign ones, with 1.36 mln. tons.

Slightly more than half of these vessels sailed eastwards compared to those moving in the opposite direction with bulk cargos dominating. For quite a time the shippers were reluctant to transport containerized cargo through the Northern Sea Route until the first Chinese vessel, Cosco's Yong Sheng, became a trail-blazer to deliver such a cargo westwards from Dalian to Rotterdam between August 27 and September 11, 2013.

By prognosis of Lloyd's List, about 15 mln. tons will be shipped by the Northern Sea Route in 2020. Russian experts estimate that in perspective the potential annual volume of transit shipping along the NSR in both eastward and western directions will rise up to 50 Mln. tons.

When Novatek's LNG refinery starts operating on the Yamal peninsula in 2017, and LNG shipments commence eastwards and westwards from the new Kara Sea port of Sabetta, a new fleet of 16 LNG carriers will depend on the Russian icebreakers to move more than 16 million tonnes per annum of LNG; the tankers will each have a rated capacity of 150,000 tonnes.

Russia views the NSR as an integrated infrastructure project. Its development is to include modernisation of basic ports, advancement of ice-breaker support, improvement of hydrographic

and meteorological services and emergency search and rescue response, as well as of radio and satellite communications.

To promote shipping via the NSR certain alterations have been made to the domestic legislation of Russia. In 2012 Federal Law No. 132-FZ was approved on the rules of navigation in the Russian Arctic zone to keep the ship and sailors safe. The new regulations cover foreign vessel navigation, vessel to shore communication, weather and hydrological services, icebreaker operations, rescue and spill response as well as protection of environment of the Arctic Ocean. These rules also require vessels applying for permits to transit the route to accept Russian icebreaker support, which is determined by whether ice conditions at voyage time are judged to be heavy, medium or light. The Northern Sea Route Administration has been established to operate and administer the route.

Russian Federation proceeds from the need of all-round protection of industrial and ecological security to be an integral part of the NSR's dynamic development as the national transportation artery of Russia. My country enjoys the unique experience of the Arctic navigation and shares this experience with the International Maritime Organisation in working out Polar Code for navigation in the Polar waters. Of special attention is the icebreaker support of transit cargo ships. On Russia's suggestion such a demand has been included to the draft Polar Code.

As the safe shipping along the NSR is possible with the use of icebreakers or high ice class ships only, that surely raises the expenses. But let us make a very simple calculation. International experts note that by using the NSR a foreign consigner can expedite cargo delivery by 15 days saving up to US\$ 500 Thousand at each voyage. The cost of support by a Russian icebreaker could reach more than US\$100 Thousand. Yes, the cost of one container's transportation by the NSR in a winter navigation season might be on average 25-27 percent higher than by the Southern Route. But in the summer navigation season shipping via the NSR would be on average 33-35 percent cheaper than that via the Southern Route. The cost of cargo transportation by a single voyage of a container carrier is on average 13 percent cheaper than the cost of delivery by the Southern Route.

Russian Federation has the world biggest fleet of icebreakers. At present eight Russian icebreakers operate in the NSR area, including four nuclear – powered and four diesel-powered ones. Unlike diesel powered vessels, the nuclear ones aren't limited in range or operation by the need to make port for refueling. By 2020 three universal nuclear icebreakers of 60 mega-Watt capacity as well as five diesel powered icebreakers of 25 megaWatt capacity will be built at the expense of Russian Federation state budget. The work on a conceptual design of a nuclear icebreaker of 110-130- megaWatt capacity for a year-round work in any type of ice conditions in

any area of the Arctic has started. The width of these icebreakers will be sufficient to secure a passage for tankers of up to 100 Thousand deadweight tonnage which could be used for LNG shipment. The first vessel will be commissioned in December 2017 and the rest ones by 2020. These icebreakers are to be the biggest in the world.

The prospects of the Northern Sea Route will be determined by the scale of investment and industrial activities in the Arctic. Anyhow some people expect that the final effect of the development of that world new route could be comparable to that of the construction of the Suez and the Panama canals in the past centuries.

Several factors will influence commercial viability. These include the availability of suitable ships, icebreakers, and other infrastructure, and trends on competing routes. A

substantial fleet of powerful Russian icebreakers and ice-capable cargo ships and a pool of experienced polar mariners already exist. The level of domestic and foreign resources to be applied to Arctic navigation in the Russian economy remains to be seen.

Economies of scale have driven development trends in world shipping over the past fifty years. Projections to 2050 are for further advancement of reliability and safety of transportation chains. There is to be further rationalization in container handling. There will be an emphasis on reducing costs in ports through new loading techniques and it is predicted that dry bulk cargoes will increasingly be shipped in larger vessels.How these trends will influence the economic future of the Northern Sea Route will depend on the niche which could be captured in projected traffic flows to and from Europe.

The transit potential of Russia's transportation system is an important element of our country's integration to the Asia Pacific economic space. This is a matter of consensus in Russia as well as among the APEC members. It was with a serious attention that our partners received the suggestion of President Putin made at the Bali APEC summit on joint projects of the modernisation of the Trans-Siberian and Baikal-Amur railways as well as on the development of the Northern Sea Route. Russia is interested to attract investments and technologies from Asia Pacific economies for that purpose. President Putin noted that those investments might come in the format of public-private partnership viz. under the safeguards of the state.

The commercial use of the NSR has now become well established. Thus far shipping has consisted largely of domestic traffic along the northern coast Russia. The development of a viable navigation route has been achieved through a lengthy and sustained effort. Will this now lead to regular international use of the Northern Sea Route for both transits and trade with Siberia and north European Russia? This question could become one of the most interesting in the present world-wide trade.

There is a need of a deep and detailed discussion by academic and business circles of the APEC economes on the political, economic, legal and all other aspects of the development of the Northern Sea Route.



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PROMOTING INVESTMENT IN INFRASTRUCTURE THROUGH PUBLIC PRIVATE PARTNERSHIP

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APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

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'Promoting investment in infrastructure through Public Private Partnership'

Introduction

There is a great need for infrastructure development within the APEC region. Some of these infrastructure needs are being procured through a Public Private Partnership (PPP) arrangement. But more could be with the right frameworks in place. Unfortunately, there is lack of capacity within the region to adequately prepare and present infrastructure projects that are attractive to the private investor. Investors are attracted by well-constructed, 'bankable' projects that are financially viable. Economies also require the capacity to generate a pipeline of bankable projects.

This paper discusses the relevant capacity building initiatives that are currently being undertaken within APEC, to address this disconnect. These capacity building initiatives include; the Asia-Pacific Infrastructure Partnership (APIP), the Pilot PPP Center in Indonesia, and the APEC Experts Advisory Panel.

The Australian APEC Study Centre (AASC) in the College of Business at RMIT University in Melbourne is strongly involved in these initiatives. The AASC is the Secretariat for the Australian APEC Business Advisory Council (ABAC) and is the Secretariat for the Asia-Pacific Infrastructure Partnership (APIP).

The Asia-Pacific Infrastructure Partnership (APIP)

Background

Discussions held at a forum at the time of the first ABAC meeting in 2010 in Melbourne, focussed on establishing the APIP and the AASC accepted the role of the interim secretariat. At a subsequent forum held in Yokohama in 2010 on private infrastructure finance, between ABAC, the Asian Development Bank (ADB), the Japan Bank for International Cooperation (JBIC) and Japan's Ministry of Finance. It was concluded that the public sector alone could not meet the vast infrastructure investment required in APEC. It would also require investment and expertise from the private sector.

To achieve this goal a greater understanding of each sector's needs would be necessary. Also, a better understanding of the specific issues and risks that the private sector faces, could contribute to creating a more conducive environment, for private financing of infrastructure.

Following this conclusion, ABAC proposed to establish the APIP as a regional structure to initiate dialogues within APEC economies. To frankly and objectively discuss complex matters related to infrastructure between Ministers and key officials from participating economies and infrastructure experts from the private sector, multilateral development banks and academia.

At the forum on 'Promoting Private Financing for Infrastructure in APEC' held by ABAC and the World Bank in Honolulu in 2011. APEC Finance Ministers agreed on the inclusion of APIP, among their policy initiatives and its management by ABAC.

APIP Panel structure and Dialogue format

The governance function for APIP is undertaken by the Chairman, Coordinators and the Secretariat. Mr Mark Johnson AO, ABAC Australia until recently, was the Chairman. Mr Ken Waller, Director, AASC and Dr Julius Caesar Parrenas, ABAC Japan, are the coordinators and the AASC is the Secretariat.

APIP panel members are invited by ABAC members to join the panel on a voluntary and self-funded basis. To date, there are 70 members on the APIP panel who were selected for their knowledge, experience and active engagement in infrastructure projects. They come from a wide range of relevant fields including; academia, asset management, commercial banking, investment banking, engineering, property development, information technology, legal and consulting sectors, the ADB, World Bank and the OECD.

APIP Dialogues are convened at the request of APEC member economies, to discuss and seek expert advice about the environment and the framework required for the design, management, administration, implementation, finance and infrastructure issues and APEC concerns. The agenda for the Dialogue is discussed between a lead agency in an economy and the APIP Secretariat. Usually a Minister or Vice-Minister will lead the economy delegation at an APIP Dialogue, along with high level Officials. Recent Dialogues have involved around 50 participants from the economy and APIP panel members.

A dialogue is usually also preceded by a preparatory meeting amongst APIP panel members. The preparatory meeting will include an economy-specific briefing from a regional expert and its purpose is to coordinate the panel's responses to items on the Dialogues agenda. The advice provided by APIP panel members is high level and based on regional and global observations.

Reports from each APIP Dialogue are written by the Coordinators and endorsed at the ABAC 'Advisory Group on APEC Financial System Capacity Building' meetings. The Summary Reports of discussions at each APIP Dialogue are then made publicly available on either the ABAC or AASC websites.

The APIP model has proved to be extremely successful, and APIP Dialogues have now been held with Mexico, Peru and the Philippines in 2011, Viet Nam and Indonesia in 2012, the Philippines (second dialogue), Thailand, Indonesia (second dialogue) and Malaysia in 2013.

Key common issues raised in APIP Dialogues

There are a range of common issues that have been discussed in the APIP Dialogues, and typically, they identify the lack of institutional capacity in agencies, inadequate coordination and collaboration between central and line agencies. The need for improved understanding of risk allocation between the public and private sectors and concerns about financing projects are also discussed, along with taxation issues, legal and regularity frameworks, procurement policies and land acquisition policies.

Capacity:

In many economies there is a need for high quality institutional capacity to prepare well-structured bankable projects, and to develop a pipeline of such projects that will attract major foreign and domestic investors.

Institutional capacity is needed to undertake long term infrastructure planning and transactions, and the capacity to demonstrate the credibility, creditworthiness, governance and management of counter parties and institutions in the public sector.

Coordination and Collaboration:

There is a need for both central and line agencies to coordinate their approaches to PPPs. There is also a need to enhance collaboration between public agencies and private sector participants about policy intentions, project design, financing and risk sharing.

It is important for all parties involved to have an understanding of risks and how they may be most effectively allocated and mitigated.

Financial Markets:

The lack of long-term local currency financing is a major bottleneck in a number of economies. The long-term solution to this is the development of savings institutions, insurance and pension fund industries and bond and other instruments to channel savings into bankable infrastructure projects. Multilateral institutions, export credit agencies and local institutions also have important roles to play in catalysing funding and enhancing the credit status of projects.

Specifically key issues identified include¹:

- Lack of capacity to prepare bankable projects that can provide a robust pipeline, as well as capacity for policy reforms and planning
- The need to better understand risks, which parties are best able to take on which risks in which sectors, and how best to allocate these risks among public, private, multilaterals and other relevant institutions.
- The need to have a transparent and efficient legal and regulatory environment that can reduce risks to the minimum possible.
- Need for mechanisms to mitigate risks that the private sector cannot cover.
- Lack of long-term local currency finance.
- Need for more coordinated and coherent public sector approach to PPPs
- Importance of having credible and creditworthy public counter parties.

¹ Dr J.C. Parrenas, September 2013 APIP update

PPP Pilot Center of Excellence in Indonesia

The PPP Center was a major APEC initiative in 2013 and designed to play a central role in PPP project preparation, approval and monitoring in Indonesia. It is also intended to be a pilot center in the development of other such centers in the region. It will serve as the Indonesian Government's focal point for enhancing the development of PPP policy and of financial instruments to support PPPs, in synergy with key relevant government institutions.

APEC PPP Experts Advisory Panel

A relative major APEC initiative to support the PPP Center in Indonesia has been the creation of an APEC PPP Experts Advisory Panel. It will comprise of representatives from seven economies, APIP panel members and representatives from the OECD and other multilateral development banks. The primary objective of the Advisory Panel will be to provide advice and assistance in capacity building to support the Indonesian PPP Center.

The first task will be to assist Indonesia with the establishment of the APEC Pilot PPP Center within the Ministry of Finance, to develop bankable PPP projects. It is hoped that further PPP Centers will be established within the APEC region.

Research commissioned by ABAC

ABAC has commissioned the following research as further capacity building resources.

- Comparative Study of Contractual Clauses to Provide for the Smooth Adjustment of Physical Infrastructure and Services through the Lifecycle of a Public-Private Partnership (PPP) Project, Foster Infrastructure
- 2. Comparative Study of Frameworks to protect the Long Term Interests of Pension Funds Investing in Public-Private Partnerships, Foster Infrastructure
- 3. Best Practice in Design of Public-Private Partnerships (PPPs) for Social Infrastructure, particularly in Health Care and Education, Foster Infrastructure
- 4. Tax incentives for Public Private Partnerships, Michael Curran, RMIT University School of Accounting

A copy of these Reports, along with all Summary Reports from APIP dialogues can be found on both the ABAC and AASC websites.

This paper heavily references the APIP Dialogue reports written by;

Mr Ken Waller, Director the Australian APEC Study Centre at RMIT University and APIP Coordinator Dr. Julius Parrenas, Coordinator, Asia-Pacific Infrastructure Partnership



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ECONOMIC IMPACTS OF CONNECTIVITY ENHANCEMENT THROUGH TRADE IN

SERVICES

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APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

Economic Impacts of Connectivity Enhancement through Trade in Services

Hikari Ishido¹

Abstract

This paper makes an analysis of the economic impact of service trade liberalization in the APEC regionin terms of Mode 3 (i.e., service provision through commercial presence). The first part of this papermentions the support functions of service firms (e.g., firms in the logistics sector) for manufacturing activities as well as the possible impacts of "intangibility", "scale economy" and "network-effect" on the service firms' foreign commercial presence. Next, APEC members' commitments under the GATS are presented, to highlight the overall low level of liberalization to enhance APEC-wide connectivity. Finally, firm-level investigation has been made. Overall, statistical data reveal some positive correlations between the degree of service trade liberalization in the host economy and service firms' commercial presence in that economy, hence a policy suggestion to further promote service trade liberalization possibly under a comprehensive APEC-wideconnectivity initiative.

Keywords: Trade in services, Connectivity, bilateral FTAs JEL Classification: F13, F14, F15

1. Introduction

This paper makes an analysis of the economic impact of service trade liberalization in the APEC region.APEC 2013 had released the Leaders Declaration which includes Annex A "APEC Framework on Connectivity.² In the document, the shared benefits arising from "advances in telecommunications and transportation" that"would shrink time and distance barriers in our region and link our economies so that goods and people move quickly and efficiently". As indicated in the Annex, APEC has since 2009 advanced the agenda to improve supply-chain connectivity, and is"working to achieve an APEC-wide target of a 10 percent improvement in supply-chain performance by

¹Director and Professor, APEC Study Center, Chiba University, Japan.Research assistantship by Shintaro Kawabata is gratefully acknowledged. This paper has been prepared under a research group on APEC-related issues at the Institute of Developing Economies (IDE) within Japan External Trade Organization (JETRO).

 $^2\ensuremath{\text{Viewable}}$ at the following APEC's website

http://www.apec.org/Meeting-Papers/Leaders-Declarations/2013/2013_aelm/2013_aelm_ annexA.aspx (accessed on 20 February 2014).
2015, in terms of reduction of time, cost, and uncertainty of moving goods and services through the Asia-Pacific region, taking into consideration individual economies' circumstances". This is indeed part of the APEC's"comprehensive approach to working 'at the border', 'behind the border' and 'across the border'".

Table 1 lists APEC economies' commercial services trade as a percentage of GDP.As indicated, dependence on service trade has been increasing over the years: on the whole, APEC economies' dependence on service trade was 5.5 percent in 1990, while the index recorded 8.2 percent in 2012. Although the statistics on service trade as defined by the IMF mainly incorporates mode 1 (cross-border transaction of services) only and excludes, most importantly, mode 3 (supply of services through commercial presence), the overall trend confirms the increasing importance of trade in services in the APEC region.

						(% of	GDP)
Economy	1990	1995	2000	2005	2010	2011	2012
Australia	7.5	9.0	9.1	8.7	8.5	8.0	7.6
Brunei			16.1	16.3	19.6	12.8	
Canada	7.9	9.9	11.4	10.5	10.6	10.3	10.0
Chile	11.9	9.5	10.9	11.7	10.8	11.3	10.2
China	2.8	5.9	5.5	7.0	5.9	5.6	5.6
Hong Kong, China	40.6	38.8	37.8	53.7	67.8	70.1	68.6
Indonesia	7.3	9.2	12.4	12.0	5.9	6.0	6.4
Japan	4.0	3.5	3.9	5.3	5.4	5.2	5.3
Korea	7.5	9.4	12.0	12.7	17.9	17.4	19.2
Malaysia	20.8	29.6	32.4	28.7	25.8	25.5	26.2
Mexico	6.6	6.5	5.1	4.2	3.6	3.5	3.5
New Zealand	12.7	14.3	17.0	14.8	13.0	13.1	12.5
Papua New Guinea	18.4	20.8	28.8	31.6	31.8	26.9	26.2
Peru	6.8	5.3	6.8	6.5	6.1	6.0	6.2
The Philippines	10.4		10.6	10.0	12.6	13.3	13.0
Russia		7.8	9.9	8.2	7.6	7.5	8.1
Singapore	59.0	59.8	60.9	89.5	88.2	91.0	83.6
Chinese Taipei	12.7	13.8	13.9	15.6	18.0	18.7	19.2
Thailand	14.6	19.8	23.7	26.3	24.7	27.0	27.8
United States	4.1	4.5	4.9	5.1	6.3	6.6	6.6
Vietnam	4.8	19.9	19.1	16.4	16.1	16.4	15.4
APEC average	5.5	6.0	6.4	7.3	8.1	8.2	8.2
World	7.3	8.0	9.1	10.7	11.7	11.8	11.8

Table1.Commercial services trade as a percentage of GDP by economy, 1990-2012

Source: StatsAPEC (http://statistics.apec.org/index.php/key_indicator/index).

As part of the work to achieve the Bogor Goals by 2020 and to achieve the 2010 Yokohama Vision of "Bogor and Beyond", the APEC is to "aspire to reach a seamlessly and comprehensively connected and integrated Asia Pacific by realizing:

- Physical connectivity that improves supply chain performance, connects and integrates logistics, transport, energy, and telecommunication infrastructure in the APEC region.
- Institutional connectivity that advances regulatory and procedural cooperation and coherence among our economies.
- People-to-people connectivity that enhances interaction, mobility and joint endeavors".

This paper focuses on the second one, i.e., the*institutional connectivity*. The structure of this paper is as follows. The next section discusses the status quo of service trade liberalization in the APEC region in terms of Mode 3 (i.e., service provision through commercial presence). Section 3 is dedicated to a firm-level analysis of service trade investment. Section 4 concludes this paper wish some policy options in terms of APEC's connectivity enhancement.

2. Liberalization of trade in services as an APEC-wide institutional connectivity-enhancement

As indicated in the previous section, service firms possess supporting functions, e.g., firms in the logistics, financial, and IT sectors facilitate manufacturing activities. And service firms can have the features of "intangibility" (with which branch offices can share business know-hows), "scale economy" and "network-effect" in their foreign commercial presence (Ishido, 2013). As indicated in the Annex, it is imperative, therefore, to advance logistics and transport facilitation.

Free trade agreements (FTAs) can strengthen the institutional linkage in favor of attracting foreign direct investment (FDI) between their member economies, through transaction costs reduction and lowering sunk costs associated with the establishment of business offices in the services sector.³The World Trade Organization (WTO) has its

³APEC at large therefore needs to launch its own service liberalization package, as

own service-sector negotiation scheme named the General Agreements on Trade in Services (GATS). APEC economiesare, together with all the other parties to WTO, committed to the GATS. As it stands, however, the degree of liberalization promised under the GATS remains limited (Ishido, 2011).

While the launching of GATS was an epoch-making event, its impact remains limited. In a commitment table under GATS, four Modes, i.e., Mode 1 up to Mode 4, andtwo aspects of liberalization, i.e., market access (MA) and national treatment (NT), arelisted in tabular formats. In each service sector, the four modes and two aspects of liberalization make eight "cells", for each of which the existence of limitations is indicated in text. Such indication is created by filling in one of the following three indications: (1) "none" (in the case of no limitation), or (2) "unbound" (in the case where there is no legally binding commitment made), or (3) description of the limitation.

GATS article 16 stipulates the following six regulations, from A to F, related to the market access of trade in services.

- A:limitations on the number of service suppliers whether in the form of numerical quotas, monopolies, exclusive service suppliers or the requirements of an economic needs test;
- B:limitations on the total value of service transactions or assets in the form of numerical quotas or the requirement of an economic needs test;
- C:limitations on the total number of service operations or on the total quantity of service output expressed in terms of designated numerical units in the form of quotas or the requirement of an economic needs test;
- D:limitations on the total number of natural persons that may be employed in a particular service sector or that a service supplier may employ and who are necessary for, and directly related to, the supply of a specific service in the form of numerical quotas or the requirement of an economic needs test;
- E:measures which restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service;
- F:limitations on the participation of foreign capital in terms of maximum percentage limit on foreign share-holding or the total value of individual or aggregate foreign

suggested in the conclusion part (Section 4).

investment.

Additionally, there are the following two types of regulation.

- G:limitations related to government approval(indicated explicitly in the specific commitment table under the GATS);
- T:restrictions related to paying taxes or fees(indicated explicitly in the specific commitment table under the GATS).

The rest of the types of commitment are either "no promise" or "no limitation" on market opening up, i.e.,

- U: Unbound (i.e., "no promise"); or
- N: None (i.e., "no limitation").

Below are the result of categorizing each APEC economy's commitment under the GATS by sector, using the GATS specific commitment tables (2003 version⁴). Several connectivity-related sectors are taken up. As regards F (limitations on the participation of foreign capital), the figure following the symbol F denotes maximum equity participation by foreign suppliers (in percentage).

		Market Access				National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	DE	Ν	EG	D	E	Ν	U	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	U	U	U	U	U	U	U	U
Chile:	U	U	U	U	U	U	U	U
China:	Ν	Ν	EF49	D	Ν	Ν	U	U
Hong Kong:	Ν	Ν	Ν	U	U	U	Ν	U
Indonesia:	Ν	Ν	E	ED	EG	Ν	DET	DEG
Japan:	U	U	U	U	U	U	U	U
Korea:	U	U	U	U	U	U	U	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	U	U	U	U	U	U	U	U
New Zealand:	Ν	Ν	U	U	Ν	Ν	U	U
PNG:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Peru:	U	U	U	U	U	U	U	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Chinese Taipei:	U	U	U	U	U	U	U	U
Thailand:	Ν	Ν	U	D	Ν	Ν	U	U
United States:	U	U	U	U	U	U	U	U
Viet Nam:	Ν	Ν	Ν	U	Ν	Ν	Ν	U

<Maritime Transport Services (Freight transportation)>

As above, the connectivity in the Maritime Transport Services (Freight transportation) remains rather weak, judging from the fact that U (Unbound) are dominant.An APEC-wide enhancement of connectivity is much needed in this sector.

		Market	Market Access			National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	U	U	U	U	U	U	U	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	U	U	U	U	U	U	U	U
Chile:	U	U	U	U	U	U	U	U
China:	E	Ν	U	U	U	Ν	U	U
Hong Kong:	U	U	U	U	U	U	U	U
Indonesia:	U	U	U	U	U	U	U	U
Japan:	U	U	U	U	U	U	U	U
Korea:	U	U	U	U	U	U	U	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	U	U	U	U	U	U	U	U
New Zealand:	U	U	U	U	U	U	U	U
PNG:	U	U	U	U	U	U	U	U
Peru:	U	U	U	U	U	U	U	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	U	U	U	U	U	U	U	U
Chinese Taipei:	U	U	U	U	U	U	U	U
Thailand:	U	U	U	U	U	U	U	U
United States:	U	U	U	U	U	U	U	U
Viet Nam:	U	Ν	U	U	U	Ν	Ν	U

<Internal Waterways Transport (Freight transportation)>

A summary comment is that the Internal Waterways Transport (Freight transportation) is almost entirely closed to foreign suppliers, since the entry of U (Unbound) is dominant. An APEC-wide enhancement of connectivity is much needed in this sector.

		Market	Market Access			National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	U	U	U	U	U	U	U	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	U	U	Ν	U	U	U	Ν	U
Chile:	U	U	U	U	U	U	U	U
China:	U	U	U	U	U	U	U	U
Hong Kong:	U	U	U	U	U	U	U	U
Indonesia:	U	U	U	U	U	U	U	U
Japan:	U	U	U	U	U	U	U	U
Korea:	U	U	U	U	U	U	U	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	U	U	U	U	U	U	U	U
New Zealand:	U	U	U	U	U	U	U	U
PNG:	U	U	U	U	U	U	U	U
Peru:	U	U	U	U	U	U	U	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	U	U	U	U	U	U	U	U
Chinese Taipei:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Thailand:	U	U	U	U	U	U	U	U
United States:	U	U	U	U	U	U	U	U
Viet Nam:	U	U	U	U	U	U	U	U

<Air Transport Services (Freight transportation)>

A comment is that the Air Transport Services (Freight transportation)is, just as the Internal Waterways Transport (Freight transportation), almost entirely closed.An APEC-wide enhancement of connectivity is much needed in this sector.

		Market	Market Access			National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	U	U	U	U	U	U	U	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Chile:	U	U	U	U	U	U	U	U
China:	Ν	Ν	U	U	Ν	Ν	U	U
Hong Kong:	U	U	U	U	U	U	U	U
Indonesia:	U	U	U	U	U	U	U	U
Japan:	U	U	U	U	U	U	U	U
Korea:	U	U	U	U	U	U	U	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	U	U	U	U	U	U	U	U
New Zealand:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
PNG:	U	U	U	U	U	U	U	U
Peru:	U	U	U	U	U	U	U	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	U	U	U	U	U	U	U	U
Chinese Taipei:	U	Ν	Ν	U	U	Ν	Ν	U
Thailand:	U	U	U	U	U	U	U	U
United States:	Ν	Ν	E	U	Ν	Ν	Ν	Ν
Viet Nam:	U	Ν	U	U	U	Ν	U	U

<Rail Transport Services (Freight transportation)>

Overall, the Rail Transport Services (Freight transportation)is closed to foreign suppliers, as the dominance of U (Unbound) above indicates. An APEC-wide enhancement of connectivity is much needed in this sector.

		Market	Market Access			National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	Ν	U	U	U	Ν	U	U	U
Chile:	U	U	U	U	U	U	U	U
China:	U	Ν	E	U	U	Ν	Ν	U
Hong Kong:	U	U	U	U	U	U	U	U
Indonesia:	U	U	U	U	U	U	U	U
Japan:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Korea:	U	U	EF100	U	Ν	Ν	Ν	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	Ν	Ν	F100	U	Ν	Ν	Ν	U
New Zealand:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
PNG:	U	U	U	U	U	U	U	U
Peru:	U	U	DG	U	U	U	Ν	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	U	U	U	U	U	U	U	U
Chinese Taipei:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Thailand:	U	U	U	U	U	U	U	U
United States:	U	U	U	U	Ν	Ν	Ν	Ν
Viet Nam:	U	U	U	U	U	U	U	U

<Distribution Services (Wholesale Trade Services)>

The Distribution Services (Wholesale Trade Services) is more closely connected across APEC member economies than the transportation-related sectors (shown above), as the entries of N (None, or no limitation against foreign suppliers) can be observed. The incidences of U (Unbound, or "no promise") are still many, indicating that an APEC-wide connectivity of wholesale services needs to be enhanced further.

		Market A	Market Access			National Treatment		
	Mode 1	Mode 2	Mode 3	Mode 4	Mode1	Mode 2	Mode 3	Mode 4
Australia:	U	Ν	Ν	U	Ν	Ν	Ν	U
Brunei:	U	U	U	U	U	U	U	U
Canada:	Ν	U	U	U	Ν	U	U	U
Chile:	U	U	U	U	U	U	U	U
China:	U	Ν	U	U	U	Ν	U	U
Hong Kong:	U	Ν	Ν	U	U	U	Ν	U
Indonesia:	U	U	U	U	U	U	U	U
Japan:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Korea:	U	U	E	U	Ν	Ν	Ν	U
Malaysia:	U	U	U	U	U	U	U	U
Mexico:	Ν	Ν	F100	U	Ν	Ν	Ν	U
New Zealand:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
PNG:	U	U	U	U	U	U	U	U
Peru:	U	U	Ν	U	U	U	Ν	U
Philippines:	U	U	U	U	U	U	U	U
Russia:	-	-	-	-	-	-	-	-
Singapore:	U	U	U	U	U	U	U	U
Chinese Taipei:	Ν	Ν	Ν	U	Ν	Ν	Ν	U
Thailand:	U	U	U	U	U	U	U	U
United States:	Ν	Ν	Ν	U	Ν	Ν	Ν	Ν
Viet Nam:	U	U	U	U	U	U	U	U

<Distribution Services(Retailing Services)>

The Distribution Services(Retailing Services) is a rather closely connected sector. It, however, needs further connection since U is still the most dominant entry under the GATS.

What about the status quo of connectivity under bilateral FTAs? To take the cases of Japan's bilateral FTAs with some APEC members (Brunei, Chile, Indonesia, Malaysia, Mexico, Peru, the Philippines, Singapore, Thailand and Vietnam). The bilateral FTA-based liberalization, especially under Mode 3 (supply of services through commercial presence) is expected to enhance connectivity. In order to assess the importance of an APEC-wide such connectivity enhancement through service trade liberalization, Japan's bilateral FTAs and their impacts are observed in the next section.

3. A firm-level analysis of service trade investment

ToyokeizaiShimposha (a Japanese publisher) releases firm-level statistical database each year, centering on Japanese affiliates' foreign investment performances. Below are economy-by-economy observations of service investment performance with a focus on the concept of connectivity. Japan has bilateral FTA (or economic partnership agreements: EPA in Japan's context); they are expected to have a positive "investment cost-reduction effect" as well as "announcement effect" to usher in FDIs in the services sector. This would ensure an enhanced level of foreign investment activities by firms in other sectors including the most important manufacturing sector. Indeed, connectivity would be enhanced by service trade liberalization.

In this connection, there is an indexation method as proposed by Hoekman which (1995), which attempts to measure the degree of liberalization: The calculation of "Hoekman Index" is as follows. First, the allocation of values to each of 8 cells (4 modesand 2 aspects--market access (MA) or National Treatment (NT)—) is made, in thefollowing way: N=1,L=0.5, U=0; then calculation of the average value by service sector and by economy is made.

Since service-investment is related to Mode 3, i.e., supply of services through commercial presence, firms' investment performance should have some positive correlation with the preferential margin of bilateral FTAs in terms of Hoekman Index.

Tables 2-11 list service trade investment by Japanese firms, in terms of the share of the number of new office establishments before and after FTA, combined with the sector's Hoekman Index both under the GATS and under the FTA with Japan (in Mode 3 only). To review the supporting role of services sectors, relevant manufacturing sectors are also listed (e.g., "Chemical products" is listed along with "Wholesale of chemical products").

< Brunei>

Table 2 shows the service trade investment in Brunei by Japanese firms. In Brunei, there are not so many incidences of Japanese firms' new investment; FTA-based Hoekman Index is not available since there is no publicly available data on the chapter on trade in services.

Sector	Share of the number of new office establish ments before FTA	Share of the number of new office establish ments after FTA	Definitio n of sector (based on the classifica tion codes in the WTO's documen t MTN. GNS/W/ 120)	GATS-ba sed Hoekma n Index	FTA-based Hoekman Index
All industries listed	0.0002	0.0000			
Chemical products	0.0008	0.0000			
Wholesale of chemical products	0.0000	0.0000	04.B	0.0000	
Transportation services	0.0000	0.0000	11.	0.0111	
Maritime transportation	0.0000	0.0000	11.A	0.0000	
Machinery	0.0000	0.0000			
Wholesale of machinery	0.0000	0.0000	04.B	0.0000	
Banking	0.0000	0.0000	07.B	0.0100	
Construction	0.0030	0.0000	03.	0.0000	
Securities	0.0000	0.0000	07.B	0.0100	
Information, systems and software	0.0000	0.0000	01.B	0.5500	
Food	0.0000	0.0000			
Wholesale of food	0.0000	0.0000	04.B	0.0000	
Storage and logistics	0.0000	0.0000	11.	0.0111	
Wholesale	0.0000	0.0000	04.B	0.0000	
Electric machinery	0.0000	0.0000			
Wholesale of electric machinery	0.0000	0.0000	04.B		
Real estate	0.0000	0.0000	01.D	0.0000	
Transport equipment	0.0000	0.0000			
Wholesale of transport equipment	0.0000	0.0000	04.B	0.0000	

Table 2.Service trade investment in Brunei by Japanese firms

Source: ToyokeizaiShimposha (2013).

<Chile>

Table 3 shows the result of calculation. Due mainly to the lack of sufficient incidence of service-trade investment, it is not possible to estimate the impact of the bilateral FTA between Chile and Japan.

Sector	Share of the number of new office establishments before FTA	Share of the number of new office establishment s after FTA	Definition of sector (based on the classificatio n codes in the WTO's document MTN. GNS/W/120)	GATS-base d Hoekman Index	FTA-base d Hoekman Index
All industries listed	0.0025	0.0000			
Chemical products	0.0008	0.0000			
Wholesale of chemical products	0.0020	0.0000	04.B	0.0000	
Transportation services	0.0000	0.0000	11.	0.0056	
Maritime transportation	0.0116	0.0000	11.A	0.0000	
Machinery	0.0000	0.0000			
Wholesale of machinery	0.0059	0.0000	04.B	0.0000	
Banking	0.0000	0.0000	07.B	0.0500	
Construction	0.0093	0.0000	03.	0.0000	
Securities	0.0000	0.0000	07.B	0.0500	
Information, systems and software	0.0000	0.0000	01.B	0.0000	
Food	0.0000	0.0000			
Wholesale of food	0.0179	0.0000	04.B	0.0000	
Storage and logistics	0.0000	0.0000	11.	0.0056	
Wholesale	0.0101	0.0000	04.B	0.0000	
Electric machinery	0.0000	0.0000			
Wholesale of electric machinery	0.0017	0.0000	04.B	0.0000	
Real estate	0.0000	0.0000	01.D	0.0000	
Transport equipment	0.0000	0.0000			
Wholesale of transport equipment	0.0121	0.0000	04.B	0.0000	

Table 3.Service trade investment in Chile by Japanese firms

<Indonesia>

Table 4 shows the result of calculation. There are some sectors in which a positive linkage is observed between the share-increase and positive preferential margin. Specifically, "Transportation services" registers share-increase after the bilateral FTA (between Indonesia and Japan). The GATS-based Hoekman Index for the sector is 0.0256, while the FTA-based Hoekman Index is 0.3333. In the "Information, systems and software", share increase is also observed after the bilateral FTA; the GATS-based

Hoekman Index for the sector is 0.0800, while the FTA-based HoekmanIndex is as high as 0.6000.

Sector	Share of the number of new office establishmen ts before FTA	Share of the number of new office establishmen ts after FTA	Definition of sector (based on the classificatio n codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoekm an Index
All industries listed	0.0328	0.0540			
Chemical products	0.0522	0.0514			
Wholesale of chemical products	0.0092	0.0504	04.B	0.0000	0.0000
Transportation services	0.0279	0.0313	11.	0.0256	0.3333
Maritime transportation	0.0220	0.0000	11.A	0.2300	0.3333
Machinery	0.0279	0.0724			
Wholesale of machinery	0.0162	0.0874	04.B	0.0000	0.0000
Banking	0.1053	0.0000	07.B	0.3900	0.3900
Construction	0.0699	0.0133	03.	0.2260	0.4000
Securities	0.0000	0.0000	07.B	0.3900	0.3900
Information, systems and software	0.0129	0.0265	01.B	0.0800	0.6000
Food	0.0333	0.0667			
Wholesale of food	0.0000	0.0233	04.B	0.0000	0.0000
Storage and logistics	0.0512	0.0500	11.	0.0256	0.0370
Wholesale	0.0275	0.0462	04.B	0.0000	0.0000
Electric machinery	0.0440	0.0347			
Wholesale of electric machinery	0.0093	0.0407	04.B	0.0000	0.0000
Real estate	0.0621	0.0200	01.D	0.0000	0.4167
Transport equipment	0.0598	0.1156			
Wholesale of transport equipment	0.0193	0.0185	04.B	0.0000	0.0000

Table 4.Service trade investment in Indonesiaby Japanese firms

Source: Calculated from ToyokeizaiShimposha (2013).

<Malaysia>

Table 5 shows the result of calculation for Malaysia. In the "Banking" sector,

share-increase of Japan's new investment is observed; the GATS-based Hoekman Index is 0.3200, while the bilateral FTA-based Hoekman Index is 0.6600 as in the Table.Overall, though, this sort of linkage is weak for other sectors.

Sector	Share of the number of new office establishmen ts before FTA	Share of the number of new office establishmen ts after FTA	Definition of sector (based on the classificatio n codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoekm an Index
All industries listed	0.0389	0.0194			
Chemical products	0.0518	0.0179			
Wholesale of chemical products	0.0246	0.0230	04.B	0.0000	0.0000
Transportation services	0.0466	0.0000	11.	0.0256	0.2500
Maritime transportation	0.0248	0.0217	11.11.A	0.2300	0.2300
Machinery	0.0225	0.0093			
Wholesale of machinery	0.0419	0.0133	04.B	0.0000	0.0000
Banking	0.0286	0.2000	07.B	0.3200	0.6600
Construction	0.0877	0.0938	03.	0.4400	0.4400
Securities	0.0208	0.0000	07.B	0.3200	0.6600
Information, systems and software	0.0173	0.0142	01.B	0.4100	0.8000
Food	0.0352	0.0361			
Wholesale of food	0.0064	0.0333	04.B	0.0000	0.0000
Storage and logistics	0.0478	0.0137	11.	0.0256	0.0278
Wholesale	0.0393	0.0000	04.B	0.0000	0.0000
Electric machinery	0.0794	0.0225			
Wholesale of electric machinery	0.0200	0.0201	04.B	0.0000	0.0000
Real estate	0.0213	0.0286	01.D	0.0000	0.0000
Transport equipment	0.0219	0.0119			
Wholesale of transport equipment	0.0259	0.0000	04.B	0.0000	0.0000

Table 5.Service trade investment in Malaysiaby Japanese firms

Source: Calculated from ToyokeizaiShimposha (2013).

<Mexico>

Table 6 lists the calculation result for Mexico.Due to lack of data, the FTA-based Hokeman Indexis not calculated. There is, however, a positive linkage between the share-increase of investment in the "Chemical products" sector and the share-increase of investment in the "Wholesale of chemical products", possibly indicating a supporting function of the wholesale service. Due to lack of sufficient data, though, no definitive analysis is possible.

Sector	Share of the number of new office establishmen ts before FTA	Share of the number of new office establishmen ts after FTA	Definition of sector (based on the classificatio n codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoekm an Index
All industries listed	0.0117	0.0177			
Chemical products	0.0070	0.0140			
Wholesale of chemical products	0.0022	0.0187	04.B	0.6875	
Transportation services	0.0180	0.0000	11.	0.0467	
Maritime transportation	0.0135	0.0000	11.A	0.0000	
Machinery	0.0088	0.0000			
Wholesale of machinery	0.0161	0.0246	04.B	0.6875	
Banking	0.0286	0.0000	07.B	0.1100	
Construction	0.0135	0.0000	03.	0.1520	
Securities	0.0000	0.0000	07.B	0.1100	
Information, systems and software	0.0000	0.0000	01.B	0.1300	
Food	0.0026	0.0102			
Wholesale of food	0.0414	0.0139	04.B	0.6875	
Storage and logistics	0.0162	0.0308	11.	0.0467	
Wholesale	0.0130	0.0179	04.B	0.6875	
Electric machinery	0.0190	0.0098			
Wholesale of electric machinery	0.0037	0.0136	04.B	0.6875	
Real estate	0.0076	0.0000	01.D	0.0000	
Transport equipment	0.0198	0.0535			

Table 6.Service trade investment in Mexico by Japanese firms

Wholesale of					
transport	0.0096	0.0253	04.B	0.6875	
equipment					

<Peru>

Table 7 shows the result of calculation for Peru. Due to lack of data, unfortunately, definitive analysis is not feasible.

Sector	Share of the number of new office establishments before FTA	Share of the number of new office establishments after FTA	Definition of sector (based on the classification codes in the WTO's document MTN. GNS/W/120)	GATS-based Hoekman Index	FTA-basedHoekman Index
All industries listed	0.0010	0.0000			
Chemical products	0.0000	0.0000			
Wholesale of chemical products	0.0000	0.0000	04.B	0.1875	
Transportation services	0.0000	0.0000	11.	0.0011	
Maritime transportation	0.0000	0.0000	11.11.A	0.0000	
Machinery	0.0000	0.0000			
Wholesale of machinery	0.0029	0.0000	04.B	0.1875	
Banking	0.0000	0.0000	07.B	0.0400	
Construction	0.0026	0.0000	03.	0.0000	
Securities	0.0000	0.0000	07.B	0.0400	
Information, systems and software	0.0000	0.0000	01.B	0.0000	
Food	0.0022	0.0000			
Wholesale of food	0.0000	0.0000	04.B	0.1875	
Storage and logistics	0.0000	0.0000	11.	0.0011	
Wholesale	0.0036	0.0000	04.B	0.1875	
Electric machinery	0.0005	0.0000			
Wholesale of electric machinery	0.0005	0.0000	04.B	0.1875	
Real estate	0.0000	0.0000	01.D	0.0000	
Transport equipment	0.0013	0.0000			
Wholesale of transport equipment	0.0035	0.0000	04.B	0.1875	

Source: Calculated from ToyokeizaiShimposha (2013).

<Philippines>

Table 8 shows the result of calculation for the Philippines. There seems to be no positive linkage between share-increase and preferential margin of the bilateral FTA between the Philippines and Japan.

Sector	Share of the number of new office establishme nts before FTA	Share of the number of new office establishme nts after FTA	Definition of sector (based on the classificati on codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoek man Index
All industries listed	0.0216	0.0107			
Chemical products	0.0201	0.0000			
Wholesale of chemical products	0.0109	0.0182	04.B	0.0000	0.0000
Transportation services	0.0353	0.0000	11.	0.1611	0.6700
Maritime transportation	0.0273	0.0000	11.A	0.2700	0.6667
Machinery	0.0114	0.0000			
Wholesale of machinery	0.0095	0.0061	04.B	0.0000	0.0000
Banking	0.0256	0.0000	07.B	0.7200	0.7500
Construction	0.0851	0.0267	03.	0.0000	0.0000
Securities	0.0377	0.0000	07.B	0.7200	0.7500
Information, systems and software	0.0254	0.0141	01.B	0.0000	0.4500
Food	0.0117	0.0182			
Wholesale of food	0.0057	0.0244	04.B	0.0000	0.0000
Storage and logistics	0.0278	0.0115	11.	0.1611	0.2494
Wholesale	0.0136	0.0328	04.B	0.0000	0.0000
Electric machinery	0.0347	0.0217			
Wholesale of electric machinery	0.0108	0.0000	04.B	0.0000	0.0000
Real estate	0.0793	0.0426	01.D	0.0000	0.0000
Transport equipment	0.0297	0.0050			
Wholesale of transport equipment	0.0019	0.0000	04.B	0.0000	0.0000

Table 8.Service trade investment in the Philippinesby Japanese firms

<Singapore>

Table 9 shows the result of calculation for Singapore. In some sectors including the "Maritime transportation" and the "Real Estate" sectors, there is a positive linkage between the share-increase of new investment by Japanese firms and the preferential margin in terms of Hoekman Index. In most sectors, though, no such positive linkage is observed.

Sector	Share of the number of new office establishme nts before FTA	Share of the number of new office establishme nts after FTA	Definition of sector (based on the classificati on codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoek man Index
All industries listed	0.0636	0.0235			
Chemical products	0.1241	0.0038			
Wholesale of chemical products	0.1045	0.0422	04.B	0.0000	1.0000
Transportation services	0.0784	0.0253	11.	0.0356	0.6667
Maritime transportation	0.1736	0.2093	11.A	0.1300	0.6667
Machinery	0.0248	0.0047			
Wholesale of machinery	0.0937	0.0219	04.B	0.0000	1.0000
Banking	0.0000	0.0000	07.B	0.5300	1.0000
Construction	0.0430	0.0811	03.	0.1500	1.0000
Securities	0.0889	0.1538	07.B	0.5300	1.0000
Information, systems and software	0.0400	0.0441	01.B	0.5900	1.0000
Food	0.0392	0.0000			
Wholesale of food	0.0640	0.0652	04.B	0.0000	1.0000
Storage and logistics	0.0636	0.0000	11.	0.0356	0.2973
Wholesale	0.0544	0.0395	04.B	0.0000	1.0000
Electric machinery	0.0300	0.0068			
Wholesale of electric machinery	0.1004	0.0329	04.B	0.0000	1.0000
Real estate	0.0480	0.0698	01.D	0.0000	1.0000
Transport equipment	0.0011	0.0045			
Wholesale of transport equipment	0.0320	0.0087	04.B	0.0000	1.0000

Table 9.Service trade investment in Singapore by Japanese firms

<Thailand>

Table 10 shows the result of calculation for Thailand.In the "Information, systems and software" sector, there is a positive linkage between investment share-increase and the preferential margin of Hoekman Index (i.e., FTA-based Hoekman Index being larger than the GATS-based Hoekman Index). In most sectors, however, there is no such linkage observed.

Sector	Share of the number of new office establishme nts before FTA	Share of the number of new office establishme nts after FTA	Definition of sector (based on the classificati on codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoek man Index
All industries listed	0.0765	0.0709			
Chemical products	0.0998	0.0845			
Wholesale of chemical products	0.0699	0.0680	04.B	0.0000	0.0000
Transportation services	0.1129	0.0857	11.	0.1144	0.1144
Maritime transportation	0.0391	0.0357	11.A	0.3000	0.3000
Machinery	0.0912	0.1105			
Wholesale of machinery	0.0709	0.0721	04.B	0.0000	0.0000
Banking	0.0000	0.0000	07.B	0.1300	0.1300
Construction	0.1584	0.0732	03.	0.4140	0.4140
Securities	0.0192	0.0000	07.B	0.1300	0.1300
Information, systems and software	0.0273	0.0457	01.B	0.5500	0.6000
Food	0.0940	0.0758			
Wholesale of food	0.0473	0.0208	04.B	0.0000	0.0000
Storage and logistics	0.0822	0.0862	11.	0.1144	0.1167
Wholesale	0.0766	0.0633	04.B	0.0000	0.0000
Electric machinery	0.0669	0.0705			
Wholesale of electric machinery	0.0432	0.0738	04.B	0.0000	0.0000
Real estate	0.0196	0.0000	01.D	0.0000	0.0000
Transport equipment	0.1175	0.0462			
Wholesale of transport equipment	0.0500	0.1644	04.B	0.0000	0.0000

Table 10.Service trade investment in Thailandby Japanese firms

<Vietnam>

Table 11 shows the result of calculation for Vietnam. In some sectors including "Transportation services", "Construction" and "Storage and logistics", a positive linkage is observed between the share-increase of new investment by Japanese firms and the preferential margin in terms of the Hoekman Index. Overall though, the observation suffers from lack of actual investment incidences.

Sector	Share of the number of new office establishme nts before FTA	Share of the number of new office establishme nts after FTA	Definition of sector (based on the classificati on codes in the WTO's document MTN. GNS/W/12 0)	GATS-bas ed Hoekman Index	FTA-basedHoek man Index
All industries listed	0.0191	0.0509			
Chemical products	0.0243	0.0357			
Wholesale of chemical products	0.0070	0.0330	04.B	1.0000	1.0000
Transportation services	0.0272	0.0769	11.	0.0850	0.1667
Maritime transportation	0.0054	0.0000	11.A	0.3000	0.3000
Machinery	0.0140	0.0661			
Wholesale of machinery	0.0061	0.0500	04.B	1.0000	1.0000
Banking	0.0250	0.0000	07.B	0.2300	0.8958
Construction	0.0496	0.0656	03.	0.5000	1.0000
Securities	0.0189	0.0000	07.B	0.2300	0.8958
Information, systems and software	0.0507	0.0246	01.B	0.7500	1.0000
Food	0.0393	0.1250			
Wholesale of food	0.0053	0.0000	04.B	1.0000	1.0000
Storage and logistics	0.0325	0.0946	11.	0.0850	0.2000
Wholesale	0.0096	0.0926	04.B	1.0000	1.0000
Electric machinery	0.0422	0.0645			
Wholesale of electric machinery	0.0032	0.0536	04.B	1.0000	1.0000
Real estate	0.0465	0.0256	01.D	0.0000	0.0000
Transport equipment	0.0056	0.0279			
Wholesale of transport equipment	0.0056	0.0606	04.B	1.0000	1.0000

Table 11. Service trade investment in Vietnamby Japanese firms

In the above, firm-level investment performances have been overviewed for some APEC members (Singapore, Malaysia, Mexico, Thailand, Indonesia, Philippines, and Vietnam). For lack of data and macroeconomic fluctuations, no clear-cut observation can be made. There is, however, surely an overall positive, albeit loose, linkage between service sector investment and manufacturing investment: the correlation coefficients of service-firms' number of newestablishment and manufacturing-firms' number of new establishment is calculated to be 0.21 for the six ASEAN members, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnamon the whole⁵, which indicates that themanufacturing sector is encouraged by the service sector, and vice versa.In this sense, it can be claimed that APEC-wide connectivity initiative would bring about positive investment creation.

4. Policy implications and conclusions

This paper has made anoverview of APEC members' commitment under the GATS and an analysis of the economic impact of service trade liberalization in the APEC regionin terms of Mode 3 (i.e., service provision through commercial presence). Itfeatures the support functions of service firms (e.g., firms in the logistics, financial, and IT sectors) for manufacturing activities as well as the possible impacts of "intangibility", "scale economy" and "network-effect" on the service firms' foreign commercial presence. Then, utilizing a newly constructed firm-level database matched with the "Hoekman Index" measuring the degree of service sector liberalization through free trade agreements, qualitativeobservations have been made. Overall, the results reveal some positive correlations between the degree of service trade liberalization in the host economy and service firms' commercial presence in that economy, hence a policy suggestion to further promote service trade liberalization possibly under a comprehensive APEC connectivity initiative.APEC at large does need to launch its own service liberalization package.

⁵ Due to data availability, these six economies only were taken.

References:

- Hoekman, B. (1995) "Assessing the General Agreement on Trade in Services", WorldBank Discussion Paper No.307, World Bank, Washington DC.
- Ishido, Hikari (2013), "Economic Impacts of FTAs on Trade in Services:Some empirics in East Asia", RIETI Discussion Paper Series, 13-E-091 (downloadable at: <u>http://www.rieti.go.jp/jp/publications/dp/13e091.pdf</u>), Research Institute of Economy, Trade and Industry (RIETI).
- Ishido, Hikari (2011), "Liberalization of Trade in Services under ASEAN+n: A Mapping Exercise", ERIA Discussion Paper 2011-02(downloadable at: <u>http://www.eria.org/publications/discussion_papers/liberalization-of-trade-in-</u> <u>services-under-aseann-a-mapping-exercise.html</u>), Economic Research Institute for ASEAN and East Asia (ERIA).
- ToyokeizaiShimposha (2013), KaigaiShinshutsuKigyoSoran(in Japanese) (Japanese Overseasinvestment: a complete listing by firms and economies), Data Bank Series 7.



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SESSION IV

Innovative Development, Economic Reform and Growth



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PACIFIC ALLIANCE AND THE CHALLENGE OF

THE GREEN ECONOMY

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Pacific Alliance and the Challenge of the Green Economy

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Abstract

The Pacific Alliance (PA) was constituted on April 28, 2011 by Mexico, Colombia, Chile and Peru; it represents a market of 209 million people with a GDP of over 2 billion USD, it has more than 35 percent of GDP in Latin America and concentrates 50 percent of Latin American exports to the world.

PA as regional integration instance that moves progressively to the openness of the movement of goods, services and investments and, shows even more the importance of the Asia Pacific region, whose economic dynamics and competitiveness achieved in the XXI century, presents a greater challenge to Latin American economies.

With the integration process that keep the four countries of the PA, it is necessary to extend cooperation with APEC, particularly in green economy area as an alternative to the challenge of the problems of climate change, the Kyoto protocol and technological change, among others issues, being an alternative to address the deterioration of renewable and nonrenewable resources in the various APEC economies.

The authors present the PA as a promising regional integration initiative that should use the experience of APEC to open a field of collaboration that allows the rapprochement between these two regions, in order to promote friendly competition with the environment. The experiences followed by each of the member economies of the PA are presented as a suitable platform to search for mechanisms intra and interregional collaboration that enable green economy that should be aspirated

Introduction

According to the United Nations Program for Environment (UNEP) report, the main drivers of environmental change in the world in recent years are the population growth and economic development, which led to limit environmental systems, and placing them in non-stable and dangerous situation.

Other emissions that pollute the atmosphere and cause major damage in Asia and Latin America are sulfur and nitrogen that contributes to the acidification of waters and for which there is no significant progress in its control.

According to OECD countries, emissions of CO2 for example, are represented (see Figure 1), by industrialized countries, which is understandable because of its economic dynamism and development of technologies that require to be replaced by other environmentally friendly. The high migration costs to a clean technology remain a key factor to carry out

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that transition. This is a problem that continues on the agenda of the green economy, governmental and NG organizations.



FIGURE, 1

SOURCE: Own calculations based on OECD data

Theoretical approach

It is the interests of authors retake the above mentioned problems from the perspective of the PA, outline recent integration in Latin America that has caused a greater expectation among Asia Pacific scholars as this scheme integration makes sense given the rapid economic dynamics has shown recently in the Pacific Rim. Precisely APEC is an important frame that takes into account issues as environment, climate change and sustainable development, on the base of a healthy economic interaction, trade flows and the implementation of new friendly technologies to the environment, moving investments along the region with noticeable effects especially to PA countries.

Thus, the APEC proposed cooperation schemes represent an area of opportunity for integration such as those recently implemented in Latin America. On the basis of these cooperation outlines economies interact globally or regionally, achieving enrich the various activities undertaken to boost their economies; therefore **cooperation** is critical for states as it includes benefits for more than one nation optimizing resources, various actors allow the exchange of experience building trust and fostering closer relationship between economies to development policies involving to slow down the damage caused by humans to the planet.

To accurately determine the evolution of climate change, organizations such as the Intergovernmental Panel on Climate Change Meteorology (IPCC), and the United Nations Program for Environment (UNEP) have been raised toward maintaining lower global warming to 2 degrees Celsius per year (UNEP, 2013), and develop reports on pollution levels and possible solutions to future environmental impact in the commercial economic performance and investment around the world taking up the concept of green economy as a source of clean and friendly business environment.

Thus UNEP introduced in late 2008 the "Green Economy" initiative in response to Energy, Climate and Food Economic crisis in which humanity is mired in the XXI century. In 2009 was edited the Green New Deal report, or 'Global Green New Deal', which proposes publicly and privately develop green sectors and green jobs "greening" that hostile practices against the environment.

A couple of examples (see Figures 2 and 3), show the generation of renewable and nuclear energy, where a noticeable participation of countries such as Iceland, Norway, New Zealand, U.S., Japan and France, followed by South Korea is observed, but with suspicion, particularly in the case of nuclear energy, due to Fukushima and Chernobyl disasters, resulting however, that the technology contributes little or nothing to the environmental pollution.



FIGURE, 2

SOURCE: Own calculations based on OECD data

FIGURE, 3



SOURCE: Own calculations based on OECD data

Green economy, according to UNEP, is defined as "the **system of economic activities** related to the production, distribution and consumption of goods and services resulting in human well-being and social equity, and significantly reduces the environmental risks and ecology scarcities". In a simple way, it is also described as the "low-carbon and efficient using resources economy and, socially inclusive."²

However, green economy should not be confused with the "sustainable development", whose definition is understood as an **integral process**, according to the World Commission on Environment and Development, established by the United Nations in 1983, who defined it as "development that meets the needs of the present without compromising the ability of future generations who have to meet their own needs." Sustainable development involves moving from a development plan in quantitative terms - based on economic growth – to a qualitative one, where close links between economic, social and environmental aspects are set in a renewed democratic and participatory institutional framework able to leverage the opportunities presented by simultaneous progress in these three areas, but progress means going one over another.³

Similarly we must consider the definition of "environmental economics", which is regarded as a specialized branch of economics devoted to the study of environmental problems from an economic point of view. Through **economic incentives and specific methodologies** environmental economics is looking for solutions to the problem of incompatibility between private uses and social practices of using natural resources modifying that

² <u>http://suite101.net/article/que-es-la-economia-verde-definicion-y-conceptos-basicos-a86272</u>, retrieved March 18, 2014

³ <u>http://uptparia.edu.ve/documentos/DESARROLLO%20SUSTENTABLE.pdf</u>, retrieved March 18, 2014

economic variables are pressing to a real economic levels of pollution, maximizing the welfare of present and future generations.⁴

Those conceptual framework is a common factor in the protection of the environment and its implications on the quality of life by making optimal use of resources, so that the life circumstances of individuals or of society especially conditions also involving a set of existing in a place and at a given time, that influence human life and for generations to come natural, social and cultural values. It means not just the geo-space where life unfolds, but also includes living beings, objects, water, soil, air and the relationships between them, as well as intangibles such as culture.⁵

Thus, both the green economy as economic cooperation are for the purposes of this paper the implementation of clean businesses that generate economic benefits in market conditions, matching action conscious manufacturing process with environmental care and quality life.

The green economy in APEC and PA

Among the latest actions taken by APEC in regards to green economy, the 21 members committed to prevent environmental measures could create barriers to trade, and to launch a program to promote environmental goods and services. APEC members also pledged to take the first concrete steps for the liberalization of environmental goods and services by reducing tariff rates on these products to 5% or less by the end of 2015, considering environmental goods "those who contribute directly and positively to our green growth and compliance with sustainable development objectives." ⁶

This impact relationship however is less clear in the case of the Pacific Alliance that was constituted in the April 28, 2011 by Chile, Colombia, Mexico and Peru as a conglomerate of countries to become a platform for economic integration and commercial, promoting the progressive actions towards the free movement of goods, services, capital and people.

So that the process of integration that keep the four countries of the PA, we consider of utmost importance to extend its cooperation with APEC, particularly on environmental issues where the green economy is presented as a future option to the problems of climate change, the Kyoto Protocol, as well as technological change, among others, being an alternative to address the deterioration of renewable and nonrenewable resources in the various economies of the Asia Pacific region.

⁴ <u>http://www.banrepcultural.org/blaavirtual/ayudadetareas/economia/econo62.htm</u>, retrieved March 18, 2014

⁵<u>http://www.efib.m2014.net/article79.html</u>, retrieved March 18, 2014

⁶<u>http://www.apec.org</u>, retrieved February 10, 2014

We consider therefore important to establish joint strategies between APEC and the PA to address the global problem of climate change and strengthening linkages and integration into scientific generate environmental issues.

Although this type of impact between the green economy and the integration scheme involving the PA itself is not as clear as we have already mentioned, each of these individual economies has been making efforts to improve their conditions through natural design their regulations impacting the generation of green jobs for example. Hence, the authors took on the task of exploring these efforts with their results which are shown below.

Green legislation

In the case of Mexico, for example we find the following rules:

-General Law on Climate Change whose purpose is to guarantee the right to a healthy environment

-General Law for Sustainable Forestry Development with the aim of contributing to social, ecological and environmental development.

-General Law of Ecological Balance and Environmental Protection pursued the preservation and restoration of ecological balance and environmental protection in the country.

Meanwhile Chile shows the following legislation on the subject:

-Law on the Environment granted the right to live in an environment free of contamination.

-Create Environmental Law Courts, whose function is to resolve environmental disputes within its jurisdiction.

-Law Number 20, 417 referred to the submission and strategic environmental assessment of policies and plans that are generally impacting on the environment or sustainability

Meanwhile Peru articulates its regulations on green growth and environmental protection in the following rules:

- Article 304, in which it is stated that the pollution of the environment refers to environmental quality or environmental health.

- Article 307, which deal with the illegal trafficking of waste or toxic or hazardous wastes, and illegal entry into the country without proper authorization.

- Article 308, which relates to the illegal trafficking of species of wildlife and protected species and specimens.

- Article 310, refers to offenses against forests or forest formations, including the penalties for the destruction, burning, or damage in whole or in part thereof logging, be they natural or plantations.

- Article 313, refers to the alteration of the environment or landscape that contravenes the provisions of the competent authority, altering the natural environment or the urban or rural landscape, or alters the flora or fauna, by building construction or logging.

In Colombia stands out about the following standards:

Law 697 of 2001, in which the rational and efficient use of energy is encouraged

Law 728 of 2001, by which approves the Convention on the Physical Protection of Nuclear Material.

Law 6007 of 2000, which seeks to ensure rural agricultural direct technical assistance, environmental as well as on matters of waters and fisheries.

Act 740 of 2002, through which the "Cartagena Protocol on Biosafety to the Convention on Biological Diversity" was adopted

Green Jobs

Green jobs are located in the center of a sustainable economy, consequently one of its key features is to develop a labor market that have decent jobs with fair pay, opportunities for both personal and professional growth and decent lifestyle and safe (OIT 2007)

According to the United Nations Environment Program (UNEP), green jobs are found in many sectors of the economy, from energy supply to recycling and from agriculture to construction and transportation.

In the case of Mexico the sectors show a higher percentage of the total environmental jobs of persons employed in economic activity are: renewable electricity (22%); recycling (12%); sustainable construction (11%); forestry and reforestation (8%) and; clean industry (7%). The other sectors have a penetration of 6% or less in terms of persons employed: organic farming (6%), sustainable tourism (2%) and government (2%).

In Chile the Green Growth Strategy is related to the insertion of this economy to the OECD in the year 2010, on the basis of the Declaration on Green Growth (June 2009), ratified in May 2010. Therefore practices have been developed in order to promote economic growth, while contributing to the protection of the environment, creating green jobs and social equity. Notable jobs in: Agriculture; Forest management; renewable wind energy. So it is increasing sustainability and social responsibility.

In the case of Peru, the design of policies associated with green growth are linked with a framework of macroeconomic stability, so that the sustained economic growth in recent years contributed to significantly reduce poverty by increasing employment and higher household income generation, as well as through increased tax revenues resulting from the increased economic activity. In regard to green jobs in Peru are the highlights: Agriculture and forest management.

Meanwhile Colombia shows that the most demanded categories are: Agriculture; Forest management and Environmental education

Conclusions: Supplementation of APEC and PA

APEC considers the cooperation of different forums such as the Pacific Alliance: "We recognize the critical importance of enhancing synergies with other international fora, such as the Pacific Alliance. We instruct our Ministers and officials to participate and cooperate with these stakeholders, taking into account international standards acceptable to both parties."⁷

Actually that is in part true as with the name "Partnership Opportunities in Climate Change Research in the countries of the Pacific Alliance", 32 scientific experts from member country of the Pacific Alliance,..., metto analyze ... environmental matters". So in our opinion this network has to work closely with APEC in order to strengthen all kinds of cooperation between the two international organizations, including the issue should be included in the regional agenda considering the APEC experience.

In conclusion we believe that there are specific conditions for a field of collaboration between APEC and the Pacific Alliance due the APEC declarations and experience; but also by the existing individual regulation in each member countries of the Pacific Alliance that we recommend as a specific item to be included in the agenda of PA without affecting free trade and investment facilitation. Bringing about an increase in green jobs, due to the policies that are being implemented in the countries of the Pacific Alliance, and other positive actions highlighting: awareness in sustainable look and care for the environment.

References

OECD http://www.oecd.org/publications/factbook/, retrieved March 31, 2014

OIT (2007) www.oei.es/pdfs/panorama_laboral_07.pdf, retrieved April 20, 2014

IPCC (2013), Intergovernmental Panel on Climate Change. IPCC. http://www.ipcc.ch/organization/organization_history.shtml#.UGI_pY11RWQ, retrieved April 20, 2014.

⁷<u>http://www.apec.org/Meeting-Papers/LeadersDeclarations/2013/2013_aelm/2013_aelm_annexA.aspx</u>, retrieved April 20, 2014

UNEP (2013), Programa Medioambiental de la ONU. http://www.unep.org/PDF/PressReleases/temperature-briefing-21-02-10-final-e.pdf., retrieved April 20, 2014

http://alianzapacifico.net, retrieved March 28, 2014

http://www.apec.org/Meeting-

Papers/LeadersDeclarations/2013/2013_aelm/2013_aelm_annexA.aspx, retrieved April 20, 2014

http://alianzapacifico.net/cientificos-se-paises-de-la-alianza-del-pacifico-debatieron-enchile-sobre-cambio-climatico/, retrieved February 10, 2014

http://www.diputados.gob.mx/LeyesBiblio/pdf/LGCC.pdf, retrieved February 25, 2014

http://www.encolombia.com/medioambiente/hume-ley69701.htm, retrieved February 25, 2014

http://www.conaf.cl/wp-content/files_mf/1370463346Ley19300.pdf, retrieved February 25, 2014

http://www.minam.gob.pe/wp-content/uploads/2013/10/07delitosambientales.pdf, retrieved February 25, 2014

http://suite101.net/article/que-es-la-economia-verde-definicion-y-conceptos-basicosa86272, retrieved March 18, 2014

http://uptparia.edu.ve/documentos/DESARROLLO%20SUSTENTABLE.pdf, retrieved March 18, 2014

http://www.banrepcultural.org/blaavirtual/ayudadetareas/economia/econo62.htm, retrieved March 18, 2014

http://www.efib.m2014.net/article79.html, retrieved March 18, 2014

www.apec.org, retrieved February 10, 2014



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ANALYZING ECONOMIC OPPORTUNITY

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Analyzing Economic Opportunity

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Abstract

Economic opportunity can serves as another factor in growth and development. This paper identifies the extensity and intensity channels through which economic opportunity are created. Data on 24 variables for 184 world economies for the period 2000-2010 are collected for the empirical analysis. The methodology involves the use of principle component analysis in constructing three indices for the parametric and non-parametric regression analysis. The countries are divided into OECD and non-OECD economies so as to examine their different performance. Extensity seems to be the more important channel to all economies, but for non-OECD economies, a higher performance in intensity can enrich the effect of extensity on economic opportunity.

Keywords: Economic opportunity, Extensity, Intensity, World economy. *JEL* classifications: C8, O1.

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I Introduction

In transforming various production factors to output, studies that used input-output analysis have given way to analysis on total factor productivity and efficiency. In addition to endogenous growth studies, development studies have focused on regional differences, influence of socio-economic variables, distinction between domestic and external variables in globalization, and the capability approach. Other literatures on growth and development have touched on financial liberalization, capital flow, trade, regional success, human capital, business cycles development, fiscal policy and income distribution, development through stages and institutional advancement (Miller and Blair, 2009; Solow, 1957; Douglas, 1976; Li and Liu, 2011; Aghion and Howitt, 1998; Barro, 1999; 2000; Deininger and Squire, 1996; Bhagwati, 2004; Tamura, 2006; Li and Zhou, 2010; Zhou and Li, 2011; Li, 2012; Panzironi and Gelber, 2012; Bekaert, *et al.*, 2005; Grossman and Helpman, 1990; Lucas, 1990; Kenny and Williams, 2001; Acemoglu and Robinson, 2012; Galor, 2000; Easterly and Rebelo, 1993; King, *et al.*, 1988; Young, 1994; Kejak, 2003; Kosempel, 2004).

There are still unanswered questions and idea gaps in economic growth studies. The concept of "gaps" has been used to explain growth constraints in developing countries. Thirlwall (1978) pointed to the savings gap and foreign exchange gap in the "two gaps analysis", while Romer (1993) raised the "idea gap and object gap" in the access to ideas capable of generating economic values. One possible gap could be in situations when economies with similar resource endowments differ considerably in their growth and development. Difference in economic opportunities can lead to difference in growth and development. The term, economic opportunity, has often been used as titles in numerous studies (Demirgüç-Kunt and Levine, 2008; O'Neil, 2012). Despite its frequent usage, there is a lack of literature that uses economic opportunity as a mechanic to growth and development (Lucas, 1988).

Economic opportunity reflects the growth or development potentials as a result of certain economic activities. Economic opportunity is intuitive, invisible, intangible, non-quantifiable, immeasurable, but can be cumulative and multiplicative. Intuitively, economic opportunity shows a process that indicates the degree of effectiveness between an *ex-ante* economic situation, where production factors are available, and an *ex-post* economic situation, where opportunity outcomes are generated. Economic opportunity can be defined as a process, or channel through

which economic possibilities and chances are created from the extensive and intensive applications of production factors.

This paper first considers the meaning of economic opportunity, discussing the two channels of extensity and intensity in the creation of economic opportunity. Economic opportunity is considered as a latent variable that could be predicted by observable variables. Section II explains the proxy variables selected for economic opportunity, intensity channel and extensity channel. Data mainly from the World Bank and the Human Rights Index are used to identify a total of 24 variables for the sample of 184 world economies for the 11 years' period from 2000 to 2010. The empirical analysis will be conducted on the entire sample, which is divided into OECD and non-OECD economies.

Section III discusses the methodology that comprises of the principle component analysis to identify the weights of the variables grouped under different categories. The weights are then used to calculate three indices for economic opportunity, extensity and intensity. Both parametric linear regression and non-parametric regression analyses are applied to the entire sample as well as the division between OECD and non-OECD economies. The empirical results are reported in Section IV, while Section V concludes the paper.

II Data Compilation

Economic opportunity could be another source of scarcity in development, as its availability could impact on economic outcomes. Economic opportunities can differ among economies even with similar endowment background due probably to the difference in the utilization of resources and the complementary conditions through which the resources are being utilized. Conceptually, economic opportunity depends on a collection of factors that could either lead to an expansion in the amount of available resources or an increase in the amount of economic activities given the available resource endowment. Economic opportunity can be regarded as a latent variable predictable by other observable variables in the multiple indicators multiple causes (MIMIC) model (Joreskog and Goldberger, 1975). To conduct an empirical analysis on economic opportunity, one can construct both the extensity and intensity channels through which economic opportunities will be affected.

The extensity channel covers the width of resource availability. The availability of resources is fundamental to the increase in economic opportunity. Typical proxy variables for the

extensity channel can include domestic capital, foreign direct investment and official assistance from international organizations. The intensity channel covers the depth through which economic opportunity can be generated from available resources, and includes a number of factors and categories.

The World Bank data are categorized into a number of feasible categories and the most representative variables from that category are selected by using correlation tests. There can always be debates in the choice of variables, and a dilemma exists between length of the time series and spread of countries. Typically, fewer countries have longer time series data. The chosen proxy variables for the empirical analysis can best be regarded as representatives. Using the criterion that the variables must have at least 80 percent of the data points produces a total data set of 184 economies for the 11 years from 2000 to 2010. For the missing values, we either take the average values for data in between years, or construct a trend value at the beginning or the end of the sample period. Regression analysis is used to locate the missing values if there are only a few data points for a chosen variable. Lastly, the data for a neighboring economy with similar background is used if the entire data series is unavailable. For example, the Singapore data are used for the missing values of expenditure on health care and mortality rates for both economies of Hong Kong and Macao. Figure 1 summarizes the proxy variables in the MIMIC model.

The proxy for economic opportunity is represented by performance in industry, service and export, employment and communication. Industry and service output values are the *ex-post* outcome of economic opportunities. The size of employment obviously can directly reflect the magnitude of economic opportunity. Economic opportunity can also be reflected in the amount of personal and business communications. There are a total of nine proxies for economic opportunity: i) value added in industry and services (expressed as percentage of GDP), ii) export of goods and services (expressed as percentage of GDP), iii) export of goods and services (expressed as percentage of GDP), iii) export of age), v) labor participation rate (percentage of population above 15 years of age), vi) air transport (registered carrier departures worldwide), vii) internet users (per 100 people), viii) mobile and ix) fixed-line telephone subscribers (per 100 people).

The categories in the extensity channel are straight forward as they include all the available channel of resources. Domestic investment in the form of gross capital formation should give

rise to employment opportunities. This effectively reflects the size of domestic investment. Domestic credit to the private sector reflects the amount of business opportunities through the banking sector. Economic opportunities arising from the stock market can be seen from market capitalization of listed companies. The six proxies used in the extensity channel include: i) gross capital formation, ii) domestic credit to private sector, iii) market capitalization of listed companies (as percentages of GDP), iv) the net inflow of portfolio equity, v) foreign direct investment and vi) net official development assistance and official aid received (US currency as percentage of GDP).

The nine proxies chosen for the intensity channel can be grouped under four categories of quality of living, education, health and human right. They are: i) carbon emissions (CO2, metric tons per capita); ii) inflation (Consumer Price Index), iii) total public spending on education (percentage of GDP), iv) total health expenditure (percentage of GDP), v) mortality rate (less than 5 years of age per 1,000 live births), vi) electoral self-determination, vii) freedom of religion, viii) freedom of speech and ix) independence of the judiciary. The data on human right are obtained from the Cingranelli-Richards (CIRI) Human Rights dataset.



Figure 1 The MIMIC Model for Analyzing Economic Opportunity

III Methodology

We first standardize the variables by transforming the data into comparable scales in the range [0, 1]. For each year and each variable, with the exception of carbon emissions, inflation and mortality rate, all data point are recalculated as (V - Min(V))/(Max(V) - Min(V)), where V represents the value of the variable in the original data set. For the variables of carbon emissions, inflation and mortality rate, the formula (Max(V) - V)/(Max(V) - Min(V)) is used.

The principle component analysis (PCA) is used to construct the three indices of economic opportunity, extensity and intensity. The PCA weightings maximize the variance of the indices. Due to possible correlation among the chosen proxy variables, the PCA method can reduce the number of factors to capture the maximum variation and commensurate on the different measurement units of the variables. Most importantly, the PCA selects the weights by the data itself (Rencher, 2002). The principal components are extracted from the correlation matrix of the variables, in a way that they accounted for the highest percentage of variation. The PCA is applied to the whole sample period to ensure consistence.

The factor analysis is applied to determine the weights for the proxy variables in constructing the three indices. Suppose that there are p variables $x_1,...,x_p$ that serve as the indicators of all factors in the construction of the index and m underlying common factors $f_1,...,f_m$. The common factors are orthogonal to each other. We have the following basic model:

$$x_1 - \mu_1 = \alpha_{11}f_1 + \alpha_{12}f_2 + \dots + \alpha_{1m}f_m + \varepsilon_1$$

$$x_2 - \mu_2 = \alpha_{21}f_1 + \alpha_{22}f_2 + \dots + \alpha_{2m}f_m + \varepsilon_2$$

$$\vdots$$

$$x_p - \mu_p = \alpha_{p1}f_1 + \alpha_{p2}f_2 + \dots + \alpha_{pm}f_m + \varepsilon_p$$

where each error term is accounted for the part of the variable that is not common with the other variables, the coefficients α_{ij} are factor loadings, showing how each individual x_i depended on the common factors f_1, \dots, f_m . We follow Rencher (2002, Chapter 13) to assume the following:

$$E(f_j) = 0, Var(f_j) = 1, cov(f_j, f_k) = 0, j \neq k;$$

$$E(\varepsilon_i) = 0, Var(\varepsilon_i) = \psi_i, cov(\varepsilon_i, \varepsilon_j) = 0, i \neq j;$$

$$cov(\varepsilon_i, f_i) = 0.$$

From these assumptions, the first m principal components are considered as good candidates for the common factors f_1, \ldots, f_m . We thus choose the first m principal components as the common

factors; that is, $f_1,...,f_m$ are the first m principal components of the correlation matrix of the p variables $x_1,...,x_p$. Without loss of generality, we use standardized variables $x_1,...,x_p$. Therefore $\alpha_{ij} = corr(x_i, f_j)$. The variance of x_i can be partitioned into a component due to the common factors $f_1,...,f_{m_i}$ namely,

$$\sigma_{ii} = Var(x_i) = \left(\alpha_{i1}^2 + \alpha_{i2}^2 + \dots + \alpha_{im}^2\right) + \psi_i \equiv h_i^2 + \psi_i$$

where communality = $h_i^2 = \alpha_{i1}^2 + \alpha_{i2}^2 + \dots + \alpha_{im}^2$, and specific variance = ψ_i . They are also called the common variance and specific variance, respectively. The factor loadings (the correlation between x_i and the principal components) ($\alpha_{i1}, \alpha_{i2}, \dots, \alpha_{im}$) and the communality h_i^2 reflect the contribution of x_i to the principal components. The larger the communality h_i^2 is, the more contribution the communality has to the variance of x_i , and the more information about x_i is reflected. A larger communality of variable x_i shows higher significant differences of the individual variable in the common factor. Therefore, the communality can be used as a gist to determine the weight for each of the individual factors. We summarize the procedure of the PCA into the following steps:

Step 1: Conduct PCA on the correlation matrix R of the sample of the variables $x_1, ..., x_p$ and select the first m principal components $f_1, ..., f_m$ with the cumulative proportion of the total variance greater than 85%, i.e. $\sum_{i=1}^m \lambda_i / \sum_{i=1}^p \lambda_i \ge 85\%$, where $\lambda_1, \lambda_2 ... \lambda_p$ are the p eigenvalues of R with $\lambda_1 \ge \cdots \ge \lambda_p$.

Step 2: For each x_i (i=1,2,...,p), calculate the correlation between x_i and each principal component f_j , j=1,2,...,m, namely, $\alpha_i = (\alpha_{i1}, \alpha_{i2}, \dots, \alpha_{im})$, and construct the communality $H_i \equiv h_i^2 = \alpha_{i1}^2 + \alpha_{i2}^2 + \dots + \alpha_{im}^2$.

Step 3: Determine the weights $w = (w_1, w_2, ..., w_p)$ of indicators $x_1, x_2 ... x_p$ as follows:

$$w_i = \frac{H_i}{\sum_{j=1}^p H_j}$$

Finally, the economic opportunity index (EOIND) is calculated as: EOI = $\sum_{i=1}^{P} w_i x_i$. These weights are used to calculate the value of the three indices for every country for each of the 11 years in the sample period.

The EOI becomes the dependent variable, while both the extensity index (EXIND) and intensity index (ININD) are the independent variables in the regression analysis. We use the

lagged independent variables as instrument variables, as this avoids the endogeneity problem. The regression is conducted on individual years such that the change in the impact of the independent variables can be considered. For the parametric analysis, the equation for the entire sample is:

$$EOI_{i,t} = \alpha_0 + \alpha_1 * EXIND_{i,t-1} + \alpha_2 * ININD_{i,t-1}, \tag{1}$$

with economy *i* and time *t*. A dummy variable is used to identify the OECD and non-OECD countries. We set the dummy variable *OECD* as 1 / 0 if it is an OECD / non-OECD economy. The parametric equation becomes:

$$EOI_{i,t} = \alpha_0 + \alpha_1 * EXIND_{i,t-1} + \alpha_2 * ININD_{i,t-1} + \alpha_3 * OECD * EXIND_{i,t-1} + \alpha_4 * OECD * ININD_{i,t-1}.$$
(2)

Effectively, α_3 and α_4 show the difference of coefficients between non-OECD and OECD economies in extensity and intensity, respectively.

We improve the parametric estimates by using non-parametric regressions, because parametric models can be misspecified and lead to inconsistent and inefficient estimates and suboptimal test statistics. The predictor in nonparametric regression analysis does not take a predetermined form but is constructed according to information derived from the data. We apply the following nonparametric model:

$$y_{it} = m(x_{i:t-1}) + v_i + u_{it},$$
(3)

where y_{it} is the EOI index for economy *i* in year *t*, $m(x_{i,t-1})$ is an unspecified function, $x_{i,t-1} = (\text{ININD}_{i,t-1}, \text{EXIND}_{i,t-1})$. v_i is the unobserved country characteristics, fixed or random or no individual effects. u_{it} is the stochastic term with $E[u_{it}|x_{i,t-1}] = 0$.

Various specification tests are conducted before estimation. The first is the Li-Hsiao test for the individual effects in Equation (3) (see Corollary 3 in Li and Hsiao, 1998), which corresponds to the parametric Bresch-Pagan test. The null hypothesis is $H_0: v_i = 0$, i.e. $v_i + u_{it}$ is a white noise. The Li-Hsiao test statistic is asymptotically standard normal. The statistic for our sample is computed as 42.239435. Thus, H_0 is rejected and the individual effects exist. Hence the second step is needed to test the null hypothesis of the random effects. We follow the *J*-test statistic in Henderson *et al.*(2008)

$$\hat{J} = \{nT(nT-1)\}^{-1} \sum_{i=1}^{n} \sum_{t=2}^{T} \sum_{j=1}^{n} \sum_{s=2,(j,s)\neq(i,t)}^{T} \hat{u}_{it} \, \hat{u}_{js} K_h(x_{i,t-1} - x_{j,s-1}),$$

where $\hat{u}_{it} = y_{it} - \hat{m}(x_{i,t-1})$ under the fixed effects assumption and $K_h(v) = \prod_{s=1}^2 [h_s^{-1}k(v_s/h_s)]$. The *J*-test statistic and its *p*-value are 0.0105 and 0.4960, respectively. So the null of random effects cannot be rejected. Hence, our empirical analysis is based on the estimation of the random effects model.

As in Ullah and Roy (1998), the nonparametric random-effects (RE) model shown in Equation (3) is estimated by local linear kernel method: the local nonparametric RE estimator of m and β (the partial derivatives of $m(x_{i,t-1})$) can be obtained by minimizing

$$\left(y^* - Z^*(x)\delta(x)\right)' K(x)\left(y^* - Z^*(x)\delta(x)\right) = \sum_{i=1}^n \sum_{t=2}^T (y_{it}^* - z_{it}^*\delta(x))^2 K\left(\frac{x_{i,t-1}-x}{h}\right),$$
where $y^* = \Omega^{-1/2}y, Z^*(x) = \Omega^{-1/2}Z(x)$, and $\Omega^{-1/2} = I_{n(T-1)} - (1 - \lambda^{1/2})DD'/T; D = I_n \otimes \iota_T,$
 ι_T is an $(T-1) \times 1$ vector of unit elements. $Z(x)$ is an $n(T-1) \times (q+1)$ matrix with *i*tth element $[1 x_{it} - x]$ and $\delta(x) = [m(x) \ \beta(x)]'$ is a $(q+1) \times 1$ parameter vector, $y_{it}^* = y_{it} - (1 - \lambda^{1/2})\overline{y}_{i,}, z_{it}^* = z_{it} - (1 - \lambda^{1/2})\overline{z}_{i,}$ and $\lambda = \sigma_u^2/(\sigma_u^2 + T\sigma_v^2).$ This amounts to doing the LS regression of $\sqrt{K_{it}}y_{it}^*$ on $\sqrt{K_{it}}z_{it}^* = [\sqrt{K_{it}}\lambda^{1/2} \ \sqrt{K_{it}}(x_{i,t-1}^* - x^*)]$ which gives our proposed estimator as

$$\tilde{\delta}_{RE}(x) = (Z^{*'}(x)K(x)Z^{*}(x))^{-1}Z^{*'}(x)K(x) y^{*}.$$

In our estimation, the kernels are chosen as the Gaussian function and the bandwidth is taken as $h = c_0 \operatorname{std}(x)(nT)^{-1/8}$, where $\operatorname{std}(x)$ is the sample standard deviation of x.

By constructing the above nonparametric RE model, we can get the estimation of the two partial derivatives f_1 (ININD, EXIND) and f_2 (ININD, EXIND), which are the marginal effects of intensity index and extensity index on the growth of EO, respectively. To study the contingent growth effects, we equally partition $[\min_{i,t} \{x_{i,t-1}\}, \max_{i,t} \{x_{i,t-1}\}]$ into 49 sub-intervals with 50 endpoints x_i , where x is ININD and EXIND. We are interested in the following marginal effects:

$$\hat{f}_1(\text{mean}(\text{ININD}), \text{EXIND}_i), \hat{f}_2(\text{mean}(\text{ININD}), \text{EXIND}_i)$$

 $\hat{f}_1(\text{ININD}_i, \text{mean}(\text{EXIND})), \hat{f}_2(\text{ININD}_i, \text{mean}(\text{EXIND})),$

where i = 1, ..., 50, and mean (x) is the sample mean of (x). The estimates $\hat{f}_1(\hat{f}_2)$ describe the contingent relationship between the marginal effects of Intensity Index (Extensity Index) and the changes in ININD and EXIND. The upper and lower bands of the bootstrap 95% pointwise confidence interval are also provided.

IV Parametric and Non-parametric Estimations

Table 1 summarizes the weights, the mean and median values of the whole sample and the two subsamples of OECD and non-OECD economies (see Appendix Table A1 for detailed estimates). For the three indices, the mean and median values of OECD economies are higher than non-OECD economies, and the differences are statistically significant. There are a number of observations from the 2010 ranking for the three indices (see Appendix Table A2). A number of economies have moved up or down in the ranking between 2000 and 2010, and only a handful of countries that have stayed constant in a similar position among the three indices. No economy has appeared in all three indices among the top 20 rankings in 2010. There is diversity among the rankings of economies, suggesting that economies have performed differently in the three dimensions. Smaller world economies can also be ranked high in all the three indices. For many low ranking economies, which are mainly developing economies, a common feature is that their rankings have fallen considerably. One can conclude that there is diversity in the world among the three indices, and the top rankings may not be occupied only by advanced industrialized economies. Indeed, a number of smaller economies rank high in all three indices. The correlation ratios between the three indices are low, as shown in Table 2, suggesting that the chosen proxies can appropriately be used to study EO.

	Table 1 Weights and Indices								
	Weights (percentages)								
EO	EO		EX			IN			
Industry,	Industry, services 21.07		Domestic resources		48.35	Life quality		30.98	
Export, h	igh-tech	29.63	Foreign r	esources	51.65	Education	n	16.05	
Employm	nent, labor	19.77				Health, n	nortality	26.97	
Commun	Communication 29.5					Human ri	ghts	26.00	
Sample		ple	OECD		Non-	OECD	Test of D	Difference	
	[1,840 obs.]		[340 obs.]		[1,500 obs.]				
			(A)		(B)		(A) - (B)		
	Mean	Median	Mean	Median	Mean	Median	t-test	Wilcoxon	
								z-test	
EOIND	0.266	0.253	0.345	0.345	0.248	0.243	<.0001***	<.0001***	
EXIND	0.176	0.161	0.200	0.183	0.170	0.155	<.0001***	<.0001***	
ININD	0.643	0.649	0.754	0.765	0.617	0.616	<.0001***	<.0001***	

*** = 1% significance.

Table 2 Correlation Ratios							
EOIND EXIND ININD							
EOIND	1	0.229201	0.242344				
EXIND	0.229201	1	0.169384				
ININD	0.242344	0.169384	1				

Table 3 reports the parametric regression for the whole sample showing the coefficients for individual years and for the entire sample. All estimated coefficients are positive, suggesting that the chosen variables for both the extensity channel and intensity channels are useful in explaining economic opportunity. The extensity channel is more important than the intensity channel, as the coefficients of the former are larger than the coefficients of the latter, with the exception of 2010. Despite the difference in values, the influence of both channels showed a declining trend as all their coefficients have gradually declined. The decline is obvious in 2008 and 2009 when the world economy suffered the financial crisis. On the contrary, the influence of intensity on economic opportunity is quite stable. The R-squared for the first few years in the sample period is larger than the latter years, implying that the explanatory variables are powerful in the earlier years.

In the performance between OECD and non-OECD economies, columns (1) in Table 4 shows that most of the coefficients for extensity for non-OECD economies are significantly larger than zero, implying that extensity variables do have a positive impact on economic opportunity. However, column (2) shows that all coefficient estimates for intensity are not significantly different from zero. For non-OECD economies, the intensity channel is not as useful as the extensity channel in the creation of economic opportunity.

Columns (3) and (4) in Table 4, respectively, show the difference of coefficients between non-OECD and OECD economies in the impact of extensity and intensity channels on economic opportunity. For the OECD countries, we can see that most of the coefficients of OECD dummy for extensity in column (3) are not significantly different from zero, meaning that the difference between OECD and non-OECD countries is not significant and variables in the extensity channel also have a positive impact on the creation of economic opportunity in OECD countries. As for the coefficients of OECD dummy for intensity in column (4), about half of the estimated coefficients are all significantly larger than zero. We can conclude that intensity is also an important channel on the creation of economic opportunity in OECD countries.

Year	Extensity Coefficients	Intensity Coefficients	R-squared
2001	0.682335***	0.084763*	0.253304
2002	0.503167***	0.107164**	0.190828
2003	0.416854***	0.121935***	0.159596
2004	0.465765***	0.138431***	0.180236
2005	0.266883***	0.126481***	0.095087
2006	0.273458**	0.138647***	0.091431
2007	0.201778**	0.126356**	0.071541
2008	0.189538**	0.111744**	0.066876
2009	0.142835	0.122277**	0.058992
2010	0.049841	0.142504***	0.059909
Aggregate	0.206006***	0.137791***	0.095177

Table 3 Parametric Linear Estimation for Economic Opportunity

Notes: *, ** and ***, respectively denote significance at 10%, 5%, and 1% level.

Year	Extensity	Intensity	OECD Dummy	OECD Dummy	R-squared
	Coefficients	Coefficients	Extensity	Intensity	
			Coefficients	Coefficients	
	(1)	(2)	(3)	(4)	
2001	0.574335***	-0.021275	-0.126963	0.147897**	0.365381
2002	0.410956***	0.002335	-0.067955	0.122786***	0.320341
2003	0.302734***	0.001860	0.171244	0.084708	0.318290
2004	0.357346***	0.006594	0.008449	0.116030**	0.319553
2005	0.168562*	-0.022541	0.305630	0.060814	0.282836
2006	0.105158	0.016428	0.289148	0.062492	0.270934
2007	0.075253	0.002318	0.329908*	0.041542	0.266523
2008	0.107315	-0.019252	0.191338	0.080944	0.263422
2009	0.174783*	-0.041733	-0.526160	0.349116**	0.259063
2010	0.018549	0.008313	0.173555	0.075003	0.227069
Aggregate	0.144634***	0.001294	0.094337*	0.102818***	0.269521

Table 4 Parametric Linear Estimation for Economic Opportunity: OECD and Non-OECD

Note: Notes: *, ** and ***, respectively denote significance at 10%, 5%, and 1% level.

The parametric analysis concludes that both extensity and intensity channels can have significant impact on economic opportunity for the advanced OECD economies. For non-OECD economies, economic opportunity can mainly be derived from extensity only. There can be different reasons. For developing and emerging economies, the various extensity variables show the different capital resources that could be channeled to the creation of economic opportunity. However, one possible reason for the insignificance of intensity in non-OECD economies could be their low level of achievement in various intensity variables.



(a)



(b)

Figure 2 The Two Marginal Effects on Economic Opportunity with Changes in Extensity Index



(a)



Figure 3 The Two Marginal Effects on Economic Opportunity with Changes in Intensity Index



(a)



Figure 4 The Marginal Effects for OECD and Non-OECD Economies

The non-parametric estimates can provide additional results. Figure 2 shows the contingent relationship between the marginal effects of the two indices on growth of economic opportunity. The extensity index varies from 0.0244 to 0.5358, while the mean value of intensity is 0.642. In Figure 2(a), the non-parametric estimate shows that at a low level, the marginal effect of the extensity index is positive and significant on economic opportunity, implying that economies with a low level of extensity index can obtain more economic opportunity by improving the performance of their extensity variables. However, the impact declines as the extensity index keeps rising, suggesting that when the intensity index is also at a relatively low level, improvements in the extensity variables would not help to gain more economic opportunity. In Figure 2(b), the marginal effect of intensity index is insignificant at most of the data points.

Figure 3 shows the contingent relationship between the marginal effects of two indices on growth of the intensity index. The scale of the intensity index ranges from 0.2174 to 0.9299, while the extensity index is kept at its mean value at 0.176. In Figure 3(a), the marginal effect of the extensity index on economic opportunity is insignificant when the intensity index is at its low level, but it becomes positive and significant as intensity index increases. The lesson is that when the intensity index is increasing and after it has reached a certain level, the marginal effect of extensity on economic opportunity becomes positive and significant. Furthermore, the increase in the marginal effect means that the intensity level can affect the impact of extensity on economic opportunity. The marginal effect of intensity on economic opportunity shown in Figure 3(b) is not significant at most of the data points.

The two observations suggest that the extensity index is more relevant than the intensity index to economic opportunity. Firstly, at low level of extensity, the increase in extensity can promote economic opportunity, but the impact is constrained by the intensity index. Secondly, an improvement in the intensity index does produce a positive marginal effect of extensity on economic opportunity.

The non-parametric regression estimates for the OECD and non-OECD economies are shown in Figure 4. For OECD economies shown in Figures 4(a) and 4(b), when the extensity index is high, the marginal effects of both intensity and extensity indices on growth of economic opportunity are positive. Similarly in Figure 4(d), when the intensity index is high, the marginal effect of extensity on economic opportunity is positive.

For Non-OECD countries, Figure 4(b) shows that when the extensity index is low, the marginal effects of extensity on economic opportunity is positive and significant, meaning that when a non-OECD economy has a low extensity index, infusing more capital resources will probably help the economy to generate more economic opportunities. But, then the effect becomes weak when the extensity index reaches a high level. This suggests that infusing more capital resources to a non-OECD economy would not have much impact on economic opportunity when the intensity index is at a relatively low level. In other words, the performance of the extensity on economic opportunity needs to have a strong support on the performance of the intensity index. This argument can be supported by Figure 4(d), which shows that for non-OECD economic opportunity. Improved performance in the intensity index for non-OECD economic opportunity.

V Conclusion

This paper fills an intellectual gap by analyzing the concept of economic opportunity. As a latent variable, economic opportunity is examined from a number of proxy variables. Serving as an outcome of economic activity, economic opportunity is considered from a combined usage of economic resources (extensity) and socio-economic complements (intensity). While extensity measures the availability of production factors, intensity shows the extent to which economic opportunity could be generated when the complementary factors are taken into account. Each of the two channels can have independent impact on economic opportunity.

As a topic on its own, economic opportunity has hardly been studied theoretically and in empirical analysis. This paper provides both a conceptual and empirical analysis based on a collection of data consisted of 24 variables from 184 world economies for the period from 2000 to 2010. The empirical analysis also divides the country sample into OECD and non-OECD economies. The principle component analysis is applied to identify the weights of the variables so as to calculate the three indices. Both parametric and non-parametric regressions have been applied.

The empirical results show that both extensity and intensity variables can contribute positively to economic opportunity. The OECD show a stronger performance in both extensity

and intensity variables. For non-OECD economies, their performance in extensity can be improved if they show improvements in intensity variables. The bottleneck in the generation of economic opportunity in non-OECD economies rests in their generally low intensity index. Their improvement in intensity would help extensity variables to promote economic opportunity. The findings in this paper are in line with other studies that advocated for the improvement of domestic factors to growth (for example, Li and Zhou, 2010).

The empirical findings can have further implications on economic development and growth, especially for non-OECD economies. Various suggestions can be made, for example, in improving the institutional factors and civic development so as to provide a healthier environment for intensity variables to perform. Stability and peace seem to be the more important economic scenarios through which economic opportunity can be nurtured, especially in economies constantly facing unrest and conflicts.

As compared to other existing indices, such as the Globalization Index (Kearney Inc., 2002; Andersen and Herbertsson, 2005; Dreher, 2006) which summarized the current status of world economies, the economic opportunity index can provide the future potential of economies. The economic opportunity index can further be expanded into the performance of individual economies on an annual basis in order to follow up the performance of individual world economy. Investment activities would be directed to economies ranked high in the economic opportunity index. Similarly, governments can make use of the economic opportunity index for policy orientation. In a nutshell, this study will open a new chapter of intellectual discussion in development economics, and further investigations on how economic opportunity impacts on growth can follow. Appendix

Economic	c Opportur	nity							
Factor	Export	Industry	Services	High-	Emplo-	Labor	Air	Inter-	Mobile
Loading	of	value	value	tech	yment	partici-	tran-	net	& fixed
	goods	added	added	export	to	pation	sport	users	line
	&				pop.	rate			tel.
	services				ratio				
Comp 1	0.2188	-0.0836	0.4280	0.1999	-0.2639	-0.2944	0.1925	0.4938	0.5336
Comp 2	-0.0548	-0.2943	0.1816	0.2000	0.6207	0.5962	0.1967	0.1970	0.1384
Comp 3	0.4966	0.6344	-0.3924	0.3497	0.1505	0.1374	-0.0183	0.1564	0.0916
Comp 4	-0.4644	0.1964	-0.2311	0.1782	-0.0921	-0.0903	0.8018	-0.0270	-0.0199
Comp 5	0.0126	0.3089	-0.0109	-0.8566	0.1000	0.1524	0.1615	0.2637	0.2042
Com H	0.5133	0.6301	0.4237	0.9678	0.4960	0.4924	0.7450	0.3774	0.3544
Weights	10.27	12.60	8.47	19.36	9.92	9.85	14.90	7.55	7.09
Intensity	Channel								
	CO2	Inflat-	Public	Health	Mortal-	Free-	Elect-	Free-	Indepe-
	emiss-	ion	spend	expend-	ity	dom of	oral	dom of	ndence
	ion		educat-	iture	rate	speech	self-	religion	of judi-
			ion				determ.		ciary
Comp 1	-0.0871	0.1193	0.2227	0.3436	0.2619	0.4629	0.4429	0.3550	0.4533
Comp 2	0.6715	-0.1618	0.0440	0.0968	-0.5798	0.0941	0.1700	0.3497	-0.1244
Comp 3	0.1868	0.6155	0.6110	0.3038	-0.0334	-0.1859	-0.1680	-0.2028	-0.1245
Comp 4	-0.0097	0.7486	-0.5861	-0.1396	-0.1033	0.0474	0.1249	0.2053	-0.0767
Comp 5	0.1349	0.1204	0.3926	-0.8632	0.1009	0.0842	0.0341	0.1667	0.1475
Comp 6	0.5941	-0.0038	-0.2013	-0.0303	0.4543	0.1387	0.2903	-0.5432	-0.0253
Com H	0.8646	0.9942	0.9630	0.9852	0.6331	0.2863	0.3543	0.6544	0.2647
Weights	14.41	16.57	16.05	16.42	10.55	4.77	5.91	10.91	4.41
Extensity									
	Net infl	ow F	oreign	Net offic	ial Gros	ss capital	Domest	ic N	Aarket
	of portfo	olio	direct	assistance	e & for	mation	credit t	o c	apital-
	equity	y inv	vestment	aid			private	e i	zation
		net	inflows				sector		
Comp 1	0.1	342	0.3170	-0.4	094	0.1322	0.6	086	0.5710
Comp 2	0.6	5728	0.5153	0.0	808	0.4033	-0.1	912	-0.2759
Comp 3	0.1	488	0.4013	0.5	390	-0.6912	0.0	775	0.2060
Comp 4	-0.4	1122	0.1557	0.6	226	0.5772	0.0	310	0.2902
Comp 5	0.5	5378	-0.6509	0.3	707	0.0948	0.3	642	0.0905
Com H		6627	0.5513		523	0.9910		139	0.5288
Weights	1	6.57	13.78	21	.31	24.78	1().35	13.22

Appendix Table A1 The Weights Estimated from Principle Component Analysis

Note: Com H = Communality H. Weights are expressed in percentages.

2010	Economic Oppo	x Table A2 The Intensity		Extensity Index		
Ranking	Economy	Change	Economy	Change	Economy	Change
0	Leonomy	from 2000	200110111	from 2000	Leonomy	from 2000
		(Average		(Average		(Average
		ranking)		ranking)		ranking)
1.	Singapore	1(1)	Kiribati	0(1)	Luxembourg	0(1)
2	U.S.A.	-1 (2)	U.S.A.	2(2)	Liberia	180 (17)
3	Iceland	6 (3)	Costa Rica	21 (18)	Hong Kong	-1 (3)
4	Hong Kong	7 (8)	East Timor	76 (11)	East Timor	1(2)
5	P. N. Guinea	42 (17)	Denmark	-3 (3)	China	9 (4)
6	Switzerland	1(5)	Lesotho	22 (7)	Cape Verde	16 (7)
7	Korea, Rep.	3 (10)	Iceland	-4 (4)	Turkmenistan	56 (106)
8	Qatar	25 (25)	Belgium	36 (14)	Maldives	75 (36)
9	Netherlands	-4 (6)	New Zealand	1 (9)	Djibouti	142 (51)
10	China	22 (19)	Micronesia	-1 (6)	Bahrain	131 (49)
11	U. A. E.	26 (22)	Sweden	-6 (5)	Vietnam	43 (18)
12	Luxembourg	10 (20)	Austria	36 (35)	Saint Lucia	17 (11)
13	Canada	-5 (12)	Norway	24 (10)	Bhutan	-6 (5)
14	U. K.	1(13)	Barbados	5 (17)	Mongolia	20 (23)
15	Macao	23 (33)	Slovenia	25 (23)	Solomon Is.	150 (77)
16	Malaysia	-13 (4)	Ireland	29 (36)	South Africa	14 (19)
17	Ireland	-11 (9)	Netherlands	3 (19)	Macao	-4 (6)
18	Equ. Guinea	1(18)	Finland	-4 (13)	Switzerland	-15 (8)
19	Germany	6 (21)	Saint Lucia	-7 (12)	Qatar	104 (15)
20	Norway	-3 (16)	Chile	11 (43)	Algeria	88 (52)
21	Barbados	9 (23)	Portugal	-10 (8)	Belarus	91 (76)
22	Sweden	-8 (15)	Canada	-6 (22)	Australia	11 (22)
23	Denmark	-10 (11)	Belize	47 (38)	Morocco	53 (45)
24	Cyprus	33 (36)	Japan	9 (26)	Spain	3 (14)
25	Philippines	-13 (14)	Uruguay	-2 (24)	Congo, D.R.	159 (111)
26	Kazakhstan	40 (46)	Estonia	16 (42)	India	72 (43)
27	Malta	-23 (7)	Botswana	-20 (21)	Singapore	-21 (16)
28	New Zealand	-2 (30)	Dominica	15 (37)	Oman	147 (116)
29	France	6 (32)	Switzerland	-23 (16)	Korea, Rep.	8 (32)
30	Brunei	9 (35)	Australia	6 (34)	Chad	49 (47)
31	Bahrain	13 (39)	Malta	1 (15)	Cyprus	-5 (24)
32	Costa Rica	-11 (27)	Hungary	-10 (25)	Canada	7 (29)
33	Anti.&Bar.	13 (37)	Solomon Is.	-7 (31)	Nepal	49 (78)
34	Australia	-10 (29)	Grenada	1 (32)	Haiti	44 (57)
35	Thailand	-15 (26)	Samoa	24 (45)	Lebanon	56 (70)
36	Austria	-7 (31)	Bahamas	16 (53)	Tonga	41 (63)
37	Japan	-19 (28)	Anti.&Barbu.	41 (63)	Malaysia	-27 (34)
38	Vietnam	4 (41)	StVincent&G.	-30 (20)	Thailand	18 (44)
39	StKitts & Nev.	9 (42)	Cape Verde	-1 (29)	U.K.	-18 (35)
40	Estonia	-17 (34)	France	-13 (28)	SaoTome&P.	106 (25)
41	Czech Rep.	8 (38)	U.K.	23 (30)	St Kitts&Ne.	-33 (10)
42	Slovenia	18 (44)	Namibia	-29 (40)	Netherlands	-31 (33)

Appendix Table A2 The Three Indices

43 Saint Lucia 13 (48) Czech Rep. 4 (61) Denmark -12 (38) 44 Belgium -8 (40) Cyprus -14 (33) Samoa 49 (93) 45 Israel -11 (49) Brazil 5 (49) Chile 12 (58) 46 Finland -30 (24) Spain -17 (46) Micronesia -6 (37) 47 Trin, & Toba. 20 (56) Argentina -6 (39) USA -33 (21) 49 Bahamas -9 (47) StKitts&Ne. 12 (64) Vanuatu 10 (81) 50 Brazil 0 (50) Lithuania 3 (47) Indonesia 70 (124) 51 Birdabwe 33 (55) Germany -15 (15) Kiribai -10 (48) 52 Zimbabwe 33 (55) Germany -1 (56) Burundi 119 (53) 52 Zimbabwe 33 (73) Germany -1 (56) Burundi 119 (53) 54 Peru 35 (77) Suriname 1 (57) Panama -9 (12) 55 Eritrea 19 (58) Luxembo							
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94	Botswana	-32 (78)	Swaziland	43 (108)	Slovenia	-6 (82)
94 95	Bulgaria	-32 (78) 38 (116)	Lebanon	-26 (103)	Kazakhstan	-0 (82) 60 (80)
96	Burkina Faso	-26 (80)	Georgia	24 (102)	Saudi Arabia	36 (125)
97	Libya	37 (125)	Seychelles	-15 (89)	Italy	-26 (105)
98	Mozambique	-44 (67)	Israel	-26 (80)	Barbados	-1 (50)
98 99	Gabon	-44 (07) -7 (102)	Maldives	-20 (80) 16 (122)	Seychelles	-14 (109)
100	SaoTome& Pr.	26 (123)	Benin	-17 (105)	Laos	21 (112)
100	Argentina	20 (123) 14 (104)	Slovak Rep.		Afghanistan	
101	Mauritius	. ,	•	-22(78)	Russia	76 (40)
102	Burundi	-16(85)	Philippines	-7 (93)	Ghana	50 (138)
		6 (95) 28 (72)	Congo, Rep.	40 (123)	Bahamas	-29 (115)
104	Uganda Nanal	-28(72)	Togo Bulgorio	28 (115)		-38 (99)
105	Nepal Malauri	-33 (92)	Bulgaria	26 (92)	Peru	20 (152)
106	Malawi	7 (107)	Macedonia	-81 (76)	Libya	70 (170)
107	Montenegro	12 (110)	Gabon	21 (114)	Moldova	-18 (67)
108	Senegal	-33 (89)	Niger	6 (113)	Malta Einland	-76 (94)
109	Serbia	-30 (103)	Honduras	-41 (75)	Finland	-92 (68)
110	Greece	-9 (106)	Peru	-19 (82)	Honduras	-61 (60)
111	Haiti	-31 (87)	Gambia	2 (107)	Mexico	2 (139)
112	Italy	-41 (93)	Bhutan	44 (128)	Latvia	4 (56)
113	Maldives	24 (129)	Tanzania	20 (137)	Israel	-41 (104)
114	Gambia	-15 (105)	Mali	-27 (99)	Ethiopia	-11 (83)
115	Guinea	5 (122)	Kenya	29 (121)	Bangladesh	0 (133)
116	Romania	-35 (119)	Mozambique	-11 (112)	Jordan	-75 (30)
117	Cape Verde	18 (127)	Cambodia	23 (109)	Estonia	-57 (42)
118	Dom. Rep.	-8 (115)	Guinea	47 (150)	StVincent&G	-60 (39)
119	Cuba	2 (111)	Singapore	5 (139)	Serbia	-12 (123)
120	Guyana	-6 (128)	Hong Kong	-10 (129)	Ecuador	13 (147)
121	Georgia	1 (88)	Macao	-14 (135)	Uganda	-19 (122)
122	Togo	-16 (114)	Guinea-Biss.	-22 (125)	Madagascar	32 (88)
123	Saudi Arabia	17 (133)	Romania	-6 (118)	Gabon	16 (146)
124	Sierra Leone	-17 (94)	Kyrgyz Rep.	26 (116)	Uzbekistan	47 (157)
125	Guatemala	-9 (117)	Zambia	-4 (120)	Namibia	3 (135)
126	Kyrgyz Rep.	-26 (132)	Mexico	-37 (104)	Germany	-88 (107)
127	Cameroon	-3 (131)	Uganda	34 (127)	Czech Rep.	-74 (103)
128	Suriname	28 (139)	Cote d'Ivoire	-1 (146)	Brazil	-2 (158)
129	Ethiopia	1 (118)	Fiji	-52 (77)	Burma	51 (180)
130	Belize	-5 (130)	Thailand	-28 (110)	P.N. Guinea	-55 (114)
131	Honduras	-23 (126)	Turkey	8 (145)	Poland	-32 (149)
132	Fiji	-1 (134)	Malaysia	-9 (138)	Rwanda	-42 (118)
133	El Salvador	-5 (135)	Nepal	2 (136)	Philippines	-11 (151)
134	Turkmenistan	-38 (124)	Nicaragua	-71 (69)	Sudan	14 (117)
135	Mongolia	18 (143)	Rwanda	33 (156)	Congo, Rep.	-6 (144)
136	Jamaica	-48 (109)	Armenia	-20 (132)	Tajikistan	26 (165)
137	Bangladesh	-5 (136)	Tunisia	-18 (134)	Bosnia H.	-76 (110)
138	Macedonia	19 (153)	Iraq	36 (160)	Burkina Faso	2 (143)
139	Cote d'Ivoire	-12 (121)	Jordan	-35 (111)	Sierra Leone	-22 (108)
140	Kenya	6 (146)	Cameroon	22 (144)	Greece	-95 (86)
141	Samoa	3 (140)	Bangladesh	-19 (131)	Slovak Rep.	-54 (120)
142	Tonga	19 (152)	Algeria	-17 (141)	Zambia	-78 (95)
143	Nicaragua	4 (145)	Vietnam	9 (153)	Mali	-74 (101)
144	Benin	-6 (142)	Mauritania	14 (155)	Ukraine	3 (140)

145	Albania	22(1(1))	Indonesia	12 (152)	Vanna	9(150)
145 146	Albania Ghana	23 (161) -29 (137)	Indonesia Angola	12 (152) 37 (169)	Kenya Iceland	-8 (159)
140	Micronesia	. ,	Venezuela		Turkey	-128 (9)
147	Sudan	1(144)	Bahrain	-38 (117)	Jamaica	-20 (167)
		33 (179)		25 (164)		-113 (64)
149	Morocco	1 (155)	Azerbaijan	20 (158)	C. Afri. Rep.	18 (179)
150	Vanuatu	-21 (138)	Belarus	-4 (149)	Togo	-14 (161)
151	Armenia	-6 (159)	Egypt	-15 (143)	Belize	-86 (136)
152	Iran	26 (165)	Morocco	-11 (147)	Georgia	-58 (90)
153	Turkey	-10 (156)	India	-24 (130)	Antigua Bar.	-133 (13)
154	Congo, D. R.	-2 (147)	Sri Lanka	-46 (126)	Argentina	-16 (162)
155	Bosnia H.	21 (169)	Iran	9 (163)	Costa Rica	3 (150)
156	Nigeria	19 (167)	Laos	24 (176)	Egypt	-51 (142)
157	Lebanon	16 (171)	Yemen	-12 (148)	Guinea	-26 (164)
158	C. Afri. Rep.	-19 (151)	Oman	-7 (154)	Lithuania	-9 (141)
159	Tunisia	8 (166)	Tajikistan	-6 (162)	Kuwait	5 (131)
160	Lesotho	-24 (141)	Equa. Guinea	19 (180)	Cambodia	-36 (153)
161	Djibouti	-2 (163)	Burma	15 (179)	Hungary	-80 (121)
162	Sri Lanka	-2 (160)	Sudan	9 (170)	Paraguay	-19 (173)
163	Solomon Is.	-5 (157)	Uzbekistan	4 (168)	Bolivia	-68 (160)
164	India	-15 (148)	China	-1 (165)	Venezuela	-45 (154)
165	Namibia	-3 (149)	Russia	-31 (151)	Syria	4 (156)
166	Swaziland	-24 (150)	Chad	0 (177)	Brunei	-80 (148)
167	Moldova	-26 (154)	Syria	-66 (142)	Iraq	6 (100)
168	Guinea-Bissau	-13 (158)	Libya	2 (167)	Uruguay	0 (175)
169	Egypt	10 (173)	Saudi Arabia	-20 (159)	Cameroon	-9 (168)
170	South Africa	-19 (162)	C. Afri. Rep.	-40 (161)	Comoros	-4 (178)
171	Kiribati	-2 (168)	Afghanistan	6 (172)	Dom. Rep.	-60 (171)
172	Niger	-9 (164)	Madagascar	-76 (133)	Azerbaijan	-30 (92)
173	Jordan	-8 (172)	Congo, DR	11 (174)	Pakistan	-14 (166)
174	Liberia	8 (176)	Ethiopia	-81 (140)	Cote d'Ivoire	5 (183)
175	Algeria	-3 (174)	Kazakhstan	0 (175)	El Salvador	-41 (174)
176	Pakistan	4 (177)	Brunei	-28 (173)	Guatemala	-26 (169)
177	Mauritania	0 (181)	Turkmenistan	1 (181)	Trin. & Toba.	-77 (145)
178	East Timor	-14 (170)	Kuwait	-40 (166)	Zimbabwe	-21 (176)
179	Yemen	-5 (178)	Eritrea	-32 (171)	Angola	-9 (182)
180	Syria	-10 (175)	Nigeria	-25 (157)	Yemen	-35 (177)
181	Mali	-10 (180)	Pakistan	-9 (178)	Swaziland	-20 (181)
181	Comoros	1 (183)	U. A. E.	-1 (182)	Cuba	-1 (184)
182	Afghanistan	1 (183)	Qatar	-1 (182)	Guinea-Biss.	-132 (172)
185	Iraq	-18 (182)	Zimbabwe	-30 (184)	Eritrea	-152 (172) -159 (89)
104	пач	-10 (102)	ZIIIIUaUWE	-30 (104)	LINCa	-139 (09)

References

Acemoglu, Daron, and James A. Robinson, (2012), Why Nations Fail? London: Profile Books.

Aghion, P., and P. Howitt, (1998), Endogenous Growth Theory, Cambridge, MA: The MIT Press.

Andersen, T. M., and T. T. Herbertsson, (2005), "Quantifying Globalization", *Applied Economics*, 37, 1089-1098.

Barro, R. J., (1999), "Human Capital and Growth in Cross-country Regressions", *Swedish Economic Policy Review*, 6, 237-277.

Barro, R. J., (2000), "Inequality and Growth in a Panel of Countries", *Journal of Economic Growth*, 5, 5-32.

Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad, (2005), "Does Financial Liberalization Spur Growth?", *Journal of Financial Economics*, 77, 3-55.

Bhagwati, Jagdish, (2004), In Defense of Globalization, New York: Oxford University Press.

Deininger, K., and L. Squire, (1996), "A New Dataset Measuring Income Inequality", *World Bank Economic Review*, 10, 3, 565-592.

Demirgüç-Kunt, A. and Ross Levine, 2008, *Finance and Economic Opportunity*, Policy Research Working Paper 4468, Development Research Group, Washington D.C.: The World Bank, January.

Douglas, Paul H., 1976, "The Cobb-Douglas Production Function Once Again: Its History, Its Testing and Some New Empirical Values", *Journal of Political Economy*, 84, 5, October: 903-916.

Dreher, Axel, (2006), "Does Globalization Affect Growth? Evidence from a New Index of Globalization", *Applied Economics*, 38: 1091-1110.

Easterly, William, and Sergio Rebelo, (1993), "Fiscal Policy and Economic Growth", *Journal of Monetary Economics*, 32, 417-458.

Galor, O., (2000), "Income Distribution and the Process of Development", *European Economic Review*, 44, 706-712.

Grossman, Gene M., and Elhanan Helpman, (1990), "Trade, Innovation, and Growth", *American Economic Review*, 80, 2, May, 96-91.

Henderson, D. J., R. J. Carroll, and Q. Li, (2008), "Nonparametric Estimation and Testing of Fixed Effects Panel Data Models", *Journal of Econometrics*, 144, 257-175.

Joreskog, Karl G., and Arthur S. Goldberger, (1975), "Estimation of a Model with Multiple Indicators and Multiple Causes of a Single Latent Variable", *Journal of the American Statistical Association*, 70, 351, 631-639.

Kejak, Michal, (2003), "Stages of Growth in Economic Development", *Journal of Economic Dynamics and Control*, 27, 5, March, 771-800.

Kearney, A. T. Inc., (2002), "Globalization Index", *Foreign Policy Magazine*, Washington D. C.: Foreign Policy.

Kenny, Charles, and David Williams, (2001), "What do We Know about Economic Growth? Or, Why don't We Know Very Much?", *World Development*, 29, 1, 1-22.

King, Robert G., Charles I. Plosser, and Sergio T. Rebelo, (1988), "Production, Growth and Business Cycles", *Journal of Monetary Economics*, 21, 195-232.

Kosempel, Stephen, (2004), "A Theory of Development and Long Run Growth", *Journal of Development Economics*, 75, 201-22.

Li, Kui-Wai, (2012), Analyzing the Kuznets Relationship using Nonparametric and Semiparametric Methods, CIRJE, University of Tokyo, Japan, CIRJE-F-839, January.

Li, Kui-Wai, and Tung Liu, (2011), "Economic and Productivity Growth Decomposition: An Application to Post-reform China", *Economic Modelling*, 28, 366-373.

Li, Kui-Wai and X. Zhou (2010), "Openness, Domestic Performance and Growth", *Economics Letters*, 107, January, 13-16.

Li, Q., and C. Hsiao, (1998), "Testing Serial Correlation in Semiparametric Panel Data Models", *Journal of Econometrics*, 87, 207-237.

Lucas, Jr. R. E. (1988), "On the Mechanics of Economics Development", *Journal of Monetary Economics*, 22, 3-42.

Lucas, Jr. R. E., (1990), "Why Doesn't Capital Flow from Rich to Poor Countries?", *American Economic Review*, 80, 2, May, 92-96.

Miller, Ronald E. and Peter Blair, (2009), *Input-Output Analysis: Foundations and Extensions*, 2nd edition, Cambridge: Cambridge University Press.

O'Neil, Jim, (2012), *The Growth Map: Economic Opportunity in the BRICs and Beyond*, London: Penguin.

Panzironi, Fransesca and Katharine Gelber, (2012), *The Capability Approach: Development Practice and Public Policy in the Asia-Pacific Region*, London: Routledge, May.

Rencher, Alvin, (2002), *Methods of Multivariate Analysis*, 2nd edition, New York: Wiley-Interscience.

Romer, Paul, (1993), "Idea Gaps and Objective Gaps in Economic Development", *Journal of Monetary Economics*, 32, 543-573.

Solow, R. M., (1957), "Technical Change and the Aggregate Production Function", *Review of Economics and Statistics*, 39, 312-320.

Tamura, Robert, (2006), "Human Capital and Economic Development", *Journal of Development Economics*, 79, 26-72.

Thirlwall, A. P., (1978), *Growth and Development*, 2nd edition, London: Macmillan.

Ullah, A., and N. Roy, (1998), "Nonparametric and Semiparametric Econometrics of Panel Data", in Ullah, A., and D. E. A. Giles (Eds.), *Handbook of Applied Economic Statistics*, New York, Marcel Dekker, pp. 579-604.

Young, Alwyn, (1994), "Lessons from the East Asian NICS: A Contrarian View", *European Economic Review*, 38, 964-973.

Zhou, X. and Kui-Wai Li, (2011), "Inequality and Development: Evidence from Semiparametric Estimation with Panel Data", *Economics Letters*, 113, 3, December, 203-207.



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IS LABOR SIGNALING ENOUGH TO ADDRESS

MANPOWER MISMATCH?

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The Philippines



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

Is labor signaling enough to address manpower mismatch?¹

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Abstract

Although there are several theories and perspectives that may explain the phenomenon of talent mismatch in the labor market, asymmetric information has been identified as the more dominant one. However, because of the volume of information needed, and the cost of gathering information, the labor signaling mechanisms provided by the government may be inadequate in responding in closing this information gap. This inadequacy becomes moreevident with the realization that information is fully disclosed at the work place where job seekers learn about the difficulties of the job and the employers learn about the skills and work aptitude of the worker on the job. This paper will probe on the role of the various key players in the labor markets on how they respond in addressing this information asymmetry through a review some of the labor signaling mechanisms being pursued by various government agencies in APEC economies. From the supply side, it will inquire on how training institutions adjust to close the information gap. From the demand side, I will argue why employers are hesitant in narrowing the information asymmetry in the labor market. The cost of training and re-training manpower can be costly to the employer. Aside from the cost of adjustment, the motivation to work, which cannot be captured by labor signals can likewise explain why mismatch persists.

I. Introduction

One of the bottlenecks in the development of human resources development in the Asia Pacific region has been the problem of talent mismatch. This labor mismatch is caused by several factors but information asymmetry has been emerging as the leading reason for this disconnect. In addressing this problem, several economies have provided various market signaling measures to stakeholders in the labor market. The role of government in the provision of information is critical in the light of the reluctance of firms and training institutions to provide optimal information in closing the gap between suppliers and consumers of labor services.

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II. Various Perspectives on Labor Mismatch

One of the manifestations of labor mismatch can be observed when highly educated workers are employed in occupations where they are over qualified. Although over-investment in education can be socially wasteful, the decision of individuals to invest too much in education or training has rational basis. More education is positively linked with higher productivity as the human capital theory predicts. The presence wage differentials between individuals with high levels of education, job training, and experience and those with relatively little has been empirically verified in support of the human capital theory. The problem of mismatch arises as the wage gap may initially give rise to over invest in education. However, as the labor market becomes more educated and the wage gap between low-skilled and high skilled workers is narrowed, the initial incentive to pursue more education stops as a consequence of the process of adjustment(Desjardins &Rubenson, 2011).

The job competition model presents another perspective for the incentive to invest in more education. In a queue for jobs, the model asserts that more education can serve as an insurance to bump a less educated individual. As workers compete for high paying jobs in a tight labor market, the pecking order becomes more pronounced. On the other hand, a labor queue ranks workers based on their predicted training costs. The labor queue is consequently reduced to workers being ranked based on their educational attainmentsince workers with higher levels of education will require less training, (Leuven & Oosterbeek, 2011).

As the average level of schooling of a population cohort increases, lower-skilled laborers are either demoted in the labor hierarchy, confronted with lower-paying jobs or worse, bumpedout of the labor market and face unemployment. In such a situation, obtaining education in excess of what the jobs require becomes an attractive choice for workers workers struggle to maintain their position in the labor queue.

The signaling and screening hypothesis, on the other hand, interprets over investment in education as part of the signals for productivity in the absence of direct and tangible measure for productivity (Spence,1973). According to this perspective, although an individual's productivity cannot be known immediately when hired, there areobservable characteristics that may facilitate an employer's assessment of an applicant's potential contributions to the firm. The applicant's education, work experience, race, age, sex, and other personal records can serve as substitutes to the unobservable labor productivity (Spence, 1973).

A different view on over investment in schooling is being proposed by the technological change theory. According to this view changes in jobs brought about by innovations and technological progressare readily handled by more educated individuals. This perspective has been supported by three alternative formulations. First, physical capital has a strong degree of complementarity between skilled laborthan with unskilled labor (Griliches, 1967, 1969). On the other hand, Nelson & Phelps (1966) argued that jobs that require individuals to keep abreast with constant technological innovationsmust have higher levels of schooling. Lastly, Milgrom&

Roberts (1990) asserts that skilled workers have an edge over unskilled workers in a workforce that can perform multiple tasks and take on a diverse set of responsibilities brought about by technological progress.

Desjardins & Rubenson (2011) provided three reasons to explain how skill-biased technological change may give rise to labor market mismatches. First, if firms are slow in adopting new technologies, skills gained by laborers that enable them to make full use of new innovations are rendered underutilized. Second, firms are said to have every incentive to hire overqualified workers as a hedging strategy in anticipation of future technological changes that may require increased capacities of workers to learn and adapt. Third, without considering the skills obtained from experience and on-the-job training, rapid technical progress may create an illusion that those currently employed are actually undereducated.

Another reason for investing in more education is the provision of greater likelihood for career mobility. The career mobility theory, according to Sicherman & Galor (1990), states that the returns to education also include higher probabilities of occupational upgrading, either through intra-firm career mobility (promotion) or inter-firm mobility aside from the usual higher income streams. It claims that better promotion prospectsmore than offset the wage penalties for over-educated laborers (Buchel & Mertens, 2001). Much of the returns to education are actually reaped during the later stages of one's careeralthough initially wage differentials between more educated and less educated individuals may be narrow.

From the labor segmentation model, enhanced education demand is based on the desire of the individual to enter the primary internal labor market where the working conditions and career path educated and skilled workers are more promising.

As individuals in search for job, they may accept jobs below the qualifications that they have attained. The job search theory attempts to explain labor-market mismatches by pointing to the presence of imperfect information and job-search costs (Fitzgerald, 1998; McCall, 1970; Stigler, 1962). The pressure to accept a job due to mounting costs associated with a prolonged search may increase the likelihood that a worker will accept a job with tasks not necessarily commensurate to his/her credentials and actual capabilities.

The job where you are assigned can lead to mismatch as well. According to the job assignment theory an individual's productivity and earnings is likewise determined by the nature of job an individual happens to be assigned and not only by job performance alone(Sattinger, 1993). A set of equally educated individuals will inevitably have varying degrees of performance when made to accomplish the same taskgiven a diversity of jobs in terms of tasks, responsibilities, expected output, skill sets, and technologies utilized. Thus, job characteristics constitute an intermediate step between individuals' characteristics and their actual earnings.

Under this framework, when workers choose jobs whose characteristics are not congruent with their own qualities, labor market mismatches may arise. This allocation problem is partly caused by information asymmetries that prevent workers from having knowledge on both the full range of jobs available to them and attributes or characteristics of each occupation. Likewise, employers' inability to adjust their technologies in ways that will better complement the current pool of workers has also led to persistent skill mismatches.

Given these decisions of the individuals, if firms or the workplace do not adjust appropriately labor mismatch will persist.

Talent mismatch can also manifest in terms of when an educated applicant does not have sufficient training to perform the job adequately. The lack of financial resources of the individuals and the presence of an imperfect credit market to provide the necessary funds to finance the cost of acquiring more educationcan lead to an under-investment in education. But beyond financial constraints, the concept of under-investment in education can be viewed as a result of inadequate preparation graduates of educational and training institutions. Mismatch again emerges because firms are reluctant to provide training for those who have under-invested in education or for graduates who are entering the labor market with inadequate skills preparation. Given this latter perspective on under-investment in education, talent mismatch can likewise occur because educational and other training institutions are slow, if not reluctant, to adjust to the changing demands of the workplace brought about by intense competition, globalization and technological innovations.

III. Some Practices in Addressing Labor Mismatch

Beyond inappropriate responses to over-education, under-investment in education and to the dynamic changes in the workplace, labor and talent mismatch is rooted in the information asymmetry as articulated in the signaling and screening hypothesis, job search theory and assignment theory. It is interesting to examine the crucial role of government since information asymmetry is a market failure. As a market failure, there may no incentive for the other actors in the labor market to provide information that can mitigate if not arrest the problem of mismatch of talents and labor services.

In this light several economies in the Asia Pacific region have responded in terms of narrowing the information gap between the suppliers and users of manpower services. Using the guideline set by Gary, et al. (1996) on effective labor signaling system, we will review some of these initiatives in providing information that will guide individuals on the amount and the type of training that they will undertake, assist in the management of training systems, improve the efficiency of the labor market and serve as framework for the government in planning public investments in training.

3.1.Information for career guidance

The various stakeholders, particularly the government, make available various macroeconomic and labor market data including wage fluctuations and trends, job vacancy rates, graduate placements, and enrollment data. This information is intended to students to guide them on their career choices but also given to other decision-makers (prospective employees, employers, and policy-makers) to make an assessment of labor market demand and supply fluctuations.

In Australia, the government provides a host of information from the performance of the economy, labor force trends from the local to national levels, and future demands across various states and territories, industries and occupations industry level labor and skills needs and information on local labor market conditions (Job Services Australia).

In Korea, labor demand signals are obtained through the Sector Human Resource Development Council (SHRDC). The SHRDC is a body tasked to collect and disseminate the skill needs of employers. Information collected is then shared to post-secondary VET providers.

In New Zealand, The *Labor Market Factsheets* provides quick facts about key interest groups in the economy's labor market, namely, Māori, Pacific peoples, females, youth and older people. Indicators such as labor force participation, employment, and unemployment are outlined for each demographic group.

In Russia, the government manages more than 400 public employment service offices that cater to Russia's 89 regions (Watts &Zabrodin, 2003). These offices are tasked to (1) collect information on job vacancies, the state of the labor market, and enrollment/graduate trends, (2) offer job-placement and job-search services, and (3) offer career information and guidance services.

In Singapore, aside from basic labor market data, MOM's Labor Market Report also features detailed information on job vacancies across industry groups (based on SSIC 2010 classification) and occupational groups. Alongside absolute figures are percentage changes in job vacancies across very specific classifications of industries and occupations. The same set of data is available for those who seek information on retrenchment, labor turnover, and redundancy. Besides data on the present state of the labor market, the report also includes companies' quarterly employment forecasts (MOM, 2012).

In the United States, the Bureau of Labor Statistics (BLS) disseminates publications regarding employment projects on a regular basis. It includes information on future labor force characteristics (size, distribution across age and race) given current trends in population growth and migration. The report also outlines projected employment changes (job creation/contraction) within various industries.Users of the report are given information on which occupations are likely to experience increased (or contracted) demand during the next ten years.

3.2.Information for managing training systems

This element requires the use of reverse tracer studies which are designed to identify levels and combinations of skill acquisition that lead to certain occupations and the provision of accompanying data on costs associated in acquiring each qualification set. Other pertinent information includes rates of return associated with various skill acquisition choices, measurement of cost effectiveness, new industry trends, and productivity rates.

In Australia, the education and training institutions get information on employers' requirements and expected student demand from various sources including the Graduate Careers

Australia and National Centre for Vocations Education Research (NCVER) on survey results on graduate employment outcomes.

In Korea, the government has undertaken steps to implement the 2+1 system where students spend two years in a classroom setting and another year in the workplace (via internships and on-the-job training). Likewise, career guidance systems have also been put in place in order to ensure that vocational programs meet labor market needs. These programs provide students with (1) information on various specificities of different careers and occupations (allowing sound decision making on the type of work one selects) as well as (2) one-to-one basis career advice.

In the US, besides changes in labor demand across industries and occupations, the report also outlines projected changes in skills demand. It also relates that certain occupations will begin to require some form of apprenticeship/internship before formal employment. Last and more importantly, it also discusses the predicted educational requirements of occupations and industries that will experience large employment expansion.

3.3.Information for improving the efficiency of the labor market

This category includes set of information that effectively reduces labor market frictions that inhibit those searching for a job from finding one that is most appropriate to their individual characteristics. For instance, information on wage differentials and job characteristics better equip workers to assess compensation-risk trade-offs

In Australia, government provides a venue through the Local Employment Coordinators where employers, training providers, government agencies, and other stakeholders develop solutions to labor market demands at the local level (Dowling, 2012).

In Canada, job seekers can secure information from billboards or self-serve computers at local offices of the Human Resources Development Canada (HRDC). Matching job seekers and employers in various sectors are facilitated by HRDC through the Job Bank and the Electronic Labor Exchange (ELE). Employers advertise job openings in this electronic interchange while job seekers advertise their skills. Networking is also a popular means of finding a job in Canada where using personal and professional contacts the Internet.

In Korea, the supply-side, signals come in the form of qualifications that assure employers of the skill level and technical expertise of graduates. Korea's vocational qualification system consists of three parts: the National Qualifications, the National Technical Qualifications, and the Private Qualification.

In New Zealand, *The Quarterly Labor Market Scorecard* makes use of 'scorecard dials' to verify the labor market's state, progress, and its contribution to economic growth. For instance, the labor demand dial makes use of employment growth, the labor market matching, unemployment rates; the labor quality dial, workforce qualification levels; the labor supply dial, participation rates, and workplace performance, wage fluctuations. Each 'dial' is then accompanied by a more elaborate discussion.

In Peru, the job matching problems in the economy has been addressed by the government through the promotion of the National Employment Services and the Unique Employment Counter. The National Employment Services facilitates the inclusion of workers in the formal labor market and the generation of information relevant to the key stakeholders in the labor market. The Unique Employment Counter, on the other hand, provides services for employment searchers (from job listings to competency certification), young students (vocational guidance and occupational information), enterprises, entrepreneurs (training for entrepreneurship), and migrants (assistance to migrants).

In the Philippines, aside from the school setting, technical and vocational education and training (TVET) programs are also offered through *company-based* delivery modes. In recognition of the need for companies' involvement in training the economy's future workforce, partners may participate in three different company-based training programs including apprenticeship program, learnership program which does not exceed three months, and dual training which combines school and company to balance theoretical and applied knowledge.

There are also community-based programs that target poor communities, underprivileged individuals (i.e. out-of-school youth, unemployed adults), marginalized sectors (i.e. subsistence farm workers, fisher folks) and economic groups (i.e. informal sector) are also conducted on a regular basis. These types of programs simply focus on basic skills and thus last for only one week to three months.

Lastly, the TVET system follows the Philippine National Qualifications Framework that awards graduates of TVET programs certificates of varying levels based on the type and mastery of knowledge/skill obtained.

In Singapore, the government operates its own employment portal to facilitate the recruitment of employees needed by various state agencies. Several third-party job portals (e.g. Monster.com.sg, JobsDB.com, Singapore Jobs) also provide Singaporeans with a means to search for employment online.

In Thailand, the Department of Employment (DOE) operates a nationwide unemployment registration system and a labor market information network that connects public and private employment services, job-seekers, and employers. The system is also a means to gather labor market data more efficiently, thus granting policy-makers a more comprehensive and timely source of information. The same agency has also set-up an improved labor market indicator system that serves as an early warning system that may signal trends in supply and demand for selected occupations, worker productivity, and other labor market issues.

In the US, the presence of information on labor demand and supply across industries will aid individuals who are currently deciding on which career to specialize in. Likewise, it will also shorten the job search process due to increased information on educational demands and industrial/occupational vacancies. This component will require information on present and future (1) industry demand for specific professions and workers and (2) distribution of labor supply by skill level and specialization. Such information will include private training capacity, programs offered by educational institutions, skills supply and demand imbalances, market imperfections, and continuing structural changes.

In Malaysia, various government agencies also offer technical and vocational training to individuals who seek to upgrade and tailor-fit their skillsets such that industry demands are met. To ensure the quality of such programs, a certification system was established. The Malaysia Skill Certificate (MSC) is awarded to an individual who has completed a program offered by an accredited institution, earned the necessary credit requirements for certification, or earned recognition for exemplary work performance. The MSC is also segmented into five levels, namely, L1 (semiskilled level), L2 (skilled level), L3 (advanced skill level), L4 (advanced skill/supervisor level), and L5 (advanced skill/manager level).

In Thailand, cooperative education (co-op) programs have also been integrated in the curricula of several higher education institutions (Rupavijetra, 2011). Co-op education in Thailand is very similar to internships or OJT programs found in other economies. Students spend one to three months working for an organization/business of choice in order to acquire occupational skills and familiarize themselves with the workplace environment. A distinct feature of the co-op program is its emphasis on a student's ability to apply and integrate their newly acquired skills in the classroom setting once they recommence normal classes.

As mentioned earlier the information provided by the government is meant to guide stakeholders in making decisions and adjustments. In terms of adjustment, it most cases the adjustment is done by training institutions and the prospective employees. The educational institutions adjust through changes in the curriculum to align with the emerging human resource trends and requirements in the labor market. The potential employees likewise adjust in terms of acquiring additional training. But in many of these economy practices, there is no apparent pressure for firms and employers to adjust. There are, however, examples of on-the-job training programs in the Philippines, and job internships in Korea where business sector participation is evident. Beyond this involvement, the system of adjustment does not put pressure on the employers to have an active participation in narrowing the information gap. The most that these firms do is to provide information on what occupations and skills that the business and the economy will need in the near future.

III. Adjustments Costs and Labor Mismatch

It is interesting to revisit the concepts of mismatch and its causes before we can recommend appropriate policy prescriptions on how to address this pervasive problem among many economies including APEC economies given the variety of theories/views/models explaining the phenomenon of mismatch in the labor market. The disconnect between the human talents and skills, on the one hand, and the job requirements of the workplace, on the other hand, emanates from the various views on the concepts and causes of mismatch. This divergence can arise from the inappropriate responses of firms arising from the over-education of graduates and the undereducation of graduates. Similarly, the mismatch can be viewed as a consequence of the incompatible responses of individuals to changes in the workplace. Lastly, the gap between demand for and supply of talents can surface from information asymmetry among actors in the labor market.

It may very well be that the problem of mismatch is based on the economics of adjustments. In a situation where there is an over-educated workforce, the mismatch can be addressed by firms having to adjust in terms of changing their production processes to accommodate an ever increasing skilled workforce. This may considered too costly as it implies huge investments in state of the art equipment and modern production processes.

On the other hand, in the case of under-investment, the burden of adjustment can be done either by educational institutions or by the firms themselves. Any sector that will adjust will have to shoulder the cost of adjustment. But because of the huge costs, both educational institutions and firms may have apprehensions in adjusting to address the talent incongruence.

If educational institutions will adjust, training institutes will have to re-align their academic programs and curriculum to the demands of the workplace. Although this move may be appropriate and can be feasibly implemented in technical and vocational schools, this option may be difficult to implement in higher educational institutions. Although part of the tasks of universities is to train manpower, these institutions of higher learning also have other objectives to pursue including expansion of the frontiers of knowledge through research and development and to be of service to the community. In addition, aligning the curricular programs of universities to suit the demands of the workplace may create rigidities in skills of graduates of academic institutions and may be counterproductive in the long run in the light of the dynamism in the workplace. The rigidities may arise as higher education institutions focus on the technical and professional component of the curriculum that can become out of date by the time the graduates exit the universities. To mitigate these rigidities an appropriate curriculum can be designed so that schools can produce graduates that are trainable and flexible to the changes in technology and the varying demands of the workplace.

If firms will have to adjust, they have to provide training to graduates with inadequate preparation that are entering the workforce. The cost of training may be too costly for the individuals to take. For firms to finance the training there is an assumption that the labor market is tight or there are difficulties, if not the prohibition, in hiring qualified trained foreign workers. Aside from the cost, the reluctance of firms to undertake these training programs stem from the fact that these training programs may differ from on-the-job training and may be considered as general training which is not specific to the firm's job requirements. It may be argued that as general training it should be financed by the workers but can be done in educational and training institutions.

If both educational institutions and firms do adjust, there will be less adjustment cost on both sides. For educational and training institutions crafting a curriculum geared towards trainable and flexible critical thinkers who are good communicators and disciples of education for life, these graduate can adapt easily to the demand of the workplace. Given these type of
graduates, it will be very easy for firms to conduct specific training programs to these trainable and flexible graduates.

IV. Motivation to Work, Job Satisfaction and Talent Mismatch

In the review of practices in the APEC member economies, it is shown that the role of the government is crucial providing information to narrow the information gap between firms and workers. However, the provision of information has to be done efficiently to properly address the problem arising from information asymmetry in the labor market. The optimal level of information will require the identification of labor information, the provider of information, the mechanisms for provision, targeted users of information, and manner, time and place for transmission.

Because of the volume of information needed and the timeliness this information is going to be transmitted to the end-users, the cost of narrowing the information gap in the labor market can be very prohibitive.

Responding to these dimensions of information provision adequately can be difficult if not costly. However, even if an economy is able to respond to these factors sufficiently, it is still possible that information may be not adequate. From what we have seen in our discussion the information provided in these schemes are mostly on the skills, educational attainment and qualifications of the potential job seekers. This information may signal productivity of the potential worker but may not really reflect the actual productivity of the workers. Sometimes productivity cannot be adequately indicated by these signals since productivity surfaces accurately on how workers use these attributes in the work place. In this case, what is important is the attitude of the worker towards his assigned task.

The motivation to work and attitude towards work sometime are not dependent on the screening credentials of the workers but more on the how these qualities respond to the work environment. In a way, this is similar to the assignment theory that views labor productivity based on the qualities of the work or tasks assigned to the worker. Drawing from the studies of industrial psychology, according to Herzberg, Mausner & Snyderman (2011), attitude towards work is important in determining productivity and performance. In particular, the expectancy theory on work behavior and attitude predicts that the satisfaction on work and the probability that this satisfaction will occur determine job satisfaction, job effort and job performance (House, Shapiro, & Wahba, 1974). In addition, it has been shown by Patterson, Warr & West (2004) that productivity of several manufacturing industries was correlated with job satisfaction of workers.

Even if we accept that attitude and motivations to work are crucial in determining job satisfaction and labor productivity, this attribute of the worker cannot be fully captured in productivity signals. Even if it is possible to mimic the work environment for the potential worker as done in apprenticeship, on-the-job training, and dual training programs which are quite popular measures in many APEC economies, the productivity of the potential worker cannot be inadequately measured.

Productivity is a product of the interactions of skills and qualifications on the worker, on the one hand, and the attitude or disposition of the worker towards his work, on the other hand. However, this disposition towards work cannotbe fully captured in apprenticeship programs because the motivation of the trainee departs from the motivation of an actual worker on the assigned tasks. More often the trainee is motivated to pass the exam or complete his academic requirements in this on-the-job training program. On the other hand, the motivation of the firm in sponsoring training program also deviates from its motivation at the actual work environment. Aside from fulfilling government requirements, firms participate in these programs as part of their corporate social responsibility initiatives as well as their contributions in human resource development of the government and not to extract productivity from the trainee that can enhance its revenue and profit as a normal optimizing firm would do.As a consequence, firms can also be indifferent in providing the training since there is a strong probability that individuals that they have trained are likely to end up elsewhere. This lukewarm behavior on firms is manifested by the insignificance of the assigned tasks to the trainees. Thus the productivity of the potential worker is not fully disclosed because of the divergences in motivations.

Various studies in industrial psychology have been instructive in showing us that productivity can only be fully observed and adequately measured at the work place. At the actual work environment, the motivation of workers is revealed in terms of acquiring satisfaction from the compensation, work environment and treatment of the employer. This motivation of the worker, in turn, coincides with the motivation of the employer which is to extract productivity from the worker. If worker's productivity can be actually observed at the work place while the process of mimicking the work place in on-the job training programs can be inadequate, it is argued that talent mismatch will persist.

V. Conclusion

There are many interpretations of talent or labor mismatch. In these perspectives, there are also several alternatives being prescribed in arresting the imbalance in the labor market. But as we have argued before, the asymmetric information is probably the most popular among competing perspectives. This is shown by the numerous examples of labor signaling mechanisms being pursued by APEC economies.

Since the normal private participants in labor market transactions tend to under-provide the optimal level of information, rectification of labor market imperfection has to be addressed primarily by an agency of the public sector. As part of its role in correcting market imperfections and in promoting public interest, this task of addressing information asymmetry has been assumed by the government. However, given the persistence of the imbalancethe provision of relevant information to key stakeholders in the labor market has not been necessarily effective. I submit two explanations for this persistence. One is the inadequacy of information being provided due to the cost in the provision of information. The second is the lack of appreciation of the motivation and attitude of workers towards work. Addressing the problem of information asymmetry in the labor market cannot be easily answered. Foremost reason is the insignificant or sometimes lack of incentives for the stakeholders to provide the appropriate information aside from the varying interests of the stakeholders, Even if there are benefits, these benefits may spillover to others including competitors resulting in a free rider problem. Moreover, even if these benefits are readily internalized by those producing and consuming it, it may be too costly to produce and secure this information. The additional benefits may not be as significant as the additional costs incurred in the production of the information.

In the end, one cannot really know the productivity of the laborer until he is observed on the job. Prior to this, the participants in the labor market can only signal information coming from educational institutions and training institutions and individual job seekers. Hopefully these sets of information are related or reflective of the productivities of job seekers. However, the existence of weak linkages of signals with job performance is one of the major causes of information asymmetry.

From the information provided by labor signals, there is a need for all the stakeholders to adjust. For firms, adjustments can take the form of internal training programs to suit their human resource requirements. Additionally, they can also adjust in terms creating conducive environment for workers to be motivated to work and have job satisfaction. Job satisfaction, job attitude may be the ones crucial to the productivity and not really the training prior to the job. Training is a necessary condition but worker's motivation to work is a sufficient condition that will fully exploit the potentials of degrees, qualifications, and other signals of productivity. Unfortunately, current job signaling devices and information are quite weak in providing information on work attitude, motivation to work and job satisfaction. This can only be observed at the actual work site. In this case, the adjustment will have to be done by the firms and not by the training institutions.

In addition, educational institutions may not be the best and efficient producers of skills. Although schools provide an environment for the acquisition of cognitive, affective, psychological and behavioralskills, the training of technical and vocational skills is best done by experience particularly on-the-job and not in school. Some tasks and specific skills can be learned from technical and vocational training institutions. However, for higher education, the indicators of employability of their graduates cannot be fully gauged by specific skills learned from school but on such qualities as trainability, adaptability and flexibility of their graduates to the dynamic changes in the work place.

Although there are numerous mechanisms being implemented across the APEC economies, in addressing the information asymmetry through labor market signaling, they are not enough. Aside from the incentives and cost of production and transmission, these measures cannot provide the full or perfect information. The most it can do is to mitigate or narrow the information gap. As already mentioned full information can only be disclosed at the work place where job seekers learn about the difficulties of the job and the employers learn about the skills and work aptitude of the workers on the job. The most that mechanisms on market signaling can do to minimize the cost of skills and talent mismatch for both the job seekers and employers. These best practices are meant to assist individuals in their decision on what and how much to

invest in human capital, assist in the management of training programs, improve labor market efficiency and serve as framework for planning on public investment in training. These practices can be shared, learned and applied in mitigating the problem of talent mismatch in the APEC region.

VI. References

- Buchel, F. & A. Mertens. (2004). Overeducation, undereducation, and the theory of career mobility. *Applied Economics*, 36(8), 803-816.
- Desjardins, R. & K. Rubenson (2011). An analysis of skill mismatch using direct measures of skills. OEDC Education Working Paper Series, No. 63.OECD Publishing. http://dx.doi.org/10.1787/5kg3nh9h52g5-en
- Dowling, N. (2012). Background on Australian institutional arrangements relevant to labor market signaling. Workforce Analysis and International Section, Department of Education, Employment and Workplace Relations.
- Fitzgerald, T.J. (1998). An introduction to the search theory of unemployment. *The Federal Reserve Bank of Cleveland Economic Review*. Retrieved from http://www.clevelandfed.org/Research/review/1998/98-q3-fitzgerald.pdf
- Griliches, Z. (1967). Production functions in manufacturing: Some preliminary results. In: Brown, M. (Ed.), *The Theory and Empirical Analysis of Production*, NBER, Studies in Income and Wealth, Vol. 31. Columbia University Press, New York, pp. 275–340.
- Griliches, Z. (1969). Capital-skill complementarity. Review of Economics and Statistics, 5, 465-68
- Herzberg, F.B. Bausner&B.B. Synderman (2011). *Motivations to Work Volume 1 of Organization and Business*. Transaction Publishers. Reprint.
- House, R. H. Shapiro, &M. Wahba, (1974), Expectancy Theory as Predictor of Work Behavior and Attitude: A Re-Evaluation of Empirical Evidence. *Decision Sciences*, 5: 481–506.
- Leuven, E. & H. Oosterbeek. (2011). Overeducation and mismatch in the labor market. In Hanushek, E. A., Machin, S., and Woessmann, L. (Eds.) *Handbook of the Economics of Education Vol. 4* (pp. 283-426). Elsevier.
- McCall, J.J. (1970). Economics of information and job search. Quarterly Journal of Economics, 84(1), 113-126
- Milgrom, P. & J. Roberts (1990). The Economics of Modern Manufacturing: Technology, Strategy, and Organization. *American Economic Review*, 80, 511-528.
- Ministry of Manpower (MOM). (2012). *Labor market: First quarter 2012*. Retrieved from http://www.mom.gov. sg/Publications/mrsd_qtlmr121.pdf
- Patterson, M. P. Warr& M. West, M. (2004), Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology*,77: 193–216.
- Nelson, R.R. and E.S. Phelps (1966). Investment in Humans, Technological Diffusion, and Economic Growth. *American Economic Review*, 56, 69-75.
- Rupavijetra, P. (2011). Linkage between higher education and labor market in Thailand: Collaboration between higher education institutions and workplace to develop students and personnel's skills. Retrieved from http://www2.gsid.nagoya-u.ac.jp/blog/anda/files/2011/08/1-phetcharee_rupavijetrae38080.pdf
- Sattinger, M. (1993). Statistical Discrimination with Employment Criteria, Discussion Papers 93-01, University at Albany, SUNY, Department of Economics.
- Sicherman, N. & O. Galor. (1990). A theory of career mobility. Journal of Political Economy, 98(1), 169-192.
- Spence, M.A. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355-374.
- Stigler, G.J. (1962). Information in the labor market. Journal of Political Economy, 70(5), 94-105.

Watts, A.G. & Y. Zabrodin. (2003). Public policies and career development: A framework for the design of career information, guidance and counseling services in developing and transition countries: Country report on Russia. Retrieved from http://siteresources.worldbank.org/INTLL/Resources/Public-Policies-and-Career-Development-Policy/Russia_Reort.pdf



2014/ASCCC/4.4

PROMOTING INNOVATIVE DEVELOPMENT IN THE APEC REGION THROUGH THE INTERNET

ECONOMY

NAM Sang-yirl

Korea



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

Promoting Innovative Development in the APEC Region through the Internet Economy



NAM Sang-yirl KISDI

ASCCC May 10-11, 2014



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APEC is to build a dynamic and harmonious Asia-Pacific Community

- by championing free and open trade and investment,
- promoting and accelerating regional economic integration,
- encouraging economic and technical cooperation
- APEC cooperation is evolving and broadening
- to address current and emerging issues of the Asia-Pacific region
- including counter terrorism, human security, disaster preparedness, climate change, energy security, global financial crisis, and bridging digital divide, etc.

I. Introduction

□ Recent emphasis of APEC

- play a role as an engine of global economic growth with its dynamism,
- more specifically, on innovation and growth, internet economy, and connectivity promoting and accelerating regional economic integration

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□ APEC 2014: theme and priorities

- "Shaping the Future through Asia-Pacific Partnership" with regional integration, economic reform, innovative growth, connectivity and infrastructure development
- "Developing the Internet Economy Through Enhanced ICT Cooperation" was proposed during the SOM2

I. Introduction

\Box This study is

 to update and analyze the economic benefits of ICT or the Internet economy as a new source of economic growth, promoting innovative development in the A-P region and hence contribute to building the A-P Community

- to overview ICT development in APEC member economies based on ICT development Index (IDI) of the ITU by access, utilization, and human skills
- to analyze potential benefits of further ICT development in terms of economic growth
- to find suggestions and implications for A-P regional cooperation





APEC Telecommunications and Information Working Group (TEL/TELWG) is

- to improve telecommunications and information infrastructure in the A-P region

- by developing and implementing appropriate policies, including relevant human resource and development cooperation strategies
- TEL expanded its vision of promoting the transition from an A-P Information Infrastructure (APII) into the A-P Information Society (APIS)
- □ TEL conducts its work program through three steering groups
- Liberalization Steering Group (LSG)
- * Mutual Recognition Arrangement Task Force (MRATF)
- ICT Development Steering Group (DSG)
- Security and Prosperity Steering Group (SPSG)



TEL targets and achievements

- (Leaders' Declaration, Brunei 2000) the Brunei Goal: tripling Internet access by 2005 and universal Internet access by 2010
- "... enable the people in every economy to have access to information and services via the Internet by 2010. ... to triple the number of people with individual and community-based access by 2005"
- (Ministerial Statement: Bangkok Declaration, TELMIN7 2008): achieving universal access to broadband by 2015
- "... noted that the Leaders' Brunei Goal of tripling Internet access had been achieved. ... to expand the reach of networks with the goal of achieving universal access to broadband by 2015."



□ TEL targets and achievements (continue)

- (Ministerial Statement: Okinawa Declaration, TELMIN8 2010): access to next generation high speed broadband by 2020
- "... We recommend that the TEL works toward achieving the ambitious goal of access to next generation high speed broadband by 2020 to expand and improve ICT infrastructure for knowledge-base economies in the APEC region."

II. APEC TEL

TEL priorities

- set by TEL ministers, Economic and Business Leaders
- five priority areas in the Strategic Action Plan 2010-2015
- (i) develop ICTs to promote growth
- (ii) enhance socio-economic activities through the use of ICT

- (iii) promote a safe and trusted ICT environment
- (iv) promote regional economic integration
- (v) strengthen cooperation in the ICT sector
- currently drafting the Strategic Action Plan 2015-2020 reflecting recent socio-economic changes and demands

$\hfill\square$ ICT Development Index (IDI) of ITU is

 a composite index combining 11 indicators to measure and compare the development of information society by country with a single number (0-10)

- integrates former Digital Opportunity Index (DOI) and ICT Opportunity Index (ICT-OI)
- evaluates diverse aspects of ICT development such as access, utilization, and human skills
- measures the level and evolution overtime of ICT developments in countries and other countries
- * covers over 150 countries including APEC member economies for 2002 and forward (currently available for 2002, 2007, 2008, 2009, 2011, and 2012)



Evolution toward an information society - ICT Development Index

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Source: ITU (2013), Measuring the Information Society 2013, Switzerland: Geneva.



ICT Development Index- indicators, reference values and weights

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Source: ITU (2013), Measuring the Information Society 2013, Switzerland: Geneva.



□ ICT Development in the APEC: IDI 2002-2012



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Source: by author with data from ITU (2013) and previous issues

- □ ICT Development in the APEC: IDI 2002-2012 (continue)
- overall, significant progress
- simple average of APEC member economies (19 except Chinese Taipei and PNG) is 5.8 in 2012, from 3.5 in 2002

- ranges between 3.3 and 8.6 in 2012, from between 1.5 and 5.8 in 2002
- * for comparison- ICT Development in the world (154 countries for 2002, 157 countries for 2012)
- simple average is 4.4 in 2012, from 2.5 in 2002
- ranges between 1.0 and 8.6 in 2012, from between 0.5 and 6.1 in 2002



□ ICT Development in the APEC: IDI 2002-2012 (continue)

- can be classified in three groups
- (Leader Group) Korea, Hong Kong, Australia, Japan, Singapore, New Zealand, US, Canada

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- 2012 IDI: 8.6-7.4
- 2002-2012 IDI changes (%): 38.5-62.2
- (Middle Group) Russia, Chile, Brunei, Malaysia
 - 2012 IDI: 6.2-5.0
 - 2002-2012 IDI changes (%): 54.7-128.4

(Follower Group) China, Mexico, Viet Nam, Peru, Thailand, Indonesia, Philippines

- 2012 IDI: 4.2-3.3
- 2002-2012 IDI changes (%): 61.4-139.0

□ ICT Development in the APEC: IDI 2002-2012 (continue)

- the rate of 2002-2012 IDI changes (%) is larger in the Middle Group and the Follower Group than in the Leader Group, which implies that, overall, the relative gap has been reduced

- however, the rate of 2002-2012 IDI changes (%) is about the same between the Middle Group and the Follower Group, which implies that the relative gap between them has not been reduced effectively
- some member economies have achieved extraordinary progress, especially Viet Nam (the rate of 2002-2012 IDI changes: 139.0%), Russia (128.4%), Indonesia (122.7%), China (114.4%), need to identify and share their success factors and policy experiences

□ ICT Access in the APEC: IDI Access Sub-Index 2002-2012

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Source: by author with data from ITU (2013) and previous issues

- ICT Access in the APEC: IDI Access Sub-Index 2002-2012 (continue)
- similar patterns and trends as IDI (the composite index)
- overall, significant progress during 2002-2012
- some member economies have achieved extraordinary progress, especially Viet Nam (the rate of 2002-2012 IDI Access Sub-Index changes: 284.8%), Indonesia (226.1%), Russia (185.2%), Peru (153.3%), Thailand (129.9%), China (123.6%), Malaysia (123.1%)

☐ ICT Use in the APEC: IDI Use Sub-Index 2002-2012



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Source: by author with data from ITU (2013) and previous issues

□ ICT Use in the APEC: IDI Use Sub-Index 2002-2012 (continue)

- overall, started from very low level in 2002, rapid progress during 2002-2012 relative to the IDI composite index and other subindexes: simple average of the APEC member economies 4.4 in 2012, increased from 1.2 in 2002
- huge and enlarged gap among the APEC member economies, ranged between 0.1 and 3.2 in 2002 and between 1.2 and 8.2 in 2012
- some member economies have achieved extraordinary progress, especially Viet Nam (the rate of 2002-2012 IDI Use Sub-Index changes: 3,600.0%), Russia (30,00.0%), Indonesia (2,242.9%), China (1,488.2%), Philippines (873.3%)
- * need to focus on reducing the gap in ICT use in APEC

□ ICT Skills in the APEC: IDI Skills Sub-Index 2002-2012





□ ICT Skills in the APEC: IDI Skills Sub-Index 2002-2012

 overall, started from very high level in 2002, slow progress during 2002-2012 relative to the IDI composite index and other subindexes: simple average of the APEC member economies 7.9 in 2012, increased from 7.3 in 2002

- reduced gap among the APEC member economies, ranged between 5.4 and 9.2 in 2002 and between 6.5 and 9.9 in 2012
- generally slow progress in every APEC member economies, relatively high progress in Indonesia (the rate of 2002-2012 IDI Skills Sub-Index changes: 23.3%), China (22.4%), Chile (16.6%), Hong Kong (16.5%)
- * relatively small gap (homogeneous) among APEC member economies and slow progress, indicators need to be more specific to ICT skills (e.g. ICT literacy rather than literacy in general)

☐ General expectation for innovative growth utilizing ICT

 need to update previous works on ICT development and economic growth

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* The World Bank (2009). "Economic Impacts of Broadband". Information and Communications for Development: Extending Reach and Increasing Impact. Washington, D.C.

Choi, C. and M. H. Yi (2009). "The Effect of the Internet on Economic Growth: Evidence from Cross-Country Panel Data". *Economic Letters* 105, pp. 39-41.Barrow, R. J. (1997). *Determinants of Economic Growth*. The MIT Press.

- utilize ICT Development Index, a composite index considering ICT access, utilization, and human skills with accumulated data for 2002-2012 and over 150 countries
- focus on APEC member economies and regional cooperation

- Two complementary approach
- production function approach
 - estimate Cobb-Douglas production function with additional input factor of ICT (IDI) as well as labor and capital

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 $log(YP_i) = 2.291^{**} + 0.798^{**} log(KP_i) + 0.528^{**} log(IDI_i), R^2 = 0.966$ (0.188) (0.044) (0.114)

where YP_i is per capita GDP, KP_i is capital-labor ratio, and IDI_i is ICT Development Index for country *i* for 128(155) countries in 2011, the numbers in the parenthesis under estimate denote standard errors, and ** denotes that the estimate is significant at 99% significance level

- Two complementary approach (continue)
- endogenous growth model approach based on Choi and Yi (2009), Barrow (1997) with ICT (IDI) as an additional explanatory variable

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 $yp_{i} = 5.608^{**} - 1.275^{**} YP_{i} + 0.203^{**} KFP_{i} - 0.078^{*} GP_{i} + 0.075^{*} inf_{i}$ (1.888) (0.293) (0.031) (0.037) (0.036)

+ 0.101^{**} IDI_100_i R²=0.388 (0.025) Two complementary approach (continue)

where yp_i is the rate of growth for per capita GDP, *KFP_i* is fixed capital investment-GDP ratio, *GP_i* is government expenditure-GDP ratio, *inf_i* is inflation rate, and *IDI_100_i* is ICT Development Index with scale adjusted between 0 and 100 for country *i* for 142(155) countries, all variables are annual average during 2002 and 2011 except *YP_i* is per capita GDP in 2002

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the numbers in the parenthesis under estimate denote standard errors, and * and ** denote that the estimate is significant at 95% and 99% significance level, respectively

□ ICT development and economic growth in APEC

- three scenarios with the results from endogenous growth model
 - (i) the level of ICT development in terms of IDI improves 30% from current level (2012) in each APEC member economies

- (ii) the level of ICT development in terms of IDI improves 30% of the gap between current and perfect level (10.0) in each APEC member economies
- (iii) the level of ICT development in terms of IDI improves to perfect level (10.0) in each APEC member economies

□ Simulation results: impacts on per capita GDP growth (%)

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Scenario	APEC Total	Leader Group	Middle Group	Follower Group
(i) 1.3 * IDI	1.99	2.33	1.82	1.23
(ii) IDI+0.3* (10.0-IDI)	1.06	0.71	1.22	1.81
(iii) IDI=10.0	3.52	2.38	4.08	6.05
Economic growth 2002-2012**	3.20	0.92	4.54	8.23
IDI change 2002-2012**	68.7	48.6	103.8	106.6

** (for comparison) economic growth is annual average rate (%) and IDI change is rate of change for 2002-2012

Simulation results (continue)

- APEC as a whole, per capita GDP is estimated to grow about 2.0,
 1.1 and 3.5% for scenario (i), (ii) and (iii), respectively
- for scenario (i), economic development gap will be enlarged by APE sub-group (leader, middle, follower) as ICT development gap
- for scenario (ii) and (iii), economic development gap will be reduced as ICT development, much larger effects with scenario (iii) than with scenario (ii)

V. Implications for APEC Cooperation

Summary and Implications

- ICT as a whole has developed significantly in APEC and the gaps among member economies have reduced in general (ICT access also showed similar trends with significant investment in ICT infrastructure)

- ICT utilization has improved significantly but with enlarged gap among APEC member economies, there seems to be lagged progress in ICT utilization following ICT access (need more focused cooperation efforts on reducing the gap in ICT use, especially, for example, services, software and ICT culture)
- ICT skills showed slow progress with relatively small gap among APEC member economies (indicators of ICT skills sub-index in IDI need to be improved to reflect more ICT skills, for example, ICT literacy rather than general literacy, and APEC TEL may play a role)
V. Implications for APEC Cooperation

Summary and Implications

- ICT development will bring significant progress in economic growth in APEC as a whole

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- ICT development can affect significantly for the future trends of economic growth and convergence among APEC member economies, hence APEC regional cooperation
- APEC can share the experience of member economies' progress in ICT development, especially Viet Nam, Russia, Indonesia, China, Philippines, Peru, Malaysia, etc.

need to identify and share their success factors and policy experiences



2014/ASCCC/4.5

PROSPECTS AND CHALLENGES OF BRAIN

GAIN FROM ASEAN INTEGRATION

Sheila V. Siar

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APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

PROSPECTS AND CHALLENGES OF BRAIN GAIN UNDER ASEAN INTEGRATION

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Introduction

- South-North has characterized international migration patterns for decades.
 - Migration flows: South-North (45%); South-South (35%);
 North-North (17%); North-South (3%)
- The developing economies, also known as South, have traditionally been the main source of migrant labor of the North or the developed economies. The advent of the knowledge economy in the late 1980s intensified skilled labor migration. This led to serious concerns about brain drain in developing economies.
- South-South migration is also increasing and the size may be bigger as some flows are underreported or undocumented.

Brain Drain (some evidence)

- Estimating the migration flows of 24 labour-exporting economies to the OECD using 2000 data, Adams (2003) finds that tertiary educated migrants from Indonesia, Philippines, Egypt, India, and Sri Lanka make up 70% of the total immigration in each country.
- Docquier and Marfouk (2004) note that among 30 most affected economies in 2000, the Philippines, India, China, Mexico, and Vietnam as well as developed economies such as UK, Germany, Canada, and Italy have the highest number of highly skilled people leaving and therefore the most affected in absolute terms. The Philippines is second to the UK (1,260,879 versus 1,542,011 people), outranking India (1,021,613) and China (906,337).
- Alburo and Abella (2002) confirmed that between 1990 and 1999, the number of professionals from the Philippines who went abroad exceeded the number of professionals added to the workforce.

Top 20 migration corridors



Source: World Migration Report 2013

Some ASEAN countries are top migration corridors.

International migration data, Southeast Asia, 1990-2010

	Net Migration Rate				
	Per 1,000 population				
Country	1990-1995	1995-2000	2000-2005	2005-2010	
Brunei Darussalam	0.8	1.8	2.0	1.8	
Cambodia	8.3	5.1	-1.1	-5.4	
Indonesia	-0.4	-0.2	-0.5	-0.6	
Lao PDR	-2.0	-5.1	-6.2	-2.5	
Malaysia	3.1	3.6	4.0	4.8	
Myanmar	-0.6	0.0	-4.1	-3.1	
Philippines	-2.1	-2.1	-2.8	-2.8	
Singapore	15.3	13.8	20.7	18.8	
Thailand	-3.8	2.0	3.4	-2.2	
Viet Nam	-1.1	-0.8	-1.9	-2.0	

Source: UNESCAP Statistical Yearbook for Asia and the Pacific 2013

Migration within the Asia-Pacific region



Source: Castles and Miller (2009)

South-South Movement

- Large numbers of Asians working in other Asian economies starting in the mid-1980s.
- Based on data from the late 1990s to the early 2000s compiled by Hugo (2007) from various sources, over 20 million Asians are working on labor contracts especially in the Middle East and other Asian economies such as Japan, Singapore, Malaysia, Thailand, Hong Kong, Taiwan, Brunei, and South Korea.
- Although Asian labor migration is mostly low-skilled migration, the movement of highly skilled people has increased over the years.

Why is there a high rate of emigration from the Southeast Asian region?

Because high rates of unemployment and poverty incidence persist in most ASEAN member-countries.

Trends in human development index, 1985-2011

Country	1985	1990	2005	2008	2009	2010	2011
Brunei	-	-	0.830	0.834	0.835	0.837	0.838
Darussalam							
Cambodia	-	0.512	0.491	0.513	0.513	0.518	0.523
Indonesia	0.582	0.623	0.696	0.712	0.718	0.723	0.728
Lao PDR	0.422	0.449	0.460	0.483	0.514	0.520	0.524
Malaysia	0.693	0.720	0.800	0750	0.752	0.758	0.761
Myanmar	-	-	0.436	0.468	0.474	0.479	0.483
Philippines	0.692	0.719	0.622	0.635	0.636	0.641	0.644
Singapore	0.784	0.821	0.835	0.855	0.856	0.864	0.866
Thailand	0.673	0.705	0.656	0.672	0.673	0.680	0.682
Viet Nam	0.582	0.610	0.561	0.580	0.584	0.590	0.590

Source: ASEAN Statistical Yearbook 2012, p. 224

'-' not available at the time of publication

Unemployment rate and labor force in the 10 ASEAN member-countries, 2004-2011

Country		Unemployment rate of 15 years old and over (%)						
	2004	2005	2006	2007	2008	2009	2010	2011
Brunei	3.5	4.3	4.0	3.4	3.7	3.5	2.7	2.6
Cambodia	2.3	0.8	n.a.	0.7	0.3	0.1	0.3	0.2
Indonesia	9.9	10.3	10.3	9.1	6.5	5.8	5.5	5.0
Lao PDR	-	1.3	-	-	-	-	-	-
Malaysia	3.5	3.5	3.3	3.2	3.3	3.7	3.3	3.1
Myanmar	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Philippines	11.0	7.5	7.4	6.3	6.8	7.1	7.1	6.4
Singapore	5.8	4.1	3.6	Na	3.2	3.1	3.1	2.9
Thailand	2.1	1.8	1.5	1.4	1.4	1.0	1.0	0.7
Viet Nam	5.6	4.8	4.8	4.6	4.7	4.3	4.3	3.6

Source: ASEAN Statistical Yearbook 2012

Proportion of population below the national poverty line in ASEAN and selected ASEAN member-states, 1990-2010

Country	Year					
	1990	1995	2000	2005	2010	
Cambodia	39	39	37	33	26	
Indonesia	15	11	19	16	13	
Lao PDR	49	43	36	30	24	
Malaysia	16.5	8.7	8.5	5.7	3.8	
Philippines	34	32	26	26	24	
Thailand	34	17	21	10	7	
Viet Nam	72	52	35	19	13	
ASEAN	31	23	23	17	14	

Source: 2011 ASEAN Statistical Report on the Millennium Development Goals (ASEAN 2012)

Brain gain opportunities from AEC 2015

AEC 2015 may facilitate brain gain for the ASEAN and its member-countries from a brain circulation perspective. The ASEAN region may benefit from AEC 2015 from increased circular flows of remittances, investments, and skills, as well as from technology and knowledge exchanges, business and professional linkages, and return migration of expatriate professionals.

Brain gain pathways under AEC 2015

- Growth of cross-border education
- Increased cross-border mobility of professional workers within the ASEAN region
- Possible return migration of Asian expatriate professionals to the ASEAN region

Student mobility/migration

- Student migration a precursor to skilled migration and a strategy to attract the 'best and the brightest'.
- 2.6 million Asian students left their home economies to study overseas between 1998 and 2003, the largest group is the Chinese (471,000), followed by South Koreans (214,000), Indians (207,000), and Japanese (191,000).
- Common destination of international students is OECD countries.
 - Total of 2.8 million: US (25%), UK (15%), France (10%), Australia (9%), and Germany (6%). Other common destinations: Japan (5%) and Korea (2%).
 - Non-OECD countries: China (292,000), Singapore (91,000), Malaysia (90,000)

Destination economies of nonresident students



Source: Labor Migration, Skills, and Student Mobility in Asia (ADBI/OECD/ILO 2014)

Various modalities of cross-border education

- Full overseas provision
- In-economy provision
 - Branch or satellite campus
 - Franchising
- In-economy provision with overseas component
 - Twinning programs
 - Double or joint degrees
- Online learning

British transnational education provision in key Asian markets

economy	No. of active UK institutions	No. of active partner institutions	No. of programs	Most common type of provision	Percent of under- graduates
Singapore (2011)	66	82	471	Partner institution In-economy	70
China (2006)	82	223	352	Progression agreement	n/a
Malaysia (2010)	72	107	260	Partner institution In-economy	n/a
India (2009)	35	53	135	Partner institution In-economy	62

Source: QAA audits, cited in Clark (2012)

Barriers hindering ASEAN to become a site for international education and a provider of cross-border education

- Low rankings in league tables and ranking systems
 - Research shows that rankings are an important factor in the choice of school by students
- High variation of progress in tertiary education
- Underdeveloped tertiary education systems
- Language issues (English still not being the primary language in many universities)
- Low research outputs
- Low innovation capacity

Prospects of developing the capacity of ASEAN member-countries in cross-border education

- Presence of winning cases that can serve as templates for success (e.g., Singapore Model)
- Different forms of university research networks, alliances, and international research consortia for strengthening research capacity, promoting international collaboration to earn higher ranking in international university assessments, and improving the quality of higher education (e.g., Asia Pacific Rim Universities; University Consortium on Post Graduate Degree in Agriculture managed by SEAMEO-SEARCA)

Prospects of developing the capacity of ASEAN member-countries in cross-border education

 Collaborative arrangements such as franchising, double or joint degrees, and twining programs with major education providers in developed economies are beneficial in raising the standard of higher education and achieving an international reputation, as exemplified by the experience of Singapore, Malaysia, China, and India.

Prospects of developing the capacity of ASEAN member-countries in cross-border education

 Efforts of intergovernmental and international organizations assist in improving the quality of higher education in the ASEAN member-countries and in accelerating the pace of cross-border education (e.g., initiatives of UNESCO, SEAMEO-RIHED, and ASEAN)

Increased cross-border movement of professional workers

 The value of high-skilled migration as an avenue for brain gain began to be recognized in the late 1990s when a more optimistic view of international migration emerged that proposed that it can enhance development in the economies of origin of the migrants not just through remittances but also through the knowledge and skills that they can transfer to their home economies.

Increased cross-border movement of professional workers

The brain gain pathway in this area is the implementation of the mutual recognition arrangements (MRAs) in key professional areas. MRAs enable the qualifications of professional workers who are recognized by the relevant authorities in their home economy to be mutually recognized by other signatory memberstates. MRAs promote mutual agreement on standards, licensing, and certification of professional workers among the ASEAN member-countries. They enable freer movement and employment of qualified and certified skilled personnel in the region, in accordance with domestic rules and regulations.

Prospects with the MRAs

- Seven MRAs have already been signed for particular professional services, namely: engineering services, nursing, architecture, land surveying, medical practice, dental practice, and accountancy.
- An MRA on Tourism Professionals (MRA-TP) was also adopted at the 12th Meeting of ASEAN Tourism Ministers (MATM) on 9 January 2009 in Ha Noi, Viet Nam. Thailand signed the MRA only on November 9, 2012, paving the way for its full implementation

Bottlenecks with the MRAs

- There are still changes in national laws that have to take place to enable ASEAN professionals to practice their professions in other ASEAN member-countries.
- The health profession is proving to be a thorny issue. Based on the AEC mid-term review, member-economies prefer to retain their national authority in deciding who can practice in their economies.

Possible return migration of Asian expatriate professionals

- Research on the extent of return migration of skilled professionals back to their home economies in the ASEAN region is limited. This may be attributed to the fact that the majority of the member-economies have higher rates of emigration than immigration.
- Return migration of Asian skilled professionals is not a remote possibility given a vibrant ASEAN economy in the long term that can generate more and better employment opportunities for professional workers.

Possible return migration of Asian expatriate professionals

- Studies show that expatriate professionals maintain strong ties with their economies of origin.
 - They have a strong motivation to help their home economies and have a deep commitment to contribute to development (diaspora philanthropy)
- Return migration is possible as shown by the experience of China, Taiwan, and South Korea, but other examples in non-OECD economies are limited. They were successful because they have the capacity to absorb high-level skills and global capital.

Possible return migration of Asian expatriate professionals

- The more advanced economies in the region such as Singapore and Malaysia have an edge in attracting expatriate professionals. They can offer more attractive remuneration and compensation packages compared with the less developed economies.
- Hence, enhancing their competitiveness should be seriously pursued by the ASEAN member-countries with the objective of not only attracting more capital investments but also the intellectual and social capital of their professional workers overseas.

Global competitiveness rankings of ASEAN member-countries, 2013 and 2012

Country	Ranking		
	2013 (out of 148	2012 (out of 144	
	economies)	economies)	
Brunei Darussalam	26	26	
Cambodia	88	86	
Indonesia	38	50	
Lao PDR	81	n/a	
Malaysia	24	25	
Myanmar	139	n/a	
Philippines	59	65	
Singapore	2	2	
Thailand	37	38	
Viet Nam	70	75	

Source: Global competitiveness rankings (World Economic Forum 2014, 2013)

Most ASEAN member-countries have low absorptive capacity as shown by their global competitiveness rankings.

Diaspora engagement programs

- Along with improving absorptive capacity, diaspora engagement programs can encourage return migration of expatriate professionals.
- A good template is the Chinese model.

The Chinese diaspora engagement model

In 2001, the government implemented a major policy that incorporated the diaspora option as an alternative for expatriate professionals and overseas scholars to serve their home economy through seven types of activities, namely: "utilizing the advantage of their professional bodies; holding concurrent positions in China and overseas; engaging in cooperative research in China and abroad; returning to China to teach and conduct academic and technical exchanges; setting up enterprise in China; conducting inspections and consultation; and engaging in intermediary services, such as running conferences, importing technology or foreign funds, or helping Chinese firms find export markets" (Zweig et al. 2008).

Dual or multiple citizenship

- Migrants from ASEAN member-countries should be allowed to retain their home-economy citizenship while being citizens of their host economy so they will have ease in doing business with their economies of origin. This could also encourage return migration of expatriate professionals as they can return and provide their services without having to hurdle immigration rules.
- Only a few Asian economies recognize dual citizenship—Sri Lanka, Cambodia, Philippines, Bangladesh, Pakistan, and Viet Nam.

Conclusion

- AEC 2015 is an opportunity for brain gain for the ASEAN member-countries through the growth of cross-border education in the region, increased labor mobility in the ASEAN through the implementation of the MRAs, and the possibility of return migration of Asian expatriate professionals to the ASEAN region.
- However, the prospects are diminished by various issues affecting the competitiveness of many ASEAN countries.

Conclusion

• The full implementation of the MRAs will mean greater competition for skilled labor among the member-economies hence the need to improve the quality of tertiary education systems in the lagging economies and develop their human resource pool to make it more competitive.
Conclusion

- The more advanced economies in the region will have more advantage in exploiting the opportunities of ASEAN integration during the initial years of the AEC.
- The ASEAN integration can be a double-edged sword for member-countries that may not be able to improve their competitiveness in the long run.

Some recommendations

- Improve the quality of tertiary education in the membereconomies, adopt an international curriculum with sufficient regional and global focus and with an entrepreneurial dimension similar to what Singapore has done, and enhance student and faculty exchanges to develop the human resource pool and make it more competitive.
- The initiatives of UNESCO, SEAMEO, and ASEAN are valuable in harmonizing Southeast Asian higher education and developing quality assurance frameworks and accreditation mechanisms but more gains can be achieved if they will harmonize their work and coordinate their efforts.

Some recommendations

- Address the issue of harmonizing domestic rules and regulations in terms of the MRAs.
- Allow dual citizenship to facilitate the movement of financial and human capital into the member-economies and the Southeast Asian region as a whole. The portability of social security benefits should also be pursued.
- Implement complementary measures to remove the barriers that impede inclusive growth. The rising inequalities within and between countries and regions will persist if nothing is purposely done to make ASEAN development more inclusive and sustainable.

THANK YOU FOR YOUR ATTENTION!



APEC Study Centre Consortium (ASCC) Conference 2014 QINGDAO, CHINA 11-12 MAY 2014



Annex



2014/ASCCC/A.1

APEC POLICY SUPPORT UNIT PRESENTATION

Gloria O. Pasadilla



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014

APEC Study Center Consortium 2014 Conference

APEC Policy Support Unit Presentation 12 May 2014, Qingdao

Presented by

Gloria O. Pasadilla, Senior Analyst APEC Policy Support Unit (PSU)

Advancing Free Trade for Asia-Pacific Prosperity



Asia-Pacific Economic Cooperation

PSU, APEC Process, and APEC Study Centers



Asia-Pacific Economic Cooperation

- Parallels between APEC PSU and APEC Study Centers
 - Involved in deliberation, framing of policy questions, research orientation but at a regional level
 - PSU helps in framing the question (sometimes), puts together researches in literature survey, and provides a few suggestions and directions at the regional level
 - Fulfilling vision of being an integral part of APEC architecture

- Involved in deliberation, framing of policy questions, research orientation but at a national level
- ASCC helps in framing the question (sometimes), puts together researches in literature survey, and provides a few suggestions and directions.
- Actual policy dilemmas and implementation are at the national level; more challenging

Current work in the pipeline



Asia-Pacific Economic Cooperation

- Regular Outputs

- StatsAPEC
- Global Economic Trends
- Trade Monitoring Report
- Bogor Goals Dashboard/ IAP Review Process

- Projects on request by APEC bodies
 - Connectivity Blueprint -> leading to action program for APEC
 - Resilience of GVCs (now on phase 3)
 - Nontariff measures
 - SMEs in GVCs
 - Advertising standards

Current work and into 2015



Asia-Pacific Economic Cooperation

- Regulatory Issues Affecting Supply Chain Finance and SME Access

- Urbanization and Sustainable City Development (one of the priorities of host)
- Regulatory Reform on Promoting Innovation: 3 sector studies
- Innovation Policies in APEC survey of fiscal policies supporting innovation
- Promoting products which contribute to sustainable and inclusive growth through rural development and poverty alleviation
- Services manufacturing link; services in GVCs.



2014/ASCCC/A.2

APEC Communications Partner Network

Proposed Pilot with ASCC

Jennifer Juo



APEC Study Centre Consortium Conference Qingdao, China 11-12 May 2014



Asia-Pacific Economic Cooperation

APEC Communications Partner Network

Proposed Pilot with ASCC

Presented by

Jennifer Juo Communications Manager APEC Secretariat 12 May 2014

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Overview: Stakeholder Engagement



Asia-Pacific Economic Cooperation

Build a communications network to enhance stakeholder engagement

- 1. APEC Communications Officials
- 2. Stakeholders and key influencers
- 3. Partners

Support:

- 1. Wholesale products and services to localize
- 2. Training of APEC host communications teams

APEC Communications Partner Network Proposed Pilot with ASCC



Asia-Pacific Economic Cooperation

STAKEHOLDER ENGAGEMENT

- Mutual Retweeting/Sharing of Content on Social Media
- Policy Blog
- Placing Opinion Articles in Local Media



We welcome your inputs and ideas: jj@apec.org, Jennifer Juo, APEC Communications Manager

APEC Communications Partner Network Proposed Pilot with ASCC



Asia-Pacific Economic Cooperation

STAKEHOLDER ENGAGEMENT



Thank You



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Economic Cooperation

2014/ASCCC/A.3

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