#### **ERIA Discussion Paper Series**

# **AEC Blueprint Implementation Performance** and Challenges: Services Liberalization<sup>1</sup>

**Dionisius NARJOKO** 

Economic Research Institute for ASEAN and East Asia

#### May 2015

**Abstract:** This paper examines the progress of liberalization of the ASEAN Framework Agreement in Services (AFAS). It measures the changes in the rate of liberalization of the AFAS commitments from the 7<sup>th</sup> to the 8<sup>th</sup> package negotiations. The comparisons show only marginal improvement in the depth of services liberalization rate between the two packages, albeit significant increase in the number of subsectors covered in the 8<sup>th</sup> package. Deeper examination of the commitments suggests that many ASEAN Member States utilized a facility under AFAS (Flexibility Rule) to put a number of sensitive subsectors which are not subject to liberalization commitments. Mode 3 liberalization rate of package 8 increases significantly when the Flexibility Rule is considered. This suggests that many subsectors do not pass the threshold set by package 8.

Keywords: AFAS, AEC, services liberalization

**JEL Classification:** F13, F15

<sup>&</sup>lt;sup>1</sup> The paper was written with inputs from the reports and questionnaire results from the research team of the 10 ASEAN Member States under the AEC Scorecard Phase IV project of the Economic Research Institute for ASEAN and East Asia (ERIA). The author acknowledges the research assistance of Made Cynthia Rini.

Free flow of services is one of the key components of the ASEAN Economic Community (AEC). ASEAN has embarked on a multilateral negotiation à la General Agreement on Trade in Services (GATS) to remove the restrictions in services in international trade, known as the ASEAN Framework Agreement on Services (AFAS). This paper examines the liberalization of services in ASEAN countries. Specifically, it examines the liberalization performance of AFAS, from the 7<sup>th</sup> to the 8<sup>th</sup> package of negotiation (hereafter, AFAS 7 and AFAS 8).

#### 1. Methodology

The following key characteristics shape the liberalization rate of the AFAS commitments defined by this study. One, on components of services liberalization, AFAS is a combination of liberalization efforts on three fronts, namely:

- Contestability on product market without commercial presence; i.e., Modes 1 and 2;
- Liberalization on the investment side; i.e., Mode 3 (commercial presence); and
- Mobility and contestability on (skilled) human resources side; i.e., Mode 4.

Two, the liberalization rate is also determined by the rather unique commitments of AFAS. AFAS has clear targets – that is, no limitation or restriction – for Modes 1 and 2. Mode 3 is more contentious and gradual; it is the heart of AFAS negotiations so far. The exercise in this study does not attempt to measure the score of Mode 4; however, it acknowledges the mobility of natural persons incidental to the foreign direct investment process and treats this as one component of the national treatment limitation for liberalization of Mode 3.

The liberalization rate of AFAS is defined to be a weighted average of the liberalization rate of the three modes of services – 30 percent, 60 percent, and 10 percent liberalization rates for Modes 1, 2, and 3, respectively. The computation of liberalization rate is based only on the subsectors that have been committed for liberalization in AFAS.

The liberalization rate for Mode 1 is equal to 100 minus the prevalence rate of restrictions on Mode 1, and the prevalence rate is the number of subsectors with Mode 1 restrictions as a percentage ratio of the total number of subsectors in the service sector. Similarly, the liberalization rate for Mode 2 is equal to 100 minus the prevalence rate of restrictions on Mode 2, and the prevalence rate is the number of subsectors with Mode 2 restrictions as a percentage ratio of the total number of subsectors with Mode 2 restrictions on Mode 2, and the prevalence rate is the number of subsectors with Mode 2 restrictions as a percentage ratio of the total number of subsectors in the service sector.

The liberalization rate for Mode 3 involves the scoring for foreign equity liberalization and for the elimination or reduction of other limitations incidental to commercial presence (broadly categorized as market access and national treatment limitations). The liberalization rate for Mode 3 is a weighted average of the liberalization rate for foreign equity liberalization (with a weight of 60 percent) and liberalization rate for the other restrictions or limitations (with a weight of 40 percent).<sup>2</sup> Foreign equity liberalization rate is computed as the number of subsectors that have liberalized foreign equity limitations as a ratio of the total number of subsectors scheduled for liberalization.

This study assigns a weight of 1 (or 100 percent) for any subsector that has full liberalization commitment (i.e., the sector has foreign equity commitment to be equal or greater than the AFAS 8 target without any conditional requirements). We, however, assign a weight of 0.5 (or 50 percent) if the subsector has at least one conditional requirement even though its foreign equity commitment meets the target.

The other market access restrictions or impediments can be grouped into six types of measures:

- Limitation on the number of service suppliers,
- Limitations on the total value of service transactions or assets,
- Limitation on the number of service operations or on the total quantity of service output,
- Limitations on the total number of service operations or on the total quantity of suppliers,

 $<sup>^2</sup>$  Foreign equity liberalization rate is given a much higher weight because this is the most critical foundation of commercial presence. The weight of 60 percent is essentially arbitrary although it follows the target 70 percent minimum allowable foreign equity under AFAS and is relatively consistent with the weight in the OECD Foreign Direct Investment Regulatory Restrictiveness Index, which is about 67 percent (Koyama and Golub 2006, p.14).

- Limitations on the total number of natural persons that may be employed, and
- Measures which restrict or require specific types of legal entity or joint venture.

The national treatment limitations or restrictions or impediments can be grouped into four types of measures, namely:

- Restrictions or discriminatory requirements on screening and approval of investment projects;
- Restrictions on the composition of board of directors and management;
- Restrictions on movement of natural persons incidental to the operations of foreign invested firms; and
- Input requirements, operational restrictions, and other restrictions.

The liberalization rate of other investment restrictions is the weighted average of the liberalization rate of other market access restrictions (weighted by 40 percent) and the liberalization rate of national treatment restrictions (weighted by 60 percent). The liberalization rate of other market access restrictions is equal to 100 minus the prevalence rate of other market restrictions per sector. The prevalence rate is the ratio of the average of other market access restrictions per sector to the total number of subsectors covered by AFAS. The prevalence rate is netted of the restrictions allowed by AFAS.<sup>3</sup>

The liberalization rate of national treatment derogations or restrictions is somewhat more complicated than the liberalization rate of other market access restrictions. Specifically, it is equal to 25 percent weight for the liberalization rate of intra-corporate movement of skilled people and 75 percent weight for the liberalization rate of the other three national treatment derogations.

<sup>&</sup>lt;sup>3</sup> AFAS introduces a number of restrictions allowed for every negotiation (see **Table 1**).

### 2. AFAS Liberalization Targets

AFAS takes a gradual approach in liberalizing services in ASEAN. **Table 1** presents the liberalization targets of AFAS and within these, three broad sectors are defined according to ASEAN priority in liberalization, that is, priority integration sectors (PIS), logistics services (LOG), and other services (OTHER). PIS and LOG consist of 29 and 9 subsectors, respectively, while the rest of the sectors covered by the AFAS make up the group of OTHER.<sup>4</sup>

Compared to the targets of AFAS 7, AFAS 8 increases the number of subsectors covered, requires no restriction (i.e., "None" commitment) for Modes 1 and 2 of all subsectors covered, and increases the threshold for the allowable foreign ownership share. The threshold for foreign equity and market access limitations are set differently between PIS, LOG, and OTHER. As noted, AFAS 8 now requires member states to commit to the threshold that allows the dominant position of foreign/ASEAN-origin investors, especially for LOG and OTHER group of subsectors.

<sup>&</sup>lt;sup>4</sup> Appendix 1 gives the detail of the sectors defined by these broad subsectors.

	5 <sup>th</sup> Package	7 <sup>th</sup> Package	8 <sup>th</sup> Package	New 9 <sup>th</sup> Package <sup>5</sup>	New 10 <sup>th</sup> Package <sup>6</sup>
Completion Target	AEM 2006	AEM 2009	AEM 2011	AEM 2013	AEM 2015
Scheduled Subsectors		65	80	104	128
Mode 1 (including horizontal)	None	None	None (for all 80 subsectors)	None (for all 104 subsectors)	None (for all 128 subsectors)
Mode 2 (including horizontal)	None	None	None (for all 80 subsectors)	None (for all 104 subsectors)	None (for all 128 subsectors)
Foreign Equity	PIS: 49%	29 PIS : 51%	29 PIS: 70%	29 PIS : 70%	29 PIS : 70%
Limitation	Construction: 51%	9 LOG : 49%	9 LOG : 51%	9 LOG : 51%-70%	9 LOG : 70%
(including horizontal)	OTHER: 30%	42 OTHER : 49%	42 OTHER : 51%	66 OTHER : 51%	90 OTHER : 51-70%
Mode 3 MA		29 PIS : max 2 lim	29 PIS : No limitation	29 PIS : No limitation	29 PIS : No limitation
limitations		9 LOG : max 3 lim	9 LOG : max 2 lim	9 LOG : No limitation	9 LOG : No limitation
(including		27 OTHER: max 3 lim	16 OTHER: max 3 lim	26 OTHER: max 2 lim	90 OTHER: No limitation
horizontal)			16 OTHER: max 2 lim	26 OTHER: max 1 lim	
Mode 3NT (including horizontal)		N.A	Max 4 lim /subsector	Max 3 lim /subsector	Max 1 lim /subsector
Mode 4		N.A	To be agreed	To be agreed	To be agreed
15% flexibility		N.A	To be agreed	To be agreed	To be agreed

Source: Summarized based on AEC Blueprint (2009).

<sup>&</sup>lt;sup>5</sup>New 9<sup>th</sup> Package is a combination of the original 9<sup>th</sup> Package and the Logistics Package. <sup>6</sup>New 10<sup>th</sup> Package is a combination of the original 11<sup>th</sup> Package and the original 12<sup>th</sup> Package.

## **3. AFAS Liberalization Rates**<sup>7</sup>

**Table 2** presents the number of AFAS subsectors defined at four digit CPC committed by AFAS 7 and 8. There is a significant increase in the number of subsectors covered by AFAS 8. This is an improvement in the AFAS liberalization at the extensive margin. As further disaggregated in **Table 3**, almost all of the subsectors newly added by AFAS 8 are categorized under OTHER group; only very small numbers are categorized under PIS or LOG.

Country	Number of AFAS 7 services sectors	Number of AFAS 8 services sectors
1 – Brunei Darussalam	131	142
2 - Cambodia	145	160
3 - Indonesia	139	151
4 - Lao PDR	135	159
5 - Malaysia	149	167
6 - Myanmar	103	137
7 - Philippines	144	144
8 - Singapore	139	140
9 - Thailand	148	166
10 - Viet Nam	164	165

Table 2: Number of Services Sectors Covered by AFAS 7 and 8

Table 3: Subsectors Newly Covered in AFAS 8 by Subsectoral Groups

Country	Priority integration sectors	Logistic sectors	Other sectors	All sectors
1 – Brunei Darussalam	0	1	10	11
2 - Cambodia	0	1	14	15
3 - Indonesia	3	0	9	12
4 - Lao PDR	0	6	18	24
5 - Malaysia	1	1	16	18
6 - Myanmar	0	1	33	34
7 - Philippines	0	0	0	0
8 - Singapore	1	0	0	1
9 - Thailand	0	0	18	18
10 - Viet Nam	0	0	1	1

 $<sup>^7</sup>$  Otherwise stated, the source of Table III.2 – Table III.8 is commitments of AFAS 7 and 8.

**Table 4** presents overall liberalization rates of AFAS 7 and 8, coming from all commitments and for all modes of services. There is only a marginal increase in the liberalization rate from the commitments of AFAS 7 to 8; on average of all member states, the liberalization rate increases only by about one percentage point. This is rather disappointing especially if one compares the difference in the liberalization rates between AFAS 5 and 7, which is about 12 percentage points (see ERIA, 2012).<sup>8</sup> Looking at the liberalization rates across the member states, increases are recorded for Brunei Darussalam, Cambodia, Malaysia, and Singapore while decreases are recorded for the other member states. It is worth noting that the increases are relatively large, which is in the range of about 10 to 20 percentage points.

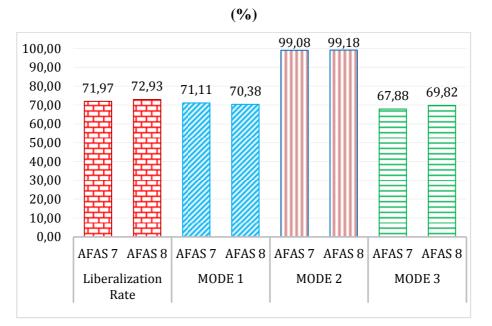
	Liberalization rate		
Country	AFAS 7	AFAS 8	
1 – Brunei Darussalam	59.9	71.6	
2 - Cambodia	78.6	86.1	
3 - Indonesia	74.6	67.8	
4 – Lao PDR	87.9	84.5	
5 - Malaysia	63.7	71.3	
6 - Myanmar	83.9	83.6	
7 - Philippines	52.5	50.2	
8 - Singapore	78.1	85.4	
9 - Thailand	64.1	57.5	
10 – Viet Nam	76.4	71.4	
Average	71.97	72.93	

Table 4: Liberalization Rates, AFAS 7 and AFAS 8 (%)

**Figure 1** breaks down the overall liberalization rates by modes of services for the ASEAN average. The key observation from the overall liberalization rate persists; that is, the rates by services modes are relatively the same between AFAS 7 and 8. It is, however, observed that the liberalization rate of Mode 3 slightly increases by about two percentage points from AFAS 7 to 8. The liberalization rate of Mode 1 in contrast slightly decreases, albeit very small. Further examination reveals that this originated from the decline in the liberalization rates of Mode 1 commitments made by Thailand and Viet Nam in AFAS 7. The largest decline is recorded for Thailand, which is from 61.4 percent to 54.2 percent (see Appendix 2).

<sup>&</sup>lt;sup>8</sup> This was reported in the AEC Blueprint Mid-Term Review report submitted by ERIA to the AEM in 2012 (ERIA, 2012).

Figure 1: Liberalization Rates by Modes of Services, AFAS 7 and AFAS 8



*Source*: Author.

**Table 5** presents the liberalization rates of Mode 1 by groups of subsectors (PIS, LOG, and OTHER). Although there is only marginal change in the liberalization rate of Mode 1 at aggregate level for all commitments, it is not the case when commitments are disaggregated by group of the subsectors. The liberalization rate for the ASEAN average increases by about two percentage points from AFAS 7 to 8. This is contributed by the increase in the liberalization rate for commitments made by Cambodia, Indonesia, and Thailand. The liberalization rates for PIS and OTHER group, however, are the same between AFAS 7 and 8.

	Mode 1							
	P	IS	LC	)G	OTHER			
Country	AFAS 7	AFAS 8	AFAS 7 AFAS 8		AFAS 7	AFAS 8		
1 – Brunei Darussalam	92.1	93.7	100.0	100.0	54.5	54.7		
2 - Cambodia	100.0	100.0	42.9	62.5	60.0	64.0		
3 - Indonesia	98.2	95.2	77.8	81.8	61.9	61.3		
4 – Lao PDR	100.0	100.0	100.0	100.0	98.3	93.6		
5 - Malaysia	100.0	100.0	100.0	100.0	48.7	50.5		
6 - Myanmar	100.0	100.0	100.0	100.0	74.5	77.0		
7 - Philippines	75.7	73.5	26.9	26.9	44.1	43.2		
8 - Singapore	83.6	83.6	96.8	96.8	93.5	94.1		
9 - Thailand	82.4	83.8	71.4	76.2	54.1	49.8		
10 – Viet Nam	80.4	80.8	75.0	75.0	35.9	34.2		
Average	91.2	91.1	79.1	81.9	62.6	62.3		

Table 5: Liberalization Rates of Mode 1 by Groups (PIS, LOG, and OTHER),

AFAS 7 and AFAS 8 (%)

**Table 6** presents the liberalization rates of Mode 3 by groups of subsectors (PIS, LOG, and OTHER). The changes in the rates between AFAS 7 and 8 recorded for ASEAN average vary across the three groups. The rate increases for PIS but it decreases for LOG and OTHER group. Looking at the rates of the member states for PIS, the increase for PIS comes from all member states except Viet Nam. The decline in the rate for Viet Nam is rather large, by about 20 percentage points. This is a completely different picture when one observes the rates for LOG and OTHER. The ASEAN average liberalization rate between AFAS 7 and 8 went down from 76 percent to 69 percent and from 73 percent to 70 percent in LOG and OTHER, respectively. The decline for PIS is contributed by Indonesia, Lao PDR, Malaysia, Thailand, and Viet Nam, and the largest of it is recorded for Indonesia where the rate drop is from 89 percent to 52 percent between the two AFAS packages. All these member states except Malaysia, but with the Philippines now, recorded a decline in the rate for OTHER but with smaller magnitude in the change observed for PIS.

	Mode 3							
	Pl	[S	LC	)G	OTHER			
Country	AFAS 7	AFAS 8	AFAS 7	AFAS 8	AFAS 7	AFAS 8		
1 - Brunei								
Darussalam	21.6	75.0	63.9	79.3	60.2	64.6		
2 - Cambodia	46.9	84.3	88.0	91.1	92.0	92.5		
3 - Indonesia	49.4	46.1	89.2	52.4	79.7	67.7		
4 – Lao PDR	78.6	84.9	86.3	78.1	81.0	73.9		
5 - Malaysia	56.0	75.4	82.6	72.1	57.5	69.5		
6 - Myanmar	81.3	82.4	79.1	83.5	80.2	77.7		
7 - Philippines	39.2	41.9	66.1	62.9	45.9	40.8		
8 - Singapore	45.0	82.3	55.5	64.0	77.8	80.4		
9 - Thailand	27.6	50.1	58.6	40.5	70.3	51.9		
10 – Viet Nam	89.5	69.6	89.5	67.7	84.4	82.3		
Average	53.5	69.2	75.9	69.1	72.9	70.1		

Table 6: Liberalization Rates of Mode 3 by Groups (PIS, LOG, and OTHER),

AFAS 7 and AFAS 8 (%)

The decline in the Mode 3 liberalization rates for LOG and OTHER are likely contributed by the failure of the commitments of the subsectors in these groups to meet the AFAS targets on foreign equity liberalization. As shown in **Table 1**, the targets of AFAS 8 for subsectors under PIS, LOG, and OTHER are 70 percent, 51 percent, and 51 percent, respectively. The failure to meet the target is indicated by the liberalization rates in foreign ownership presented in **Table 7**. As the table shows, foreign ownership liberalization rates (SFELs) drop significantly from 83 percent to 67 percent for LOG and from 77 percent to 69 percent for OTHER. For PIS, the drop in the rates is observed for Indonesia, Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam, with the largest decline recorded for Indonesia. The decline recorded for Thailand and Viet Nam is also relatively large compared to the other or average decline. The cross-section pattern regarding the decline is similar for OTHER; in fact, it is more disappointing because virtually all member states except Singapore record a decline in the foreign equity liberalization rates from AFAS 7 to 8, although the magnitude of the decline in this group is smaller than that observed for LOG.

	Foreign Equity Liberalization Rate (SFEL Score)								
Country	P	IS	LC	)G	OTHER				
	AFAS 7	AFAS 8	AFAS 7	AFAS 8	AFAS 7	AFAS 8			
1 - Brunei									
Darussalam	11.1	89.2	100.0	100.0	87.5	85.8			
2 - Cambodia	21.3	80.9	100.0	100.0	91.9	90.2			
3 - Indonesia	34.2	28.0	100.0	38.2	86.6	64.4			
4 – Lao PDR	82.3	91.5	91.7	80.0	84.8	75.6			
5 - Malaysia	54.3	84.0	100.0	80.0	55.7	72.5			
6 - Myanmar	90.4	85.9	85.7	87.5	89.2	81.4			
7 - Philippines	24.1	23.8	65.4	53.8	38.1	24.9			
8 - Singapore	25.8	84.1	39.7	50.8	77.1	77.8			
9 - Thailand	1.2	30.7	48.6	16.7	70.3	35.3			
10 – Viet Nam	91.8	55.6	100.0	60.7	89.2	82.3			
Average	43.6	65.4	83.1	66.8	77.0	69.0			

Table 7: Foreign Equity Liberalization Rates (SFEL) of Mode 3 by Groups(PIS, LOG, and OTHER), AFAS 7 and AFAS 8 (%)

The information presented in **Tables 6 and 7** suggest that there is great difficulty in AFAS negotiation to move the commitments from 49 percent to 51 percent for the subsectors of LOG and OTHER. This may indicate that member states have weak intention to liberalize subsectors defined by these groups; member states have only marginal commitment to allow foreign investors a majority role. As far as trade integration within ASEAN is concerned, the commitments to liberalization in logistics sectors (under the group of LOG) are rather disappointing. As demonstrated by Deardorff (2001), services liberalization in subsectors that closely facilitate trade in goods, such as in this case logistics services, analytically gives a higher marginal benefit for trade in goods than the other services sectors that are not related to, or closely facilitate, trade in goods such as health or education services.

### 4. Applying the AFAS Flexibility Rule

As we described, we found that the  $8^{th}$  package of AFAS commitments does not seem to make significant progress in terms of liberalization rate compared to the  $7^{th}$ 

package. This raises the question of how ASEAN could agree to sign the 8<sup>th</sup> package. Ideally, the liberalization rate between two packages of AFAS commitments should have a rather big difference. As we observed earlier in the ERIA MTR report, for example, there is significant difference/increase in the liberalization rate between the AFAS 5<sup>th</sup> and 7<sup>th</sup> commitments (ERIA 2012). One possible explanation of why ASEAN agreed to signing the AFAS 8 package is the possibility that the member states – in the 8<sup>th</sup> package negotiation – have stated to fully utilize the 15 percent flexibility rule allowed by the AFAS modality (see **Table 1**). The flexibility rule allows each member state to have 15 percent of its mode-subsector combinations defined as sensitive sectors, which are the sectors allowed not to meet the AFAS target of liberalization.

Therefore, in this section, we conduct an experiment by re-computing the liberalization rate of Mode 3 using a scenario that ASEAN Member Dtates apply the flexibility rule to many of the commitments of this services mode. In the experiment, we would like to see how the liberalization rate after the application of the flexibility rule is different to our earlier computations/results. The experiment at this stage focuses only on Mode 3 for the reason that it is probably the most challenging mode of services to be liberalized and because of the rather disappointing performance we have seen earlier.

We do not have the information about which subsectors from each member state are treated as sensitive subsectors. However, we know that half of the total combination of the services mode and subsectors available from a country from its commitments are eligible for an application of flexible rule for Mode 3. For a country, this study then chooses half of all available Mode 3 commitments at the subsector level and marks these as the sensitive subsectors. The sensitive subsectors are distributed across the three sectoral groups (PIS, LOG, and OTHER) proportionally using the ratio of the committed subsectors in these three groups.

**Figure 2** presents the computation of liberalization rates using this assumption and compares these rates with those computed without the flexibility rule. Applying the flexibility rule to the computation increases the liberalization rates of Mode 3 significantly for the overall AFAS 8 and across the subsectoral groups (PIS, LOG, and OTHER). The increase in the rates is significant by 14 percentage points for the overall AFAS 8.

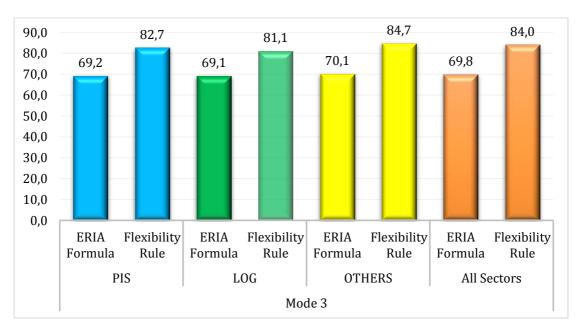


Figure 2: Liberalization Rates of AFAS 8: Comparison of the Rates with Assumption of Flexibility Rule (%)

Source: Author.

Examining **Table 8**, one can indicate that much of this increase comes from the adjusted rates of SFEL, which is the component of market access restriction coming from maximum foreign ownership allowed in the commitment. This means many of the committed subsectors are not able to pass the threshold set by AFAS 8 if the flexibility rule is not applied.

	SFEL Score									
Country	PIS		LOG		OTHER		All Sectors			
country	Without FR	With FR	Without FR	With FR	Without FR	With FR	Without FR	With FR		
1 - Brunei										
Darussalam	89.2	100.0	100.0	100.0	85.8	100.0	87.6	100.0		
2 - Cambodia	80.9	100.0	100.0	100.0	90.2	100.0	88.3	100.0		
3 - Indonesia	28.0	66.7	38.2	63.6	64.4	96.9	51.6	85.6		
4 – Lao PDR	91.5	100.0	80.0	100.0	75.6	100.0	79.2	100.0		
5 - Malaysia	84.0	100.0	80.0	100.0	72.5	100.0	75.2	100.0		
6 - Myanmar	85.9	100.0	87.5	100.0	81.4	100.0	83.2	100.0		
7 - Philippines	23.8	66.7	53.8	84.6	24.9	66.4	26.7	67.7		
8 - Singapore	84.1	100.0	50.8	100.0	77.8	100.0	78.2	100.0		
9 - Thailand	30.7	62.0	16.7	33.3	35.3	69.6	33.9	67.2		
10 – Viet Nam	55.6	83.7	60.7	85.7	82.3	100.0	74.5	95.2		
Average	65.4	87.9	66.8	86.7	69.0	93.3	67.9	91.6		

Table 8: Foreign Equity Liberalization Rates (SFEL) of Mode 3 by Groups (PIS, LOG, and OTHER), AFAS 8 (%): Comparison of the Rates with Assumption of Flexibility Rule

### **5.** Summary

This paper examines the progress of liberalization of AFAS. It measures the changes in the rate of liberalization of AFAS commitments from the 7<sup>th</sup> to the 8<sup>th</sup> package negotiations. The comparisons show only marginal improvement in the depth of services liberalization rate between the two packages, albeit significant increase in the number of subsectors covered in the 8<sup>th</sup> package. Thus, the improvement occurs more at the extensive margin, although it is important to note that much of this comes from the non-priority subsectors. The addition of subsectors committed under PIS and LOG is marginal. Observing the rates across the member states, the increase in the liberalization rates is observed for Brunei Darussalam, Cambodia, Malaysia, and Singapore.

The marginal increase in the liberalization rate of commitments of the 8<sup>th</sup> package raises the question of how ASEAN could sign the package. Ideally, one expects a big difference between two packages of liberalization commitments. Deeper examination of the commitments suggests that many ASEAN Member States utilized a facility under AFAS (Flexibility Rule) to put a number of sensitive subsectors which are not

subject to liberalization commitments. Mode 3 liberalization rate of the 8<sup>th</sup> package increases significantly when the Flexibility Rule is considered, much of which comes from the inclusion of subsectors with below-targeted foreign share to the sensitive list. Thus, many newly added subsectors actually do not pass the threshold set by the 8<sup>th</sup> package.

#### References

- ASEAN (2009), *The Roadmap for the ASEAN Community 2009–2015*, Jakarta: ASEAN Secretariat.
- Deardorff, A.V. (2001) 'International Provision of Trade Services, Trade, and Fragmentation,' *Review of International Economics*, Vol. 9, Issues 2, pp.233–248.
- ERIA (2012), *Mid-Term Review of the Implementation of AEC Blueprint*, Jakarta: ERIA.
- Koyama, T. and S.S. Golub (2006), 'OECD's FDI Regulatory Restrictiveness Index: Revision and Extension to More Economies', *OECD Working Papers on International Investment*, 2006/04, OECD Publishing.

Appendix 1. CPC Definition for the Services Priority Integration Sector (PIS)
and Logistics Services (LOG)

		a Logistics Se
No.	PIS Subsectors	СРС
1.	Medical and dental services	9312
2.	Veterinary services	932
3.	Services provided by midwives, nurses, physiotherapists, and para- medical personnel	93191
4.	Consultancy services related to the installation of computer hardware	841
5.	Software implementation services	842
6.	Data processing services	843
7.	Data base services	844
8.	Others - Computer and Related Services	845+849
9.	Voice telephone services	7521
10	Packet-switched data transmission services	7523**
11.	Circuit-switched data transmission services	7523**
12.	Telex services	7523**
13.	Telegraph services	7522
14.	Facsimile services	7521**+7529**
15.	Private leased circuit services	7522**+7523**
16.	Electronic mail	7523**
17.	Voice mail	7523**
18.	On-line information and data base retrieval	7523**
19.	Electronic data interchange (EDI)	7523**
20.	Enhanced/value-added facsimile services, incl. store and forward, store and retrieve	7523**
21.	Code and protocol conversion	n.a.
22.	On-line information and/or data processing (incl. transaction processing)	843**
23.	Other telecommunication services	
24.	A. Hospital services	9311
25.	B. Other human health services	9319 (o.t. 93191)
26.	A. Hotels and restaurants (incl. catering)	641-643
27.	B. Travel agencies and tour operators services	7471
28.	C. Tourist guides services	7472
29.	D. Other tourism & travel- related services	

No.	Logistics Subsectors	CPC
1.	Packaging services	876
2.	B. Courier services	7512
3.	Freight transportation (Maritime)	7212
4.	Freight transportation (Rail)	7112
5.	Freight transportation (Road)	7123
6.	Cargo handling services	741
7.	Storage and warehouse services	742
8.	Freight transport agency services	748
9.	Other services auxiliary to all modes of transport	749

Source: ASEAN Secretariat.

# Appendix 2. Liberalization Rates of Mode 1 Committed in AFAS 7 and AFAS 8

(%)

Country	Country MODE 1 Liberalization Rates	
	AFAS 7	AFAS 8
1 - Brunei Darussalam	68.26	70.11
2 - Cambodia	71.17	72.39
3 - Indonesia	74.14	74.86
4 - Lao PDR	98.69	99.38
5 - Malaysia	61.68	62.64
6 - Myanmar	85.37	85.87
7 - Philippines	49.66	50.44
8 - Singapore	91.32	90.74
9 - Thailand	61.37	54.17
10 - Viet Nam	49.79	49.54
Average	71.14	71.01

Source: Author.

No.	Author(s)	Title	Year
2015-39	Dionisius NARJOKO	AEC Blueprint Implementation Performance and Challenges: Services Liberalization	May 2015
2015-38	Kazunobu HAYAKAWA, Nuttawut LAKSANAPANYA KUL, Shujiro URATA	Measuring the Costs of FTA Utilization: Evidence from Transaction-level Import Data of Thailand	May 2015
2015-37	Kazunobu HAYAKAWA, Nuttawut LAKSANAPANYA KUL, Pisit PUAPAN, Sastra SUDSAWASD	Government Strategy and Support for Regional Trade Agreements: The Case of Thailand	May 2015
2015-36	Dionisius A. NARJOKO	AEC Blueprint Implementation Performance and Challenges: Non-Tariff Measures and Non-Tariff Barriers	May 2015
2015-35	Kazunobu HAYAKAWA, Tadashi ITO, and Fukunari KIMURA	Trade Creation Effects of Regional Trade Agreements: Tariff Reduction versus Non- tariff Barrier Removal	Apr 2015
2015-34	Kazunobu HAYAKAWA, Tadashi ITO	Tarrif Pass-through of the World-wide Trade: Empirical Evidence at Tarriff-line Level	Apr 2015
2015-33	Kazubobu HAYAKAWA, Nuttawut LAKSANAPNYAK UL, and Shujiro URATA	Firm-level Impact of Free Trade Agreements on Import Prices	Apr 2015
2015-32	Ponciano INTAL, Jr.	AEC Blueprint Implementation Performance and Challenges: Investment Liberalization	Apr 2015
2015-31	Emily Christi A. CABEGIN	The Challenge of China and the Role of Deepening ASEAN Integration for the Philippine Semiconductor Industry	Apr 2015
2015-30	Venkatachalam ANBUMOZHI, Alex BOWEN and Puthusserikunnel Devasia JOSE	Market-Based Mechanisms to Promote Renewable Energy in Asia	Apr 2015
2015-29	Venkatachalam ANBUMOZHI	Low Carbon Green Growth in Asia: What is the Scope for Regional Cooperation?	Apr 2015
2015-28	Tan LI and Larry D. QIU	Beyond Trade Creation: Free Trade Agreements and Trade Disputes	Mar 2015

# **ERIA Discussion Paper Series**

No.	Author(s)	Title	Year
2015-27	Mai Anh NGO	Exporting and Firm-Level Credit Constraints – Evidence from Ghana	Mar 2015
2015-26	Sunghoon CHUNG, Joonhyung LEE, Thomas OSANG	Did China Tire Safeguard Save U.S. Workers?	Mar 2015
2015-25	Esther Ann BØLER, Beata JAVORCIK, Karen Helene ULLTVEI-MOE	Globalization: A Woman's Best Friend? Exporters and the Gender Wage Gap	Mar 2015
2015-24	Tristan Leo Dallo AGUSTIN and Martin SCHRÖDER	The Indian Automotive Industry and the ASEAN Supply Chain Relations	Mar 2015
2015-23	Hideo KOBAYASHI and Yingshan JIN	The CLMV Automobile and Auto Parts Industry	Mar 2015
2015-22	Hideo KOBAYASHI	Current State and Issues of the Automobile and Auto Parts Industries in ASEAN	Mar 2015
2015-21	Yoshifumi FUKUNAGA	Assessing the Progress of ASEAN MRAs on Professional Services	Mar 2015
2015-20	Yoshifumi FUKUNAGA and Hikari ISHIDO	Values and Limitations of the ASEAN Agreement on the Movement of Natural Persons	Mar 2015
2015-19	Nanda NURRIDZKI	Learning from the ASEAN + 1 Model and the ACIA	Mar 2015
2015-18	Patarapong INTARAKUMNER D and Pun-Arj CHAIRATANA and Preeda CHAYANAJIT	Global Production Networks and Host-Site Industrial Upgrading: The Case of the Semiconductor Industry in Thailand	Feb 2015
2015-17	Rajah RASIAH and Yap Xiao SHAN	Institutional Support, Regional Trade Linkages and Technological Capabilities in the Semiconductor Industry in Singapore	Feb 2015
2015-16	Rajah RASIAH and Yap Xiao SHAN	Institutional Support, Regional Trade Linkages and Technological Capabilities in the Semiconductor Industry in Malaysia	Feb 2015
2015-15	Xin Xin KONG, Miao ZHANG and Santha Chenayah RAMU	China's Semiconductor Industry in Global Value Chains	Feb 2015
2015-14	Tin Htoo NAING and Yap Su FEI	Multinationals, Technology and Regional Linkages in Myanmar's Clothing Industry	Feb 2015
2015-13	Vanthana NOLINTHA and Idris JAJRI	The Garment Industry in Laos: Technological Capabilities, Global Production Chains and Competitiveness	Feb 2015
2015-12	Miao ZHANG, Xin Xin KONG, Santha	The Transformation of the Clothing Industry in China	Feb 2015

No.	Author(s)	Title	Year
	Chenayah RAMU		
2015-11	NGUYEN Dinh Chuc, NGUYEN Ngoc Anh, NGUYEN Ha Trang and NGUYEN Ngoc Minh	Host-site institutions, Regional Production Linkages and Technological Upgrading: A study of Automotive Firms in Vietnam	Feb 2015
2015-10	Pararapong INTERAKUMNER D and Kriengkrai TECHAKANONT	Intra-industry Trade, Product Fragmentation and Technological Capability Development in Thai Automotive Industry	Feb 2015
2015-09	Rene E. OFRENEO	Auto and Car Parts Production: Can the Philippines Catch Up with Asia	Feb 2015
2015-08	Rajah RASIAH, Rafat Beigpoor SHAHRIVAR, Abdusy Syakur AMIN	Host-site Support, Foreign Ownership, Regional Linkages and Technological Capabilites: Evidence from Automotive Firms in Indonesia	Feb 2015
2015-07	Yansheng LI, Xin Xin KONG, and Miao ZHANG	Industrial Upgrading in Global Production Networks: Te Case of the Chinese Automotive Industry	Feb 2015
2015-06	Mukul G. ASHER and Fauziah ZEN	Social Protection in ASEAN: Challenges and Initiatives for Post-2015 Vision	Feb 2015
2015-05	Lili Yan ING, Stephen MAGIERA, and Anika WIDIANA	Business Licensing: A Key to Investment Climate Reform	Feb 2015
2015-04	Gemma ESTRADA, James ANGRESANO, Jo Thori LIND, Niku MÄÄTÄNEN, William MCBRIDE, Donghyun PARK, Motohiro SATO, and Karin SVANBORG- SJÖVALL	Fiscal Policy and Equity in Advanced Economies: Lessons for Asia	Jan 2015
2015-03	Erlinda M. MEDALLA	Towards an Enabling Set of Rules of Origin for the Regional Comprehensive Economic Partnership	Jan 2015
2015-02	Archanun KOHPAIBOON and Juthathip JONGWANICH	Use of FTAs from Thai Experience	Jan 2015

No.	Author(s)	Title	Year
2015-01	Misa OKABE	Impact of Free Trade Agreements on Trade in East Asia	Jan 2015
2014-26	Hikari ISHIDO	Coverage of Trade in Services under ASEAN+1 FTAs	Dec 2014
2014-25	Junianto James LOSARI	Searching for an Ideal International Investment Protection Regime for ASEAN + Dialogue Partners (RCEP): Where Do We Begin?	Dec 2014
2014-24	Dayong ZHANG and David C. Broadstock	Impact of International Oil Price Shocks on Consumption Expenditures in ASEAN and East Asia	Nov 2014
2014-23	Dandan ZHANG, Xunpeng SHI, and Yu SHENG	Enhanced Measurement of Energy Market Integration in East Asia: An Application of Dynamic Principal Component Analysis	Nov 2014
2014-22	Yanrui WU	Deregulation, Competition, and Market Integration in China's Electricity Sector	Nov 2014
2014-21	Yanfei LI and Youngho CHANG	Infrastructure Investments for Power Trade and Transmission in ASEAN+2: Costs, Benefits, Long-Term Contracts, and Prioritised Development	Nov 2014
2014-20	Yu SHENG, Yanrui WU, Xunpeng SHI, Dandan ZHANG	Market Integration and Energy Trade Efficiency: An Application of Malmqviat Index to Analyse Multi-Product Trade	Nov 2014
2014-19	Andindya BHATTACHARYA and Tania BHATTACHARYA	ASEAN-India Gas Cooperation: Redifining India's "Look East" Policy with Myanmar	Nov 2014
2014-18	Olivier CADOT, Lili Yan ING	How Restrictive Are ASEAN's RoO?	Sep 2014
2014-17	Sadayuki TAKII	Import Penetration, Export Orientation, and Plant Size in Indonesian Manufacturing	July 2014
2014-16	Tomoko INUI, Keiko ITO, and Daisuke MIYAKAWA	Japanese Small and Medium-Sized Enterprises' Export Decisions: The Role of Overseas Market Information	July 2014
2014-15	Han PHOUMIN and Fukunari KIMURA	Trade-off Relationship between Energy Intensity-thus energy demand- and Income Level: Empirical Evidence and Policy Implications for ASEAN and East Asia Countries	June 2014
2014-14	Cassey LEE	The Exporting and Productivity Nexus: Does Firm Size Matter?	May 2014
2014-13	Yifan ZHANG	Productivity Evolution of Chinese large and Small Firms in the Era of Globalisation	May 2014
2014-12	Valéria SMEETS, Sharon TRAIBERMAN, Frederic WARZYNSKI	Offshoring and the Shortening of the Quality Ladder:Evidence from Danish Apparel	May 2014

No.	Author(s)	Title	Year
2014-11	Inkyo CHEONG	Korea's Policy Package for Enhancing its FTA Utilization and Implications for Korea's Policy	May 2014
2014-10	Sothea OUM, Dionisius NARJOKO, and Charles HARVIE	Constraints, Determinants of SME Innovation, and the Role of Government Support	May 2014
2014-09	Christopher PARSONS and Pierre-Louis Vézina	Migrant Networks and Trade: The Vietnamese Boat People as a Natural Experiment	May 2014
2014-08	Kazunobu HAYAKAWA and Toshiyuki MATSUURA	Dynamic Tow-way Relationship between Exporting and Importing: Evidence from Japan	May 2014
2014-07	DOAN Thi Thanh Ha and Kozo KIYOTA	Firm-level Evidence on Productivity Differentials and Turnover in Vietnamese Manufacturing	Apr 2014
2014-06	Larry QIU and Miaojie YU	Multiproduct Firms, Export Product Scope, and Trade Liberalization: The Role of Managerial Efficiency	Apr 2014
2014-05	Han PHOUMIN and Shigeru KIMURA	Analysis on Price Elasticity of Energy Demand in East Asia: Empirical Evidence and Policy Implications for ASEAN and East Asia	Apr 2014
2014-04	Youngho CHANG and Yanfei LI	Non-renewable Resources in Asian Economies: Perspectives of Availability, Applicability, Acceptability, and Affordability	Feb 2014
2014-03	Yasuyuki SAWADA and Fauziah ZEN	Disaster Management in ASEAN	Jan 2014
2014-02	Cassey LEE	Competition Law Enforcement in Malaysia	Jan 2014
2014-01	Rizal SUKMA	ASEAN Beyond 2015: The Imperatives for Further Institutional Changes	Jan 2014
2013-38	Toshihiro OKUBO, Fukunari KIMURA, Nozomu TESHIMA	Asian Fragmentation in the Global Financial Crisis	Dec 2013
2013-37	Xunpeng SHI and Cecilya MALIK	Assessment of ASEAN Energy Cooperation within the ASEAN Economic Community	Dec 2013
2013-36	Tereso S. TULLAO, Jr. And Christopher James CABUAY	Eduction and Human Capital Development to Strengthen R&D Capacity in the ASEAN	Dec 2013
2013-35	Paul A. RASCHKY	Estimating the Effects of West Sumatra Public Asset Insurance Program on Short-Term Recovery after the September 2009 Earthquake	Dec 2013
2013-34	Nipon POAPONSAKORN and Pitsom MEETHOM	Impact of the 2011 Floods, and Food Management in Thailand	Nov 2013
2013-33	Mitsuyo ANDO	Development and Resructuring of Regional Production/Distribution Networks in East Asia	Nov 2013

No.	Author(s)	Title	Year
2013-32	Mitsuyo ANDO and Fukunari KIMURA	Evolution of Machinery Production Networks: Linkage of North America with East Asia?	Nov 2013
2013-31	Mitsuyo ANDO and Fukunari KIMURA	What are the Opportunities and Challenges for ASEAN?	Nov 2013
2013-30	Simon PEETMAN	Standards Harmonisation in ASEAN: Progress, Challenges and Moving Beyond 2015	Nov 2013
2013-29	Jonathan KOH and Andrea Feldman MOWERMAN	Towards a Truly Seamless Single Windows and Trade Facilitation Regime in ASEAN Beyond 2015	Nov 2013
2013-28	Rajah RASIAH	Stimulating Innovation in ASEAN Institutional Support, R&D Activity and Intelletual Property Rights	Nov 2013
2013-27	Maria Monica WIHARDJA	Financial Integration Challenges in ASEAN beyond 2015	Nov 2013
2013-26	Tomohiro MACHIK ITA and Yasushi UE KI	Who Disseminates Technology to Whom, How, and Why: Evidence from Buyer-Seller Business Networks	Nov 2013
2013-25	Fukunari KIMURA	Reconstructing the Concept of "Single Market a Production Base" for ASEAN beyond 2015	Oct 2013
2013-24	Olivier CADOT Ernawati MUNADI Lili Yan ING	Streamlining NTMs in ASEAN: The Way Forward	Oct 2013
2013-23	Charles HARVIE, Dionisius NARJOK O, Sothea OUM	Small and Medium Enterprises' Access to Finance: Evidence from Selected Asian Economies	Oct 2013
2013-22	Alan Khee-Jin TAN	Toward a Single Aviation Market in ASEAN: Regulatory Reform and Industry Challenges	Oct 2013
2013-21	Hisanobu SHISHID O, Shintaro SUGIYAM A,Fauziah ZEN	Moving MPAC Forward: Strengthening Public-Private Partnership, Improving Project Portfolio and in Search of Practical Financing Schemes	Oct 2013
2013-20	Barry DESKER, Mely CABALLERO- ANTHONY, Paul TENG	Thought/Issues Paper on ASEAN Food Security: Towards a more Comprehensive Framework	Oct 2013
2013-19	Toshihiro KUDO, Satoru KUMAGAI, So UMEZAKI	Making Myanmar the Star Growth Performer in ASEAN in the Next Decade: A Proposal of Five Growth Strategies	Sep 2013
2013-18	Ruperto MAJUCA	Managing Economic Shocks and Macroeconomic Coordination in an Integrated Region: ASEAN Beyond 2015	Sep 2013
2013-17	Cassy LEE and Yoshifumi FUKUNAGA	Competition Policy Challenges of Single Market and Production Base	Sep 2013

No.	Author(s)	Title	Year
2013-16	Simon TAY	Growing an ASEAN Voice? : A Common Platform in Global and Regional Governance	Sep 2013
2013-15	Danilo C. ISRAEL and Roehlano M. BRIONES	Impacts of Natural Disasters on Agriculture, Food Security, and Natural Resources and Environment in the Philippines	Aug 2013
2013-14	Allen Yu-Hung LAI and Seck L. TAN	Impact of Disasters and Disaster Risk Management in Singapore: A Case Study of Singapore's Experience in Fighting the SARS Epidemic	Aug 2013
2013-13	Brent LAYTON	Impact of Natural Disasters on Production Networks and Urbanization in New Zealand	Aug 2013
2013-12	Mitsuyo ANDO	Impact of Recent Crises and Disasters on Regional Production/Distribution Networks and Trade in Japan	Aug 2013
2013-11	Le Dang TRUNG	Economic and Welfare Impacts of Disasters in East Asia and Policy Responses: The Case of Vietnam	Aug 2013
2013-10	Sann VATHANA, Sothea OUM, Ponhrith KAN, Colas CHERVIER	Impact of Disasters and Role of Social Protection in Natural Disaster Risk Management in Cambodia	Aug 2013
2013-09	Sommarat CHANTARAT, Krirk PANNANGPETCH, Nattapong PUTTANAPONG, Preesan RAKWATIN, and Thanasin TANOMPONGPHA NDH	Index-Based Risk Financing and Development of Natural Disaster Insurance Programs in Developing Asian Countries	Aug 2013
2013-08	Ikumo ISONO and Satoru KUMAGAI	Long-run Economic Impacts of Thai Flooding: Geographical Simulation Analysis	July 2013
2013-07	Yoshifumi FUKUNAGA and Hikaru ISHIDO	Assessing the Progress of Services Liberalization in the ASEAN-China Free Trade Area (ACFTA)	May 2013
2013-06	Ken ITAKURA, Yoshifumi FUKUNAGA, and Ikumo ISONO	A CGE Study of Economic Impact of Accession of Hong Kong to ASEAN-China Free Trade Agreement	May 2013
2013-05	Misa OKABE and Shujiro URATA	The Impact of AFTA on Intra-AFTA Trade	May 2013
2013-04	Kohei SHIINO	How Far Will Hong Kong's Accession to ACFTA will Impact on Trade in Goods?	May 2013
2013-03	Cassey LEE and Yoshifumi FUKUNAGA	ASEAN Regional Cooperation on Competition Policy	Apr 2013

No.	Author(s)	Title	Year
2013-02	Yoshifumi FUKUNAGA and Ikumo ISONO	Taking ASEAN+1 FTAs towards the RCEP: A Mapping Study	Jan 2013
2013-01	Ken ITAKURA	Impact of Liberalization and Improved Connectivity and Facilitation in ASEAN for the ASEAN Economic Community	Jan 2013
2012-17	Sun XUEGONG, Guo LIYAN, Zeng ZHENG	Market Entry Barriers for FDI and Private Investors: Lessons from China's Electricity Market	Aug 2012
2012-16	Yanrui WU	Electricity Market Integration: Global Trends and Implications for the EAS Region	Aug 2012
2012-15	Youngho CHANG, Yanfei LI	Power Generation and Cross-border Grid Planning for the Integrated ASEAN Electricity Market: A Dynamic Linear Programming Model	Aug 2012
2012-14	Yanrui WU, Xunpeng SHI	Economic Development, Energy Market Integration and Energy Demand: Implications for East Asia	Aug 2012
2012-13	Joshua AIZENMAN, Minsoo LEE, and Donghyun PARK	The Relationship between Structural Change and Inequality: A Conceptual Overview with Special Reference to Developing Asia	July 2012
2012-12	Hyun-Hoon LEE, Minsoo LEE, and Donghyun PARK	Growth Policy and Inequality in Developing Asia: Lessons from Korea	July 2012
2012-11	Cassey LEE	Knowledge Flows, Organization and Innovation: Firm-Level Evidence from Malaysia	June 2012
2012-10	Jacques MAIRESSE, Pierre MOHNEN, Yayun ZHAO, and Feng ZHEN	Globalization, Innovation and Productivity in Manufacturing Firms: A Study of Four Sectors of China	June 2012
2012-09	Ari KUNCORO	Globalization and Innovation in Indonesia: Evidence from Micro-Data on Medium and Large Manufacturing Establishments	June 2012
2012-08	Alfons PALANGKARAYA	The Link between Innovation and Export: Evidence from Australia's Small and Medium Enterprises	June 2012
2012-07	Chin Hee HAHN and Chang-Gyun PARK	Direction of Causality in Innovation-Exporting Linkage: Evidence on Korean Manufacturing	June 2012
2012-06	Keiko ITO	Source of Learning-by-Exporting Effects: Does Exporting Promote Innovation?	June 2012

No.	Author(s)	Title	Year
2012-05	Rafaelita M. ALDABA	Trade Reforms, Competition, and Innovation in the Philippines	June 2012
2012-04	Toshiyuki MATSUURA and Kazunobu HAYAKAWA	The Role of Trade Costs in FDI Strategy of Heterogeneous Firms: Evidence from Japanese Firm-level Data	June 2012
2012-03	Kazunobu HAYAKAWA, Fukunari KIMURA, and Hyun-Hoon LEE	How Does Country Risk Matter for Foreign Direct Investment?	Feb 2012
2012-02	Ikumo ISONO, Satoru KUMAGAI, Fukunari KIMURA	Agglomeration and Dispersion in China and ASEAN: A Geographical Simulation Analysis	Jan 2012
2012-01	Mitsuyo ANDO and Fukunari KIMURA	How Did the Japanese Exports Respond to Two Crises in the International Production Network?: The Global Financial Crisis and the East Japan Earthquake	Jan 2012
2011-10	Tomohiro MACHIKITA and Yasushi UEKI	Interactive Learning-driven Innovation in Upstream-Downstream Relations: Evidence from Mutual Exchanges of Engineers in Developing Economies	Dec 2011
2011-09	Joseph D. ALBA, Wai-Mun CHIA, and Donghyun PARK	Foreign Output Shocks and Monetary Policy Regimes in Small Open Economies: A DSGE Evaluation of East Asia	Dec 2011
2011-08	Tomohiro MACHIKITA and Yasushi UEKI	Impacts of Incoming Knowledge on Product Innovation: Econometric Case Studies of Technology Transfer of Auto-related Industries in Developing Economies	Nov 2011
2011-07	Yanrui WU	Gas Market Integration: Global Trends and Implications for the EAS Region	Nov 2011
2011-06	Philip Andrews- SPEED	Energy Market Integration in East Asia: A Regional Public Goods Approach	Nov 2011
2011-05	Yu SHENG, Xunpeng SHI	Energy Market Integration and Economic Convergence: Implications for East Asia	Oct 2011
2011-04	Sang-Hyop LEE, Andrew MASON, and Donghyun PARK	Why Does Population Aging Matter So Much for Asia? Population Aging, Economic Security and Economic Growth in Asia	Aug 2011
2011-03	Xunpeng SHI, Shinichi GOTO	Harmonizing Biodiesel Fuel Standards in East Asia: Current Status, Challenges and the Way Forward	May 2011
2011-02	Hikari ISHIDO	Liberalization of Trade in Services under ASEAN+n : A Mapping Exercise	May 2011
2011-01	Kuo-I CHANG, Kazunobu HAYAKAWA	Location Choice of Multinational Enterprises in China: Comparison between Japan and Taiwan	Mar 2011

No.	Author(s)	Title	Year
	Toshiyuki MATSUURA		
2010-11	Charles HARVIE, Dionisius NARJOKO, Sothea OUM	Firm Characteristic Determinants of SME Participation in Production Networks	Oct 2010
2010-10	Mitsuyo ANDO	Machinery Trade in East Asia, and the Global Financial Crisis	Oct 2010
2010-09	Fukunari KIMURA Ayako OBASHI	International Production Networks in Machinery Industries: Structure and Its Evolution	Sep 2010
2010-08	Tomohiro MACHIKITA, Shoichi MIYAHARA, Masatsugu TSUJI, and Yasushi UEKI	Detecting Effective Knowledge Sources in Product Innovation: Evidence from Local Firms and MNCs/JVs in Southeast Asia	Aug 2010
2010-07	Tomohiro MACHIKITA, Masatsugu TSUJI, and Yasushi UEKI	How ICTs Raise Manufacturing Performance: Firm-level Evidence in Southeast Asia	Aug 2010
2010-06	Xunpeng SHI	Carbon Footprint Labeling Activities in the East Asia Summit Region: Spillover Effects to Less Developed Countries	July 2010
2010-05	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey of the Eight Literatures	Mar 2010
2010-04	Tomohiro MACHIKITA and Yasushi UEKI	The Impacts of Face-to-face and Frequent Interactions on Innovation: Upstream-Downstream Relations	Feb 2010
2010-03	Tomohiro MACHIKITA and Yasushi UEKI	Innovation in Linked and Non-linked Firms: Effects of Variety of Linkages in East Asia	Feb 2010
2010-02	Tomohiro MACHIKITA and Yasushi UEKI	Search-theoretic Approach to Securing New Suppliers: Impacts of Geographic Proximity for Importer and Non-importer	Feb 2010
2010-01	Tomohiro MACHIKITA and Yasushi UEKI	Spatial Architecture of the Production Networks in Southeast Asia: Empirical Evidence from Firm-level Data	Feb 2010
2009-23	Dionisius NARJOKO	Foreign Presence Spillovers and Firms' Export Response: Evidence from the Indonesian Manufacturing	Nov 2009
2009-22	Kazunobu HAYAKAWA, Daisuke HIRATSUKA, Kohei SHIINO, and Seiya SUKEGAWA	Who Uses Free Trade Agreements?	Nov 2009

No.	Author(s)	Title	Year
2009-21	Ayako OBASHI	Resiliency of Production Networks in Asia: Evidence from the Asian Crisis	Oct 2009
2009-20	Mitsuyo ANDO and Fukunari KIMURA	Fragmentation in East Asia: Further Evidence	Oct 2009
2009-19	Xunpeng SHI	The Prospects for Coal: Global Experience and Implications for Energy Policy	Sept 2009
2009-18	Sothea OUM	Income Distribution and Poverty in a CGE Framework: A Proposed Methodology	Jun 2009
2009-17	Erlinda M. MEDALLA and Jenny BALBOA	ASEAN Rules of Origin: Lessons and Recommendations for the Best Practice	Jun 2009
2009-16	Masami ISHIDA	Special Economic Zones and Economic Corridors	Jun 2009
2009-15	Toshihiro KUDO	Border Area Development in the GMS: Turning the Periphery into the Center of Growth	May 2009
2009-14	Claire HOLLWEG and Marn-Heong WONG	Measuring Regulatory Restrictions in Logistics Services	Apr 2009
2009-13	Loreli C. De DIOS	Business View on Trade Facilitation	Apr 2009
2009-12	Patricia SOURDIN and Richard POMFRET	Monitoring Trade Costs in Southeast Asia	Apr 2009
2009-11	Philippa DEE and Huong DINH	Barriers to Trade in Health and Financial Services in ASEAN	Apr 2009
2009-10	Sayuri SHIRAI	The Impact of the US Subprime Mortgage Crisis on the World and East Asia: Through Analyses of Cross-border Capital Movements	Apr 2009
2009-09	Mitsuyo ANDO and Akie IRIYAMA	International Production Networks and Export/Import Responsiveness to Exchange Rates: The Case of Japanese Manufacturing Firms	Mar 2009
2009-08	Archanun KOHPAIBOON	Vertical and Horizontal FDI Technology Spillovers:Evidence from Thai Manufacturing	Mar 2009
2009-07	Kazunobu HAYAKAWA, Fukunari KIMURA, and Toshiyuki MATSUURA	Gains from Fragmentation at the Firm Level: Evidence from Japanese Multinationals in East Asia	Mar 2009
2009-06	Dionisius A. NARJOKO	Plant Entry in a More LiberalisedIndustrialisationProcess: An Experience of Indonesian Manufacturing during the 1990s	Mar 2009
2009-05	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Mar 2009
2009-04	Chin Hee HAHN and Chang-Gyun PARK	Learning-by-exporting in Korean Manufacturing: A Plant-level Analysis	Mar 2009

No.	Author(s)	Title	Year
2009-03	Ayako OBASHI	Stability of Production Networks in East Asia: Duration and Survival of Trade	Mar 2009
2009-02	Fukunari KIMURA	The Spatial Structure of Production/Distribution Networks and Its Implication for Technology Transfers and Spillovers	Mar 2009
2009-01	Fukunari KIMURA and Ayako OBASHI	International Production Networks: Comparison between China and ASEAN	Jan 2009
2008-03	Kazunobu HAYAKAWA and Fukunari KIMURA	The Effect of Exchange Rate Volatility on International Trade in East Asia	Dec 2008
2008-02	Satoru KUMAGAI, Toshitaka GOKAN, Ikumo ISONO, and Souknilanh KEOLA	Predicting Long-Term Effects of Infrastructure Development Projects in Continental South East Asia: IDE Geographical Simulation Model	Dec 2008
2008-01	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Dec 2008