ERIA Discussion Paper Series

Firm-level Impact of Free Trade Agreements on Import Prices

Kazunobu HAYAKAWA[#§]
Bangkok Research Center, Institute of Developing Economies, Thailand
Nuttawut LAKSANAPANYAKUL
Science and Technology Development Program, Thailand Development Research Institute, Thailand
Shujiro URATA
Graduate School of Asia-Pacific Studies, Waseda University, Japan

April 2015

Abstract: *We examine the firm-level impact of the use of free trade agreement (FTA) schemes on import prices by employing firm-level import data that enables us to identify the use of different tariff schemes, such as FTA schemes and most favoured nation (MFN) schemes. Unlike the previous studies, we estimate the firm-level effects of FTA use on import prices by controlling for firms' characteristics. We find that, on average, the use of FTA schemes raises (tariff-exclusive) import prices by 3 percent in total. Interestingly, the use of FTA schemes raises import prices even if FTA rates are same as MFN rates. We also find that the large-sized firms in terms of import values reduce the positive effects of the use of FTA schemes on import prices.*

Keywords: FTA; Prices; Thailand
JEL Classification: F15; F53

[#] Corresponding author: Kazunobu Hayakawa; Address: Japan External Trade Organization, 16th Floor, Nantawan Building, 161 Rajadamri Road, Pathumwan, Bangkok 10330, Thailand; Tel: 66-2-253-6441; Fax: 66-2-254-1447; E-mail: kazunobu_hayakawa@ide-jetro.org.
[§] This research was conducted as part of a project of the Economic Research Institute for ASEAN and East Asia "Comprehensive Analysis on Free Trade Agreements in East Asia". We would like to thank Fukunari Kimura, Kiyoyasu Tanaka, Toshiyuki Matsuura, Kozo Kiyota, Hiroshi Mukunoki, and the seminar participants at Chukyo University, the Japan Society of International Economics, and East Asian Economic Association. This work was also supported by JSPS KAKENHI Grant Number 26705002.

1. Introduction

The price change through the use of free trade agreement (FTA) schemes is one of the major benefits for exporters. The use of FTA tariff rates, which are lower than general tariff rates, such as the most favoured nation (MFN) rates, enables importers to import products at cheaper prices inclusive of the tariff rates. On the other hand, in order to export under FTA schemes, exporters need to comply with the rules of origin (RoO). Compliance of the RoO requires exporters to incur costs for collecting several kinds of documents including a list of inputs, production flow chart, production instructions, invoices for each input, contract documents, and so on. While importers can enjoy the direct benefits (i.e. saving tariff payments) from importing under FTA schemes without any substantial work, exporters need to pay some amount of the costs for exporting under FTA schemes. Therefore, the extent of the export price rise through FTA use becomes crucial for an exporter's decision on FTA utilization.[1] As a result, the potential FTA exporters will have to bargain about export prices with the importers.

In addition to the above "RoO effect", there is the traditional mechanism on the price change through FTA utilization, which is called the "tariff effect" in this paper. As well summarized in Chapter 7 in Feenstra (2003), under some conditions, the reduction of tariff rates raises export prices. For example, under the case of a duopoly (either a Cournot duopoly or Bertrand duopoly), the export prices rise if we assume "less convex" demand curves, such as linear or concave demand curves. Also, under perfect competition, such a rise occurs if the exporting country is a large country that can affect the global price of the goods. Although these results are derived in the country-level framework, we can obtain similar predictions in the context of firm-level FTA utilization.[2] On the other hand, as found in Chang and Winters (2002) and Winters and Chang (2000), export prices from non-FTA partner countries may also change after enactment of FTA. Indeed, they may decline due to trade diversion.

There are several studies that have empirically quantified the price effects of

[1] Although another important factor will be the extent of the increase of export quantities, this paper focuses on the export price rise.

[2] Also see the simple illustration provided in Cirera (2014).

FTAs.[3] Most of the studies employed product-level import data that can differentiate trade values according to tariff schemes. Cadot *et al*. (2005) found the rise of export prices by Mexican textile and apparel exporters through the use of NAFTA by around 80 percent of the tariff margin (i.e. the difference between FTA and MFN rates). Ozden and Sharma (2006) examined the US Caribbean Basin Initiative's impact on the prices received by eligible apparel exporters and found that export prices rose by around 65 percent of the tariff margin. African apparel exporters captured 16 percent-53 percent of the tariff margin under the African Growth and Opportunity Act (Olarreaga and Ozden, 2005). Cirera (2014) found the rise of export prices to the European Union through the use of the generalized scheme of preferences and its related schemes was 17-80 percent of the tariff margin. Overall, the previous studies using product-level data found higher export prices when trading under FTA schemes than under MFN schemes.

The difference in export prices may reflect not only the use of different tariff schemes but also the characteristics of the firms. Indeed, as demonstrated in Demidova and Krishna (2008)[4], exporters under the MFN and FTA schemes are systemically different in terms of, say, productivity. Thus for example, if productive firms have lower export prices due to having lower marginal costs[5] and are likely to use FTA schemes when exporting, the export prices under FTA schemes will be related to not only the effects of FTA use but also the effect of the exporter's productivity when using FTA schemes. In addition to these export firm characteristics, import firm characteristics may also affect the use of FTA schemes in trading and yield biases for the estimates on the price effects of FTAs. In sum, obtaining unbiased estimates on the price effects of FTAs requires consideration of firm-level factors. Indeed, to the best of our knowledge, there have not been any studies that have dealt with these problems

[3] Feenstra (1989) is the first paper that examined the effects of tariff rates on trade prices though he did not examine the tariff changes of FTAs. The general changes of tariff rates on trade prices are called "tariff path-through". For example, Gorg *et al*. (2010) examined the tariff path-through in Hungarian exports at firm level but did not find significant tariff path-through.

[4] Demidova and Krishna (2008) introduces the choice of tariff schemes into the firm-heterogeneity model of Melitz (2003).

[5] Baldwin and Harrigan (2011), Kugler and Verhoogen (2012), and Johnson (2012) introduce a quality dimension into this firm heterogenic framework. In such models with product-quality differences, the productive producers have higher product prices due to producing higher quality products.

successfully.

In this paper, we employ the data on firm-level import by different tariff schemes in Thailand in order to tackle the above-mentioned bias problems. Our data enables us to identify not only the firm, source country, and commodity, but also the tariff scheme (e.g., FTA scheme or MFN scheme) used by the importing firm. Although several empirical papers recently used firm-level trade data (e.g. Amiti *et al*., 2014; Berman *et al*., 2012; Eaton *et al*., 2011), few studies have yet used data that enables us to identify tariff schemes. One such study is Cherkashin *et al*. (2015). However, their dataset covered only the apparel industry, while our dataset covers all sectors. Takahashi and Urata (2010) and Hayakawa (2014) employed firm-level survey data that can identify firms' FTA use in their trading. However, that survey data only covered some of the trading firms and did not enable them to identify commodity at a detailed level. With our detailed dataset, we can examine at a tariff-line level how import prices by the same firm changed before and after FTA utilization.[6] Namely, by controlling the differences in an import firm's characteristics we can estimate the price effects of FTA use. In short, our estimates will be less biased compared to those obtained by the previous studies.

Specifically, we examine the price effects in the case of Thai firms importing from China. Thailand has enacted an FTA with China (ASEAN-China FTA, ACFTA), which entered into force in 2004. We examine how firm level import prices from China changed before and after utilization of the ACFTA schemes. The choice of China is to avoid the firms' complicated decisions on tariff schemes. Thailand has enacted several FTAs, but most of those have overlapped their country coverage. For example, Thailand has not only bilateral but also plurilateral FTAs with Japan, Australia, New Zealand, and India. When multiple FTA schemes are available, firms can choose the tariff scheme from among the MFN rates, bilateral FTA rates, and plurilateral FTA rates rather than simply choose between the MFN rates and FTA rates. Since our aim is not to examine such complicated decisions on tariff schemes, we focus on the imports from China, which has a single FTA scheme with Thailand. We employ the firm-level import data for the period 2007-2011 in order to keep the same harmonized

[6] In this paper, we use export and import price interchangeably, as will be explained later.

system (HS) version, i.e. HS 2007.[7] In this way, we can control product fixed effects at a highly detailed level (HS eight-digit level).

With this dataset, we conducted several analyses on the effects of FTA use on import prices. In particular, we tried to quantify the tariff effects and other effects including the RoO effects separately. As far as we know, no studies have presented these separate estimates. Such examination requires a dataset with sufficient variation in the magnitude of tariff reduction. Unlike the afore-mentioned datasets in Cherkashin *et al*. (2015), Takahashi and Urata (2010), and Hayakawa (2014), our dataset satisfies this condition since it covers all sectors and can identify firm-level imports at a tariff-line level. Such separate examination of the effects of FTA use is important once one realizes that the simple reduction of MFN rates yields only the tariff effects but not the RoO effects. No RoO effects appear in the reduction of MFN rates because firms do not need to comply with RoOs when exporting under MFN rates. In this sense, the price effects of FTA utilization are qualitatively different from those of the reduction of MFN rates. Having discussed the importance of identifying the tariff effects and other effects, we will find it difficult to identify tariff effects separately from the other effects using only the import side data. Furthermore, due to the importance of RoO effects, we also attempt to decompose the RoO effects. For example, we explore whether the price effects of FTA use differ by the size of import firms. Our detailed analysis is expected to uncover comprehensive evidence on the impact of FTA use on import prices.

The rest of this paper is organized as follows. Section 2 provides an overview of our dataset. After specifying our empirical framework in Section 3, we report our estimation results in Section 4. Section 5 concludes the paper.

2. Overview of Dataset

Our dataset, which is obtained from the Customs, Kingdom of Thailand,[8] is

[7] This period includes the global financial crisis in 2007/2008. If the rise of export prices is less likely to be accepted by importers due to this crisis, our estimates on the price effects of FTA utilization may be underestimated.

[8] The data was collected confidentially. We have been given permission to use it for academic purposes only.

transaction-level import data from 2007 to 2011 and covers all commodity imports in Thailand. Our dataset contains the Customs clearing date, HS eight-digit code, export country, import firm ID, tariff scheme (e.g., FTA, MFN, etc.), and import values in Thai Baht (THB). We used the data on imports from China aggregated by the years in addition to the HS eight-digit codes, import firms, and tariff schemes. We classify tariff schemes into three categories including the MFN scheme, FTA scheme, and the other schemes. The other schemes include imports under the schemes of bonded warehouses, free zones, investment promotion, duty drawbacks under Section 19 bis, and duty drawbacks for re-exports.[9] Although the choice of those other schemes has an important impact in our analysis (as in the above-mentioned case of choices among MFN and multiple FTA schemes), we did not consider them to keep our analysis simple.

Table 1 reports the numbers of import firms and import firm-product observations in addition to the import values. The left panel shows those for the products with the same MFN rates as FTA rates and the right panel shows those for products with a lower FTA rates than MFN rates. Since our sample FTA is a multilateral FTA (i.e., FTA among China and ten ASEAN member states) with diagonal cumulation rules, firms have incentives to use FTA schemes even for products with the same MFN rates as the FTA rates, in order to enjoy the benefits from diagonal cumulation. When firms export their products to other ACFTA member countries such as Indonesia under ACFTA by using materials from China as inputs for their products, those materials are imported under ACFTA even if the MFN rate for those materials is zero (see Hayakawa *et al*., 2013b). In this table, we focus on the right panel and name those products with the lower FTA rates as "eligible products". The table shows the increase in the number of eligible products over time. Their number did not change between 2007 and 2008 but increased in 2009 and 2010.

[9] Goods imported under the schemes of bonded warehouses, free zones, and investment promotion may be exempted from Customs duties, subject to certain conditions. The duty drawback under Section 19 bis or for re-exports enables exporting firms to obtain a refund on Customs duty paid on imported goods when those goods are an input for goods for export or are re-exported without any transformation. Under these schemes, only firms with approval of the authorities in charge can claim such privileges. Eligible imported goods and duty privileges vary among the schemes. For example, virtually all goods imported under bonded warehouse and free zone schemes are duty-free. Under the investment promotion scheme, raw materials are duty-free while machinery may be either duty-free or subject to a 50% tariff reduction. On the other hand, machinery is ineligible for a refund on import duty paid under duty drawback schemes.

Table 1: The Numbers of Import Firms and Import Firm-product Observations and the Import Values

	MFN = FTA				MFN > FTA			
	# of prod.	MFN	FTA	Others	# of prod.	MFN	FTA	Others
		Number of Import firms				Number of Import firms		
2007	5,885	10,827	60	2,137	2,415	17,092	427	3,594
2008	5,885	11,807	244	2,478	2,415	18,271	1,980	4,321
2009	3,403	12,286	715	1,698	4,897	19,303	4,159	3,102
2010	2,407	13,472	1,862	1,612	5,893	19,986	8,417	2,720
2011	2,407	14,312	2,344	1,615	5,893	20,596	10,354	2,701
		Number of Import firm - product				Number of Import firm - product		
2007	5,885	42,213	106	7,677	2,415	117,973	2,185	22,367
2008	5,885	42,128	405	8,342	2,415	117,588	11,326	22,500
2009	3,403	41,274	1,444	5,768	4,897	111,040	28,465	15,537
2010	2,407	46,735	3,717	5,880	5,893	113,637	52,481	15,280
2011	2,407	49,480	4,497	5,898	5,893	116,891	61,588	15,063
		Import values (Million THB)				Import values (Million THB)		
2007	5,885	197,277	177	126,765	2,415	142,465	2,790	101,670
2008	5,885	214,700	886	148,135	2,415	151,213	23,732	124,158
2009	3,403	191,182	2,060	117,500	4,897	110,209	53,444	106,669
2010	2,407	242,671	6,617	151,679	5,893	107,928	127,321	133,692
2011	2,407	280,208	10,082	176,324	5,893	127,395	182,933	136,954

Source: Customs Department, Kingdom of Thailand

Taking a look at the number of import firms, we can see that the number of FTA users has increased over time. This increase resulted not only from the increase of the number of eligible products but also the start of FTA use for existing eligible products. For example, even for the two years in which the number of eligible products did not change (i.e., from 2007 to 2008 or from 2010 to 2011), the number of FTA users increased. As a result, in 2011, around ten thousand firms used FTA schemes for their imports from China. These patterns can be also found in the number of import firm-product observations and the import values. The pattern is particularly notable for the import values, as the import values under FTA schemes were larger than those under MFN schemes in 2010 and 2011. This pattern implies larger import values per import firm in the case of FTA schemes, indicating the qualitative differences in import firms' characteristics between FTA users and non-users. In short, we need to control the import firm characteristics when analyzing the price effect of FTA use.

Table 2 reports the import firm-product-level transition of tariff-scheme status between 2007 and 2011. In this table, we restrict the sample products only to those in

which FTA rates are lower than MFN rates in 2011. "Both" indicates the observations in which a firm imports a product under both FTA and MFN schemes. This status is likely in the case of import-side data and is because the firms in "Both" import a product from different firms (e.g., a productive firm and a less productive firm). There are a large number of observations that show a large number of starting or stopping import cases for the firms using only MFN schemes. A relatively large number of observations can also be found in starting importing for import firms using only FTA schemes. The number of observations with the change from Only MFN to Only FTA is larger than that with the change from Only FTA to Only MFN or Both, though it is smaller than the number observed importing under only MFN rates in both years.

Table 2: Import Firm-product-level Transition of Tariff-scheme Status between 2007 and 2011 (Number of Observations)

	2011			
	NO	Only MFN	Only FTA	Both
2007				
NO		85,558	37,934	10,937
Only MFN	88,868	15,728	7,630	4,418
Only FTA	873	16	194	72
Both	592	33	274	129

Source: Customs Department, Kingdom of Thailand

Table 3 reports the import firm-product-level changes in import prices from 2007 to 2011. In this table, we restrict the sample to the observations existing in both 2007 and 2011. Namely, it does not include the observations for which the status changed from "No" in 2007 or to "No" in 2011. In addition, in the case of Both, we calculated the price changes for MFN and FTA schemes separately. From this table, we can see the larger increase of import prices is for observations which changed the status from Only MFN to Only FTA (31 percent) than for those whose status remained as Only MFN in both years (25 percent). A large increase can also be found for products whose status changed from Only MFN to Both, or from Both to Only FTA. In sum, a relatively large increase of import prices can be observed for products in which the status changed to importing under FTA schemes.

Table 3: Import Firm-product-level Changes in Prices from 2007 to 2011 (percent)

		2011			
		Only MFN	Only FTA	Both	
				MFN	FTA
2007					
Only MFN		25	31	30	45
Only FTA		14	2	3	1
Both	MFN	1	24	2	1
	FTA	2	16	3	2

Source: Customs Department, Kingdom of Thailand

3. Empirical Framework

This section specifies our empirical framework to examine how the change from importing under MFN to that under FTA schemes affects import prices. As in the previous section, our sample for estimation is firm-product-year-level imports of Thailand from China during 2007-2011. Enjoying the nature of such transaction-level panel data, we conduct the difference-in-differences analysis on the price effects of FTAs. To do that, we parameterized the firms' import price equation as follows.

$$\ln P_{fpt} = \alpha S_{fpt} - \beta \ln(1 + T_{fpt}) + \mathbf{Z}_{ft}\boldsymbol{\gamma} + \mathbf{X}_{pt}\boldsymbol{\varphi} + u_{fp} + u_t + \varepsilon_{fpt}, \quad (1)$$

where

$$1 + T_{fpt} = \begin{cases} 1 + MFN_{pt} & if\ S_{fpt} = 0 \\ 1 + FTA_{pt} & if\ S_{fpt} = 1 \end{cases}. \quad (2)$$

P_{fpt} denotes firm *f*'s import price of HS eight-digit product *p* from China in year *t*. S_{fpt} indicates the tariff scheme and takes the value one if firm *f* imports product *p* from China under FTA schemes (i.e., ACFTA) in year *t*. T_{fpt} is the tariff rate and differs according to the tariff scheme used for importing. *MFN* and *FTA* are the MFN rates and FTA rates, respectively. In our estimation we do not include imports under other schemes. $\mathbf{Z}_{ft}$ is the vector of time-variant import firm-characteristics, while $\mathbf{X}_{pt}$ is the vector of time-variant product-characteristics. Firm-product fixed effects and year fixed effects are also introduced.

In equation (1), coefficient β captures the tariff effects while coefficient α captures the other effects including RoO effects. Both coefficients are expected to be positively

estimated. This specification implies that we assume the same magnitude of tariff effects between the reduction of MFN rates and the tariff reduction through using FTA rates. As a time-variant import firm characteristic, we introduce the firms' total imports. As demonstrated in Kugler and Verhoogen (2012), the more productive firms procure inputs with higher quality. Thus, if firm productivity is positively related to total import values, the larger-sized importers in terms of import values may import the more expensive inputs and thus have higher import prices. The industry-level wage rates in China (i.e., export country) are included as the time-variant product characteristics.[10] The firm-product fixed effects control for time-invariant product-specific import firm characteristics, such as the import firms' product-specific inherent productivity. The year fixed effects are expected to control various kinds of export country characteristics (e.g., supply capacity) in addition to those of the import country characteristics (e.g., demand size or extent of competition).

We modify equation (1) so as to collect the whole effect of using FTA schemes into a single term rather than capture the tariff effects and RoO effects separately. For simplicity, we restrict sample products only to those in which MFN rates do not change during the sample period. In the case of Thailand, this treatment is not restrictive at all since only 0.4 percent of all products have experienced a change of MFN rate during the sample period. Therefore, this restriction does not yield sample selection bias. Although this restriction is not necessarily essential for our analysis, as demonstrated below, due to this restriction, the effects of the MFN rates are absorbed into product fixed effects. Also, it enables us to avoid a potential multi-colineariy issue.

With this restriction MFN_{pt} changes to MFN_p. Then, equation (2) can be modified as follows by employing Maclaurin's expansion. .

$$\ln\left(1+T_{fpt}\right) = \ln\left\{\left(1-S_{fpt}\right)\times\left(1+MFN_p\right)+S_{fpt}\times\left(1+FTA_{pt}\right)\right\}$$
$$\cong \ln\left(1+MFN_p\right)+\left(\frac{FTA_{pt}-MFN_p}{1+MFN_p}\right)\times S_{fpt}$$

Substituting this equation into (1), we obtain the following.

[10] We obtained the industry-level (four-digit level of SITC revision 3) data on wages in China from INDSTAT4 - Industrial Statistics Database, United Nations Industrial Development Organization. Then, employing concordance between SITC and HS, which is available in the website of World Integrated Trade Solution, we computed the wages at a HS six-digit level.

$$\ln P_{fpt} = \left\{\alpha + \beta\left(\frac{MFN_p - FTA_{pt}}{1 + MFN_p}\right)\right\} S_{fpt} + \mathbf{Z}_{ft}\boldsymbol{\gamma} + \mathbf{X}_{pt}\boldsymbol{\varphi} - \beta \ln\left(1 + MFN_p\right) + u_{fp} + u_t + \varepsilon_{fpt}$$

$$= \alpha S_{fpt} + \beta Ratio_{pt} \times S_{fpt} + \mathbf{Z}_{ft}\boldsymbol{\gamma} + \mathbf{X}_{pt}\boldsymbol{\varphi} + v_{fp} + u_t + \varepsilon_{fpt} \quad (3)$$

$$= \delta S_{fpt} + \mathbf{Z}_{ft}\boldsymbol{\gamma} + \mathbf{X}_{pt}\boldsymbol{\varphi} + v_{fp} + u_t + \varepsilon_{fpt} \quad (4)$$

where

$$Ratio_{pt} \equiv \frac{MFN_p - FTA_{pt}}{1 + MFN_p}, \delta \equiv \alpha + \beta Ratio_{pt}, \;\; v_{fp} \equiv -\beta \ln\left(1 + MFN_p\right) + u_{fp}.$$

We call *Ratio* the tariff margin ratio.[11] In equation (4), δ captures the average of the whole FTA effect including tariff effects and RoO effects. The separate effects can be obtained by estimating equation (3).

As mentioned in the introductory section, our specification controls the biases which were not controlled in the previous studies. The estimates in the product-level studies, such as Cadot *et al*. (2005), Ozden and Sharma (2006), and Olarreaga and Ozden (2005) include not only the price effect of FTAs but also the differences in exporter/importer characteristics between FTA users and non-users. Our inclusion of import firm (-product) dummy variables controls at least the time-invariant import firm characteristics such as inherent productivity. The inclusion of time-variant import firm variables further controls the importer characteristics. Moreover, if import firms do not change product-level trading partners extensively, our import firm-product dummy variables will be able to control the exporter characteristics to some extent.

Although the use of importer-side data is not perfect to control the role of exporter characteristics, that for exporter-side data in the FTA literature has the following problems. First, the data on FTA utilization in exports is difficult to obtain. FTA utilization data is usually obtained from the Customs records in the case of imports and from issuance of certificates of origin (CoOs) in the case of exports. In the case of FTAs adopting the self-certification system[12], there is no way of knowing the tariff scheme of the exports, since the information on CoOs is kept by the exporting company.

[11] With products in which MFN rates change during the sample period, we need to introduce ln (1 + MFN_{pt}) as an independent variable, which is likely to have high correlation with $Ratio_{pt}$.

[12] For example, these include NAFTA, the US-Australia FTA, the US-Singapore FTA, the Trans-Pacific Partnership, the Singapore-New Zealand FTA, the Thailand-New Zealand FTA, the Australia-New Zealand FTA, the Mexico-Chile FTA, the US-Korea FTA, and so on.

Second, as in the case of regular trade data, import data is believed to be more accurate than export data. In the case of FTA utilization data, export-side data based on the issuance of CoOs are likely to overestimate the true value because exporters do not necessarily export the products under FTA schemes, even if they have obtained CoOs. Finally, the differences in the tariff line-level HS codes in the exporting and importing countries make use of export-side data difficult to discern the use of FTAs, because FTA eligibility or preferential rates are defined at detailed tariff line-level HS codes, such as the 8-digit HS codes in Thailand, in importing countries.[13][14]

Another concern on our use of importer-side data is that import prices are not the same as export prices. Import prices (cif prices) include not only export prices (fob prices) but also freight and insurance costs. However, such costs do not seem to change much, depending on FTA utilization. We may be justified to assume that *at least* in the case of our analysis of the *changes* in prices, there are no qualitative differences between the use of import prices and export prices. Thus, our estimates can be interpreted as the effects of FTA use on export prices.

The remaining noteworthy points are the following. First, we drop the import transactions that exist for only one year since we need price changes over time. Second, we exclude the outliers, which are here defined as those with import prices below the 3rd percentile or above the 97th percentile of the entire sample. Third, as categorized into "Both" in Tables 2 and 3, there are firms that import products under both MFN and FTA schemes, probably due to importing from different firms (e.g., a productive firm and a less productive firm). Among observations for such firms, in the estimation sample, we keep those importing under FTA schemes but drop those importing under MFN schemes in order to control exporter characteristics by our import firm (-product) fixed effects as precisely as possible.[15] Fourth, as in the previous tables, we restrict

[13] As is well known, the internationally common digits of HS is six-digits.

[14] For more details on the non-use of preferential exports after obtaining CoOs or the differences between export-side data and import-side data in the context of FTA utilization, see Hayakawa *et al.* (2013a).

[15] Imagine that firm A imported a product from firms B and C under MFN schemes in 2007 and again imported that product from firm B undexr MFN schemes and from firm C under FTA schemes in 2008, although our dataset does not enable us to explicitly identify whether firms B and C are different or not. In this example, we drop the observation of importing under MFN schemes in 2008, i.e., that of importing from firm B in 2008. Otherwise, our import firm (-product) dummy variable turns out to take the value of one for two observations (i.e. two tariff schemes) in 2008. To focus on the price impacts of changing from MFN schemes to FTA schemes, we drop

sample products only to those eligible to ACFTA in 2011 (i.e. those with lower FTA rates than MFN rates in 2011). In the next section, we also estimate our model for ineligible products, i.e., products in which the FTA rates are the same as MFN rates.

4. Empirical Results

This section reports our estimation results. We first present our baseline results and show the whole effect of FTA use on import prices. Next, after showing the robustness of such results, we differentiate tariff effects from other effects including RoO effects. Also, we try to further decompose the other effects of FTA utilization. Lastly, we examine the lag effect of FTA utilization. The basic statistics are provided in Table 4.

Table 4: Basic Statistics

	Obs	Mean	Std. Dev.	Min	Max
MFN > FTA					
ln Price	376,725	4.6388	2.4603	-0.2412	11.5924
FTA	376,725	0.2583	0.4377	0	1
FTA * Ratio	376,725	0.0290	0.0609	0	0.4444
FTA * Elasticity	370,977	0.8941	2.1556	0	103.0347
FTA * Ratio * Elasticity	370,977	0.0958	0.2735	0	23.7772
FTA * ln Total Imports	376,725	4.5076	7.6888	0	26.0204
FTA * User Share	376,725	0.1096	0.2121	0	1
ln Total Imports	376,725	17.4449	2.2324	5.958425	26.41185
ln Wages	376,725	8.1803	0.3428	7.2399	9.6141
MFN = FTA					
ln Price	121,226	5.1760	2.5971	-0.2405	11.5929
FTA	121,226	0.0456	0.2085	0	1
FTA * ln Total Imports	121,226	0.8041	3.7000	0	24.8878
FTA * User Share	121,226	0.0116	0.0682	0	1
ln Total Imports	121,226	17.9173	2.5335	4.094345	26.08444
ln Wages	121,226	8.3015	0.3429	7.3046	9.5305

Source: Authors' computation

observations of importing under MFN schemes in the case of firms who import under both MFN and FTA schemes. As a result, in terms of both the import values and the number of observations, 5% of all are dropped.

4.1. Baseline Estimation

Before estimating the equation (4), we examine the existence or magnitude of bias in the price effects of FTA use when not controlling the firms' characteristics. To do that, we simply regress the FTA dummy variable on a log of import prices by including HS dummy variables (i.e., ν_p), but not import firm-HS dummy variables (i.e., ν_{fp}), in addition to year dummy variables.[16] This estimation is aimed to show how the coefficient for FTA changes if we control import firm fixed effects. The estimation result is reported in column (I) in Table 5.[17] The coefficient for wage rates is significantly positive, indicating that, naturally higher wages lead to higher prices. Contrary to our expectation, on the other hand, the coefficient for FTA is estimated to be significantly negative, indicating that import prices are lower in international transactions under FTA schemes. The estimation result of this equation by including import firm-HS dummy variables is provided in column (II) and shows the significantly positive coefficient for FTA dummy variables.

Table 5: Baseline Results

	(I)	(II)	(III)
FTA	-0.731***	0.033***	0.032***
	[0.008]	[0.007]	[0.007]
ln Total Imports			0.008**
			[0.004]
ln Wages	0.299***	0.062*	0.062*
	[0.053]	[0.032]	[0.032]
HS Dummy	YES	NO	NO
Year Dummy	YES	YES	YES
Import Firm-HS Dummy	NO	YES	YES
Number of obs.	376,725	376,725	376,725
Adj. R-squared	0.4156	0.8508	0.8508

Notes: The dependent variable is a log of import prices. ***, **, and * indicate 1%, 5%, and 10% significance, respectively. In the parenthesis is the robust standard error.

[16] The coefficient for the FTA dummy in column (I) is different from the figure in Table 3 since it shows the price effects of FTA utilization by controlling the differences in product characteristics.
[17] The significance of coefficients is not changed even if the standard errors are clustered by HS four-digit code-year, import firm, or HS eight-digit code.

This contrasting result between columns (I) and (II) implies that at least in the context of ACFTA utilization, the price effects of FTA use are underestimated when not controlling import firm-product fixed effects. It seems to be more natural to suppose that import firm-product fixed effects capture well the role of exporter characteristics in FTA utilization. Namely, as demonstrated in Demidova and Krishna (2008), productive exporters are likely to use FTA schemes for exporting and have lower export prices. Therefore, if import firm-product fixed effects are not controlled, the coefficient for FTA dummy includes not only the price effects of FTA use but also the effect of lower export prices by the productive exporters. Our negative result in column (I) implies that the latter effect is much larger than the former effect. The former effect is shown in the coefficient in column (II) and indicates that the start of FTA use raises import prices by around 3 percent (= exp(0.033) – 1). Furthermore, since the average tariff margin in our sample is around 10 percent, this result implies that, on average, import prices rise by around 30 percent of the tariff margin after the use of FTA schemes.

The estimation result of equation (4) is reported in column (III). In this estimation, due to data limitation, we control one time-variant import firm's characteristic, i.e., total imports. The coefficient for the FTA dummy variable is again estimated to be significantly positive but does not change much, compared with that in column (II). Therefore, controlling the time-invariant import firm's characteristics does not significantly affect the estimates on the price effects of FTA use. On the other hand, as is consistent with our expectation, the coefficient for Total Imports is estimated to be significantly positive, indicating that larger-sized importers in terms of import values have the higher import prices.

4.2. Tariff Effects

Next, we estimate equation (3), which differentiates tariff effects with the other effects of FTA utilization. The estimation results for (3) without and with Total Imports are presented in columns (I) and (II) in Table 6, respectively. The coefficients for the FTA dummy, which capture the price effects other than tariff effects, are significantly estimated with a positive sign. These results indicate that the price effects other than tariff effects are around 4-5 percent, which is larger than the magnitude found in Table

5. The results for the interaction term of the FTA dummy with the tariff margin ratio, which captures tariff effects, show negatively insignificant coefficients. The coefficients for Wages and Total Imports are again estimated to be significantly positive.

Table 6: Tariff Effects

	(I)	(II)	(III)	(IV)
FTA	0.045***	0.044***	0.034***	0.037**
	[0.010]	[0.010]	[0.013]	[0.017]
FTA * Ratio	-0.132	-0.135	-0.133	-0.163
	[0.082]	[0.082]	[0.083]	[0.127]
FTA * Elasticity			0.003	0.002
			[0.002]	[0.004]
FTA * Ratio * Elasticity				0.009
				[0.029]
ln Total Imports		0.008**	0.009**	0.009**
		[0.004]	[0.004]	[0.004]
ln Wages	0.059*	0.058*	0.061*	0.061*
	[0.032]	[0.032]	[0.033]	[0.033]
Number of obs.	376,725	376,725	370,977	370,977
Adj. R-squared	0.8508	0.8508	0.8506	0.8506

Notes: The dependent variable is a log of import prices. ***, **, and * indicate 1%, 5%, and 10% significance, respectively. In the parenthesis is the robust standard error. All specifications include import firm-HS dummy variables in addition to year dummy variables.

As mentioned in the introductory section, from the theoretical point of view, the tariff effects change according to the shape of demand curves. Therefore, we estimate this equation by controlling the demand elasticity (Elasticity) in Thailand, for which estimates are drawn from Broda and Weinstein (2006) and are available at the HS three-digit level. Specifically, we introduce the interaction term of FTA dummy with Elasticity in addition to the triple-interaction term among FTA dummy, Ratio, and Elasticity. The results are reported in columns (III) and (IV). Since the estimates of elasticity are not available in some products, the number of observations decreases a bit. These new variables have insignificant coefficients. The interaction term of FTA dummy with Ratio is also estimated to be negative and insignificant.

One possible explanation for this negative and insignificant coefficient for the interaction term with Ratio is that this variable captures not only the tariff effects but

also the role of export firm characteristics in the other price effects of FTAs, probably the RoO effect.[18] As demonstrated in Demidova and Krishna (2008), the more productive export firms choose to use FTA schemes when exporting even products with a smaller tariff margin. Thus, in our framework, the share of productive exporters may be higher in the category of the smaller ratio. Since such productive export firms have stronger bargaining power, they may be able to achieve a larger rise in export prices in the negotiation with the import firms. As a result, the insignificant coefficient may indicate that the positive effect through tariff effects is countervailed by the negative effect through RoO effects based on export firm characteristics.

4.3. RoO Effects

In this subsection, we decompose the other effects of FTA utilization on import prices. In particular, since RoO effects are based on the bargaining power between the importer and exporter, their competitiveness, or the extent of market competition will affect the magnitude of such effects. Therefore, we first examine the role of import firm's size for RoO effects, since larger-sized importers are expected to have stronger bargaining power in price negotiation. To do that, we introduce the interaction with import firms' total imports (of all products globally). The results are reported in column (I) in Table 7 and show that, as is consistent with the above expectation, the coefficient for the interaction term with total imports is estimated to be significantly negative. Namely, the other effects of FTA utilization on import prices are smaller when importer sizes are larger. This result is unchanged even if simultaneously including the interaction term with Ratio, i.e., column (III). The significantly negative coefficient for the interaction term with Ratio may indicate that the RoO effects through export firm characteristics are larger than the tariff effects.

[18] Notice that the inclusion of the role of export firm characteristics in our estimates is different from the bias included in those in the previous studies or the afore-mentioned difference between columns (I) and (II). As mentioned in the introductory section, the bias in the previous studies is the difference in the level of export prices between FTA users and non-users. As we discussed in the previous section, we believe that such a difference is eliminated in our transaction-level difference-in-differences method. On the other hand, our estimates here indicate the difference in the price effects of FTAs across exporters.

Table 7: RoO Effects

	(I)	(II)	(III)	(IV)	(V)	(VI)
FTA	0.367***	0.074***	0.383***	0.073***	0.057**	0.056**
	[0.060]	[0.012]	[0.061]	[0.013]	[0.024]	[0.024]
FTA * Ratio			-0.146*	0.032		
			[0.082]	[0.088]		
FTA * ln Total Imports	-0.019***		-0.019***			
	[0.003]		[0.003]			
FTA * User Share		-0.114***		-0.118***		
		[0.025]		[0.027]		
ln Total Imports	0.013***	0.008**	0.013***	0.008**		0.011
	[0.004]	[0.004]	[0.004]	[0.004]		[0.007]
ln Wages	0.069**	0.070**	0.065**	0.071**	-0.043	-0.043
	[0.032]	[0.032]	[0.032]	[0.032]	[0.056]	[0.056]
Number of obs.	376,725	376,725	376,725	376,725	121,226	121,226
Adj. R-squared	0.8508	0.8508	0.8508	0.8508	0.8718	0.8718

Notes: The dependent variable is a log of import prices. ***, **, and * indicate 1%, 5%, and 10% significance, respectively. In the parenthesis is the robust standard error. All specifications include import firm-HS dummy variables in addition to year dummy variables. The sample in columns (V) and (VI) is restricted to imports of products in which FTA rates are equal to MFN rates.

Second, we take the existence of competitors into account. For example, if there are a larger number of ACFTA users, the advantages of utilizing FTA schemes by each import firm will be smaller. Therefore, importers may not allow exporters to raise export prices by large percentages. To control this effect, we introduce the interaction term of the share of ACFTA users in all importers at each tariff-line product (User Share). The results are reported in column (III). As is consistent with the above expectation, the coefficient for such an interaction term is significantly negative. Namely, the rise of import prices through ACFTA utilization becomes smaller when there are a larger number of ACFTA users.[19] The inclusion of the interaction term with Ratio does not change this result, i.e., column (IV).

Next, we try to identify the existence of RoO effects by another approach. So far,

[19] In addition, we tried to introduce some more interaction terms of FTA dummy. For example, we found an insignificant coefficient for the interaction term with the Herfindahl–Hirschman index. Due to data limitation we constructed this index by employing only the import data used in this paper. This index captures the extent of buyer concentration. Also, we introduced the interaction term with the difference between ACFTA rates and the lowest preference rate in Thailand in order to examine the role of other FTA preference schemes. If other FTA schemes in Thailand present a lower preference rate than ACFTA, the rise of export prices due to ACFTA utilization will be smaller. However, we obtained the opposite relationship. These results are available upon request. Lastly, we also tried to estimate these effects by FTA utilization according to RoOs. However, this analysis is impossible in the context of ACFTA because around 90% of products have the same rule, i.e., the regional value content rule.

we have excluded products ineligible for ACFTA, i.e., products with the FTA rates the same as the MFN rates. This exclusion is because importers do not enjoy saving the tariff payment in importing such products. However, as mentioned before, they still have an incentive to request exporters to use FTA schemes in order to enjoy diagonal cumulation. In the process of requesting exporters to use FTA schemes, the RoO effects (i.e., increase in export prices which may result from the cost for obtaining CoOs by the exporters) will still work even for products with the FTA rates the same as the MFN rates. In other words, restricting sample products only to such ineligible products, we are able to focus on the effects of FTA utilization other than tariff effects, and including the RoO effects.

The estimation results for the ineligible products are provided in column (V). The coefficient for FTA dummy is estimated to be significantly positive, indicating around a 6 percent rise of import prices. Importantly, this significant coefficient is obtained for FTA utilization in ineligible products and thus proves the existence of the FTA effects other than tariff effects. Furthermore, this magnitude is larger than that in Table 5, although it is difficult to compare between these two cases because export firm distribution is different. For example, the larger magnitude may indicate that on average FTA users in China are more productive in ineligible products than in eligible products.[20] On the other hand, the coefficient for wages is insignificant. These results are unchanged when including total imports, i.e., column (VI), though its coefficient is insignificant.[21]

4.4. Lag Effect

Lastly, we examine the lag effect of FTA utilization on import prices by simply introducing a one-year lag FTA dummy variable in addition to its interaction term with a one-year lag Ratio variable. The results are reported in Table 8. There are two noteworthy points. One is that some estimations show a significantly negative coefficient for the one-year lag FTA dummy. Furthermore, the coefficients for the

[20] This might be the reason why Thailand does not liberalize these products to China.

[21] Under the sample of ineligible products, we also include the interaction term of FTA dummy with total imports (ln Total Imports) or the share of ACFTA users (User Share), as in Table 7. The results show that not only those interaction terms but also FTA dummy variables have insignificant coefficients. These insignificant results might be due to multi-colinearity. For example, the correlation between FTA dummy and its interaction term with total imports is 0.99.

current year FTA dummy are still positive and significant. Importantly, the absolute magnitude of coefficients is larger in the current year FTA dummy variable. Therefore, these results indicate that import prices rise when starting FTA utilization, but decrease one year later. Nevertheless, these prices remain higher compared with the level before FTA utilization. This change may indicate that importers allow exporters to raise export prices only when starting FTA utilization but try to gradually lower export prices after that.

Table 8: Lag Effect

	(I)	(II)	(III)	(IV)	(V)	(VI)
FTA (t)	0.071***	0.062***	0.060***		0.073***	0.067***
	[0.012]	[0.017]	[0.016]		[0.012]	[0.017]
FTA ($t-1$)	-0.011		-0.013	-0.018	-0.030**	-0.029*
	[0.011]		[0.011]	[0.014]	[0.015]	[0.015]
FTA (t) * Ratio (t)		0.101	0.136	0.511***		0.07
		[0.150]	[0.141]	[0.108]		[0.151]
FTA ($t-1$) * Ratio ($t-1$)		0.016		0.025	0.220*	0.199
		[0.096]		[0.122]	[0.121]	[0.130]
ln Total Imports	0.022***	0.022***	0.022***	0.023***	0.022***	0.022***
	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]
ln Wages	0.076	0.079*	0.080*	0.097**	0.076	0.078
	[0.048]	[0.048]	[0.048]	[0.048]	[0.048]	[0.048]
Number of obs.	215,583	215,583	215,583	215,583	215,583	215,583
Adj. R-squared	0.8889	0.8889	0.8889	0.8888	0.8889	0.8889

Notes: The dependent variable is a log of import prices. ***, **, and * indicate 1%, 5%, and 10% significance, respectively. In the parenthesis is the robust standard error. All specifications include import firm-HS dummy variables in addition to year dummy variables.

The other point is that all interaction terms with Ratio turn out to have positive coefficients, some of which are statistically significant. This sign is consistent with our expectation and indicates that the rise of import prices through FTA utilization is larger when the tariff margin is greater. Nevertheless, it should be noted that this change might be because of multi-colinearity among FTA-related variables. Indeed, this model still does not succeed in controlling export firm characteristics, which seems crucial to examine the tariff effects of FTA utilization.

5. Concluding Remarks

In this paper, we examined the firm-level impact of FTA use on import prices. To do that, we employed firm-level import data that enables us to differentiate tariff schemes between FTA schemes and general tariff schemes. Unlike the previous studies in this literature, we estimated the effects of FTA use on prices by controlling the differences in import firms' characteristics. Our main findings are as follows. First, the price effect of FTA use is underestimated when not controlling the import firm-product fixed effects. Second, on average, the use of FTA schemes raises export prices by 3% in total, although it will lower consumer prices (i.e., tariff-inclusive import prices). Third, due to the existence of costs for RoO compliance, the use of FTA schemes raises import prices even if the FTA rates are the same as the MFN rates. Fourth, importers seem to allow exporters to raise export prices only when starting FTA utilization but try to gradually lower export prices after that. Fifth, due to stronger bargaining power, the larger-sized import firms in terms of total import values reduce the rise of import prices through the exporter's use of FTA schemes.

These results have important policy implications. In particular, we show how more beneficial the use of FTA schemes is for exporters rather than importers. It is easy for policy makers to encourage importers to use FTA schemes because importers enjoy "visible" benefits of saving tariff payments from the use of FTA schemes. On the other hand, in spite of much necessary documentation work, the benefits for the exporters are unclear. Our results indicate that when exporters do such work and use FTA schemes for exporting, the importers are likely to allow the exporters to raise the export prices. It is useful for policy makers to encourage exporters to use FTA schemes by introducing or disseminating the existence of these benefits for exporters.

Lastly, we point out one limitation of our study. In this paper, we tried to identify the tariff effects and RoO effects of FTA utilization separately. We at least proved the existence of the latter effects, but did not necessarily succeed in identifying the tariff effects. One possible reason is that our dataset cannot control the export firms' characteristics. As mentioned before, it is difficult to identify FTA utilization with export-side data. Thus, ideally, we need import data matching the exporter-side data, as in Blum *et al*. (2010). Using such data, we would be able to obtain more unbiased estimates on the price effects of FTA utilization.

References

Amiti, M., O. Itskhoki and J. Konings (2014), 'Importers, Exporters, and Exchange Rate Disconnect', Forthcoming in *American Economics Review*.

Baldwin, R. and J. Harrigan (2011), 'Zeros, Quality and Space: Trade Theory and Trade Evidence', *American Economic Journal Microeconomics*, 3, pp.60–88.

Berman, N., P. Martin and T. Mayer (2012), 'How do Different Exporters React to Exchange Rate Changes?', *Quarterly Journal of Economics*, 127(1), pp.437-492.

Blum, B.S., S. Claro and I. Horstmann (2010), 'Facts and Figures on Intermediated Trade', *American Economic Review*, 100(2), pp.419-423.

Broda, J.G. and D. Weinstein (2006), 'From Groundnuts to Globalization: A Structural Estimate of Trade and Growth', NBER Working Paper No. 12512.

Cadot, O., C. Carrere, J. de Melo, A. Portugal-Perez (2005), 'Market Access and Welfare under Free Trade Agreements: Textiles under NAFTA', *World Bank Economic Review*, 19(3), pp.379-405.

Cadot, O., C. Carrere, J. De Melo and B. Tumurchudur (2006), 'Product-specific Rules of Origin in EU and US Preferential Trading Arrangements: An Assessment', *World Trade Review*, 5(2), pp.199-224.

Chang, W. and L. Winters (2002), 'How Regional Blocs Affect Excluded Countries: The Price Effects of MERCOSUR', *American Economic Review*, 92(4), pp.889-904.

Cherkashin, I., S. Demidova, H. Kee, and K. Krishna (2015), 'Firm Heterogeneity and Costly Trade: A New Estimation Strategy and Policy Experiments', Forthcoming in *Journal of International Economics*.

Cirera, X. (2014), 'Who Captures the Price Rent? The Impact of European Union Trade Preferences on Export Prices', *Review of World Economics*, 150(3), pp.507-527.

Demidova, S. and K. Krishna (2008), 'Firm Heterogeneity and Firm Behavior with Conditional Policies', *Economics Letters*, 98(2), pp.122-128.

Eaton, J., S. Kortum and F. Kramarz (2011), 'An Anatomy of International Trade: Evidence From French Firms', *Econometrica*, 79(5), pp.1453-1498.

Feenstra, R. (1989), 'Symmetric Pass-through of Tariffs and Exchange Rates under Imperfect Competition: An Empirical Test', *Journal of International Economics*, 27(1-2), pp.25-45.

Gorg, H., L. Halpern and B. Muraközy (2010), 'Why Do within Firm-product Export Prices Differ across Markets?', Kiel Working Paper No. 1596.

Hayakawa, K., (2014), Does Firm Size Matter in Exporting and Using FTA Schemes?, Forthcoming in *Journal of International Trade and Economic Development*.

Hayakawa, K., H.S. Kim, N. Laksanapanyakul, and K. Shiino (2013a), FTA Utilization: Certificate of Origin Data versus Customs Data, IDE Discussion Papers 428.

Hayakawa, K., N. Laksanapanyakul and K. Shiino (2013b), 'Some Practical Guidance for the Computation of Free Trade Agreement Utilization Rates', IDE Discussion Papers 438.

Johnson, R., (2012), 'Trade and Prices with Heterogeneous Firms', *Journal of International Economics*, 86(1), 43–56.

Kugler, M. and E. Verhoogen, (2012), 'Prices, Plant Size, and Product Quality', *Review of Economic Studies*, 79, 307–339.

Melitz, M., (2003), 'The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity', *Econometrica*, 71(6), pp.1695-1725.

Olarreaga, M. and C. Ozden (2005), 'AGOA and Apparel: Who Captures the Tariff Rent in the Presence of Preferential Market Access?', *The World Economy*, 28(1): 63-77.

Ozden, C. and G. Sharma (2006), 'Price Effects of Preferential Market Access: Caribbean Basin Initiative and the Apparel Sector', *World Bank Economic Review*, 20(2): 241-259.

Takahashi, K. and S. Urata (2010), 'On the Use of FTAs by Japanese Firms: Further Evidence', *Business and Politics*, 12(1), Pages 2.

Winters, L. and W. Chang (2000), 'Regional Integration and Import Prices: An Empirical Investigation', *Journal of International Economics*, 51(2), pp.363-377.

ERIA Discussion Paper Series

No.	Author(s)	Title	Year
2015-33	Kazubobu HAYAKAWA, Nuttawut LAKSANAPNYAKUL, 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
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

No.	Author(s)	Title	Year
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 INTARAKUMNERD 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 Dinh 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 INTERAKUMNERD 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,	Fiscal Policy and Equity in Advanced Economies: Lessons for Asia	Jan 2015

No.	Author(s)	Title	Year
	and Karin SVANBORG-SJÖVALL		
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
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	ASEAN-India Gas Cooperation: Redifining India's "Look East" Policy with Myanmar	Nov 2014

No.	Author(s)	Title	Year
	BHATTACHARYA		
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
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

No.	Author(s)	Title	Year
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
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

No.	Author(s)	Title	Year
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 MACHIKITA and Yasushi UEKI	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 NARJOKO, 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 SHISHIDO, Shintaro SUGIYAMA,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

No.	Author(s)	Title	Year
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
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 TANOMPONGPHANDH	Index-Based Risk Financing and Development of Natural Disaster Insurance Programs in Developing Asian Countries	Aug 2013

No.	Author(s)	Title	Year
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
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

No.	Author(s)	Title	Year
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
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

No.	Author(s)	Title	Year
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 Toshiyuki MATSUURA	Location Choice of Multinational Enterprises in China: Comparison between Japan and Taiwan	Mar 2011
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

No.	Author(s)	Title	Year
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

No.	Author(s)	Title	Year
2009-22	Kazunobu HAYAKAWA, Daisuke HIRATSUKA, Kohei SHIINO, and Seiya SUKEGAWA	Who Uses Free Trade Agreements?	Nov 2009
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:	Mar 2009

No.	Author(s)	Title	Year
		The Case of Japanese Manufacturing Firms	
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
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

No.	Author(s)	Title	Year
2008-01	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Dec 2008