

Wignaraja, Ganeshan

Working Paper

Regional trade agreements and enterprises in Southeast Asia

ADB Working Paper, No. 442

Provided in Cooperation with:

Asian Development Bank Institute (ADBI), Tokyo

Suggested Citation: Wignaraja, Ganeshan (2013) : Regional trade agreements and enterprises in Southeast Asia, ADB Working Paper, No. 442, Asian Development Bank Institute (ADBI), Tokyo

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ADB Working Paper Series

**Regional Trade Agreements and
Enterprises in Southeast Asia**

Ganeshan Wignaraja

No. 442
October 2013

Asian Development Bank Institute

Ganeshan Wignaraja is director of research, Asian Development Bank Institute.

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Suggested citation:

Wignaraja, G. 2013. Regional Trade Agreements and Enterprises in Southeast Asia. ADBI Working Paper 442. Tokyo: Asian Development Bank Institute. Available: <http://www.adbi.org/working-paper/2013/10/28/5920.regional.trade.agreements.enterprises/>

Please contact the authors for information about this paper.

Email: gwnaraja@adbi.org

Acknowledgements: Thanks are due to Matthias Helble, Yothin Jinjarak, and Victor Pontines for comments and to Menaka Arudchelvan for efficient research assistance. The views expressed in this paper are solely those of the author and do not necessarily reflect the views or policies of the Asian Development Bank (ADB), its Institute (ADBI), its Board of Directors, or the governments they represent.

Asian Development Bank Institute
Kasumigaseki Building 8F
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

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Abstract

The spread of regional trade agreements (RTAs) in Southeast Asia has ignited a debate about their impact on business, and ways to avoid raising the business costs from the Asian ‘noodle bowl’ effect. This paper undertakes a comparative and firm-level analysis of the impact of RTAs in Indonesia, Malaysia, and the Philippines including: a descriptive analysis of patterns of RTA use at the firm level and econometric analysis of factors affecting firm-level RTA use. The paper finds that firm-heterogeneity matters in RTA use. Acquiring knowledge about RTAs through in-house efforts and actively forging links with RTA support institutions, building technological capabilities, and membership of industrial clusters show up as significant factors affecting the likelihood of firm-level RTA use. A lack of information about RTAs and the absence of RTAs with major trading partners are the main reasons for non-use of RTAs. Key policy implications include the need to improve business support for RTAs, to conclude RTAs with major trading partners, and to create a database on preference use in RTAs.

JEL Classification: F13, F14, F15, O31, O32

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1. INTRODUCTION

Heralding a shift in trade policy since the millennium, Southeast Asian economies have actively pursued various regional trade agreements (RTAs). The number of bilateral and plurilateral RTAs in effect in Southeast Asia increased from 3 to 35 between 2000 and June 2013 (WTO 2011; ADB 2013). One of Southeast Asia's oldest RTAs, the 1992 ASEAN Free Trade Area (AFTA), is the central building block for the ASEAN Economic Community (AEC). To facilitate Asia-wide regional integration, five ASEAN+1 RTAs are also in effect with large neighboring economies including the People's Republic of China (PRC), Japan, Republic of Korea, India, and Australia/New Zealand. Furthermore, some Southeast Asian economies are participating in various bilateral RTAs, and in negotiations for the two mega-regional agreements: the Regional Comprehensive Economic Partnership (RCEP) and the Transpacific Partnership (TPP).

The spread of RTAs in Southeast Asia over the past decade has ignited a debate about their impact on business and ways to avoid increasing business costs from the Asian 'noodle bowl' effect. This paper undertakes a comparative and firm-level analysis of the impact of RTAs in three Southeast Asian economies (Indonesia, Malaysia, and the Philippines). It seeks to improve our understanding of micro-level impacts of RTAs and to contribute to the scant literature on firm-level effects of RTAs. The paper analyses firm-level data in the three Southeast Asian economies on the use of tariff preferences in RTAs, benefits and costs of RTAs, and reasons for non-use. It also attempts to identify factors affecting firm-level RTA use through econometric analysis.

The paper breaks down as follows: section 2 reviews the literature on RTAs; section 3 discusses the enterprise dataset on Asian economies; section 4 presents the descriptive analysis of patterns of RTA use and reasons for non-use; section 5 contains the econometric analysis of RTA use; and section 6 concludes with some policy implications.

2. STUDIES ON REGIONAL TRADE AGREEMENTS

Since Viner (1950) coined the terms 'trade diversion' and 'trade creation', economists and policymakers have been ambivalent about the welfare implications of customs unions and RTAs. The worldwide growth of RTAs over recent decades has intensified the international debate on the net benefits of agreements versus their harmful effects on economies and firms (WTO 2011). Ambivalence about RTAs is also reflected in Asia including Southeast Asia (for overviews of the RTA debate in Asia see Dent 2006; Das 2012). Early academic interest focused on assessing the economic consequences for Southeast Asian economies of establishing AFTA (see the papers in Imada and Naya 1992 ed.) and the creation of an ASEAN-China RTA (see Chirativat 2002; Tongzon 2005).

The Regional Trade Agreement Debate in Relation to Southeast Asian Economies

The recent spread of RTAs has sparked two main lines of academic focus on Southeast Asian economies. One body of model-based studies uses sophisticated computable general equilibrium (CGE) models to simulate the welfare effects of RTAs, particularly ASEAN+1 RTAs, on Southeast Asian economies. The value of CGE studies lies in their ability to indicate potential gains from the elimination of import tariffs

on trade in goods, and in liberalizing cross-border trade in services. Moreover, they can highlight unintended consequences for encompassed countries and sectors, thereby enabling corrective policies to be developed. While there exists some variation in the underlying economic structure, behavior of agents, and RTA scenarios, CGE studies typically suggest that full implementation of the various ASEAN+1 RTAs brings gains to members and limited losses to non-members.¹ These studies conclude that the magnitude of gains for ASEAN differs between agreements. Large projected gains for ASEAN arise from RTAs encompassing large Northeast Asian economies like the PRC and Japan. But even larger gains for ASEAN could arise from large region-wide RTAs such as an East Asia Free Trade Agreement, a Regional Comprehensive Economic Partnership, or a Trans-Pacific Partnership.

One of the problems with CGE simulations of RTAs in Southeast Asian economies is that not all Southeast Asian economies (such as transitional economies like those of Cambodia, Lao PDR, and Myanmar) are properly represented due to the lack of databases for these countries (Tongzon 2005). Another problem is that CGE simulations are unable to incorporate rules of origin and non-tariff measures, which may afford more protection for domestic industries than tariffs (Kawai and Wignaraja 2009).

Another strand of enquiry questions whether potential gains from CGE simulations of RTAs can be translated into actual gains for the Southeast Asian economies and firms encompassed therein.² Informed by Bhagwati's (1995 and 2008) famous insight into the 'spaghetti bowl'³ – known as the 'noodle bowl' in Asia – research in this domain focuses on utilization of tariff preferences, rules of origin (ROOs), and the discriminatory effects of RTAs in Southeast Asia. The key conclusion from this research is that the AFTA common effective preferential tariff (CEPT) utilization rates (based on the shares of export values enjoying preferences) are extremely low, and that AFTA is not particularly effective (see McKinsey and Company 2003; Baldwin 2006; and Avila and Manzano 2007).⁴ Low margins of preference and cumbersome bureaucracy related to satisfying the 40% regional value content rule are cited as the main problems of AFTA (Manchin and Pelkmans-Balaoing 2007; World Bank 2007). This evidence has led to suggestions that AFTA and other ASEAN FTAs are discriminatory, and a drain on the scarce trade negotiation capacity of ASEAN members. In general, however, this research is based on data from the 1990s and early 2000s, which does not capture the impact of the recent spurt of RTAs involving Southeast Asian economies.

¹ For a recent selection of CGE studies, see Francois and Wignaraja (2008); Kawai and Wignaraja (2009); Kitwiwattanachai *et al.* (2010); Petri, Plummer, and Zhai (2011); and Estrada *et al.* (2012).

² Athukorala and Kohpaiboon (2011), for instance, examine the impact of the Australia-Thailand RTA on bilateral trade between the two countries looking particularly at the implications of ROOs and the use of tariff preferences. They argue that the use of officially announced preference rates in trade flow modeling is likely to exaggerate the trade flow effects of RTAs.

³ Bhagwati (1995 and 2008) argued that discriminatory trade liberalization occurs under multiple, overlapping RTAs and that this is a serious problem because the same commodity can be subject to different tariffs, tariff reduction trajectories, and ROOs for obtaining preferences. With a growing number of RTAs, the international trading system is likely to become chaotic. Bhagwati also suggested that coping with multiple tariffs and ROOs in RTAs could raise transaction costs for enterprises, particularly small and medium enterprises (SMEs).

⁴ McKinsey and Company (2003) reported that less than 5% of intra-ASEAN trade in 2000 made use of AFTA preferences. Baldwin (2006) provides evidence suggesting that overall AFTA utilization rates were under 3% in the late 1990s, but had risen somewhat, to 4%, in Malaysia and to 11% in Thailand by 2002. Similarly, Avila and Manzano (2007) report an overall AFTA utilization rate of 15% in the Philippines for the early 2000s.

One of the major challenges to researching the impact of RTAs in Southeast Asia is the lack of published information on trade flows enjoying preferences. Transaction records on exports and imports for preferential tariff purposes are filed with authorities of origin, like national customs authorities or trade ministries, but not published. Thailand is one exception to this norm, publishing annual information on RTA preference use, albeit in the Thai language. Using Thai data, Chirathivat (2008) has shown that the overall actual utilization rate for Thailand's RTA partners has been rising, nearly doubling (16% to 27%) from 2005–2008.⁵ The 2008 utilization rates of Thailand's partners vary by market, with 72% for the Thailand–Australia RTA and 28% for AFTA. Using data from Thai secondary sources, Kawai and Wignaraja (2013) have shown that the overall actual utilization rate for Thailand's RTA partners rose further, to around 61%, in 2011 while the RTA utilization rate for the Thailand–Australia RTA increased to 91% and AFTA to 52%.

Micro-level Studies of Regional Trade Agreements

In the absence of published data on preference utilization, micro-level information obtained from interviews with firms as well as large-scale enterprise surveys can be useful. In an early study, Kumar (1992) interviewed 15 trading companies and manufacturers in Kuala Lumpur, Singapore, and Jakarta to identify possible impediments to successful implementation of AFTA in the future. Kumar reported that the main bottlenecks were likely to be non-tariff barriers (standards, testing procedures, and customs procedures), a lack of information about the CEPT scheme, domestic investment regulations, and subsidy schemes. In spite of obvious gaps in the methodology (such as small sample size of firms from several countries), this early study provides evidence to support reasons for not using AFTA that are discussed in section 4 using more recent enterprise survey data.

To explore micro-level evidence of the Asian 'noodle bowl', the Asian Development Bank (ADB) and the Asian Development Bank Institute (ADBI) conducted comprehensive enterprise surveys on the business impact of RTAs in several Asian countries (Kawai and Wignaraja 2011). The economies of Japan, the Peoples Republic of China (PRC), Republic of Korea, and three Southeast Asian countries (Singapore, Thailand, and the Philippines) were included in the first round of surveys. Of 841 Asian firms surveyed from among the six economies, 28% said they used RTA preferences. Interestingly, the average RTA use among the three Southeast Asian economies was reported to be somewhat lower than for manufacturing giants like Japan and the PRC. Furthermore, only 20% of the sampled firms said that multiple ROOs significantly added to business costs. Weighing up the firm-level evidence, the study concluded that concerns about the Asian FTA 'noodle bowl' effect on business might have been overstated at the time of the surveys. Nonetheless, the study noted the risk of an Asian 'noodle bowl' problem in the future with the growing number of RTAs in the region.

Some studies have explored the factors affecting RTA use at the firm level using econometric analysis. Using a sample of Japanese firms, Takahashi and Urata (2008) examined the influence of several enterprise characteristics (e.g. firm size, trading relations with RTA partners, the ratio of overseas sales to total sales, overseas business bases, and manufacturing membership) on RTA use. Firm size and trading

⁵ The Thai case of RTA use seems different to the widely cited Australian experience. An influential study by Pomfret, Kaufmann, and Findlay (2010) shows a notable fall in the share of Australian imports claiming preferential treatment over time, and this is attributed to the increasing number of zero-rated most favored nation (MFN) tariff lines. Meanwhile, Chirathivat (2008), and Kawai and Wignaraja (2013) show a rise in RTA use in Thailand over time, which may be linked to formerly excluded items being brought within AFTA and relatively high MFN tariffs within Asia.

relations with RTA partners were found to be positive and significant parameters. Takahashi and Urata (2008) concluded that large firms were more likely to use RTAs, reflecting the costs of such practices, and that trading experience in RTA markets also influenced the likelihood of RTA use.

In their study of Japanese multinational firms (MNCs), Hiratsuka *et al.* (2009) tested the relationship between firm size and RTA use, and various enterprise characteristics (e.g. the share of local inputs among total inputs, the share of imports with zero tariffs, and sector and country dummy variables). One key finding was that large firm size (proxied by employment) positively correlated with RTA use. Another was that firms actively engaged in international fragmentation are likely to use RTAs for exports.

These econometric studies provide useful insights into the determinants of RTA use at the firm level. However, they also focus on firms from Japan - a developed industrial economy with relatively well-functioning markets and institutions - from which it is difficult to extrapolate to newly industrializing Southeast Asian economies with imperfect markets and institutions. Furthermore, there may be methodological gaps in these studies. For instance, in Takahashi and Urata (2008) the exclusive use of dummy variables as regressors resulted in a model with weak explanatory power. On the other hand, Hiratsuka *et al.* (2009) employed sophisticated panel data analysis of a large sample of Japanese MNCs but only a few explanatory variables were explored, which could contribute to omitted-variable bias in the results. Hence, there is a need for research on firm-level RTA use in Southeast Asian economies using a comprehensive set of determinants of econometric analysis.

3. QUESTIONNAIRE AND ENTERPRISE DATASET

The ADB/ADBI enterprise surveys mentioned above focused on the critical question posed by the spread of RTAs: how do they affect business? A questionnaire designed by the ADB and ADBI (with input from partner think-tanks) was used to collect information from firms on issues such as characteristics of firms, RTA preference use, impediments to RTA use, and sources of institutional support for firms. Firms were selected from a sample frame of manufacturing exporters using random sampling. The questionnaires were administered in person or through telephone interviews, which provides for more reliable information than mailed questionnaire surveys. The first round of enterprise surveys among six Asian economies was conducted from 2007–2008 (including a Philippines survey conducted in 2008) and the findings were reported by Kawai and Wignaraja (2011). Using a revised questionnaire, a second round of enterprise surveys were carried out in Indonesia in early 2011, and in Malaysia between late 2011 and early 2012.

The current paper is based on a dataset of 595 responding firms in Southeast Asia located as follows: Indonesia (206 firms), Malaysia (234 firms), and the Philippines (155 firms). All three Southeast Asian economies are founder members of ASEAN, and have been closely involved in negotiating and implementing ASEAN RTAs. Thus, invaluable insights into the business impact of ASEAN RTAs can be gained from their experience. The survey data from these Southeast Asian economies are of good quality due to methodical data entry and extensive data checking, which provides for reliable cross-country/cross-firm comparisons. Additionally, the data are relatively recent and of current policy interest.

The attributes of the responding firms are provided in Table 1. Large and giant firms make up the majority of firms sampled in Indonesia (77%) and the Philippines (59%), while SMEs dominate the Malaysian sample. In addition, firms with some proportion of

foreign equity account for about two-thirds of the Philippine sample, half of the Indonesian sample, and one-tenth of the Malaysian sample. Furthermore, a breakdown of the sample by industry suggests that automotive firms account for 23% of firms in the Philippines, 20% in Malaysia, and 11% of those in Indonesia. Other industries account for the remainder.

Table 1: Characteristics of Responding Firms

Country and survey year	Indonesia (2011)		Malaysia (2012)		Philippines (2008)	
	Firm Count	%	Firm Count	%	Firm Count	%
Number of respondents	206	100.0	234	100.0	155	100.0
By Size(a)						
SME	48	23.3	207	88.5	64	41.3
Large	113	54.9	20	8.5	81	52.3
Giant	45	21.8	7	3.0	10	6.5
By Ownership(b)						
Domestic	100	48.5	210	89.7	55	35.5
Foreign	106	51.5	24	10.3	100	64.5
By Sector						
Auto	22	10.7	47	20.1	36	23.2
Other	184	89.3	187	79.9	119	76.8

Notes

SME = small or medium sized enterprise.

(a) SMEs have 100 or fewer employees, large firms have 101–1000 employees and giant firms have over 1000 employees.

(b) A firm with more than 10% foreign equity is classified as a foreign firm in the case of Indonesia and the Philippines. For Malaysia, a firm with 100% foreign ownership or majority foreign ownership is classed as a foreign firm.

Source: Author's calculations based on ADB/ADBI survey data.

4. DESCRIPTIVE ANALYSIS OF REGIONAL TRADE AGREEMENT USE

This section looks at the findings of the enterprise surveys of three Southeast Asian economies on patterns of use of tariff preferences in major RTAs, notably the ASEAN Free Trade Agreement (AFTA), the ASEAN-China RTA, the ASEAN-Korea RTA, and the ASEAN-Japan RTA. The benefits and costs of RTAs and reasons for non-use are also examined.

Patterns of Regional Trade Agreement Use

AFTA seeks to increase ASEAN's competitive edge as a production base in the world market through the elimination, within ASEAN, of tariff and non-tariff barriers. The Common Effective Preferential Tariff (CEPT) scheme under AFTA emphasizes a tariff rate of 0–5% for goods originating within ASEAN with differential adjustment for ASEAN-6 countries and Cambodia, Lao PDR, Myanmar and Viet Nam (CLMV) (Appendix Table A). The ASEAN-China, ASEAN-Korea, and ASEAN-Japan RTAs extend the notion of preferential tariffs among members (with differential adjustment for CLMV countries) to create a huge regional trade bloc. One might assume, therefore, that firms would make significant use of concessions under such RTA schemes once they are in effect. Nonetheless, as discussed in section 2, early studies seem to indicate that AFTA CEPT utilization rates (based on shares of export value associated with preferences) are extremely low. This evidence has fed suggestions in some

quarters that AFTA and other ASEAN+1 RTAs are discriminatory and a drain on the scarce trade negotiation capacity of ASEAN members.

A virtual absence of published data from official sources in Southeast Asian economies on the use of AFTA and ASEAN+1 RTAs makes it difficult to verify these early findings. Insights into the use of ASEAN RTAs, however, can be provided by well-designed and implemented cross-country enterprise surveys. Table 2 shows data from the ADB/ADBI firm surveys of three Southeast Asian economies on preference use and future plans to use preferences in ASEAN RTAs.⁶

The data suggest greater use of preferences from AFTA in 2008, and from the three ASEAN+1 RTAs in 2011-12, than generally believed. AFTA preferences are used by about 31% of the responding Indonesian firms, 21% of Malaysian firms, and 20% of the Philippine firms. Based on the firms' future plans to use AFTA, these figures are likely to rise to 43% for Indonesian firms, 52% for Malaysian firms, and 61% for Philippine firms. It is possible that the present use of AFTA by Southeast Asian firms may be partly linked to low margins of preferences. Increased business use of AFTA in the future may be related to the creation of an ASEAN economic community by 2015. A larger regional market is expected to offer increased business opportunities to firms within ASEAN as well as heightened competition such that even low margins of preference could offer a competitive advantage.

ASEAN-China preferences are used by 22% of Indonesian firms and 20% of Malaysian firms. Incorporating firms' future plans in the ASEAN-China RTA suggests that preference use may rise to 35% for Indonesian firms and 50% for Malaysian firms. Margins of preference are relatively high in the case of the ASEAN-China RTA, which means firms have an incentive to use the agreement. Present preference use of the ASEAN-China RTA is related to the relatively recent implementation of the agreement. The ASEAN-China RTA has been in effect through an early harvest scheme since 2005, and tariff elimination on most products for ASEAN-6 countries and the PRC occurred as recently as 2010.

There seems to be less business interest in the ASEAN-Korea and ASEAN-Japan RTAs compared to that in AFTA and the ASEAN-China RTA. About 16% of Indonesian firms and 7% of Malaysian firms use the ASEAN-Korea RTA. Factoring in firms' future plans increases use of the ASEAN-Korea RTA to 25% for Malaysian firms and 23% for Indonesian firms. In the case of the ASEAN-Japan RTA, 9% of Indonesian firms and 10% of Malaysian firms have indicated usage. Including future use, the forecast rises to 17% for Indonesia and 28% for Malaysia. Less business interest in the ASEAN-Korea RTA may be caused by the fact that Republic of Korea is a smaller market than the PRC with somewhat less business opportunities and is less central to the production networks of Southeast Asian firms. Being Asia's second largest economy and at the center of regional production networks, Japan is attractive to Southeast Asian firms. But firms in Indonesia and Malaysia may prefer to use bilateral RTAs with Japan (which seem to offer more attractive tariffs and other concessions) rather than the ASEAN-Japan RTA.

⁶ As it is difficult to collect information from firms on the proportion of exports or imports under preferences, these surveys use a simpler measure of RTA use - the number of firms using RTAs for exports as a share of sampled firms. While such a proxy is not ideal, we expect it to be reasonably accurate; in Thailand, the utilization rate of RTAs based on certificates of origin matches the utilization rate found in the Thai firm survey (see Kawai and Wignaraja 2011 ed.).

**Table 2: Firms Using and Planning to Use Association of Southeast Asian Nations Regional Trade Agreements
(Number of Firms (Percentage of Total Respondents))**

	Indonesia						Malaysia						Philippines					
	AFTA		ASEAN-China		ASEAN-Korea		ASEAN-Japan		AFTA		ASEAN-China		ASEAN-Korea		ASEAN-Japan		AFTA	
	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%
Users	64	31.1	45	21.8	32	15.5	18	8.7	49	20.9	47	20.1	17	7.3	24	10.3	31	20
Future Users	25	12.1	27	13.1	16	7.8	16	7.8	73	31.2	71	30.3	41	17.5	42	17.9	63 ^a	40.7
<i>Users and Future Users</i>	89	43.2	72	35	48	23.3	34	16.5	122	52.1	118	50.4	58	24.8	66	28.2	31	60.7
Number of Respondents	206	100	206	100	206	100	206	100	234	100	234	100	234	100	234	100	155	100

Notes:

ASEAN = Association of Southeast Asian Nations, RTA = Regional Trade Agreement, AFTA = ASEAN Free Trade Area.

^a Refers to firms that plan to use AFTA or recently implemented RTAs

Source: Author's calculations based on ADB/ADBI survey data.

Benefits and Costs of Regional Trade Agreements

Preferential tariffs are usually cited as the main benefit of ASEAN RTAs, and increased documentation relating to RTA use as the main cost. It may be the case, however, that other benefits (e.g. increased foreign direct investment) and costs (e.g. increased competition from imports) may arise from ASEAN RTAs and it is fascinating to study this issue in more detail using firm-level data. A related point is whether firms perceive the benefits of ASEAN RTAs as exceeding costs, or vice versa. Greater than expected use of AFTA and the more recent ASEAN-China, ASEAN-Korea and ASEAN-Japan agreements at the firm level are indicative of the net benefits of these RTAs for enterprises.

Table 3 provides data from the ADB/ADBI surveys on perceptions by firms of a variety of benefits and costs of ASEAN RTAs. For each of the benefits and costs, the numbers of respondents and percentage of total respondents are provided. In the case of the AFTA, Southeast Asian enterprises typically report more benefits than costs. As expected, the most important benefit from the AFTA is preferential tariffs that encourage imports of intermediate inputs (74% of firms in Malaysia, 71% in the Philippines, and 42% in Indonesia). A second benefit is wider market access, which results in higher export sales. The main cost from the AFTA is increased competition from the entry of imports and foreign direct investment (51% of firms in Malaysia, 36% in Indonesia, and 36% in the Philippines). Documentation costs associated with the AFTA are considered somewhat less important. Southeast Asian firms suggest that broadly similar net benefits also arise from the ASEAN+1 RTAs. In general, a key benefit seems to be preferential tariffs, while a notable cost is increased competition.

Table 3: Benefits and Costs of Association of Southeast Asian Nations Regional Trade Agreements (Number of Firms (Percentage of Firms that Use the Regional Trade Agreements))

	Indonesia								Malaysia ^a								Philippines	
	AFTA		ASEAN-China		ASEAN-Korea		ASEAN-Japan		AFTA		ASEAN-China		ASEAN-Korea		ASEAN-Japan		AFTA	
	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%	No of firms	%
Benefits																		
Preferential Tariffs	27	42.2	26	57.8	10	31.3	10	55.6	90	73.8	79	66.9	19	32.8	31	47	22	71
Market Access	23	35.9	11	24.4	11	34.4	10	55.6	54	44.3	36	30.5	16	27.6	21	31.8	18	58.1
New Business Opportunities	8	12.5	6	13.3	9	28.1	6	33.3	44	36.1	43	36.4	5	8.6	19	28.8	11	35.5
Concentration of Production	17	26.6	11	24.4	8	25	8	44.4	41	33.6	51	43.2	10	17.2	20	30.3	11	35.5
Costs																		
Increased Competition	23	35.9	17	37.8	7	21.9	6	33.3	62	50.8	52	44.1	10	17.2	18	27.3	11	35.5
Documentation Costs	21	32.8	13	28.9	7	21.9	7	38.9	38	31.1	39	33.1	10	17.2	13	19.7	8	25.8
Competitive Disadvantage	11	17.2	3	6.7	4	12.5	4	22.2	32	26.2	21	17.8	5	8.6	8	12.1	5	16.1
Relocation of Production	3	4.7	3	6.7	4	12.5	4	22.2	32	26.2	44	37.3	10	17.2	14	21.2	8	25.8
Number of Respondents	64	100	45	100	32	100	18	100	122	100	118	100	58	100	66	100	31	100

Notes:

ASEAN = Association of Southeast Asian Nations, RTA = Regional Trade Agreement, AFTA = ASEAN Free Trade Area.

^a Results are for firms that use and plan to use FTA.

Note: Multiple responses were allowed.

Source: Author's calculations based on ADB/ADBI survey data.

Reasons for Not Using Regional Trade Agreements

The discussion above indicates a somewhat higher use of preferences from the AFTA and the ASEAN-China RTA than generally thought, and points to increased use in the future. However, present levels of use of these two ASEAN RTAs may be sub-optimal in relation to potential use. Furthermore, the majority of the sampled Southeast Asian firms currently do not use ASEAN RTAs. To investigate this key issue, ADB/ADBI surveys asked non-users of ASEAN RTAs their main reasons for not using these agreements. Table 4 provides the reasons given for not using ASEAN RTAs by total respondents and as a percentage of total respondents. What does the data reveal based on the ranking of reasons?

Table 4: Impediments to Using Regional Trade Agreements (Number of Firms, Non-users Only (Percentage))

	Indonesia		Malaysia		Philippines	
Lack of Information about RTAs	82	83.7	119	71.7	86	78.9
Use of EPZ Schemes/ITA	30	30.6	35	21.1	31	28.4
Delays and Administration						
Costs in Acquiring	24	24.5	49	29.5	34	31.2
Certificates of Origin						
Small Margin of Preference in RTAs	8	8.2	61	36.7	9	8.3
Too Many Exclusions in RTAs					14	12.8
Arbitrary Classification of Product Origin ('Rent Seeking')	22	22.4	54	32.5	20	18.3
NTMs in RTA Partners	8	8.2	8	4.8	6	5.5
Confidentiality of Information Required for Rules of Origin					11	10.1
Not Interested in Trading with RTA Partners	20	20.4	71	42.8	42*	38.5*
					23*	21.1
Number of Respondents	98	100	166	100	109	100

Notes:

RTA = Regional trade agreement, EPZ = Export processing zone, NTM = Non-tariff measures.

Notes:

Multiple responses were allowed.

* was manually computed

Source: Author's calculations based on Asian Development Bank (ADB)/ Asian Development Bank Institute (ADBI) survey data.

By far the main reason for not using ASEAN RTAs is a lack of information. Most firms said that they had heard about the AFTA and other ASEAN RTAs. However, about 84% of responding firms in Indonesia, 79% in the Philippines, and 72% in Malaysia said that they do not use ASEAN RTAs because they do not know the detailed tariff preferences and other provisions of ASEAN agreements, or how to use them. Thus, our findings confirm the early prediction of Kumar (1992) who suggested that a lack of information (along with non-tariff barriers and domestic investment regulations) was likely to be an impediment to implementation of the AFTA.

This seems surprising as the AFTA is Asia's best-known agreement and its CEPT scheme has been in effect for over two decades. The ASEAN-China RTA is also nearly a decade old, as the early harvest scheme took effect in 2005. In addition, over the years, Southeast Asian governments have attempted to disseminate information to businesses on how to use preferences in ASEAN RTAs through a variety of outreach

efforts (including printed leaflets, websites, and occasional short seminars). Part of the problem may be that ASEAN RTAs are complex legal texts (often running to hundreds of pages) drafted by ASEAN officials with experience of international trade law. Businesses, particularly SMEs, lack in-house international trade law skills to interpret provisions in ASEAN RTAs and the incentive (or the ability) to pay for specialist consultancy services. Furthermore, business outreach services provided by Southeast Asian governments may be ineffective for several reasons. For instance, the quantity of available outreach services could be woefully insufficient to support the needs of a large population of SMEs, and the quality of those outreach services may be poor due to gaps in skills and funding in public support institutions.

A second reason for this effect is that ASEAN RTA partners (i.e., Southeast Asian economies, the PRC, Republic of Korea, and Japan) may not necessarily be the main trading partners of the responding firms. About 43% of Malaysian firms, 39% of Philippine firms, and 20% of Indonesian firms said that they were not interested in trading with existing RTA partners. Instead, the key trading countries of such firms were likely to be the US or the EU with which RTAs do not exist for these three Southeast Asian countries.

A third reason is delays and administrative costs related to rules of origin. Delays and administrative costs involved in claiming origin were mentioned by 31% of Philippine firms, 30% of Malaysian firms, and 25% of Indonesian firms. Part of the problem seems to lie with cumbersome domestic procedures for applying for preferential certificates of origin. The sole issuers of certificates of origin in the three Southeast Asian economies – notably, the Bureau of Customs in the Philippines, the Ministry of Trade in Indonesia, and the Ministry of International Trade and Industry in Malaysia – are said to be less efficient than private institutions.⁷

About 10% of Philippine firms mentioned an additional issue concerning rules of origin: the confidentiality of information required in certificate of origin applications. This low figure indicates that the design of the regional value content (RVC) rule in ASEAN RTAs generally seems acceptable to firms, and that firms are willing to provide accounting information as part of the process of meeting the origin criteria. It may additionally reflect the fact that the option rule was formally adopted by ASEAN in August 2008 whereby firms are able to choose between using an RVC rule and a change in tariff classification (CTC) rule to prove origin. Even before formal adoption, the option rule had started to be phased in for priority integration sectors in the AFTA.

A fourth reason for not using ASEAN RTAs is the existence of other incentive schemes for export promotion, such as the export processing zone (EPZ) and the Information Technology Agreement (ITA) for electronics. The availability of these alternative export promotion schemes means that some firms had little incentive to use ASEAN RTAs and deal with their administrative procedures. About 31% of Indonesian firms, 28% of Philippine firms, and 21% of Malaysian firms mentioned this issue.

Other reasons for not using ASEAN RTAs include: small margins of preference (highlighted in particular by 37% of Malaysian firms), arbitrary classification of product origin (also known as 'rent seeking'), non-tariff measures (NTMs) by RTA partners, and too many exclusions in ASEAN RTAs. As mentioned by less than 10% of firms in each of the three Southeast Asian economies, NTMs are not presently a serious barrier for using ASEAN RTAs. However, the continuing fragility of the world economy and risks

⁷ A recent study reported lower levels of business complaints in PRC where certificates of origin for the ASEAN-China RTA are being issued by chambers of commerce rather than by public institutions (Wignaraja 2010).

to growth in Southeast Asian economies may induce an increase in protectionist pressures, including the use of murky NTMs (e.g. government procurement, export incentives, and technical barriers to trade) to protect domestic industries.

5. ECONOMETRIC ANALYSIS OF REGIONAL TRADE AGREEMENT USE

This section analyzes the factors affecting firm-level RTA use in the three Southeast Asian countries and reports the findings. A probit model⁸ is used to examine the factors that affect firm-level use of RTA preferences. The following model is estimated for firms in the three Southeast Asian economies:

$$Y = \beta X + \varepsilon \quad (1)$$

The dependent variable in this model, Y, a binary variable, is a proxy for the probability of using an RTA at the firm level. If a firm decides to use an RTA, then Y takes the value of 1; zero if it chooses not to use an RTA. X is the matrix of explanatory variables related to firm and industry characteristics, β is the matrix of coefficients, and ε is the matrix of error terms. Table 5 describes the explanatory variables and the expected signs. The hypotheses and explanatory variables are mentioned below.

Table 5: Explanatory Variables and Expected Sign

Variable	Description	Expected Sign
SIZE	Total employment	+
AUTO	Dummy variable, takes on the value of 1 if the firm is in the auto industry, 0 otherwise	+
LOCATION	Dummy variable, takes on the value of 1 if the firm is located in a manufacturing centre, 0 otherwise	+
MULTIPLE MARKET	Dummy variable, takes on the value of 1 if the firm exports to more than one country, 0 otherwise	+
AGE	The number of years the firm has been in commercial operation	+
R&D	Research and development spending as a share of total sales	+
RTA KNOWLEDGE	Dummy variable, takes on the value of 1 if firm has some or thorough knowledge of RTA, 0 otherwise	+
RTA SUPPORT	Dummy variable, takes on the value of 1 if the firm has public/private sector organisations it can contact for RTA related issues	+

Note: R&D = Research and Development, RTA = Regional trade agreement

⁸ A logit model was also used to test the robustness of the results. Similar results were obtained but we only report the probit results in this paper.

Firm size is expected to have a positive effect on the probability of using RTAs because large firms have relatively better access to resources (such as skills, finance, and information), which puts them in a better position to use RTAs than small firms. Size is represented by total number of employees.⁹

A *firm's geographical location and membership of the automotive industry* are expected to be positively associated with RTA use. Firms concentrated in major industrial centers are more likely to use RTAs than geographically isolated firms, for two reasons. Firstly, geographical clusters of networked firms are characterized by information spillovers and exchanges (including know-how on tariff preferences, rules of origin, and origin administration). Secondly, public and private sector RTA support institutions are more likely to provide technical assistance to firms in major industrial centers. As tariffs on automotive vehicles and parts are relatively high in Asia, firms in the automotive industry have an incentive to use RTAs. Geographical location and automotive industry membership are represented by two dummy variables: LOCATION, which takes on a value of 1 if the firm is located in a major industrial area, and 0 otherwise; and AUTO, which takes on a value of 1 if the firm is an automotive manufacturer or parts supplier, and 0 otherwise.

Export experience in multiple markets is expected to be positively associated with RTA use. This is because firms with experience of several export markets may be more likely to develop knowledge of international markets and trade regulations (including import tariffs, RTA preferences, rules of origin, and custom procedures). Given this assumption, export experience of multiple markets is considered to be positively associated with the probability of using RTAs. This is proxied by a dummy variable that takes a value of 1 if a firm exports to more than one market, and 0 otherwise.

Building technological capabilities at the firm level leading to greater cost efficiency is expected to have a positive influence on the probability of using RTAs. Acquiring the requisite technical competence requires conscious investment in creating new skills and information to operate imported technologies efficiently. Typically, this involves a range of engineering activities as well as research and development. Simple learning by doing, i.e., passively undertaking production tasks repetitively over time, can also contribute to building technological competence. Efficient, technologically capable firms are more likely to trade internationally and use RTAs than less technologically capable firms. Two variables are used to represent technological capabilities at the firm level. One is the R&D–sales ratio to represent active technological efforts. This variable was included in the estimation for Indonesia and Malaysia only as R&D data were not available for the Philippines from the ADB/ADBI firm surveys. The other variable is the number of years a firm has been in commercial operation (AGE), which is a proxy for learning by doing.

Acquiring knowledge about RTAs at the firm level is expected to have a positive influence on the probability of using RTAs. RTA texts are complex, lengthy legal documents requiring significant investment in specialist skills (e.g., trade law, customs procedures, and business strategy) to derive benefits from RTAs. Firms that have acquired relevant in-house RTA expertise or those that actively build linkages with RTA support institutions are more likely to use RTAs than other firms. Two dummy variables are used here. RTA KNOWLEDGE takes a value of 1 if the firm has some or a thorough knowledge of RTA provisions, and 0 otherwise. RTA SUPPORT has a value of 1 if the firm engages with public or private support institutions, and 0 otherwise.

⁹ Data on capital employed or generated was not available from the ADB/ADBI firm surveys.

Probit coefficients and the results for the individual country regressions are shown in Table 6. A baseline specification (equation (i)) is provided for all three Southeast Asian countries, together with alternative specifications (equations (ii-v)). In the discussion that follows we will be referring to the full model (i.e., equations (iv) and (v)). The pseudo R^2 in equations (iv) and (v) suggest that the regressions explain about 20% of the variation in the data. Key explanatory variables are mostly significant (some at the 1% level) and have the expected sign.

Table 6: Probit Regression of Factors Affecting the Use of Regional Trade Agreements

	Indonesia					Malaysia					Philippines			
	(i)	(ii)	(iii)	(iv)	(v)	(i)	(ii)	(iii)	(iv)	(v)	(i)	(ii)	(iii)	(iv)
SIZE	0	0	0	0	0	0.0002	0.0001	0.0002	0.0001	0.0001	0.0007	0.0005	0.000296	0.0001
	0.5	0.51	0.78	0.74	0.84	1.34	1.25	1.37	1.28	1.29	2.32**	1.78*	1.02	0.39
AUTO	1.1265	1.3865	1.0771	1.233	1.3274	0.5368	0.5188	0.4666	0.4653	0.4441	0.9167	0.9352	0.647916	0.665
	2.90***	3.38***	2.6***	2.87***	3.06***	2.25**	2.18**	1.87*	1.88*	1.78*	3.3***	3.38***	2.29**	2.29**
LOCATION	0.6784	0.6007	0.6377	0.5469	0.6103	0.5	0.4907	0.4565	0.4559	0.4444	-0.6322	-0.4733	-0.4718	-0.3067
	3.20***	2.69***	2.86***	2.33**	2.55**	2.42**	2.36**	2.18**	2.17**	2.12**	-2.48**	-1.76*	-1.68*	-1.04
MULTIPLE MARKET	0.4782	0.185	0.2828	0.0456	-0.0056	1.1433	1.0523	1.0924	1.0714	1.0028	-0.1798	-0.2409	-0.0257	-0.0831
	1.79*	0.64	1.06	0.16	-0.02	5.71***	5.10***	5.35***	5.16***	4.76***	-0.46	-0.64	-0.06	-0.22
AGE		0.0342		0.0285	0.0319		0.0111		0.0089	0.0102		0.0386		0.044
		3.41***		2.63***	2.79***		1.25		0.99	1.16		2.17**		2.27**
R&D		0.0183			0.0199		0.0086			0.0094				
		1.58			1.88*		2.02**			2.20**				
FTA KNOWLEDGE			1.2312	1.1727	1.1768			0.4632	0.4515	0.4821			0.716542	0.6838
			5.20***	4.85***	4.87***			2.17**	2.12**	2.27**			1.79*	1.62
FTA SUPPORT			0.3963	0.418	0.443			-0.2611	-0.2705	-0.3387			0.679022	0.7653
			1.70*	1.78*	1.83*			-0.42	-0.42	-0.54			2.47**	2.74***
Constant	-0.6203	-1.0412	-1.0764	-1.354	-1.5002	-1.3908	-1.6033	-1.2139	-1.3038	-1.3505	-0.8644	-1.4078	-1.2362	-1.8847
	-2.46**	-3.60***	-3.65***	-4.20***	-4.27***	-9.03***	-9.38***	-1.96**	-2.03**	-2.15**	-2.02**	-2.85***	-2.65***	-3.58***
n	200	199	200	199	199	234	234	234	234	234	155	155	155	155
Wald Chi2	30.96***	37.1***	55.38***	55.84***	58.13***	42.82***	58.39***	46.00***	53.16***	61.45***	19.27***	26.02***	27.76	34.16***
Pseudo R2	0.11	0.16	0.23	0.26	0.27	0.17	0.19	0.18	0.19	0.2	0.12	0.16	0.2003	0.2422

Notes:

R&D = Research and development, RTA = Regional trade agreement.

Dependent binary variable: 1 = firm uses FTAs.

Coefficients are estimated using robust standard errors; z-values are in parenthesis. *** is significant at the 1% level, ** is significant at the 5% level and * is significant at the 10% level.

Source: Author's calculations based on Asian Development Bank (ADB)/ Asian Development Bank Institute (ADBI) survey data.

The important links between learning – via building technological capabilities as well as acquiring knowledge about RTAs – and the probability of RTA use is highlighted by the findings. R&D is a significant predictor of RTA use (at the 5% significance level in both Indonesia and Malaysia) with firms spending more on R&D and engineering activities more likely to be users. This shows the critical link between actively investing in technical competence, engaging in international trade, and the likelihood of a firm using an RTA. Examination of marginal effects (Table 7) suggests that a firm that invests 0.5% of total sales revenue on R&D has a 52% probability of using RTA in Indonesia and 24% probability in Malaysia.

Table 7: Marginal Effects of Factors Affecting the Use of Regional Trade Agreements

	Indonesia		Malaysia		Philippines	Pooled Probit	
Model	(iv)	(v)	(iv)	(v)	(iv)	(i) ^(a)	(ii) ^(b)
SIZE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
AUTO	0.3559	0.3756	0.1222	0.1140	0.1392	0.2147	0.3314
LOCATION	0.1579	0.1727	0.1197	0.1141	-0.0642	0.0778	0.1386
MULTIPLE MARKET	0.0132	-0.0016	0.2813	0.2575	-0.0174	0.1618	0.186
AGE 10	0.4776	0.4712	0.2599	0.2596	0.1579	0.3129	0.3674
R&D 1%		0.5236		0.2367			0.3698
RTA KNOWLEDGE	0.3385	0.333	0.1185	0.1238	0.1431	0.2349	0.2326
RTA SUPPORT	0.1207	0.1254	-0.071	-0.087	0.1602	0.1382	0.1032
INDONESIA DUMMY						0.1072	0.1183
MALAYSIA DUMMY						0.2066	

Notes:

R&D = Research and development, RTA = Regional trade agreement.

^(a) Includes all three economies, i.e. Indonesia, Malaysia and the Philippines

^(b) Indonesia and Malaysia only

Dependent binary variable: 1 = firm uses FTAs

Coefficients are estimated using robust standard errors; z-value are in parenthesis: *** is significant at the 1% level, ** is significant at the 5% level and * is significant at the 10% level

Source: Author's calculations based on Asian Development Bank (ADB)/ Asian Development Bank Institute (ADBI) survey data.

AGE also matters in predicting RTA use (statistically significant at the 1% level in Indonesia and at the 5% level in the Philippines) with older firms more likely to be users. This indicates that learning by doing fosters trading and use of RTAs. On average, the likelihood of a five-year-old firm using an RTA is 42% in Indonesia, 25% in Malaysia, and 12% in the Philippines.

We now turn to the proxies for acquiring knowledge about RTAs. Strikingly, RTA KNOWLEDGE plays a significant role in the likelihood of RTA use in all three Southeast Asian countries. It is significant at the 1% level in Indonesia, at the 5% level in Malaysia and at the 10% level in the Philippines. This shows that firms that have acquired relevant in-house RTA expertise are more likely to use RTAs than other firms. On average, the probability of firms with some or a thorough understanding of RTAs being a user is 33% higher in Indonesia, 14% higher in the Philippines, and 12% higher in Malaysia.

Similarly, FTA SUPPORT is a significant predictor of RTA use (significant at the 1% level in the Philippines and at the 10% level in Indonesia). Accordingly, firms that actively build linkages with RTA support institutions are more likely to use RTAs than other firms.

Meanwhile, the proxies for geographical location (LOCATION) and automotive membership (AUTO) are also significant and positive for all three Southeast Asian

countries. Firms concentrated in major industrial centers or members of the automotive industry are more likely to use RTAs than other firms. The proxy for export experience in multiple markets (MULTIPLE MARKET) is positive in sign and significant only for Malaysia. This provides support for the association between export experience of more than one market and RTA use in Malaysia.

SIZE is not significant in any of the three Southeast Asian countries. This is a puzzle given the findings of Takahashi and Urata (2008) and Hiratsuka *et al.* (2009), which conclude that for Japanese firms large rather than small firms use RTAs. This discrepancy may, however, be due to the size of the sample or the proxy for firm size used in the current study. Further research is needed on the effect of firm size on RTA use with larger multi-country, multi-enterprise datasets and alternative proxies for firm size (e.g. capital employed or generated).

For robustness, pooled probit regression models were also estimated for the total sample of Southeast Asian firms with country dummies. Concatenating across the whole sample of Southeast Asian firms increases the number of observations, yielding greater degrees of freedom. Table 8 provides two different pooled regression models. Equation (i) is the pooled baseline model for firms from all three Southeast Asian countries while equation (ii) is the pooled model with the R&D –sales ratio for firms from Malaysia and Indonesia only.

Table 8: Probit Regression of Factors Affecting the Use of Regional Trade Agreements - Pooled Data

	Pooled Probit	
	(i) ^a	(ii) ^b
SIZE	0.0000 0.92	0.0000 0.89
AUTO	0.7842 3.82***	1.1805 2.91***
LOCATION	0.2842 2.22**	0.4936 3.25***
MULTIPLE MARKET	0.5910 3.72***	0.6624 3.75***
AGE	0.0219 3.6***	0.0179 2.85***
R&D		0.0120 3.17***
RTA KNOWLEDGE	0.8577 6.21***	0.8285 5.58***
RTA SUPPORT	0.5046 2.95***	0.3676 1.67*
MALAYSIA DUMMY	0.3915 1.69*	0.4215 2.31**
INDONESIA DUMMY	0.7547 3.99***	
Constant	-2.3672 -10.14***	-2.0424 -7.75***
n	588	433
Wald Chi2	156.14***	132.48***
Pseudo R2	0.24	0.25

Notes:

R&D = Research and development, RTA = Regional trade agreement.

^a Includes all three economies, i.e. Indonesia, Malaysia and the Philippines

^b Indonesia and Malaysia only

Dependent binary variable: 1 = firm uses FTAs

Coefficients are estimated using robust standard errors; z-value are in parenthesis: *** is significant at the 1% level, ** is significant at the 5% level and * is significant at the 10% level
 Source: Author's calculations based on Asian Development Bank (ADB)/ Asian Development Bank Institute (ADBI) survey data.

The pooled results confirm the findings from the individual regressions. Most of the key explanatory variables are significant in equations (i) and (ii) with positive signs. FTA KNOWLEDGE is significant at the 1% level in both equations while FTA SUPPORT is significant at the 1% level in equation (i). Furthermore, AGE is significant (at the 1% level) in both equations while R&D is significant (at the 1% level) in equation (ii). AUTO, LOCATION and MULTIPLE MARKETS are also significant. However, firm size is not significant in either equation. The country dummies are also significant in both equations indicating some differences between countries.

6. CONCLUSIONS

To study the business impacts of RTAs in Southeast Asia, this paper combined descriptive analysis on patterns of RTAs use with econometric analysis of factors influencing their use. The comparative and firm-level analysis of the impact of RTAs in Malaysia, Indonesia and the Philippines brings some new insights to the international and regional debate on RTAs.

Firstly, use of ASEAN RTAs is somewhat higher than generally thought and seems set to rise in the future based on firms' future plans. More business interest is visible in some ASEAN RTAs (e.g. the AFTA and the ASEAN-China RTA) than others (e.g. the ASEAN-Korea and ASEAN-Japan RTAs). This seems to be related to enterprise perceptions of the greater benefits of such agreements (such as preferential tariffs and market access) relative to their costs (e.g. increased competition from the entry of imports and foreign direct investment, documentation costs, and costs of relocating production). Accordingly, it seems that the potential gains from ASEAN RTAs are gradually being translated into actual gains for business.

Secondly, the key reasons for not using RTAs in Southeast Asia suggested in this paper differ from those conventionally emphasized such as low margins of preference and the documentation costs associated with ROOs. Instead, by far the main reason for non-use of RTAs is a lack of information: firms do not know the detailed tariff preferences and other provisions of ASEAN RTAs, or how to use them. Another important reason for non-use is that ASEAN RTA partners are not necessarily the main trading partners of the responding firms.

Thirdly, in the current study a more comprehensive set of factors influencing RTA use at the firm level was explored in the context of Southeast Asian economies than in the few other related studies of Japanese firms, and the findings are different. Firm heterogeneity matters in RTA use. The likelihood of RTA use in the Southeast Asian economies is particularly influenced by learning at the firm level via the building of technological capabilities (through R&D expenditure and learning by doing, proxied by firm age) as well as acquiring knowledge about RTAs through in-house efforts and actively developing links with RTA support institutions. Finally, firms concentrated in major industrial centers or members of the automotive industry are more likely to use RTAs than other firms.

The continuing stalemate in the WTO Doha Round, the advent of mega-regionals like RCEP and TPP, and the formation of various bilateral agreements suggest that RTAs are likely to remain a part of the trade policy architecture of Southeast Asia for the foreseeable future. Three key policy implications can be drawn from the current

research. Firstly, it is imperative to significantly improve business support services for RTAs, particularly for SMEs in Southeast Asian economies. This means the provision of integrated information services for firms to learn about RTAs, comprehensive technical advisory services for firms to use RTAs, university courses on RTAs and business, and greater participation of business associations in RTA negotiations and provision of RTA training programs. Secondly, there is a need to rapidly conclude RTAs with all major trading partners of Southeast Asian economies including the ambitious TPP negotiations with the US. Thirdly, systematic effort is needed in Southeast Asian economies and in the ASEAN secretariat to develop an online database of official information on the utilization of preferences of individual RTAs; until this is established, comparative and firm-level analysis can provide a fruitful avenue for further study of RTAs in Southeast Asian economies.

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APPENDIX

Table A: Background on Association of Southeast Asian Nations Regional Trade Agreements

	ASEAN RTA	ASEAN–PRC CECA	ASEAN–Korea CECA	ASEAN–Japan CEPA	ASEAN– Australia–New Zealand RTA	ASEAN–India CECA
Date in Effect	1 Jan 1993	1 Jul 2005	1 Jun 2007	1 Dec 2008	1 Jan 2010	1 Jan 2010
Time to Negotiate (start of formal negotiations to RTA signing)	2-3 years (Oct 1990–Jan 1993)	2-3 years (Nov 2002–Nov 2004)	1-2 years (Feb 2005–Aug 2006)	4-5 years (Oct 2003–Apr 2008)	4 years (Feb 2005–Feb 2009)	5-6 years (Oct 2003–Aug 2009)
Trade in Goods Liberalization	<p>Inclusion List: 99% of tariff lines at 0–5% (of which 60% are duty-free) for ASEAN-6 by 2010; 88% for CLMV by 2015.</p> <p>Sensitive Track: (0.2% of tariff lines remaining among ASEAN-6 (Philippines and Indonesia).</p>	<p>Normal Track: Tariff elimination on 90% of products for ASEAN-6 and PRC by 2010 (flexibility up to 2012); for CLMV by 2015 (flexibility up to 2018).</p> <p>Sensitive Track: tariff reduced to 0–5% by 2018 for ASEAN-6 and PRC; 2020 for CLMV.</p> <p>Highly Sensitive Track: tariff rate reduced to below 50% by 2015 for ASEAN-6 and PRC and 2018 for CLMV.</p>	<p>Normal Track: Tariff elimination on 95% of products by 2010 (flexibility for 5% of tariff lines for Philippines and Indonesia up to 2012).</p> <p>Sensitive Track: maximum of 10% of tariff lines where tariff reduced to 0–5% by 2016.</p>	<p>Normal Track: Tariff elimination within 10 years upon entry into force.</p> <p>Sensitive Track: tariff reduction to 0–5% in 10 years.</p>	<p>Normal Track: Tariff elimination on 90% of products by 2013 for Australia, New Zealand and ASEAN-6 with (flexibility for Indonesia and Thailand).</p> <p>SL1: 6% of tariff lines by 2020.</p> <p>SL2: 3% of tariff lines with 20% margin of preference by 2020.</p> <p>Longer Tariff Elimination: Cambodia, Lao PDR, Myanmar, and Viet Nam (2020-2024).</p>	<p>Normal Track: coverage: 80% of tariff lines (NT1/NT2) by 2013/2016 for ASEAN-5 and India; 2018/2019 for Philippines and India; 2018/2021 for CLMV.</p> <p>Sensitive Track: 10% of tariff lines. At least 50 tariff lines at MFN 5% will be at standstill; reduction to 4.5% from entry to 4% by 2016 for ASEAN 6 and India (special arrangements for Indonesia and Thailand; and</p>

	ASEAN RTA	ASEAN–PRC CECA	ASEAN–Korea CECA	ASEAN–Japan CEPA	ASEAN– Australia–New Zealand RTA	ASEAN–India CECA
						2019 for Philippines). India identified crude and refined palm oil, coffee, black tea, and pepper as highly sensitive.
Others	ASEAN economic community blueprint in November 2007 sets out concrete steps for services by 2015. ASEAN has concluded 7 (seven) mutual recognition agreements in services. Comprehensive investment agreement was signed 26 February 2009.	Services agreement entered into force in July 2007 (first package of service liberalization). Investment agreement signed in August 2009.	Services agreement signed in November 2007. Investment agreement signed 2 June 2009.	Bilateral EPAs and BITs commitments will apply.	A single undertaking and what appears to be the most comprehensive ASEAN RTA was concluded to cover goods, services, investment, intellectual property, e-commerce, temporary movement of business people, and economic cooperation.	

	ASEAN RTA	ASEAN–PRC CECA	ASEAN–Korea CECA	ASEAN–Japan CEPA	ASEAN– Australia–New Zealand RTA	ASEAN–India CECA
What's Next? (Under Each RTA)	AEC: a single market and production base by 2020.	Implementation of economic cooperation programme.		Schedule of specific commitments on services and investments under negotiation.	Implementation of the chapter of economic cooperation among member countries to be carried out.	Agreement on trade in services and investments to be signed up.
What's next? (At Regional Level)	The first meeting of RECP was carried on May 2013. By 2015, it is expected to achieve agreement on a comprehensive package, including trade in goods, services, investments, economic and technical cooperation, intellectual property, competition, dispute settlement and other issues.					

Notes:

ASEAN = Association of Southeast Asian nations, RTA = Regional trade agreement, CECA = Comprehensive Economic Cooperation Agreement, CEPA = Closer Economic Partnership Agreement, PRC = The People's Republic of China, NT1/NT2 = Normal Track 1/Normal Track 2, CLMV = Cambodia, Lao PDR, Myanmar and Viet Nam, MFN = Most Favored Nation, **EPA** = Environmental protection agency, BIT = Bilateral Investment Treaty, AEC = ASEAN economic community, RECP = Regional Economic Comprehensive Partnership. Sources: ADB FTA database (www.aric.adb.org), data as of 22 August 2013; ASEAN Secretariat (www.aseansec.org) and member government websites.