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Economic Impacts of FTAs on Trade in Services: Some empirics in East Asia

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Economic Impacts of FTAs on Trade in Services: Some empirics in East Asia*

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Abstract

While so many research reports feature the positive impacts of free trade agreements (FTAs) on liberalization in the services sector, there seems to be no detailed quantitative analysis focusing exclusively on the liberalization of trade in services under the FTAs in the Association of Southeast Asian Nations (ASEAN). This paper makes a first-step analysis on the impact of ASEAN-related FTAs on the Mode 3 (commercial presence)-based trade in services. The first section analyzes the aggregate survey results, featuring the support functions of service firms for manufacturing activities as well as the possible impacts of “intangibility,” “scale economy,” and “network effect” on the service firms’ foreign commercial presence. Then, utilizing a newly constructed firm-level database matched with the Hoekman Index (for measuring the degree of service sector liberalization) through Mode 3 (commercial presence), standard qualitative regression analyses were conducted. Overall, the results reveal some positive correlations between the degree of service trade liberalization in the host country and service firms’ commercial presence in that country, hence a policy suggestion to promote service trade liberalization further possibly under the proposed Regional Comprehensive Economic Partnership (RCEP).

Keywords: Trade in services, Free trade agreements, ASEAN, Commercial presence

JEL classification: F14, F15, F21

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1. Introduction

With the advancement of globalization, service activities, hitherto deemed “non-tradable” across national borders have come to be traded on a global scale: in 2011, the world export of services recorded 4.1 trillion dollars, while the world merchandise trade in the same year registered 18.1 trillion dollars¹. Considering, however, the fact that the services sector comprises some 70 to 80 percent of advanced countries GDP, the service trade figure is below its proportionate share.

The services sector is indeed indispensable to the East Asia’s further economic development. Professional services (e.g., lawyers and architects) as well as more facility-oriented services including transportation and information technology services contribute to smoothening agricultural and manufacturing activities. Economic impacts of FTAs in East Asia on trade in general should therefore be measured quantitatively to the extent possible.

To the best of the author’s knowledge, however, there is virtually no publicized work exclusively addressing the impact of FTAs in East Asia specifically on trade in services. This is mainly due to the fact that trade in services has only been a secondary concern in the impact analysis where merchandise trade is exclusively focused upon. There are some works to be referred to, in the context of a comprehensive economic integration including goods and service trade liberalization. In a nutshell, while so many research reports feature positive impacts of free trade agreements (FTAs) on liberalization in the services sector, there seems to be no detailed quantitative analysis focusing exclusively on the liberalization of trade in services under FTAs in ASEAN.

In lieu of making a literature survey on that point, therefore, this paper refers to a

¹ The figures are released in the WTO's website (http://www.wto.org/english/news_e/pres12_e/pr658_e.htm).

few analyses on the impact of Japan's bilateral FTAs on the Mode 3 (commercial presence)-based trade in services.² The next section of this paper features an analysis of aggregate survey results, while the following section covers a survey-based regression analysis. The third section makes a survey-based analysis of Japanese service firms' preferences surrounding FTA-related policies. The fourth section attempts a micro-based analysis of Japanese service firms' investment behaviors and their correlation with the newly calculated values of "Hoekman Index" which is an FTA-mediated preferentiality index. The fifth section makes a policy suggestion for service trade liberalization through merging the ongoing ASEAN-centered FTAs and concludes this paper.

2. Survey-based macro analysis: Japanese governmental survey

Some individual ASEAN countries and Japan have bilateral FTAs covering liberalization of trade in services. Since the levels of service sector commitment under bilateral FTAs are known to be higher than that under the pluri-lateral FTA between ASEAN and Japan (Chan and Okabe, 2011; Ishido, 2012), this section makes an analysis of the correlation between the service trade performance covered in the survey conducted by the Japanese government, in its connection to the service-sector commitments under the bilateral FTAs between individual ASEAN members and Japan.

The expectation of FTA expressed by Japanese foreign affiliates (headquartered

² As is known, there are four "modes" of service supply defined by the WTO: Mode 1 is the cross-border supply of services (often mediated by IT technology) without producers' and consumers' movement across borders (e.g., cross-border sales of software products from through the internet); Mode 2 is "consumption abroad" in which the consumer of services moves to the producer's country (as exemplified by hotel services); Mode 3 is the supply of services through "commercial presence" (i.e., establishment of offices as foreign direct investment); and Mode 4 is "movement of natural persons" in which natural persons as producers of services move to consumers' countries (e.g., a medical doctor's surgical operation abroad). Among these, Mode 3 (supply of services through commercial presence) is the focus of this paper for its importance in East Asia.

in Japan) is shown in Table 1. This is part of the annual company survey by the Japanese Ministry of Economy, Trade and Industry (METI). According to the Table, the manufacturing industry and the nonmanufacturing industry both value "Reduction/Removal of tariffs" (item 1), and "Facilitation/Simplification of custom procedures" (Item 8). However, for the nonmanufacturing (including service) firms, the degree of high evaluation is relatively low, with the response rate to the item 1 (Reduction/Removal of tariffs) and the item 8 (Facilitation/Simplification of custom procedures) being lower than in the case of the manufacturing firms, and instead the response rate to the item 2 "Service sector deregulation/liberalization" is clearly higher (at 21.0 percent in the Table) for the non-manufacturing firms than for the manufacturing firms (at 10.3 percent). That is, in the service industries, domestic (or behind-the-border) deregulation is more important for FTAs to achieve.

Tables 2 through 4 break down Table 1 according to the size of respondent companies: a general observation is that the smaller the firm size is, the higher the expectation of the Item 1 (Reduction/Removal of tariffs) and the Item 8 (Facilitation/Simplification of custom procedures) becomes. Conversely, the smaller the firm size is, the lower the expectation of the Item 2 (Service sector deregulation/liberalization) becomes. These observations seem to indicate that smaller-sized non-manufacturing Japanese firms tend to expect "basic" functions of tariff-related liberalization effect to arise from FTAs.

Table 1. Expectations of FTAs expressed by Japanese firms (Total)

(Units: number, %)

| | Total responses | | Item 1 | | Item 2 | | Item 3 | | Item 4 | | Item 5 | | Item 6 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 3,297 | 100.0 | 1,896 | 57.5 | 458 | 13.9 | 951 | 28.8 | 627 | 19.0 | 687 | 20.8 | 886 | 26.9 |
| Manufacturing (reference) | 2,192 | 100.0 | 1,407 | 64.2 | 226 | 10.3 | 633 | 28.9 | 410 | 18.7 | 514 | 23.4 | 583 | 26.6 |
| Non-manufacturing (including service) | 1,105 | 100.0 | 489 | 44.3 | 232 | 21.0 | 318 | 28.8 | 217 | 19.6 | 173 | 15.7 | 303 | 27.4 |
| Agriculture, forestry And fishery(reference) | 6 | 100.0 | 3 | 50.0 | - | - | 1 | × | 1 | × | 2 | × | 2 | × |
| Mining | 18 | 100.0 | 5 | 27.8 | 1 | × | 8 | 44.4 | 2 | × | 1 | × | 7 | 38.9 |
| Construction | 90 | 100.0 | 35 | 38.9 | 14 | 15.6 | 28 | 31.1 | 28 | 31.1 | 9 | 10.0 | 34 | 37.8 |
| Information and communication | 148 | 100.0 | 30 | 20.3 | 36 | 24.3 | 38 | 25.7 | 38 | 25.7 | 51 | 34.5 | 41 | 27.7 |
| Transportation | 126 | 100.0 | 37 | 29.4 | 31 | 24.6 | 40 | 31.7 | 19 | 15.1 | 5 | 4.0 | 34 | 27.0 |
| Wholesale | 478 | 100.0 | 302 | 63.2 | 86 | 18.0 | 133 | 27.8 | 68 | 14.2 | 63 | 13.2 | 118 | 24.7 |
| Retailing | 86 | 100.0 | 38 | 44.2 | 22 | 25.6 | 20 | 23.3 | 15 | 17.4 | 17 | 19.8 | 17 | 19.8 |
| Other services | 91 | 100.0 | 23 | 25.3 | 26 | 28.6 | 25 | 27.5 | 28 | 30.8 | 19 | 20.9 | 26 | 28.6 |
| Other non-manufacturing | 62 | 100.0 | 16 | 25.8 | 16 | 25.8 | 25 | 40.3 | 18 | 29.0 | 6 | 9.7 | 24 | 38.7 |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities" .

Table 1. Expectations of FTAs expressed by Japanese firms (Total) (Cont.)

(Units: number, %)

| | Item 7 | | Item 8 | | Item 9 | | Item 10 | | Item 11 | | Item 12 | | Item 13 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 381 | 11.6 | 1,598 | 48.5 | 57 | 1.7 | 110 | 3.3 | 967 | 29.3 | 590 | 17.9 | 213 | 6.5 |
| Manufacturing (reference) | 269 | 12.3 | 1,154 | 52.6 | 35 | 1.6 | 65 | 3.0 | 645 | 29.4 | 418 | 19.1 | 149 | 6.8 |
| Non-manufacturing (including service) | 112 | 10.1 | 444 | 40.2 | 22 | 2.0 | 45 | 4.1 | 322 | 29.1 | 172 | 15.6 | 64 | 5.8 |
| Agriculture, forestry And fishery(reference) | 1 | x | 3 | 50.0 | - | - | - | - | 2 | x | 1 | x | - | - |
| Mining | 1 | x | 5 | 27.8 | - | - | 1 | x | 7 | 38.9 | - | - | - | - |
| Construction | 16 | 17.8 | 28 | 31.1 | 3 | 3.3 | 8 | 8.9 | 27 | 30.0 | 10 | 11.1 | 4 | 4.4 |
| Information and communication | 16 | 10.8 | 22 | 14.9 | 3 | 2.0 | 3 | 2.0 | 37 | 25.0 | 5 | 3.4 | 4 | 2.7 |
| Transportation | 11 | 8.7 | 55 | 43.7 | 2 | x | 5 | 4.0 | 41 | 32.5 | 21 | 16.7 | 3 | 2.4 |
| Wholesale | 51 | 10.7 | 264 | 55.2 | 7 | 1.5 | 17 | 3.6 | 129 | 27.0 | 118 | 24.7 | 41 | 8.6 |
| Retailing | 6 | 7.0 | 33 | 38.4 | 1 | x | 5 | 5.8 | 23 | 26.7 | 8 | 9.3 | 3 | 3.5 |
| Other services | 5 | 5.5 | 22 | 24.2 | 4 | 4.4 | 5 | 5.5 | 35 | 38.5 | 5 | 5.5 | 5 | 5.5 |
| Other non-manufacturing | 5 | 8.1 | 12 | 19.4 | 2 | x | 1 | x | 21 | 33.9 | 4 | 6.5 | 4 | 6.5 |

Notes : x indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformance

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 2. Expectations of FTAs expressed by Japanese firms (large-scale firms only)

| | Total responses | | Item 1 | | Item 2 | | Item 3 | | Item 4 | | Item 5 | | Item 6 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 1,533 | 100.0 | 871 | 56.8 | 246 | 16.0 | 539 | 35.2 | 248 | 16.2 | 376 | 24.5 | 513 | 33.5 |
| Manufacturing (reference) | 1,031 | 100.0 | 663 | 64.3 | 122 | 11.8 | 359 | 34.8 | 141 | 13.7 | 290 | 28.1 | 341 | 33.1 |
| Non-manufacturing (including service) | 502 | 100.0 | 208 | 41.4 | 124 | 24.7 | 180 | 35.9 | 107 | 21.3 | 86 | 17.1 | 172 | 34.3 |
| Agriculture, forestry And fishery(reference) | 2 | × | 1 | × | - | - | 1 | × | - | - | 1 | × | 1 | × |
| Mining | 14 | 100.0 | 4 | 28.6 | - | - | 7 | 50.0 | 1 | × | - | - | 7 | 50.0 |
| Construction | 70 | 100.0 | 28 | 40.0 | 11 | 15.7 | 23 | 32.9 | 23 | 32.9 | 8 | 11.4 | 29 | 41.4 |
| Information and communication | 76 | 100.0 | 14 | 18.4 | 24 | 31.6 | 24 | 31.6 | 16 | 21.1 | 28 | 36.8 | 22 | 28.9 |
| Transportation | 62 | 100.0 | 19 | 30.6 | 16 | 25.8 | 24 | 38.7 | 9 | 14.5 | 4 | 6.5 | 14 | 22.6 |
| Wholesale | 156 | 100.0 | 103 | 66.0 | 37 | 23.7 | 56 | 35.9 | 30 | 19.2 | 22 | 14.1 | 54 | 34.6 |
| Retailing | 44 | 100.0 | 21 | 47.7 | 17 | 38.6 | 10 | 22.7 | 11 | 25.0 | 11 | 25.0 | 13 | 29.5 |
| Other services | 38 | 100.0 | 12 | 31.6 | 11 | 28.9 | 15 | 39.5 | 9 | 23.7 | 9 | 23.7 | 14 | 36.8 |
| Other non-manufacturing | 40 | 100.0 | 6 | 15.0 | 8 | 20.0 | 20 | 50.0 | 8 | 20.0 | 3 | 7.5 | 18 | 45.0 |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 2. Expectations of FTAs expressed by Japanese firms (large-scale firms only) (Cont.)

(Units: number, %)

| | Item 7 | | Item 8 | | Item 9 | | Item 10 | | Item 11 | | Item 12 | | Item 13 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 212 | 13.4 | 721 | 45.5 | 40 | 2.5 | 63 | 4.0 | 474 | 29.9 | 245 | 15.5 | 108 | 6.8 |
| Manufacturing (reference) | 152 | 14.4 | 529 | 50.0 | 26 | 2.5 | 35 | 3.3 | 309 | 29.2 | 174 | 16.5 | 76 | 7.2 |
| Non-manufacturing (including service) | 60 | 11.4 | 192 | 36.5 | 14 | 2.7 | 28 | 5.3 | 165 | 31.4 | 71 | 13.5 | 32 | 6.1 |
| Agriculture, forestry And fishery(reference) | 1 | × | - | - | - | - | - | - | - | - | - | - | 1 | × |
| Mining | 1 | × | 5 | 35.7 | - | - | 1 | × | 5 | 35.7 | - | - | - | - |
| Construction | 15 | 21.4 | 21 | 30.0 | 3 | 4.3 | 8 | 11.4 | 26 | 37.1 | 7 | 10.0 | 4 | 5.7 |
| Information and communication | 10 | 12.2 | 8 | 9.8 | 1 | × | 1 | × | 18 | 22.0 | 3 | 3.7 | 2 | × |
| Transportation | 6 | 9.2 | 29 | 44.6 | - | - | 3 | 4.6 | 21 | 32.3 | 12 | 18.5 | 1 | × |
| Wholesale | 18 | 11.2 | 97 | 60.2 | 5 | 3.1 | 9 | 5.6 | 52 | 32.3 | 38 | 23.6 | 16 | 9.9 |
| Retailing | 4 | 8.9 | 15 | 33.3 | 1 | × | 3 | 6.7 | 13 | 28.9 | 5 | 11.1 | 3 | 6.7 |
| Other services | 3 | 7.0 | 11 | 25.6 | 3 | 7.0 | 2 | × | 17 | 39.5 | 3 | 7.0 | 4 | 9.3 |
| Other non-manufacturing | 2 | × | 6 | 13.6 | 1 | × | 1 | × | 13 | 29.5 | 3 | 6.8 | 2 | × |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 3. Expectations of FTAs expressed by Japanese firms (medium-scale firms only)

(Units: number, %)

| | Total responses | | Item 1 | | Item 2 | | Item 3 | | Item 4 | | Item 5 | | Item 6 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 733 | 100.0 | 400 | 54.6 | 101 | 13.8 | 194 | 26.5 | 144 | 19.6 | 152 | 20.7 | 172 | 23.5 |
| Manufacturing (reference) | 383 | 100.0 | 241 | 62.9 | 31 | 8.1 | 106 | 27.7 | 85 | 22.2 | 95 | 24.8 | 88 | 23.0 |
| Non-manufacturing (including service) | 350 | 100.0 | 159 | 45.4 | 70 | 20.0 | 88 | 25.1 | 59 | 16.9 | 57 | 16.3 | 84 | 24.0 |
| Agriculture, forestry And fishery(reference) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mining | 1 | × | 1 | × | 1 | × | 1 | × | 1 | × | 1 | × | - | - |
| Construction | 8 | 100.0 | 4 | 50.0 | 1 | × | 3 | 37.5 | 2 | × | 1 | × | 3 | 37.5 |
| Information and communication | 39 | 100.0 | 8 | 20.5 | 9 | 23.1 | 7 | 17.9 | 14 | 35.9 | 16 | 41.0 | 10 | 25.6 |
| Transportation | 33 | 100.0 | 8 | 24.2 | 8 | 24.2 | 10 | 30.3 | 2 | × | - | - | 11 | 33.3 |
| Wholesale | 180 | 100.0 | 110 | 61.1 | 28 | 15.6 | 47 | 26.1 | 16 | 8.9 | 26 | 14.4 | 43 | 23.9 |
| Retailing | 35 | 100.0 | 16 | 45.7 | 5 | 14.3 | 8 | 22.9 | 3 | 8.6 | 5 | 14.3 | 3 | 8.6 |
| Other services | 42 | 100.0 | 5 | 11.9 | 13 | 31.0 | 8 | 19.0 | 15 | 35.7 | 7 | 16.7 | 10 | 23.8 |
| Other non-manufacturing | 12 | 100.0 | 7 | 58.3 | 5 | 41.7 | 4 | 33.3 | 6 | 50.0 | 1 | × | 4 | 33.3 |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 3. Expectations of FTAs expressed by Japanese firms (medium-scale firms only) (Cont.)

(Units: number, %)

| | Item 7 | | Item 8 | | Item 9 | | Item 10 | | Item 11 | | Item 12 | | Item 13 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 381 | 11.6 | 1,598 | 48.5 | 57 | 1.7 | 110 | 3.3 | 967 | 29.3 | 590 | 17.9 | 213 | 6.5 |
| Manufacturing (reference) | 269 | 12.3 | 1,154 | 52.6 | 35 | 1.6 | 65 | 3.0 | 645 | 29.4 | 418 | 19.1 | 149 | 6.8 |
| Non-manufacturing (including service) | 112 | 10.0 | 444 | 40.2 | 22 | 2.0 | 45 | 4.1 | 322 | 29.1 | 172 | 15.6 | 64 | 5.8 |
| Agriculture, forestry And fishery(reference) | 1 | × | 3 | 50.0 | - | - | - | - | 2 | × | 1 | × | - | - |
| Mining | 1 | × | 5 | 27.8 | - | - | 1 | × | 7 | 38.9 | - | - | - | - |
| Construction | 16 | 17.8 | 28 | 31.1 | 3 | 3.3 | 8 | 8.9 | 27 | 30.0 | 10 | 11.1 | 4 | 4.4 |
| Information and communication | 16 | 10.8 | 22 | 14.9 | 3 | 2.0 | 3 | 2.0 | 37 | 25.0 | 5 | 3.4 | 4 | 2.7 |
| Transportation | 11 | 8.7 | 55 | 43.7 | 2 | × | 5 | 4.0 | 41 | 32.5 | 21 | 16.7 | 3 | 2.4 |
| Wholesale | 51 | 10.7 | 264 | 55.2 | 7 | 1.5 | 17 | 3.6 | 129 | 27.0 | 118 | 24.7 | 41 | 8.6 |
| Retailing | 6 | 7.0 | 33 | 38.4 | 1 | × | 5 | 5.8 | 23 | 26.7 | 8 | 9.3 | 3 | 3.5 |
| Other services | 5 | 5.5 | 22 | 24.2 | 4 | 4.4 | 5 | 5.5 | 35 | 38.5 | 5 | 5.5 | 5 | 5.5 |
| Other non-manufacturing | 5 | 8.1 | 12 | 19.4 | 2 | × | 1 | × | 21 | 33.9 | 4 | 6.5 | 4 | 6.5 |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 4. Expectations of FTAs expressed by Japanese firms (small-scale firms only)

(Units: number, %)

| | Total responses | | Item 1 | | Item 2 | | Item 3 | | Item 4 | | Item 5 | | Item 6 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 1,031 | 100.0 | 625 | 60.6 | 111 | 10.8 | 218 | 21.1 | 235 | 22.8 | 159 | 15.4 | 201 | 19.5 |
| Manufacturing (reference) | 778 | 100.0 | 503 | 64.7 | 73 | 9.4 | 168 | 21.6 | 184 | 23.7 | 129 | 16.6 | 154 | 19.8 |
| Non-manufacturing (including service) | 253 | 100.0 | 122 | 48.2 | 38 | 15.0 | 50 | 19.8 | 51 | 20.2 | 30 | 11.9 | 47 | 18.6 |
| Agriculture, forestry And fishery(reference) | 4 | 100.0 | 2 | × | - | - | - | - | 1 | × | 1 | × | 1 | × |
| Mining | 3 | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction | 12 | 100.0 | 3 | 25.0 | 2 | × | 2 | × | 3 | 25.0 | - | - | 2 | × |
| Information and communication | 33 | 100.0 | 8 | 24.2 | 3 | 9.1 | 7 | 21.2 | 8 | 24.2 | 7 | 21.2 | 9 | 27.3 |
| Transportation | 31 | 100.0 | 10 | 32.3 | 7 | 22.6 | 6 | 19.4 | 8 | 25.8 | 1 | × | 9 | 29.0 |
| Wholesale | 142 | 100.0 | 89 | 62.7 | 21 | 14.8 | 30 | 21.1 | 22 | 15.5 | 15 | 10.6 | 21 | 14.8 |
| Retailing | 7 | 100.0 | 1 | × | - | - | 2 | × | 1 | × | 1 | × | 1 | × |
| Other services | 11 | 100.0 | 6 | 54.5 | 2 | × | 2 | × | 4 | 36.4 | 3 | 27.3 | 2 | × |
| Other non-manufacturing | 10 | 100.0 | 3 | 30.0 | 3 | 30.0 | 1 | × | 4 | 40.0 | 2 | × | 2 | × |

Notes : × indicates that data confidentiality applies. Survey items (multiple choices) are as follows

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

Table 4. Expectations of FTAs expressed by Japanese firms (small-scale firms only) (Cont.)

(Units: number, %)

| | Item 7 | | Item 8 | | Item 9 | | Item 10 | | Item 11 | | Item 12 | | Item 13 | |
|--|------------------|-----------|--------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
| | No. of responses | Share (%) | No. | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) | No. of responses | Share (%) |
| Total | 91 | 8.8 | 534 | 51.8 | 10 | 1.0 | 21 | 2.0 | 290 | 28.1 | 211 | 20.5 | 60 | 5.8 |
| Manufacturing (reference) | 72 | 9.3 | 422 | 54.2 | 8 | 1.0 | 18 | 2.3 | 231 | 29.7 | 167 | 21.5 | 49 | 6.3 |
| Non-manufacturing (including service) | 19 | 7.5 | 112 | 44.3 | 2 | × | 3 | 1.2 | 59 | 23.3 | 44 | 17.4 | 11 | 4.3 |
| Agriculture, forestry And fishery(reference) | - | - | 3 | 75.0 | - | - | - | - | 2 | × | 1 | × | - | - |
| Mining | - | - | - | - | - | - | - | - | 1 | × | - | - | - | - |
| Construction | - | - | 4 | 33.3 | - | - | - | - | - | - | 1 | × | - | - |
| Information and communication | 4 | 12.1 | 7 | 21.2 | - | - | 1 | × | 8 | 24.2 | 1 | × | 1 | × |
| Transportation | 4 | 12.9 | 12 | 38.7 | 1 | × | 1 | × | 8 | 25.8 | 2 | × | 1 | × |
| Wholesale | 10 | 7.0 | 80 | 56.3 | 1 | × | 1 | × | 31 | 21.8 | 37 | 26.1 | 9 | 6.3 |
| Retailing | - | - | 2 | × | - | - | - | - | 1 | × | - | - | - | - |
| Other services | 1 | × | 3 | 27.3 | - | - | - | - | 5 | 45.5 | 2 | × | - | - |
| Other non-manufacturing | - | - | 1 | × | - | - | - | - | 3 | 30.0 | - | - | - | - |

Notes : Survey items (multiple choices)

Item 1. Reduction/Removal of tariffs

Item 2. Service sector deregulation/liberalization

Item 3. Deregulation/liberalization of investment, provision of investment rules

Item 4. Deregulation/liberalization of movement of people

Item 5. Provision of regulation on intellectual property rights

Item 6. Provision and transparency of business-related laws

Item 7. Mutual recognition of standards and conformances

Item 8. Facilitation/Simplification of custom procedures

Item 9. Improvement in the market access of government procurement

Item 10. Conflict resolution

Item 11. Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems

Item 12. Simplification/harmonization of rules of origin (to gain preferential treatments)

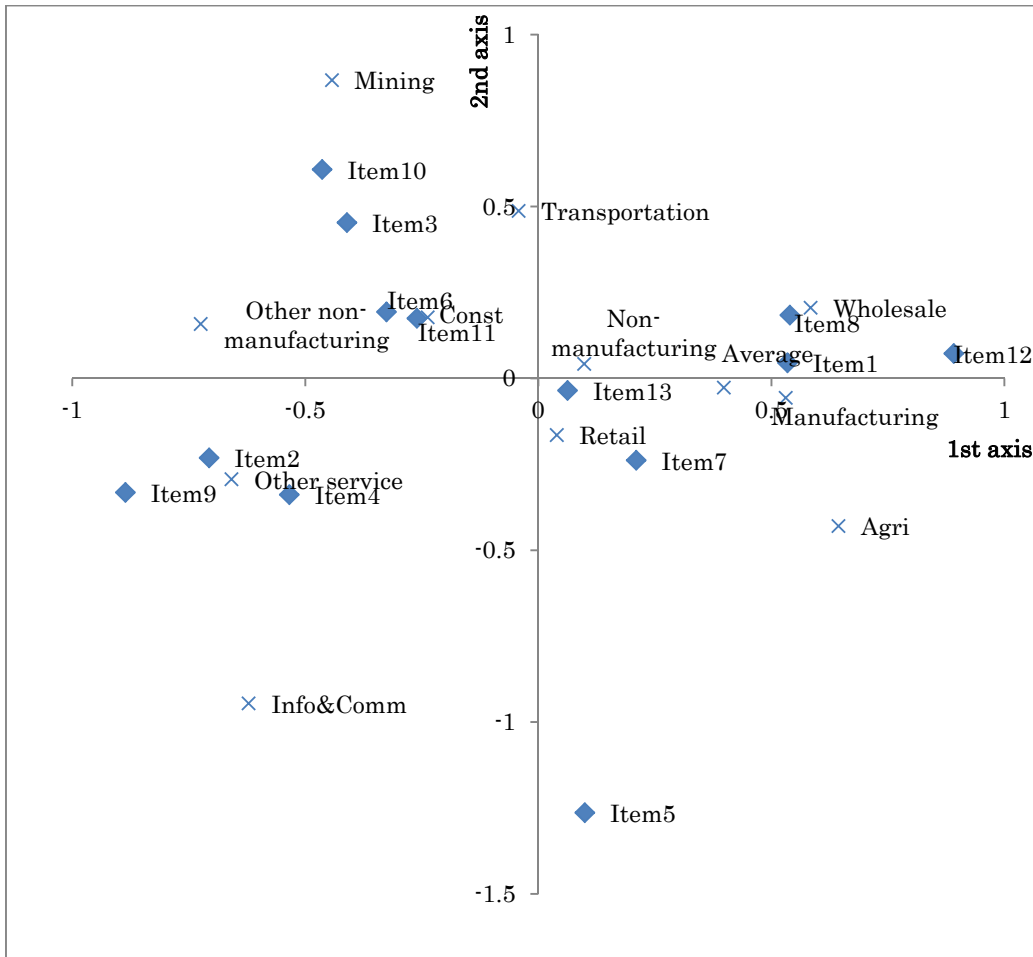
Item 13. Elimination of disadvantageous competitive conditions arising from other countries' FTAs

Item 14. Others (not listed in the table above for lack of space)

Source: Japanese Ministry of Economy, Trade and Industry, "The 2008 (38th) Survey of Overseas Business Activities".

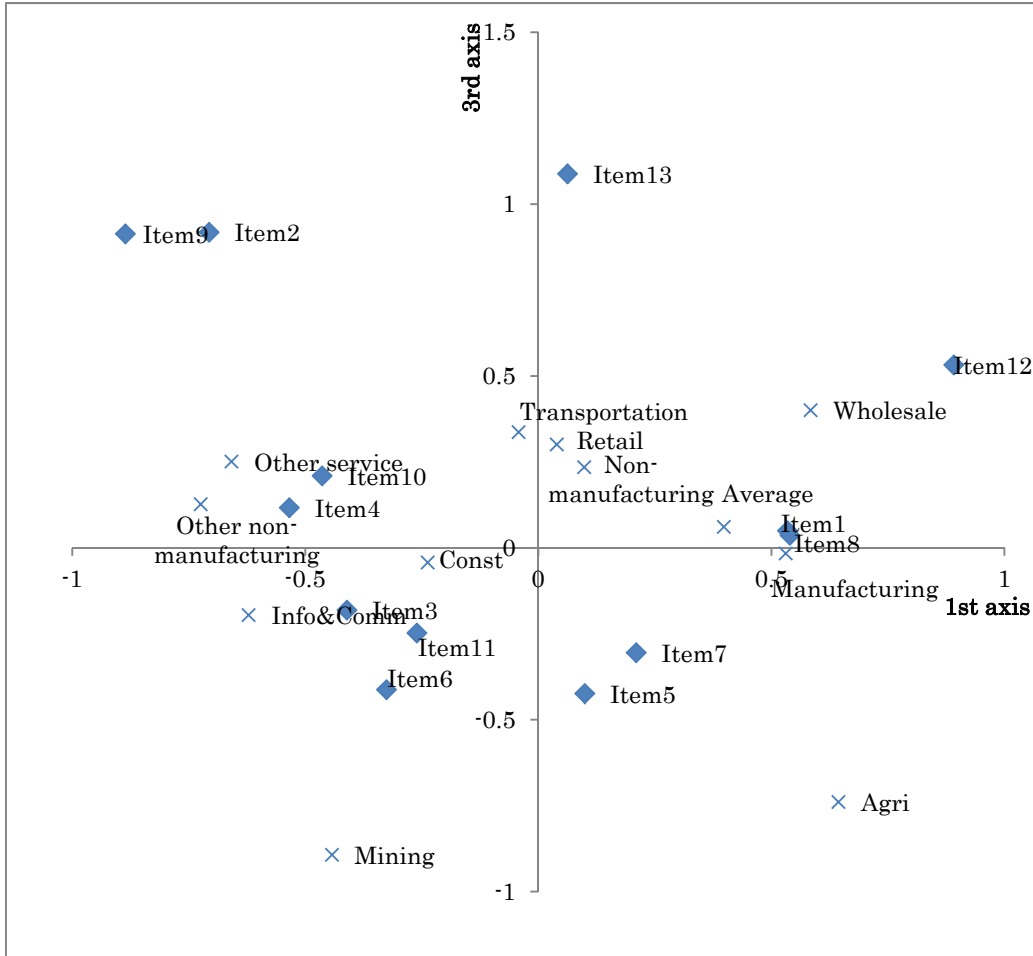
Next, Figure 1 and Figure 2 show the result of a standard “correspondence analysis” (the method to summarize the “closeness” of different categories by mapping along a few meaningful axes) applied to Table 1 (Expectations of FTAs expressed by Japanese firms (Total)). Judging from Table 5 which points to the high statistical significance of the correspondence analysis, there seem to be three meaningful factors (i.e., 1st, 2nd and the 3rd axes) along which different service sectors can be mapped.

Figure 1. Correspondence analysis of Table 5 (1st axis × 2nd axis)



Source: Made from Table 5.

Figure 2. Correspondence analysis of Table 5 (1st axis × 3rd axis)



Source: Made from Table 5.

The 1st axis (the horizontal one in Figures 1 and 2) puts “Manufacturing” and “Wholesale” close to Item 1 (Reduction/Removal of tariffs), and Item 8 (Facilitation/Simplification of custom procedures), these industrial sectors high value tariff-related FTA measures. The 2nd axis (the vertical one in Figure 1) puts Transportation close to the Item 3 (Deregulation/liberalization of investment, provision of investment rules), Construction to the Item 11 (Deregulation/liberalization of money transmission and financial/foreign exchange transactions including cash management systems), Wholesale to the Item 8 (Facilitation/Simplification of custom procedures),

and Retail to the Item 7 (Mutual recognition of standards and conformances), indicating high-priority regulations for each service sector. The 3rd axis (the vertical one in Figure 2) puts Information & Communication close to the Item 3 (Deregulation/liberalization of investment, provision of investment rules) and so forth.³

Table 5. Summary statistics and significance testing of the correspondence analysis

| Eigen value table | | | | |
|-----------------------|----------------|-------------|-------------------|------------------------------|
| Axis | Singular value | Eigen value | Contribution rate | Cumulative contribution rate |
| 1 st axis | 0.2340 | 0.0547 | 0.4433 | 0.4433 |
| 2 nd axis | 0.1678 | 0.0282 | 0.2280 | 0.6713 |
| 3 rd axis | 0.1472 | 0.0217 | 0.1755 | 0.8468 |
| 4 th axis | 0.0866 | 0.0075 | 0.0607 | 0.9075 |
| 5 th axis | 0.0669 | 0.0045 | 0.0362 | 0.9437 |
| 6 th axis | 0.0667 | 0.0045 | 0.0361 | 0.9798 |
| 7 th axis | 0.0441 | 0.0019 | 0.0158 | 0.9956 |
| 8 th axis | 0.0199 | 0.0004 | 0.0032 | 0.9988 |
| 9 th axis | 0.0121 | 0.0001 | 0.0012 | 1.0000 |
| 10 th axis | 0.0004 | 0.0000 | 0.0000 | 1.0000 |
| 11 th axis | 0.0001 | 0.0000 | 0.0000 | 1.0000 |

| Significance testing of inter-row and inter-column difference | Chi-square value | Degree of freedom | P value | Significance |
|---|------------------|-------------------|---------|--------------|
| 1 st axis | 173.2068 | 22 | 0.0000 | ** |
| 2 nd axis | 87.8509 | 20 | 0.0000 | ** |
| 3 rd axis | 67.4078 | 18 | 0.0000 | ** |
| 4 th axis | 23.1539 | 16 | 0.1097 | |
| 5 th axis | 13.8022 | 14 | 0.4645 | |
| 6 th axis | 13.7360 | 12 | 0.3179 | |
| 7 th axis | 6.0018 | 10 | 0.8151 | |
| 8 th axis | 1.2169 | 8 | 0.9965 | |
| 9 th axis | 0.4530 | 6 | 0.9984 | |
| 10 th axis | 0.0006 | 4 | 1.0000 | |
| 11 th axis | 0.0001 | 2 | 1.0000 | |

Source: Calculated from Table 1.

³ To enumerate, the larger the size of the firm is, the higher the response rates for the Item 2, Item 3, Item 5, Item 6, Item7, Item9, Item 10, Item 11, and Item 13 become: and the smaller the size of the firm is, the higher the response rate for the Item 1, Item 8, and Item 12 become.

While the characterization of these statistically meaningful axes is not easy, a suggested naming of the three factors is as follows:

1st Axis (or Factor): measurement of “tangible trade – intangible trade”;

2nd Axis (or Factor): measurement of “agglomeration (or scale economy)-network”;
and

3rd Axis (or Factor): measurement of “trade liberalization-trade facilitation”.

What can be stated at least is that three (and only three) factors dominate the variety of expectations of FTAs held and expressed by Japanese business firms. This survey also reveals that service firms’ size matters for different priorities or expectations of FTAs.

3. A survey analysis: Toyokeizai Shimposha dataset

This section makes a micro-based analysis of Japanese service firms’ commercial presence (mode 3). Toyokeizai Shimposha (a Japanese publisher) annually releases detailed statistics of Japanese foreign affiliates by host country. Table 6 shows the number of newly established service firms by country, while Table 7 shows the Number of newly established manufacturing firms by country. Figure 3 graphs the number of newly-established Japanese foreign affiliates in ASEAN countries possessing (as of end-2012) service-covering bilateral FTAs with Japan (namely, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam). As clearly seen, trade creation (for the ASEAN countries possessing bilateral FTAs with Japan) is observed in the service sector’s investment performance (i.e., the increasing share of ASEAN in terms of the number of foreign establishments), while on the other hand, trade diversion (i.e., decreasing share in terms of the number of foreign establishments) is observed in China (without such a service-covering FTA) as in Figure 4.

Table 8 calculates correlation coefficients of service-firms' number of new establishment and manufacturing-firms' number of new establishment: a positive correlation is observed overall (with the exception of Malaysia), which indicates that the manufacturing sector is encouraged by the service sector, and vice versa.

This dataset released by Toyokeizai Shimposha can be used for a more micro-based analysis featuring service firms' investment performance. For this study, several services sectors including the wholesale sector are chosen, in part for an obvious reason that the sector directly serves manufacturing sectors; and also in part for data availability: the service sector investment (mode 3) remains limited in number, and as a result, statistically meaningful observations cannot be made for some service sectors.⁴

⁴ This is the reason why Tables 6-8 as well as Figures 3-4 are based on the service/manufacturing sectors *on the whole*. Desirably, sectorally disaggregated data would be needed, and this remains a future research agenda.

Table 6. Number of newly established service firms by country

| Country | Total | before 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------|--------|-------------|------|------|------|------|------|------|------|------|------|
| World Total | 14,015 | 8,397 | 558 | 586 | 590 | 621 | 494 | 532 | 416 | 417 | 437 |
| Asia | 7,345 | 3,917 | 374 | 379 | 393 | 393 | 300 | 336 | 253 | 290 | 329 |
| Korea | 431 | 213 | 20 | 31 | 26 | 28 | 18 | 17 | 12 | 18 | 18 |
| China | 2,350 | 750 | 223 | 219 | 224 | 191 | 143 | 127 | 120 | 116 | 132 |
| Hong Kong | 944 | 707 | 30 | 30 | 27 | 23 | 14 | 16 | 19 | 23 | 18 |
| Macao | 9 | 4 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 |
| Taiwan | 540 | 398 | 11 | 13 | 14 | 21 | 11 | 25 | 10 | 13 | 6 |
| Mongolia | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| Vietnam | 199 | 54 | 6 | 6 | 10 | 19 | 16 | 22 | 20 | 18 | 17 |
| Thailand | 813 | 484 | 38 | 31 | 33 | 47 | 35 | 41 | 23 | 20 | 27 |
| Singapore | 857 | 606 | 17 | 21 | 15 | 19 | 15 | 28 | 17 | 23 | 32 |
| Malaysia | 370 | 279 | 8 | 7 | 11 | 7 | 5 | 10 | 3 | 10 | 6 |
| Brunei | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Philippines | 225 | 159 | 4 | 6 | 6 | 5 | 6 | 6 | 7 | 3 | 6 |
| Indonesia | 286 | 177 | 11 | 13 | 14 | 6 | 6 | 6 | 4 | 9 | 25 |
| Cambodia | 16 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 4 |
| Laos | 5 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Myanmar | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| India | 249 | 53 | 5 | 2 | 7 | 24 | 28 | 36 | 14 | 29 | 31 |
| Near and Middle East | 141 | 70 | 9 | 7 | 5 | 7 | 6 | 14 | 3 | 8 | 4 |
| Europe | 2,828 | 1,845 | 87 | 91 | 93 | 97 | 88 | 78 | 76 | 46 | 44 |
| North America | 2,402 | 1,726 | 58 | 74 | 62 | 71 | 53 | 60 | 46 | 33 | 34 |
| Canada | 219 | 155 | 5 | 4 | 2 | 4 | 5 | 3 | 5 | 4 | 4 |
| USA | 2,183 | 1,571 | 53 | 70 | 57 | 67 | 48 | 57 | 41 | 29 | 30 |
| Middle and South America | 706 | 411 | 18 | 26 | 21 | 35 | 40 | 27 | 22 | 26 | 13 |
| Mexico | 143 | 82 | 4 | 8 | 6 | 2 | 9 | 9 | 7 | 2 | 1 |
| Africa | 93 | 59 | 4 | 1 | 5 | 4 | 1 | 5 | 2 | 3 | 2 |
| Oceania | 500 | 369 | 8 | 8 | 11 | 14 | 6 | 12 | 14 | 11 | 11 |
| Australia | 381 | 280 | 6 | 6 | 8 | 11 | 4 | 10 | 13 | 8 | 9 |
| New Zealand | 67 | 53 | 0 | 2 | 2 | 0 | 1 | 2 | 0 | 2 | 0 |

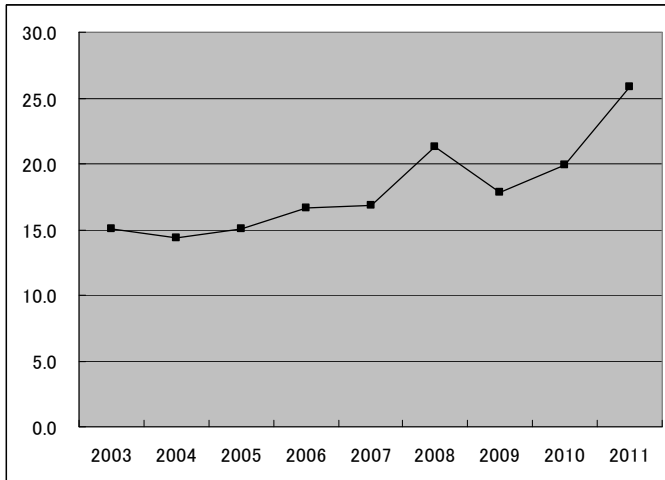
Source: Toyokeizai (2012).

Table 7. Number of newly established manufacturing firms by country

| Country | Total | before 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------|-------|-------------|------|------|------|------|------|------|------|------|------|
| World Total | 9,843 | 6,404 | 426 | 479 | 443 | 363 | 281 | 241 | 174 | 222 | 225 |
| Asia | 7,232 | 4,628 | 350 | 417 | 366 | 286 | 204 | 176 | 136 | 176 | 192 |
| Korea | 331 | 245 | 9 | 17 | 11 | 5 | 3 | 7 | 5 | 5 | 9 |
| China | 3,345 | 1,714 | 264 | 317 | 270 | 188 | 114 | 75 | 80 | 100 | 91 |
| Hong Kong | 226 | 183 | 9 | 7 | 2 | 4 | 6 | 0 | 0 | 0 | 0 |
| Macao | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taiwan | 408 | 343 | 6 | 8 | 8 | 10 | 5 | 6 | 0 | 3 | 3 |
| Mongolia | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vietnam | 329 | 126 | 9 | 15 | 33 | 30 | 29 | 27 | 14 | 11 | 19 |
| Thailand | 964 | 723 | 32 | 30 | 26 | 24 | 18 | 24 | 12 | 16 | 26 |
| Singapore | 212 | 187 | 0 | 2 | 2 | 2 | 0 | 1 | 1 | 3 | 1 |
| Malaysia | 436 | 384 | 4 | 8 | 0 | 6 | 4 | 4 | 5 | 1 | 6 |
| Brunei | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Philippines | 225 | 192 | 2 | 5 | 3 | 1 | 3 | 2 | 0 | 1 | 4 |
| Indonesia | 469 | 393 | 10 | 3 | 3 | 4 | 4 | 3 | 6 | 9 | 18 |
| Cambodia | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 |
| Laos | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Myanmar | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| India | 240 | 107 | 5 | 5 | 8 | 10 | 18 | 23 | 12 | 23 | 13 |
| Near and Middle East | 33 | 17 | 0 | 1 | 2 | 2 | 1 | 3 | 3 | 2 | 0 |
| Europe | 922 | 585 | 27 | 34 | 27 | 30 | 30 | 27 | 15 | 12 | 14 |
| North America | 1,190 | 864 | 38 | 22 | 36 | 27 | 29 | 21 | 11 | 15 | 11 |
| Canada | 69 | 50 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| USA | 1,121 | 814 | 36 | 21 | 34 | 26 | 28 | 20 | 10 | 14 | 10 |
| Middle and South America | 329 | 224 | 8 | 4 | 6 | 8 | 12 | 11 | 6 | 12 | 8 |
| Mexico | 138 | 88 | 2 | 3 | 4 | 4 | 8 | 9 | 2 | 5 | 4 |
| Africa | 38 | 23 | 1 | 0 | 4 | 3 | 2 | 0 | 1 | 3 | 0 |
| Oceania | 99 | 63 | 2 | 1 | 2 | 7 | 3 | 3 | 2 | 2 | 0 |
| Australia | 78 | 50 | 2 | 0 | 2 | 5 | 2 | 3 | 2 | 1 | 0 |
| New Zealand | 19 | 11 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 0 |

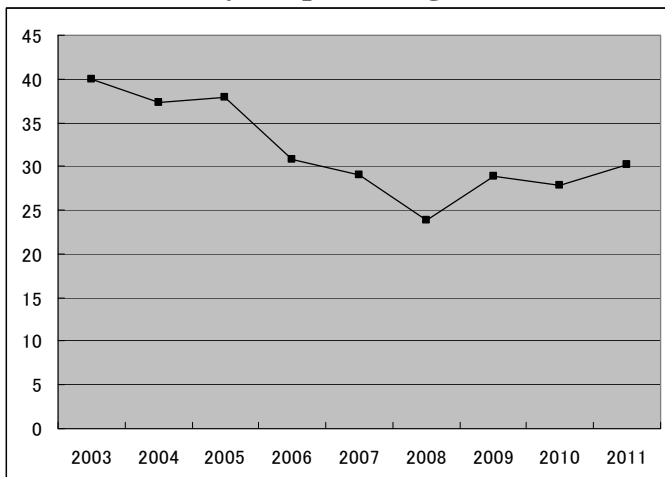
Source: Toyokeizai Shimposha (2012).

Figure 3. Number of newly-established Japanese foreign affiliates in ASEAN countries possessing (as of end-2011) service-covering bilateral FTAs with Japan



Source: Made from Table 6.

Figure 4. Number of newly-established Japanese foreign affiliates in China (as a reference country not possessing a bilateral FTA with Japan)



Source: Made from Table 6.

Table 8. Correlation between manufacturing and service sectors

| | |
|-------------|-------|
| Indonesia | 0.72 |
| Malaysia | -0.62 |
| Philippines | 0.23 |
| Singapore | 0.14 |
| Thailand | 0.50 |
| Vietnam | 0.27 |
| Average | 0.21 |

Source: Calculated from Tables 6 and 7.

This section has made survey-based analyses. They have revealed that service firms' major expectations of FTAs include service sector deregulation/liberalization and that the presence of service-covering FTAs promote trade in services in terms of the number of new investment by foreign service suppliers (a result from the case study in Section 3). It would be desirable for ERIA to design and conduct, in collaboration with the ASEAN Secretariat, more comprehensive questionnaire-based *company surveys* on the issue of the impact of FTAs in ASEAN on business companies' service trade performance (mainly in Mode 3, i.e., supply of services through establishing a commercial presence).

4. A micro-based analysis of Japanese service firms' performance and Japan's bilateral FTAs

Table 9 shows the share of new commercial establishments by Japan's bilateral FTA partner. It is revealed in the Table that while the two countries of Malaysia and the Philippines record decrease, the majority of countries (namely, Singapore, Thailand, Indonesia, and Vietnam) register increase in the number of new commercial establishments (i.e., mode 3 market entry) after the relevant bilateral FTA with Japan. At the level of the six-country average, this point is valid.

Table 9. Share of new commercial establishments by Japan's bilateral FTA partner

| Country | Year of FTA coming into effect | Share of new commercial establishment before FTA as a share of world total counts (percent) | Share of new commercial establishment after FTA as a share of world total counts (percent) | Increase/Decrease |
|----------------------------|--------------------------------|---|--|-------------------|
| Singapore | 2002 | 0.50 | 0.62 | Increase |
| Malaysia | 2006 | 2.91 | 1.80 | Decrease |
| Thailand | 2007 | 5.96 | 6.00 | Increase |
| Indonesia | 2008 | 1.96 | 3.89 | Increase |
| Philippines | 2008 | 1.03 | 0.74 | Decrease |
| Vietnam | 2009 | 1.13 | 3.24 | Increase |
| Six country simple average | Various | 2.25 | 2.72 | Increase |

Source: Author's calculation based on Yoyokeizai Shimposha (2012, 2013).

Combining the Toyokeizai Shimposha's database and the "Hoekman Index"⁵ (for measuring the degree of service sector liberalization, as defined below) for Mode 3 (commercial presence), quantitative analyses can be conducted. Hoekman (1995) proposes an indexation method for measuring the GATS-style degree of commitment in the service sector. This method assigns values to each of 8 cells (4 modes and 2 aspects--market access (MA) or National Treatment (NT)--), as follows: N=1, L=0.5, U=0; then calculates the average value by service sector and by country. Using the database constructed, the "Hoekman Index" can be calculated for each 155 sub-sectors. Then the simple average at the level of the 55 sectors is calculated. For this study, the values under mode 3 (commercial presence) only were considered in calculating the Hoekman Index. Tables 10-14 report the calculation results for selected service sectors.

⁵ Measuring the impact, i.e., indexation, of service trade liberalization is a relatively new research area, primarily because the trade in services has long been considered as "non-tradable" (which is currently not the case), and also because the modalities of trade in services differs greatly across different sub-sectors (as indicated by Adlung and Martin, 2005). Indeed, so much mention is made of the restricted status of trade in services (see, e.g., Fink and Molinuevo, 2008; Gootiiz and Mattoo, 2009; Hoekman, Martin and Mattoo, 2009), yet the paucity of indexation efforts is obvious.

⁶As indicated, the GATS commitments are supposed to be equal to or lower than the bilateral FTAs.

Table 10. Hoekman Index for Mode 3 of the information services (GATS code: 01B)

| | Hoekman Index under the GATS | Hoekman Index under the FTA with Japan | Net preferentiality of the host country |
|-------------|------------------------------|--|---|
| Singapore | 0.75 | 1.00 | 0.25 |
| Malaysia | 0.45 | 0.80 | 0.35 |
| Thailand | 0.80 | 0.80 | 0.00 |
| Indonesia | 0.20 | 0.60 | 0.40 |
| Philippines | 0.00 | 0.45 | 0.45 |
| Vietnam | 1.00 | 1.00 | 0.00 |

Source: Calculated by the author based on the specific commitment tables of each of the countries under each of the bilateral FTAs.

Table 11. Hoekman Index for Mode 3 of real estate services (GATS code: 01D)

| | Hoekman Index under the GATS (Mode3) | Hoekman Index under the FTA with Japan (Mode3) | Net preferentiality of the host country (Mode3) |
|-------------|--------------------------------------|--|---|
| Singapore | 0.00 | 1.00 | 1.00 |
| Malaysia | 0.00 | 0.00 | 0.00 |
| Thailand | 0.00 | 0.00 | 0.00 |
| Indonesia | 0.00 | 0.25 | 0.25 |
| Philippines | 0.00 | 0.00 | 0.00 |
| Vietnam | 0.00 | 0.00 | 0.00 |

Source: Calculated by the author based on the specific commitment tables of each of the countries under each of the bilateral FTAs.

⁶ For more details on the Hoekman Index as applied to the ASEAN+1 type FTAs, see Ishido (2012).

Table 12. Hoekman Index for Mode 3 of the wholesale trade services (GATS code: 04B)

| | Hoekman Index under the GATS (Mode3) | Hoekman Index under the FTA with Japan (Mode3) | Net preferentiality of the host country (Mode3) |
|-------------|--------------------------------------|--|---|
| Singapore | 0.0 | 1.0 | 1.0 |
| Malaysia | 0.0 | 0.0 | 0.0 |
| Thailand | 0.0 | 0.0 | 0.0 |
| Indonesia | 0.0 | 0.0 | 0.0 |
| Philippines | 0.0 | 0.0 | 0.0 |
| Vietnam | 0.0 | 1.0 | 1.0 |

Source: Calculated by the author based on the specific commitment tables of each of the countries under each of the bilateral FTAs.

Table 13. Hoekman Index for Mode 3 of the banking (GATS code: 07B)

| | Hoekman Index under the GATS (Mode3) | Hoekman Index under the FTA with Japan (Mode3) | Net preferentiality of the host country (Mode3) |
|-------------|--------------------------------------|--|---|
| Singapore | 0.69 | 0.69 | 0.00 |
| Malaysia | 0.25 | 0.66 | 0.41 |
| Thailand | 0.06 | 0.06 | 0.00 |
| Indonesia | 0.29 | 0.29 | 0.00 |
| Philippines | 0.56 | 0.75 | 0.19 |
| Vietnam | 0.00 | 0.50 | 0.50 |

Source: Calculated by the author based on the specific commitment tables of each of the countries under each of the bilateral FTAs.

Table 14. Hoekman Index for Mode 3 of the maritime transport services (GATS code: 11A)

| | Hoekman Index under the GATS (Mode3) | Hoekman Index under the FTA with Japan (Mode3) | Net preferentiality of the host country (Mode3) |
|-------------|--------------------------------------|--|---|
| Singapore | 0.17 | 0.67 | 0.50 |
| Malaysia | 0.25 | 0.38 | 0.13 |
| Thailand | 0.08 | 0.08 | 0.00 |
| Indonesia | 0.17 | 0.33 | 0.16 |
| Philippines | 0.33 | 0.67 | 0.34 |
| Vietnam | 0.38 | 0.38 | 0.00 |

Source: Calculated by the author based on the specific commitment tables of each of the countries under each of the bilateral FTAs.

Combining the data on Hoekman Index (Tables 10-14) and the local establishment-level data⁷ released by Toyokeizai Shimposha, a statistical analysis has been made. Based on data availability, the following five service sectors have been chosen: information services, real estate services, wholesale, banking and maritime transportation. Since the values of Hoekman Index are discrete by nature, variance-based statistical investigations (including logistic regression and Poisson regression) are infeasible. In this study, therefore, a discriminant analysis has been applied. In the discriminant analysis, the value of 1 is assigned to the “post-FTA new commercial presence”; otherwise, the value of 0 is assigned. Then adopting the 1-0 discrete variable in the discriminant analysis as the target variable, the corresponding linear discriminant function has been estimated. The variables in the discriminant function are: the net Hoekman Index for mode 3 (commercial presence) of the each service sector, parent companies’ number of workers (in the most recent reporting year, viz., 2012) and parent companies’ amount of capital (in the most recent reporting year, viz., 2012). Since there seems to be a positive correlation between the latter two variables, one of the two has been used in each estimation.

Table 15 shows the result. Among the five services sectors, wholesale and maritime transportation (as well as the real estate services with the variable for parent companies’ amount of capital) have revealed statistical significance for all the variables used in the discriminant function. As is expected, the sign of the discriminant coefficient for the net Hoekman Index is positive in these sectors. What is notable is the negative

⁷ For an overview of this data source, see Toyokeizai Shimposha’s relevant website, e.g., http://dbs.toyokeizai.net/products/list.php?category_id=20 (in Japanese, accessed 10 October 2013).

sign of the discriminant coefficient for parent companies' number of workers as well as their amount of capital. Judging from this result, it might be stated that overall, Japan's bilateral FTAs with the six ASEAN countries enable smaller-scale Japanese companies to make an investment choice in those countries. Other variables, including parent companies' year of establishment and their level of equity participation in the subsidiary, were not significant in the discriminant analysis (not reported here). Since sales figures (which include mode-3 trade values) are not available for a non-negligible number of companies, more comprehensive datasets are awaited for more detailed statistical analyses measuring the impact of service-covering FTAs.

Table 15. Results of the discriminant analysis by sector

| Service sector | Information services | | Real estate services | | Wholesale ^a | | Banking | | Maritime transportation | |
|---|--|----------------------|----------------------|---------------------|------------------------|----------------------|----------------------|----------------------|-------------------------|----------------------|
| | Independent variable: New commercial presence in a post-FTA country (1 or 0) | | | | | | | | | |
| <i>Variable for discriminant function</i> | | | | | | | | | | |
| M3NetHoekman | 28.468*** (0.000) | 28.525*** (0.000) | 7.910*** (0.000) | 7.738*** (0.000) | 17.222*** (0.000) | 17.229*** (0.000) | 33.380*** (0.000) | 33.137*** (0.000) | 22.774*** (0.000) | 23.050*** (0.000) |
| ln(ParentWorkers) | 0.055 (0.500) | | -0.102 (0.710) | | -0.167* (0.064) | | -0.274 (0.127) | | -0.635*** (0.010) | |
| ln(ParentCapital) | | 0.064 (0.385) | | -0.500** (0.020) | | -0.088* (0.053) | | -0.013 (0.907) | | -0.362*** (0.000) |
| Intercept | -0.668 | -0.668 | 0.052 | 1.801 | 0.354 | 0.202 | 0.880 | 0.004 | 1.530 | 1.390 |
| Hitting ratio for the successful prediction of post-FTA new commercial presence | 77.78 | 77.78 | 33.33 | 33.33 | 75.00 | 75.00 | 66.67 | 66.67 | 50.00 | 70.00 |
| Hitting ratio for the successful prediction of post-FTA no action | 100.00 | 100.0 | 100.00 | 100.00 | 100.0 | 100.0 | 100.0 | 100.0 | 100.00 | 100.00 |
| Overall hitting ratio | 98.39 | 98.39 | 93.75 | 93.75 | 99.55 | 99.55 | 99.20 | 99.20 | 98.25 | 98.95 |
| No. of observations | 372 | 372 | 96 | 96 | 891 | 891 | 125 | 125 | 285 | 285 |

Notes: ^a For this sector alone, the dataset used was constructed from Toyokeizai Shimposha (2012). The other sectors are based on the dataset constructed from Toyokeizai Shimposha (2013). Figures in parentheses show p-values. *** indicates statistically significant at the 1% level; ** indicates statistically significant at the 5% level; * indicates statistically significant at the 10% level. “M3NetHoekman” denotes the value of Hoekman Index for Mode 3; “ParentWorkers” denotes the parent company’s number of workers; “ParentCapital” denotes the parent company’s capital.

Source: Author’s calculation based on Toyokeizai Shimposha (2012, 2013).

5. Policy suggestions and conclusions

Given that services sector on the whole serves as a supporting industry for the manufacturing sector, the promotion of cross-border investment in the services sector is vital for promoting manufacturing activities too. This paper has focused on the economic impacts of Japan's bilateral FTAs on Japanese firms in the services sector. While services sectors are "non-manufacturing" in nature, their business features vary greatly across different sub-sectors.

As the business survey featured in this study reveals, some firms are more location-oriented, while others are more network-oriented. In the wholesale sector, for example, tangibility of commodities handled for wholesaling might be at issue, therefore those companies in this sector show sensitivity to tariff rates. They are also keen on the factors of agglomeration or scale economy: For the information services, on the other hand, tariff rate might not be a serious consideration. One thing in common across the services sectors, however, is their supporting (indeed, "service") role.

From this perspective, the first policy suggestion is: promotion of service sector investment (i.e., market entry in mode 3) should be made *as a single policy package*, irrespective of the diversity in character of service sector firms.

This study has also made some analyses of firm-level surveys. With the use of firm-level surveys, detailed analyses become possible. The firm-level has found out that the service trade liberalization through Japan's bilateral FTA with each of the six ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam) facilitate new commercial presence and also enable smaller parent companies to invest.

The share analysis in this study has revealed that, overall, service-investment

creation is taking place thanks to Japan's bilateral FTAs with the six ASEAN countries. A natural second Policy suggestion is: promotion of investment (mode-3 market entry) *by small-scale firms* should be more explicitly focused upon, especially because the majority of Japanese (potential) parent firms are under the category of "small and medium scale". And the existence of EPA itself might give a positive signal that investing in those countries having FTAs with Japan is both safe and profitable.

Generally speaking, manufacturing and service activities are mutually reinforcing: manufacturing activities become dominant first (logically as well as historically), then the demand for service activities are enhanced and as a result, foreign service firms are attracted to invest. This study has revealed the overall correlation between service firms' and manufacturing firms' investment activities. Conducting more comprehensive and more detailed firm-level surveys in the context of service-covering FTAs in East Asia (including the ASEAN region as well as China, Korea, India and elsewhere) would reveal new insights into the effective use of future FTAs.

This study has made a first step effort to clarify the impact of Japan's bilateral FTAs on the new commercial presence by Japanese service firms. At it stands, however, service-sector investment remains low in scale. The statistical analysis in this study therefore suffers from the overall lack of data. As for the scope for future work, a discussion of newly established firms' sales performance would be beneficial, since this is precisely the mode 3-based trade in services (which, however, has not been covered in this study due mainly to the lack of relevant information).

The third policy suggestion, which is relevant to this study but broader in scope is: the level of service sector commitments currently negotiated under the Japan-ASEAN FTA should be *as highly-committed as possible*, since, after all, *bilateral*

FTAs could be a source of “spaghetti bowl” complication. And this point precisely relates to the creation of what could be called a seamless service region under the proposed Regional Comprehensive Economic Partnership (RCEP) in East Asia. Further research efforts should indeed be directed toward the analysis of an East Asian-wide service sector, once it is realized in a highly committed and harmonized fashion.

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