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Economic Cooperation**

Advancing Free Trade
for Asia-Pacific **Prosperity**

Research on Promoting Trade in Services by SMEs and Women Entrepreneurs

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Table of Contents

LIST OF FIGURES	vi
LIST OF TABLES	viii
List of Abbreviations / Glossary	x
HIGHLIGHTS OF THE REPORT	xii
EXECUTIVE SUMMARY	xiv
Acknowledgement and Disclaimer	xv
Chapter 1: INTRODUCTION	1
1.1. Introduction.....	1
1.2. Main Features of Trade in Services.....	4
1.3. Services Industry and Women	7
1.4. Productivity of Service Industry	13
1.5. Gravity Model.....	14
CHAPTER REFERNECES	16
Chapter 2: Review of Methodology for Service Trade Restrictiveness	17
2.1. Multiple FTAs and APEC Policies for Promoting Trade in Services	17
2.2. Scope and Review Methodology	20
2.3. Indexation of Service Trade Restrictiveness.....	21
2.4. Structure of the Online Survey	30
2.5. Field Survey Analysis	32
CHAPTER REFERNECES	39
Chapter 3: FTAs AND SIZE OF THE INVESTING SERVICE SUPPLIERS	40
3.1. Introduction.....	40
3.2. Factors Inhibiting Trade in Services	40
3.3. Challenges Experienced by SMEs as They Look to Expand Their Business to Overseas Market.....	49
3.4. Women Entrepreneurs and Service Investment Abroad.....	56
CHAPTER REFERENCES	64
Chapter 4: CASE STUDY OF SERVICE SECTORS: WOMEN ENTREPRENEURSHIP IN EDUCATION	65
4.1. Index Analysis of Restrictions on Trade in Educational Service	65
4.2. Role of Education Services for APEC Economies	77
4.3. Case study: PISA Scores and Promotion of Trade in Educational Services.....	80
4.4. Case Study: Implications of the ASEAN Free Labour Market and Educational Services	84
4.5. Case of At-Home Ryugaku Produced and Run by Sunshine Maki (Kamiya Maki)	86
4.6. Case of Green School in Bali, Indonesia	88
4.7. Insights on Cross-Border Business Expansion of Educational Services	89
CHAPTER REFERENCES	91

Chapter 5: CASE STUDY OF SERVICE SECTORS: GREEN ECONOMY IN SCOPE	92
5.1. Index Analysis of Restrictions for Environmental Services	92
5.2. APEC’s Environmental Services Action Plan (ESAP)	106
5.3. Case Study: Characteristics of Environmental Services through Financial Indicators	107
5.4. Coco&K: Cocoro International Inc.	108
5.5. Case Study on the Company “HIES Inc” and “Women in the Environment (WE)”	111
5.6. Green-Practice Efforts (GPE) at a Hotel near Bangkok, Thailand	111
CHAPTER REFERENCES	114
Chapter 6: CASE STUDY OF SERVICE SECTORS: SMES IN REAL ESTATE SERVICES	115
6.1. Index Analysis of Restrictions for Real Estate Service	115
6.2. Basic Structure of Real Estate Services	120
6.3. Case Study: China International Real Estate	120
6.4. Financial Analysis of Real Estate Services and SMEs	121
CHAPTER REFERENCES	123
Chapter 7: POLICY SUGGESTION: INTRODUCTION OF A FRAMEWORK FOR SERVICE TRADE LIBERALIZATION IN FAVOR OF SMEs, WOMEN ENTREPRENEURS AND GREEN ECONOMY	124
7.1. Trade in Services and Values of Economic Activities	124
7.2. Policy Suggestions for the Promotion of Trade in Service by SMEs	124
7.3. Policy Suggestions for the Promotion of Trade in Service by Women Entrepreneurs	126
CHAPTER REFERENCES	132
APPENDIX A	133
APPENDIX B	137
APPENDIX B. REFERENCES	143
APPENDIX C. Composition of Companies	144
APPENDIX D. List of Companies (Originally from APEC Economy) Investing in a Foreign Economy	146
APPENDIX E. Share of Domestic Companies and Foreign Subsidiaries	149
APPENDIX F. Detailed Results of Gravity Model Regressions (Software: STATA)	150
APPENDIX G. Regulations for Access of Internet Ranking (2015-2018 Average)	151
APPENDIX H. Regression of Gravity Model with Hoekman Index (Under GATS)	151
APPENDIX I. Expert Judgement Weights by Policy Area and Sector (as Defined by OECD)	152
APPENDIX J. AFAS10 Hoekman Index Average by Sector	155
APPENDIX K. Hoekman Index for the Members of Trans-Pacific Partnership(TPP)	161
APPENDIX L. Questionnaire Format	160
APPENDIX M. The Result of Questionnaire Survey (Online) on the Overseas Expansion of Business	161

APPENDIX N. Current Status of Educational Service and STRI	186
APPENDIX N. REFERENCES	187
APPENDIX O. Current Status of Environmental Service and STRI.....	190
APPENDIX O. REFERENCES	189
APPENDIX P. Current Status of Real Estate Service and STRI.....	189
APPENDIX P. REFERENCES.....	190
APPENDIX Q. Financial Ratios	191
APPENDIX R. Profit and Loss Statement (Composition Rate)	194
APPENDIX S. Balance Sheet (Composition Rate)	201

LIST OF FIGURES

Figure 1.1 Removal of Service Trade Restrictiveness with SMEs and Women Entrepreneurs in Focus.....	2
Figure 1.2 Structure of Service Trade Restrictiveness for a Service Sector and Mode.....	3
Figure 1.3 Share of Labor Force in the Service Industry (2015-2017 Average).....	6
Figure 1.4 Number of Days Required for the Opening of Business Establishments (2015-2018 Average).....	7
Figure 1.5 APEC Members' Trade in Services (Year: 2015-2017 Average).....	7
Figure 1.6 Sectoral Shares in Total Employment in APEC, 2015-2017 Average.....	8
Figure 1.7 Employment Shares by Sector for the APEC Members (Year: 2015-2017 Average).....	9
Figure 1.8 Estimated Earned Income by Gender.....	13
Figure 2.1 Correspondence Analysis of the Survey Results.....	31
Figure 3.1 Future Plan of Foreign Investment (Total).....	43
Figure 3.2 Future Plan of Foreign Investment (Large Companies).....	43
Figure 3.3 Future Plan of Foreign Investment (Small and Medium Companies).....	44
Figure 3.4 Challenges on Utilizing FTAs (Total, by Time Trend).....	44
Figure 3.5 Reasons for Overseas Expansion by Service Companies (Total).....	47
Figure 3.6 Purpose of Foreign Investment by Service Companies (at the Time of Overseas Expansion).....	48
Figure 3.7 Preparation for Overseas Expansion by Service Companies (Total).....	48
Figure 3.8 Business Strategies and Schemes for Overseas Expansion by Service Companies (Total).....	49
Figure 3.9 Self-Employed Rate for Women and Men in APEC Region.....	56
Figure 4.1 Literacy Rates in the APEC Economies by Gender (2017).....	78
Figure 4.2 Average Rate of University Enrolment in APEC Economies.....	79
Figure 5.1 Aluminum Packs for Upcycling.....	109
Figure 5.2 Upcycle Products.....	110
Figure 6.1 Basic Structure of Real Estate Services (in General).....	120
Figure A.1 Word Frequency Analysis (1993-2016).....	133
Figure A.2 Frequency Analysis of Modifiers and Modified Words (1993-2016).....	133
Figure A.3 Word Network (1993-2016).....	134
Figure A.4 Focus Word Analysis; “woman”.....	135
Figure A.5 Focus Word Analysis: “gender”.....	135
Figure A.6 Focus Word Analysis: “services”.....	136
Figure B.1 Firm Distribution and Productivity Partitions.....	140
Figure B. 2 Oversea Sales vs. Productivity.....	141
Figure B.3 Oversea Sales after a Higher Fixed Cost Imposed.....	141
Figure B.4 Oversea Sales after a Higher Variable Cost Imposed.....	142
Figure C.1 Composition of Companies (Domestic).....	144
Figure C.2 Composition of Companies (Foreign).....	145
Figure D.1 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Real Estate Services).....	146
Figure D.2 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Educational Services).....	147
Figure D.3 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Environmental Services).....	148
Figure J.1 AFAS10 Hoekman Index Average (Real Estate Services).....	158

Figure J.2 AFAS10 Hoekman Index Average (Educational Services).....	159
Figure J.3 AFAS10 Hoekman Index Average (Environmental Services)	160
Figure M.1 Distribution of Respondents' Economies	167
Figure M.2 Composition of Gender in Total Responses (percent)	168
Figure M.3 Age Groups in Total (percent)	169
Figure M.4 Distribution of Sectors in Total (percent)	170
Figure M.5 Number of Years since Establishment of the Business in Total	172
Figure M.6 Distribution of Firm Size Based on the Number of Employees	173
Figure M.7 Percentage of Respondents Considering Overseas Business Expansion (Total)	173
Figure M.8 Percentage of Respondents Considering Overseas Business Expansion (Those Who Answered Question 6 Onward).....	174
Figure M.9 Distribution of Respondents' Economies (Those Who Answered Question 6 Onward)	175
Figure M.10 Distribution of Respondents' Gender (Those Who Answered Question 6 onward)	175
Figure M.11 Distribution of Respondents' Age Groups (Those Who Answered Question 6 Onward)	176
Figure M.12 Distribution of Respondents' Sectors (Those Who Answered question 6 onward)	176
Figure M.13 Number of Years since the Establishment of Business (Those Who Answered Question 6 onward).....	177
Figure M.14 Distribution of Firm Size Based on the Number of Employees	177
Figure M.15 Responses to the Questions on Restriction (Foreign Entry)	178
Figure M.16 Responses to the Questions on Restriction (Movement of People).....	178
Figure M.17 Responses to the Questions on Restriction (Discriminatory Measures).....	179
Figure M.18 Responses to the Questions on Restriction (Barriers to Competition)	179
Figure M.19 Responses to the Questions on Restriction (Regulatory Transparency).....	180
Figure M.20 Yes/No Weighted Average Score	180
Figure M.21 Gender and Yes/No Weighted Average Score.....	181
Figure M.22 Responses to the Question "How much will the following factors affect your decision?".....	181
Figure M.23 Number of Years Since the Establishment of Business (by gender).....	182
Figure M.24 Distribution of Firm Size (by gender).....	182
Figure M.25 Results of Logistics Regression Analysis	183
Figure M.26 Data Set from the Online Survey	185

LIST OF TABLES

Table 1.1 Results of Gravity the Model Analysis (OLS Regression).....	15
Table 2.1 List of the FTAs in the World (as Reported to the World Trade Organization).....	18
Table 2.2 Experts Judgement Weights of Service Trade Restrictiveness by Policy Area and Sector by OECD	22
Table 2.3 Matching of OECD Policy Measures and the World Bank Policy Measures	23
Table 2.3 Average Scores of the Online Survey Responses (Barriers against Foreign Business Expansion in terms of Individual Factors).....	30
Table 2.5 Result of Interview-Based Surveys (Utilizing the Online Questionnaire)	38
Table 3.1 Definition of the Size of Firms for the Survey	40
Table 3.2 Existence of Overseas Bases (by category and by size)	41
Table 3.3 Survey on Effective Measures for Overseas Business Expansion	42
Table 3.4 Challenges on Utilizing FTAs (by Sector)	45
Table 3.5 Challenges on Human Resources	50
Table 3.6 Challenges on Cost Issues.....	51
Table 3.7 Challenges on Management.....	51
Table 3.8 Interest in Investment Abroad.....	52
Table 3.9 Reasons for Not Investing Abroad.....	52
Table 3.10 General Characteristics of Male and Female Entrepreneurs	61
Table 3.11 Comparison of Risk Tolerance by Male and Female Entrepreneurs	61
Table 3.12 Comparison of Financing Aspect by Male and Female Entrepreneurs	62
Table 3.13 Comparison of Motivation for Work by Male and Female Entrepreneurs.....	62
Table 3.14 Comparison of Management Style by Male and Female Entrepreneurs	63
Table 3.15 Comparison of Networking for Work by Male and Female Entrepreneurs	63
Table 4.1 Scores of Restrictive Indices for Education Services (for all Economies).....	66
Table 4.2 Average of all Economies and all Modes	67
Table 4.3 Average Scores of Policy Restrictiveness for Education Services (Total) by OECD Policy Category.....	67
Table 4.4 Number of Domestic Companies in Education Services and their Size Distribution at the End of 2016	69
Table 4.5 Matrix of Mode-3 Based Investment (Education Services), at the End of 2016.....	70
Table 4.6 Average Utilization Rate of Regulations by Five OECD Categories for Primary Education Services.....	71
Table 4.7 Average Utilization Rate of Regulations by Five OECD Categories for Secondary Education Services.....	72
Table 4.8 Average Utilization Rate of Regulations by Five OECD Categories for Secondary Education Services.....	73
Table 4.9 Average Utilization Rate of Regulations by Five OECD Categories for Adult Education Services.....	75
Table 4.10 Average Utilization Rate of Regulations by Five OECD Categories for Other Education Services.....	76
Table 4.11 Pros and Cons on Public Investment in Technical and Vocational Education and Training (TVET).....	80
Table 4.12 Comparison of PISA Scores	80
Table 5.1 Indexation Results by Sector and by Mode (Environmental Services)	92
Table 5.2 Average of All Economies and All Modes for Environmental Services	93
Table 5.3 Average Scores by OECD Policy for Environmental Services (Total)	93

Table 5.4 Number of Domestic Companies in Environmental Services and their Size Distribution at the End of 2016.....	94
Table 5.5 Matrix of Mode-3 Based Investment (Environmental Services), at the End of 2016	95
Table 5.6 Average Utilization Rate of Regulations by Five OECD Categories for Sewerage, Sewage Treatment and Septic Tank Cleaning Services (941).....	97
Table 5.7 Average Utilization Rate of Regulations by Five OECD Categories for Waste Collection Services (942).....	99
Table 5.8 Average Utilization Rate of Regulations by Five OECD Categories for Waste Treatment and Disposal Services (943)	100
Table 5.9 Average Utilization Rate of Regulations by Five OECD Categories for Remediation Services (944)	102
Table 5.10 Average Utilization Rate of Regulations by Five OECD Categories for Sanitation and Similar Services (945).....	104
Table 5.11 Average Utilization Rate of Regulations by Five OECD Categories for Other Environmental Protection Services (949)	105
Table 6.1 Range of Restrictiveness Index Values Among the APEC Members for Real Estate Services	115
Table 6.2 Average Scores of APEC Members by OECD Policy Category for Real Estate Services	115
Table 6.3 Restrictiveness Index: Average of all Economies and all Modes for Educational, Environmental and Real Estate Services in Comparison.....	116
Table 6.4 Number of Domestic Companies in Real Estate Services and their Size Distribution at the End of 2016	117
Table 6.5 Counts of mode-3 Based Investment (Real Estate Services) at the End of 2016 ..	118
Table 6.6 Average Utilization Rate of Regulations by Five OECD Categories for Real Estate Services (Total).....	119
Table 7.1 Policy options for SMEs and women entrepreneurs in line with the Boracay Action Agenda	129
Table E.1 Size Distribution of Business Firms in the Home Economy and Abroad	149
Table H.1 Hoekman Index of GATS 2003 offer by APEC Member Economies.....	153
Table H.2 Hoekman PPML for all Service Sectors	155
Table I.1 Expert Judgement Weights by Policy Area and Sector (as Defined by OECD) ...	156
Table M.1 Distribution of Respondents' Economies.....	167
Table M.2 Composition of Gender in Total Responses (percent)	168
Table M.3 Age Groups in Total (percent)	169
Table M.4 Distribution of Sectors in Total (percent)	171
Table M.5 Number of Years since Establishment of the Business in Total	172
Table M.6 Distribution of Firm Size Based on the Number of Employees.....	173
Table M.7 Percentage of Respondents Considering Overseas Business Expansion (Total) .	174
Table Q.1 Financial Ratios for Solid Waste Management Services	195
Table Q.2 Financial Ratios for Real Estate Brokering Service	196
Table Q.3 Financial Ratios for Real Estate Leasing and Management Service	197
Table R.1 Profit and Loss Statement for Solid Waste Management Services.....	198
Table R.2 Profit and Loss Statement for Real Estate Broker Services	199
Table R.3 Profit and Loss Statement for Real Estate Leasing and Management Services....	200
Table S.1 Balance Sheet for Solid Waste Management Services	201
Table S.2 Balance Sheet for Real Estate Broker Services	202
Table S.3 Balance Sheet for Real Estate Leasing and Management Service	206

List of Abbreviations / Glossary

ADB	Asian Development Bank
APEC	Asia-Pacific Economic Cooperation
ASCR	APEC Services Competitiveness Roadmap
ESAP	Environmental Service Action Plan
ESD	Education for Sustainable Development
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GPE	Green-Practice Efforts
GSB	Green School Bali
Hoekman Index	The index taking values between 0 for the case of no trade liberalization and 1 for the case of full trade liberalization in terms of market access and domestic treatment
JETRO	Japan External Trade Organization
Melitz Effect	Impact of trade liberalization in the form of enhancement of domestic productivity threshold (firms below which have to exit but possibly reorganized into higher productivity firms) and reduction of export productivity threshold
MSMEs	Micro, small and medium enterprises
MSAP	Manufacturing Related Services Action Plan
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Co-operation and Development
PT	Indonesian Abbreviation for Limited Corporation
SMEs	Small and Medium-Sized Enterprises
STEM Education	Science, Technology, Engineering and Mathematics Education
STRI	Service Trade Restrictiveness Index
TILF	Trade and Investment Liberalization and Facilitation
TVET	Technical and Vocational Education and Training
We-Fi	Women Entrepreneurs Finance Initiative
WTO	World Trade Organization

EXECUTIVE SUMMARY

This research report addresses promotion of trade in services by small and medium sized enterprises (SMEs) and women entrepreneurs through data analyses and case studies.

In Chapter 1, the existence of domestic regulations as barriers against trade in services, as well as multiple free trade agreements (FTAs) in the Asia Pacific Region have been reviewed. In connection to regulatory barriers against trade in services and firm-level heterogeneity.

Chapter 2, based on the thesis of firm-level heterogeneity in terms of productivity, reports that SMEs with lower productivity face barriers in the form of having to pay the high “fixed cost” to comply with export-related regulations (e.g., costs and time required for approval of commercial presence, application for visa and work permits) when considering trade in services. As also revealed, there is a higher proportion of female workers (than male workers) employed in the service industry across all the APEC member economies. The online survey part of this study reveals that in comparison with male respondents, importantly, female respondents are, in comparison with male respondents, less concerned about their capacity, family matters, funds and safety of the area for investment. At a more disaggregated level, however, female respondents actually planning foreign business expansion lists “Family” and “Funds” as barriers against their business plan. It would make sense to promote service trade liberalization focussed on SMEs and women entrepreneurs with practical support related to these aspects. While the number of responses is not necessarily enough for making statistical inferences, there are some observations. As for the category “Female not planning foreign business expansion”, the three policy categories, “Barriers to competition”, “Other discriminatory measures” and “Safety of the area” are their main concerns, rather than individual-level concerns (e.g., Family). Concerning “Female planning foreign business expansion”, the two individual-level items “Funds”, and “Family”, as well as “Restrictions to Movement of people” at the policy-level are the main concerns. On “Male not planning foreign business expansion”, No closely associated components are observed. Regarding “Male planning foreign business expansion”, “Capacity” (at the individual level) as well as “Restrictions on foreign entry” (at the policy level) are the main concerns in considering their business expansion abroad. Ensuing statistical regression results show that at the individual level, younger generation and longer period of work both lead to the choice of overseas business expansion. At the policy level, the regression result shows that “Other discriminatory measures” of the host economies have a significant negative impact on the choice of overseas business expansion. The field interviews have identified that the removal of “implicit barriers”

against foreign expansion by SMEs and women entrepreneurs at the societal level as well as at the individual level might be important for the promotion of trade in services by them. APEC's role is precisely to remove those "implicit barriers" through implementing "flagship" projects to this end.

Chapter 3 of this report finds that for most of the companies, especially for SMEs, "human resource for overseas business" has been the most crucial challenge followed by "(finding) local business partner" and "(collecting) overseas regulatory information", when looking to enter an overseas market with their business ideas. These barriers could be resolved by training the local managers and modifying the management policy as there could be a huge gap between the policies and the actual business climate in the overseas market. The top concern of the female business suppliers who are not considering an investment abroad is their human resource capacity that makes them less confident, followed by lack of access to sufficient capital and family-related matters in their pursuit of business abroad; they need to find a balance between work and home. Creating educational tactics for improving women's human capital potential is fundamental for entrepreneurial growth and an essential component for producing women entrepreneurs who can enter and survive in the entrepreneurial world. Access to financial capital in this context is seen as a major criterion for entrance and survival.

Chapter 4 addresses the scope for expanding trade in education services broadly first. As for SMEs in this sector, it was found that not so many suppliers of education services are statistically recorded as investing across APEC members. There is thus much scope for promoting cross-border business expansions of education services. The education services remain rather restrictive for investment from abroad. The category "Other Education Services", because of its wide scope for embracing diverse and innovative education services, has an innovative potential when restrictions are gradually removed. The role of education as screening and imparting knowledge and skills (Stiglitz, 2009) should both be underpinned as necessary by promoting trade in education services.

Chapter 5 deals with environmental services, first in general, in which the concept of environmentally friendly "green economy" could be a core value for APEC. The case study analysis has revealed the fact that in spite of uncertainty with respect to global climate change, private sector business organizations are trying to respond to the local needs for environmental friendliness in their business (including "upcycling" or creative recycling use), and this momentum is expected to spread across borders in the Asia Pacific region.

Chapter 6 highlights real estate services, which could be requiring much funding due to the need for purchasing lands and buildings. The financial analysis of the real estate services

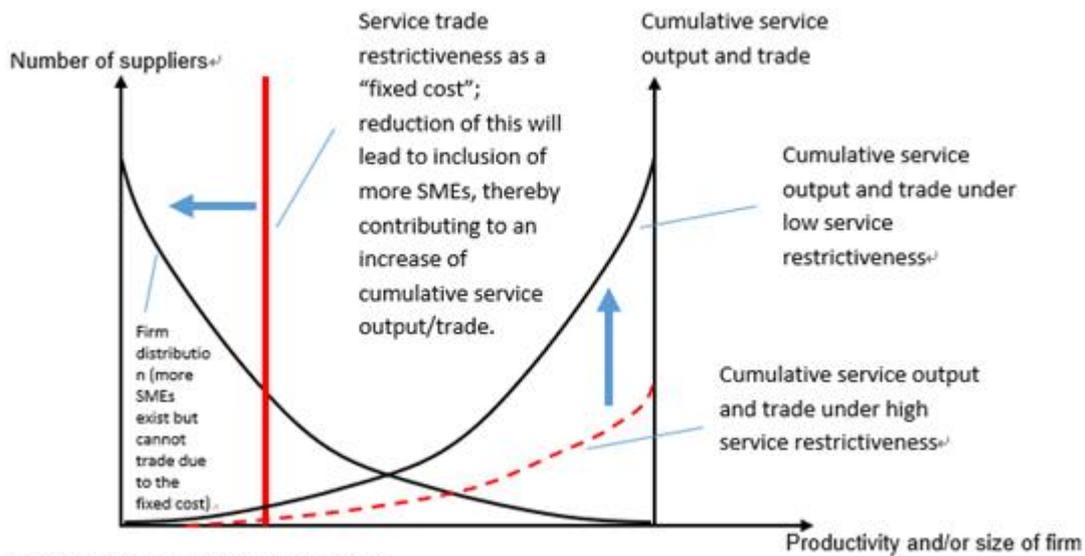
has revealed that the ratio of fixed cost (for purchasing lands and buildings) is above all-industry average. Identifying trustworthy local business partners are indispensable for this sector, since business customs differ drastically across different APEC economies and the volume of transactions tend to be large especially for real estate services. Promoting trade in real estate sectors is beneficial as the cross-border movement of people (mode 4 in terms of supply of services abroad) can be facilitated; this sector therefore needs to be further liberalized. Small scale companies as well as women entrepreneurs can potentially join this sector more actively, to cater to the needs of business people from abroad.

Chapter 7 makes a summarization of this report and suggests policy options for promoting trade in services by SMEs and women entrepreneurs. In order to avoid the market failure of not utilizing SMEs and women entrepreneurs, the fixed cost aspect (including economic and psychological or subjective barriers avoiding venturing into new businesses) should be mitigated through APEC-wide “effectuation” policy (beyond formal institutional supports, i.e., “causation” policy) for business networking by SMEs and women entrepreneurs. Given that the actual “marginal cost” of foreign business operation by SMEs does not seem to be drastically disadvantaged as the “fixed cost” (including time and costs required for visa and work-permit applications) of starting the supply of services abroad, the initial push of facilitating effective business networking by APEC, in collaboration with the APEC Business Advisory Council (ABAC) continues to be indispensable. As for women entrepreneurs, their empowerment strategy includes promotion of access to capital and foreign markets, as well as removal of “other discriminatory measures” would be indispensable. Adaptation to innovation and new technology is also among the key policy issues for promoting trade in services by potential women entrepreneurs who have already accumulated “transferable” (business-applicable) skills. In order to effectually remove the fixed costs of services trade, effectual and possibly ICT-based affirmative actions, in line with the ongoing Boracay Action Agenda are needed.

HIGHLIGHTS OF THE REPORT

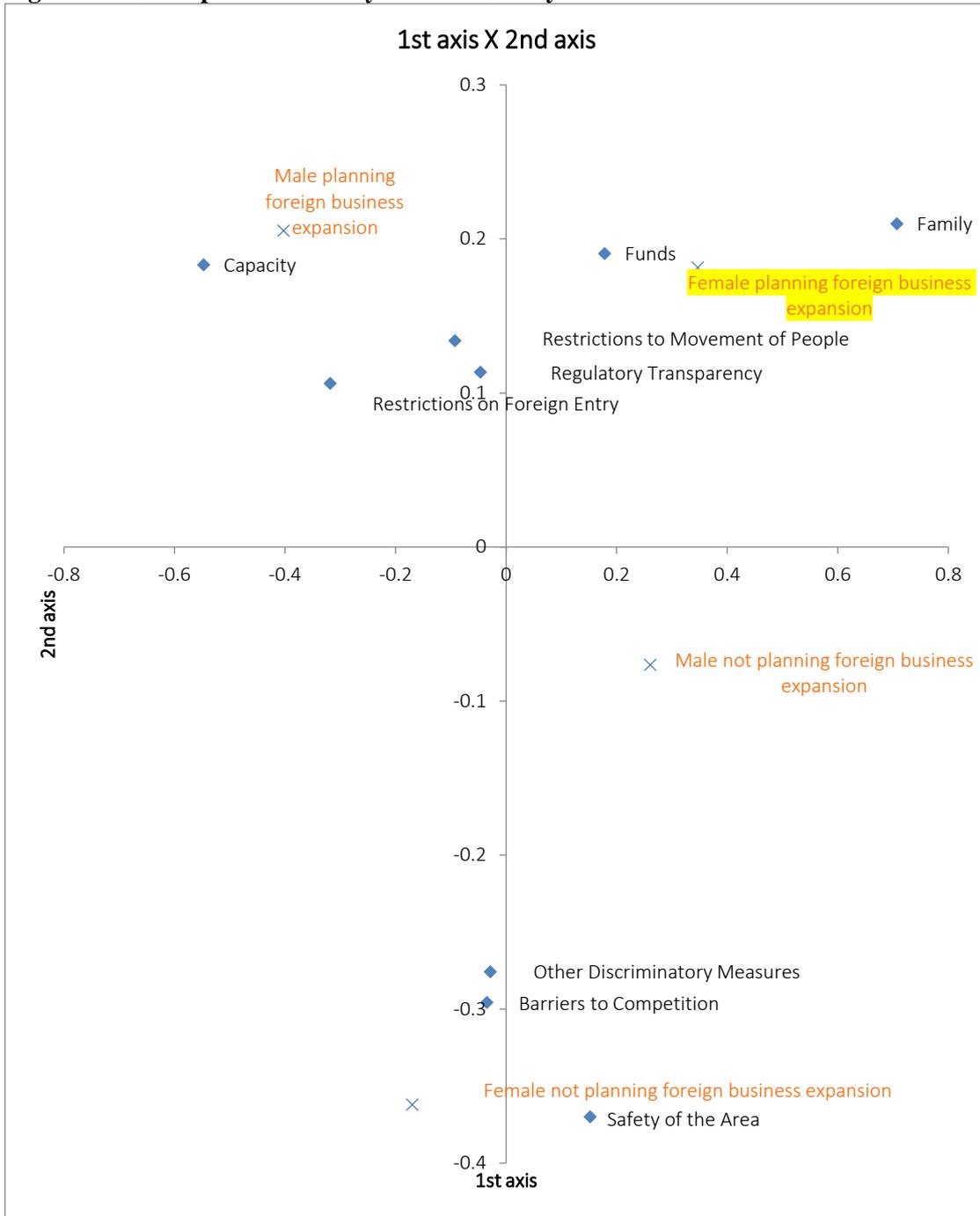
The fixed costs (the red line in Figure 1.1) associated with overseas business expansion (e.g., application for visa, work permits and compliance with regulations abroad) make SMEs and women entrepreneurs unable or reluctant to participate in services trade. Based on the online survey result (Figure 2.1) highlighting female business workers' need for funds and in order to secure their financial profits with non-financial social values (e.g., work-life balance), effectual and possibly ICT-based affirmative actions (in line with the Boracay Action Agenda, excerpt from Table 7.1) are needed.

Figure 1.1 Removal of Service Trade Restrictiveness with SMEs and Women Entrepreneurs in Focus



Source: Cadot, Munadi and Ing (2015).

Figure 2.1 Correspondence Analysis of the Survey Results



Source: Online survey for this research.

Table 7.1 (Excerpt) Policy options for SMEs and women entrepreneurs in line with the Boracay Action Agenda

Boracay Action Agenda item (selective)	Policy option for SMEs and women entrepreneurs	Capacity building for SMEs and women entrepreneurs
4. Support measures to widen options on financing for MSMEs and further develop the infrastructure to facilitate lending to them.	Promote inclusive finance mechanisms with focus on broad-based financial products and services such as crowdfunding with block chain-type verification processes.	Capacity building seminars on the use of crowdfunding and other financing schemes to enable MSMEs to strengthen global value chain could be held.
5. Expand internationalization opportunities for micro and small enterprises providing goods and services through ICT and e-commerce.	Cooperate with ABAC in identifying and promoting strategic e-commerce platforms and innovative business models for MSMEs to support services trade; encourage the availability of next-generation online technology in support of SMEs and women entrepreneurs; identify and promote policies and regulatory frameworks for creating conducive environment for e-commerce and address unnecessary regulations that constrain the ability of MSMEs to participate in e-commerce.	In collaboration with ABAC's Cross-Border E-Commerce Training (CBET) Programme and other similar platforms, hold capacity building seminars on the familiarization of new technology (ICT)-based services trade, including the adoption of cross-border (remote) working in mode 1 and provision of ICT-based services (e.g., online viewing of real estate, environment and education services for this research) could be held, in collaboration with ABAC.
7. Strengthen focus on MSMEs led by women	Promote an understanding of the divergent constraints faced by male and female-led MSMEs in terms of self capacity for business activities, coping with family matters, funds availability and safety of invest destinations (focus points in this research).	As women workers tend to feel the individual safety of investment area is the barrier to services trade and they also feel barriers to competition, seminars on securing the safety of investment area and promoting fair competition as a set through ICT-based technology could be held; especially on the movement of people (mode 4), share online information on eVisa, eWorkPermit applications; as a domestic business support, share next-generation ICT-based services, including, e.g., community-based and online support scheme providing affordable childcare services among registered SME workers and women entrepreneurs.

Acknowledgement

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Disclaimer

The information and data used in the report were selected from public and submitted information from some APEC economies. The opinions and conclusions are the views of the authors of this report. The analysis and recommendations in this report do not necessarily represent the views of APEC member economies.

Chapter 1: INTRODUCTION

1.1. Introduction¹

Trade in services by Small and Medium-sized Enterprises (SMEs) and women entrepreneurs is becoming high on agenda at the APEC.² This report investigates the status quo and the impact of liberalizing trade in services carried out in the Asia Pacific region in accordance with the APEC Services Competitiveness Roadmap (ASCR), Environmental Service Action Plan (ESAP) and Manufacturing Related Services Action Plan (MSAP). The special focus of this report is to make a policy proposal for promoting further participation of SMEs and women entrepreneurs in services trade. In this research report, we have analyzed to what extent service trade liberalization could be achieved. As for a sectoral focus, we have included both the domestic-market oriented sectors (e.g., educational services and environmental services) as well as the real estate services with a high growth potential after liberalization, based on the policy criteria as laid by both the OECD and the World Bank; such as legal forms of entry, restrictions on foreign equity, licensing requirements, restrictions on operations, regulatory environment and qualification requirements.

Trade in services has an investment component, i.e., “mode 3” or supply of services through commercial presence is a conduct of investment which is expected to contribute to achieving the APEC’s overall trade and investment liberalization and facilitation (TILF) objectives³ that are articulated by Leaders’ or Ministers’ directives or relate to the 15 areas listed in the Osaka Action Agenda. With a focus on these points, the case studies of mode 3 service trade in this report are expected to shed some light on APEC’s realities concerning the service sector investment.

This report also pays special attention to how the developing member economies in APEC benefits from the SMEs. Capacity building in order to face the issue of securing “level-playing fields” in various service sub-sectors (especially domestically oriented service sub-

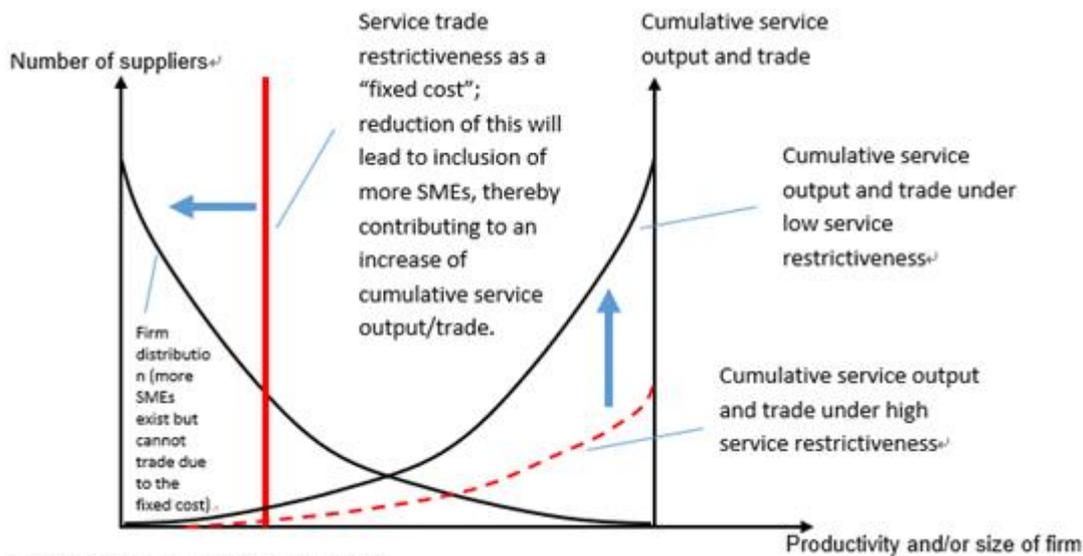
¹This section draws on the project proposal with permission.

²See APPENDIX A for the text analysis of APEC Leaders Declarations with the focus words relevant to SMEs and women entrepreneurs; this analysis is for the purpose of capturing how, overall, APEC has been addressing the issue of SMEs and women entrepreneurs.

³As a background, the Bogor goals as APEC’s central agenda for achieving TILF, stipulate that “APEC’s advanced members should succeed in liberalizing trade and investment by 2010, and its developing economies by 2020”. These goals were officially mentioned in the 1994 APEC Leaders' Declaration (the Bogor Declaration), concluded at Bogor Palace, Indonesia, in November of that year. Specifically, these included: 1. The reduction of barriers to trade and investment; 2. Promotion of the free movement of goods, services and capital; 3. Conformity with GATT; 4. Opposition to internal barriers to trade; 5. Implementation and realization of the Uruguay Round Agreements; and 6. Moves towards the deepening and expanding of the gains from the Uruguay Round.

sectors with the majority presence of local SMEs) for them to participate in services exports would be the main goal of this project. Figure 1.1 conceptualizes the linkage among SMEs (including women entrepreneurs), service trade restrictiveness and cumulative service output. Capacity building on the participation of SMEs and women entrepreneurs in services trade will be the focus.

Figure 2.1 Removal of Service Trade Restrictiveness with SMEs and Women Entrepreneurs in Focus



Source: Cadot, Munadi and Ing (2015).

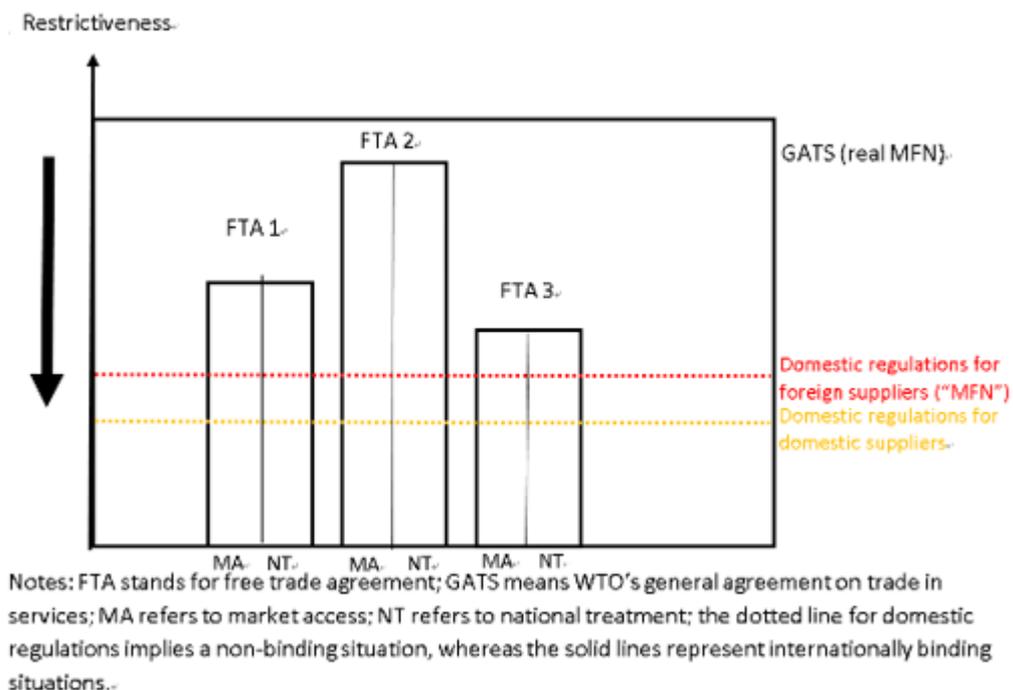
The presence of “firm-level heterogeneity” as analyzed by Melitz, Helpman, and Yeaple (2004) puts SMEs and women entrepreneurs under a higher fixed cost business environment for entering and operating in domestic as well as foreign markets. They then exhibit lower productivity levels. The least productive firms, usually SMEs (including women entrepreneurs), expect negative operating profits and therefore exit the industry. Firms with higher productivity levels can expect positive operating profits from sales in the domestic market but expect to lose money from exports in mode 1 (“cross-border supply of services) and foreign direct investment (FDI) in mode 3 (supply of services through commercial presence). They therefore choose to serve the domestic market but not to serve the foreign market.

In principle, exports are more profitable than FDI for low-productivity firms and less profitable for high-productivity firms. There exist productivity levels at which exporters have positive operating profits that exceed the operating profits from FDI. Higher-productivity firms can export profitably. Those firms with still higher productivity, however, gain more from FDI. For this reason, firms with intermediate productivity levels export while those with higher

productivity levels build subsidiaries in the foreign economy, which they use as platforms for servicing the economy’s market. (See APPENDIX B for a simulation analysis of the linkage between trade costs and firm-level heterogeneity; APPENDIX C for the actual size distribution of companies in the APEC economies; APPENDIX D for the list of companies investing in a foreign economy and APPENDIX E for the share of domestic companies and foreign subsidiaries in the APEC region.)

Promoting trade in services without high business-related costs has an important implication for the global free trade regime at large. In this context, Figure 1.2 shows the disparity among WTO’s GATS-level restrictiveness (sometimes the highest), FTA-level restrictiveness and domestic regulatory restrictiveness (sometimes the lowest although non-binding, with the hope of binding in the future). Domestic regulations (indicated as red and yellow dotted lines), the focus of this report, are sometimes less restrictive than GATS-level and FTA-level commitments (i.e., cross-border binding but sometimes more restrictive). Policymakers from the APEC member economies should bear this in mind for promoting trade in services by SMEs as well as women entrepreneurs. It is on this basis that small-scale service suppliers and women service suppliers have been selected as case studies in this research.

Figure 1.3 Structure of Service Trade Restrictiveness for a Service Sector and Mode



The structure of the remaining part of this report is as follows. The remaining part of this chapter addresses what is meant by the term “services” and why its liberalization and participation of SMEs and women in service trades are necessary for further growth of APEC

economies (section 2). Section 3 describes the linkage between service industry trade and women entrepreneurs. Section 4 deals with the productivity of service industry. Section 5 makes a statistical investigation of the feature of trade in services. Following Chapter 2, Chapter 3 discusses FTAs and size of the investing service suppliers with firm-level evidences. Chapter 4 focuses on women entrepreneurship in education – drawing on examples from the case studies. Chapter 5 discusses “green economy” in scope – drawing on examples from the case studies. Chapter 6 focuses on SMEs in real estate services – drawing on examples of the case studies. Chapter 7 concludes the report with the policy suggestion and introduction of a framework for service trade liberalization in favor of SMEs, women entrepreneurs and green economy.

1.2. Main Features of Trade in Services

The service industry has traditionally been regarded as a non-tradable good, over the years, the globalization of the service industry has been rapidly advancing. It is believed that advances in information and communications technology, overseas travel and other cross-border movements of business people, and the reduction of institutional barriers related to service trade through WTO’s General Agreement on Trade in Services (GATS), all contributed to the rise of trade in services⁴.

The income level rises with economic growth and consumption expenditure as a demand component expands rather proportionately⁵. However, at the more disaggregate level, the demand for essential goods such as foodstuffs and clothing items is smaller than income growth, and expenditure for services increase. On the other hand, the service industry, especially labor-intensive time subsectors (including education and real estate services) tends to feature higher

⁴According to Morikawa (2017), the “servicification” of economy can be divided into three phases: (1) Along with the progress of industrialization, the share of the service industry also expands; (2) The manufacturing share of GDP peaks out and the market share of the service industry accelerates; and (3) The importance of structural change in the service industry become noticeable due to IT revolution, globalization, and deregulation. This is the historical trend shared by advanced APEC economies. Herrendorf et al. (2014) mention, based on a survey on industrial structural changes, that compared with the long-term industrial structural change since the 19th century of advanced economies, service industry has been consistently rising, especially when the share of the manufacturing industry starts to decline. Also, they pointed out that the market share of the service industry tends to accelerate especially when GDP per capita is about US \$ 8,000 (in 1990 constant price). In connection to this line of discussion, “Petty Clark’s law” that the share of primary industry to secondary industry and tertiary industry will increase with economic growth is famous. The renowned economist Kuznetz (1973) cites these changes in the industrial structure a main feature of modern economic growth. Thus, shift towards service industry accompanied with the economic growth is an empirical rule common to major economies. The basic mechanism behind the service economy is a high income elasticity on the demand side, a low productivity increase rate on the supply side, and a rise in relative price to the resultant service as a result (Schettkat and Yocarini, 2006; Morikawa, 2016)

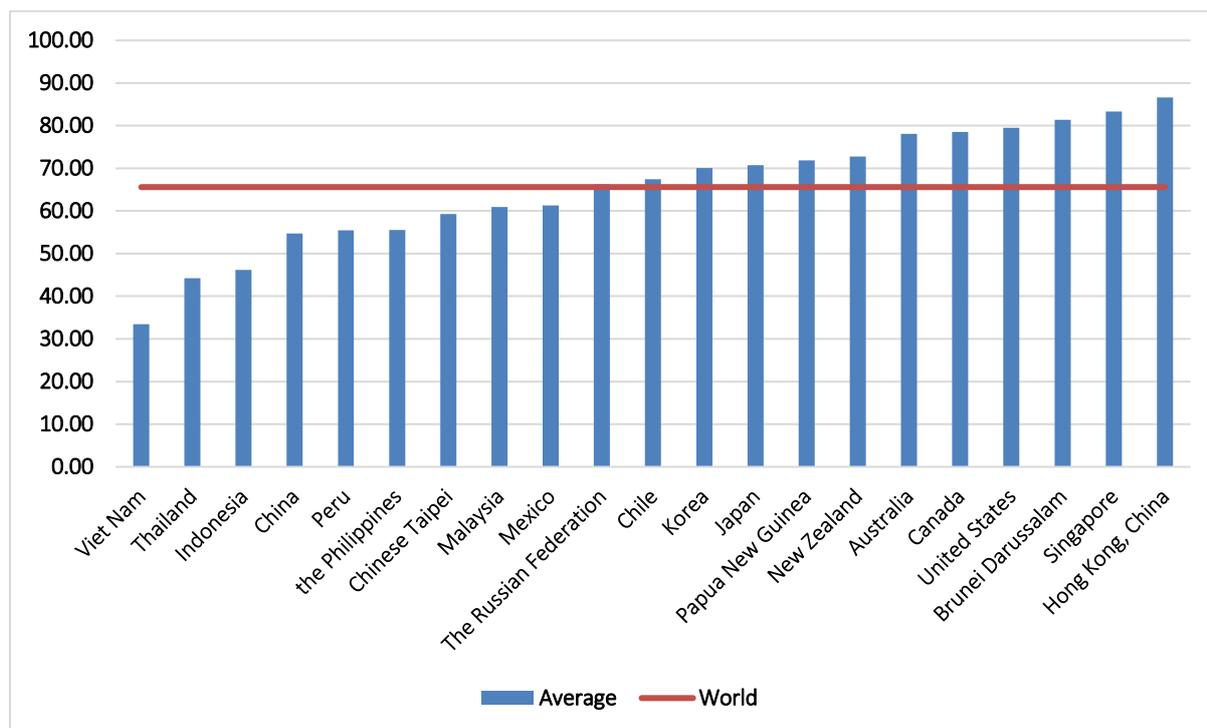
⁵This paragraph draws on Morikawa (2017).

labor intensity than the manufacturing industry and tends to have a lower rate of productivity increase. As the rate of productivity increase is low, the relative price of the service rises. In addition to this, with the rise in labor participation rate of women, the marketization of in-house service production such as cooking, washing and childcare, the outsourcing of in-house service production activities also increases the share of the service industry.

Supply of services can be characterized by the inseparability of production and consumption, unlike in the case of goods for which production and consumption can be separated both temporally and spatially. Trade in services, i.e., supply of services by foreign firms and individuals, naturally entails cross-border trade of services contents (in mode 1) as well as movement of either consumers (mode 2) or suppliers (mode 3 in the case of commercial presence; mode 4 in the case of movement of natural persons). Then the removal of behind the border measures (except for legitimate regulatory measures) in each mode becomes an important policy agenda.

While most of the working population in the world is said to be engaged in the service industry (see Figure 1.3 on the share of labor force in the services industry for APEC members), its liberalization has not been rapid. Unlike trade in goods, liberalization framework, the General Agreement on Trade in Services (GATS) under the WTO alone does not facilitate further service trade liberalization especially for SMEs as well as women entrepreneurs. The APEC Services Competitiveness Roadmap (ASCR), Environmental Service Action Plan (ESAP) and Manufacturing Related Services Action Plan (MSAP) all serve as APEC's main drivers for promoting trade in services in an inclusive manner.

Figure 1.4 Share of Labor Force in the Service Industry (2015-2017 Average)



Note: the orange-colored horizontal line shows the world average.

Source : GLOBAL NOTE (<https://www.globalnote.jp/post-7503.html>)

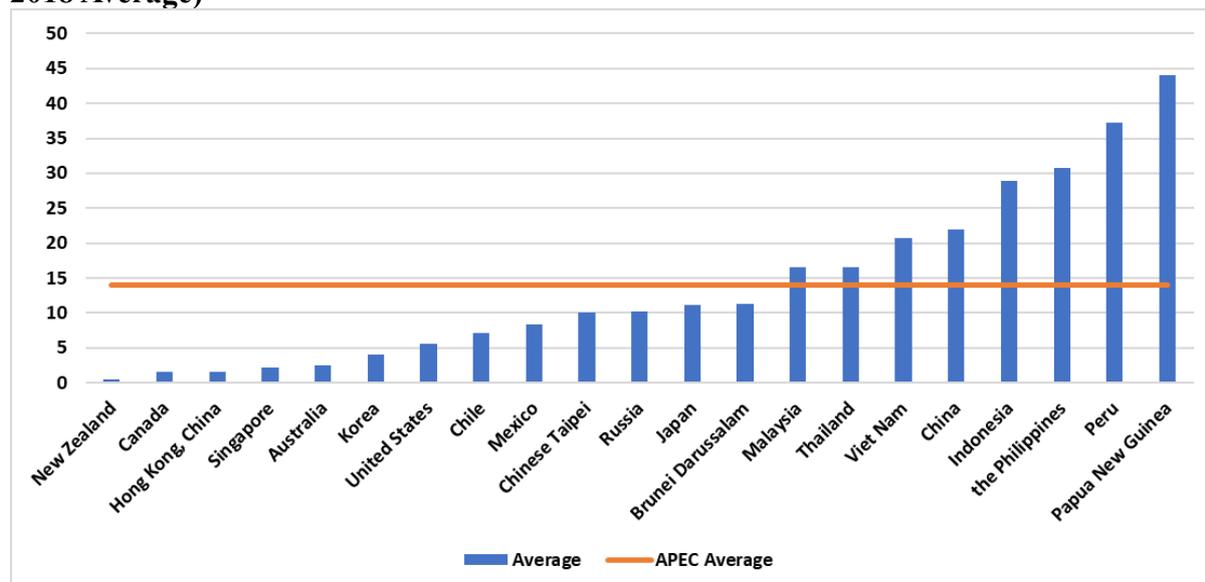
There is a close linkage between the volume of trade in services⁶ and policy measures. Take the case of mode 3. Figure 1.4 shows the number of days required for the opening of business establishments (2015-2018 average). Figure 1.5 shows APEC members’ trade in services (in mode 1 only, but with a close correlation with mode 3).⁷ It seems there is a negative correlation between the number of days required for the opening of business establishments (all companies including services companies) and the volume of service trade flows⁸. Since commercial presence is the prerequisite of mode 3-based trade in services, trade facilitation in terms of facilitating commercial presence through shortening the waiting time would be an important policy agenda for APEC.

⁶ As is well known, trade in services has four modes of supply: cross-border supply (mode 1), consumption abroad (mode 2), commercial presence (mode 3) and movement of people (mode 4)

⁷ Statistical data on trade in services in mode 3 remains limited.

⁸ Mode 1 basis, as a proxy for mode 3 based data (there is no official statistics for this mode).

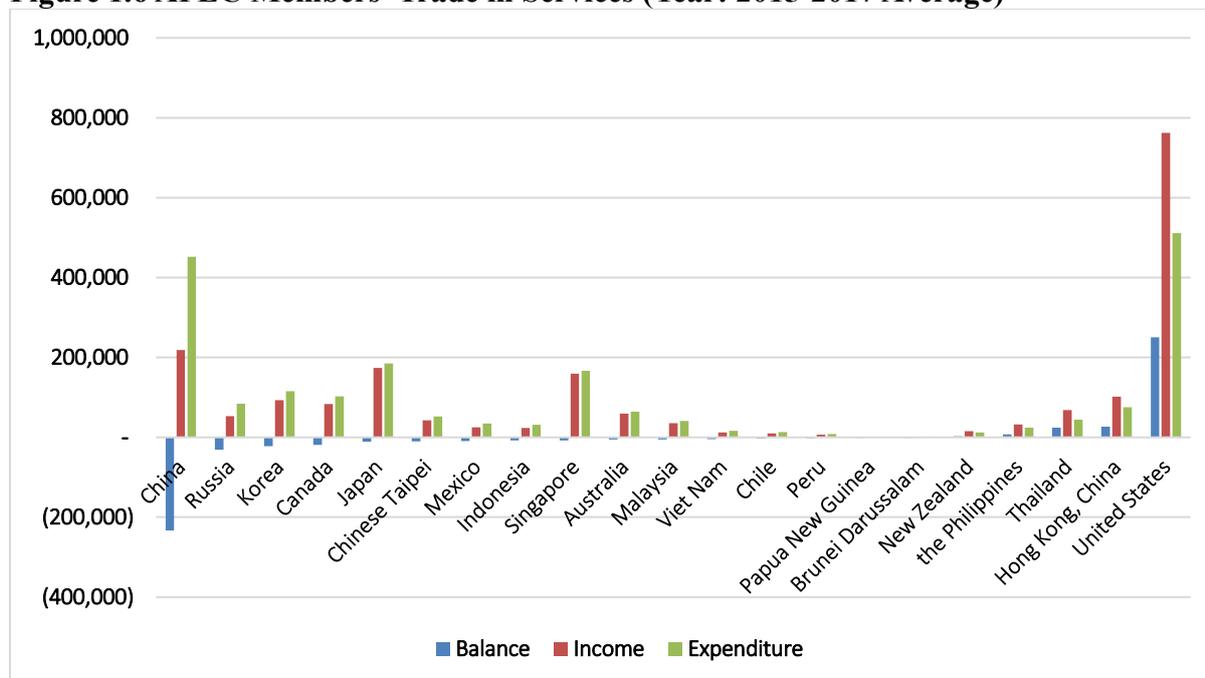
Figure 1.5 Number of Days Required for the Opening of Business Establishments (2015-2018 Average)



Note: Unit: Days

Source: GLOBAL NOTE (<https://www.globalnote.jp/post-1430.html>).

Figure 1.6 APEC Members' Trade in Services (Year: 2015-2017 Average)



Note: Unit: US\$ million

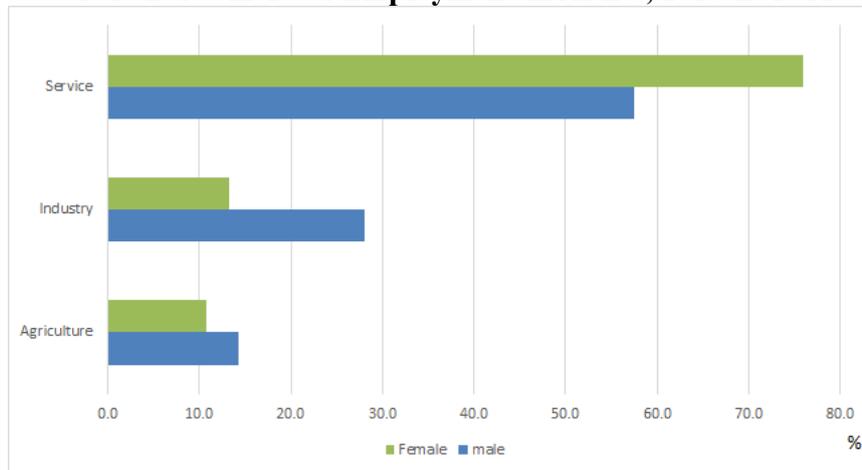
Source: GLOBAL NOTE (<https://www.globalnote.jp/post-8270.html>).

1.3. Services Industry and Women

This section makes an overview of services industry and women, as a background for discussing SMEs and women entrepreneurs in services. The percentage of female employees

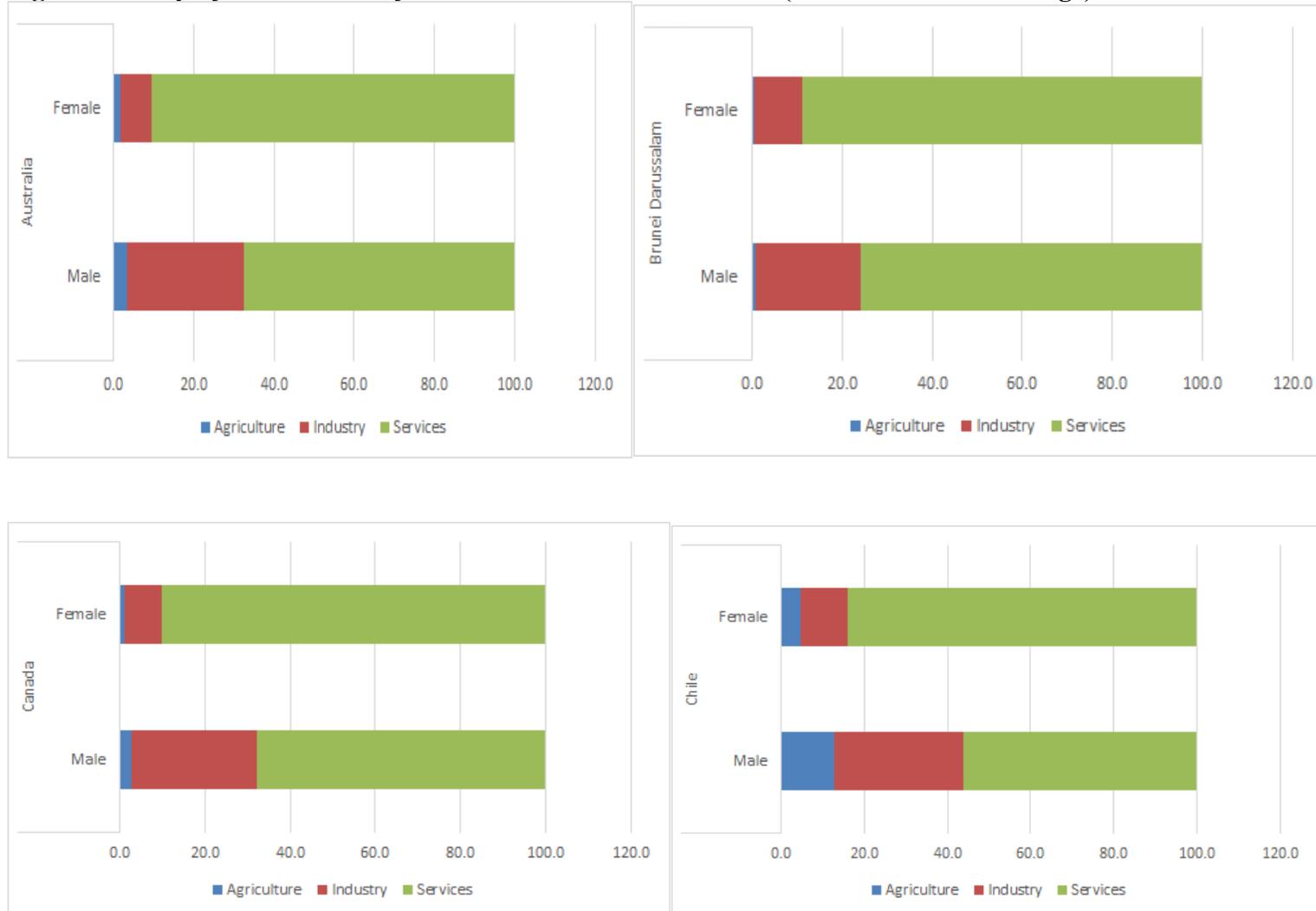
is high in the service industry: the female ratio of the tertiary industry tends to be higher than the secondary. Figures 1.6 shows employment share by sector and by gender for the APEC members. And Figures 1.7 show employment share by sector and by gender. As revealed in these figures, there is a higher proportion of female workers (than male workers) employed in the service industry across all the APEC member economies.

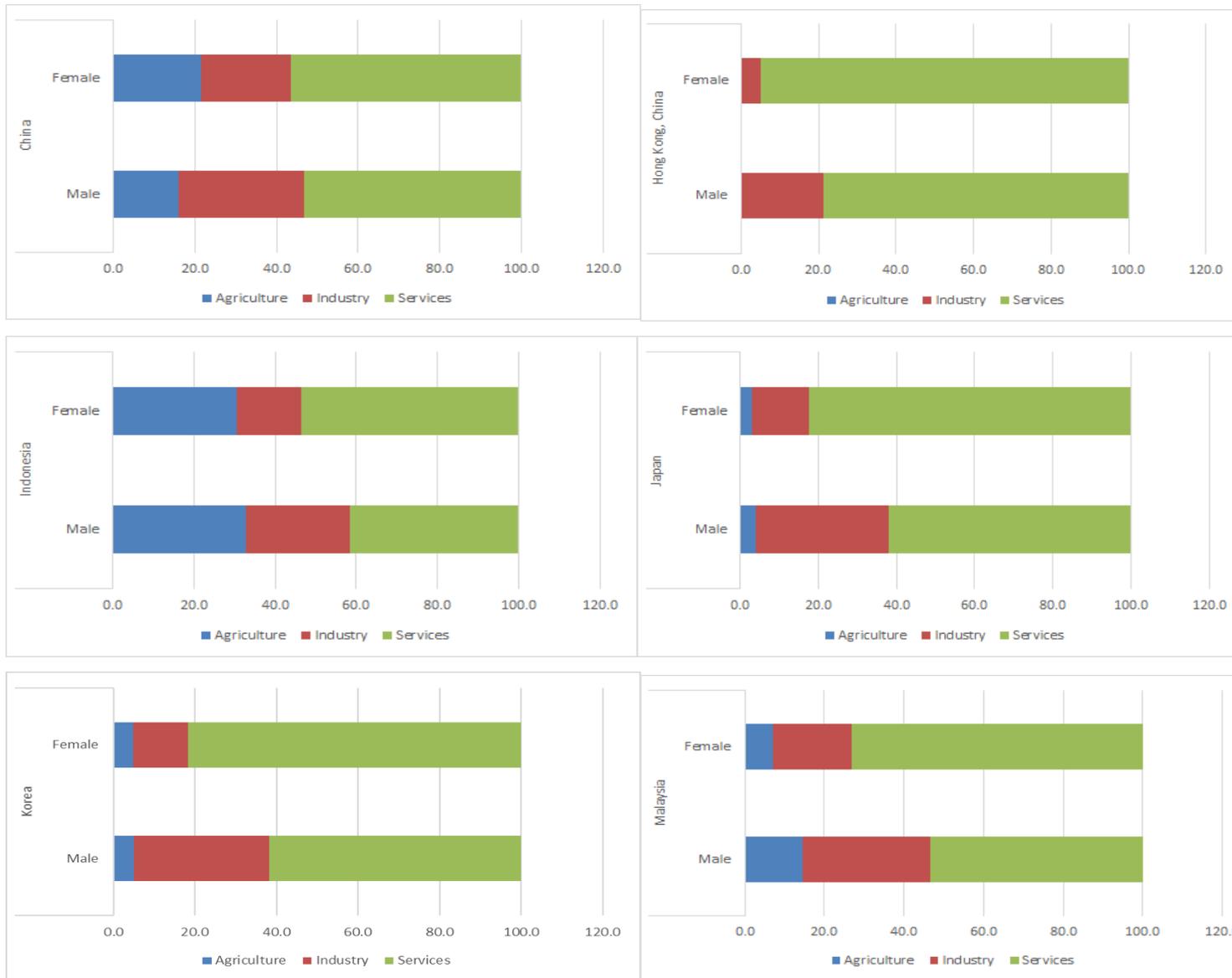
Figure 1.7 Sectoral Shares in Total Employment in APEC, 2015-2017 Average

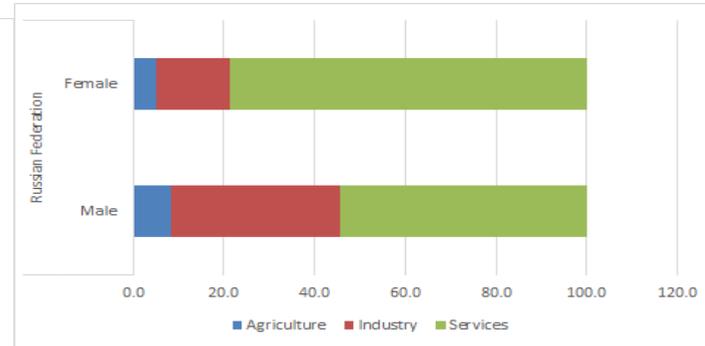
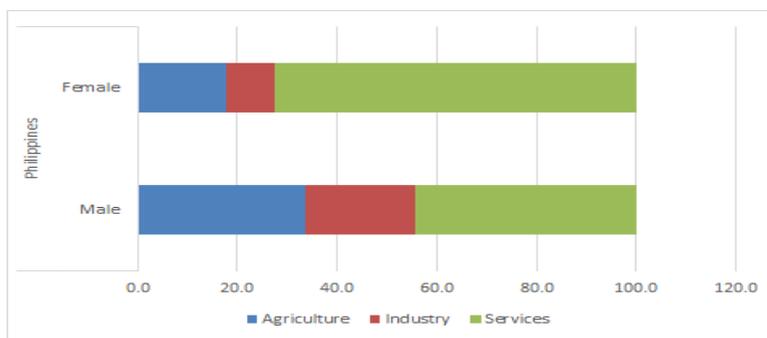
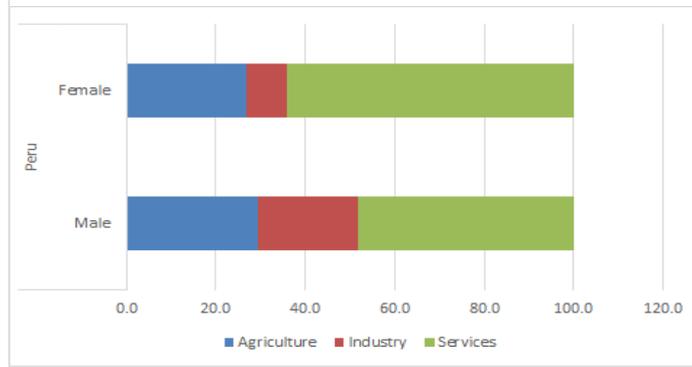
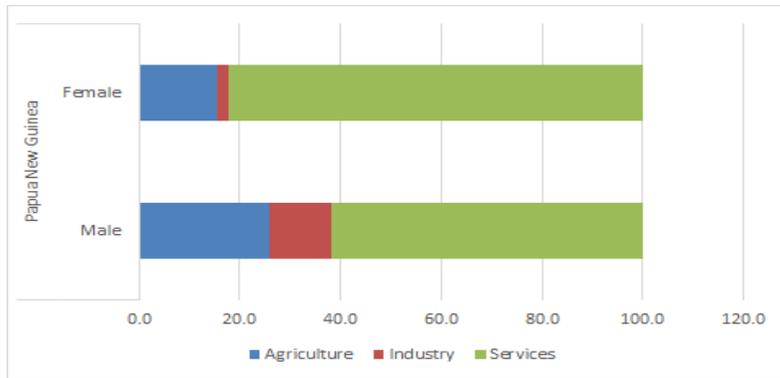
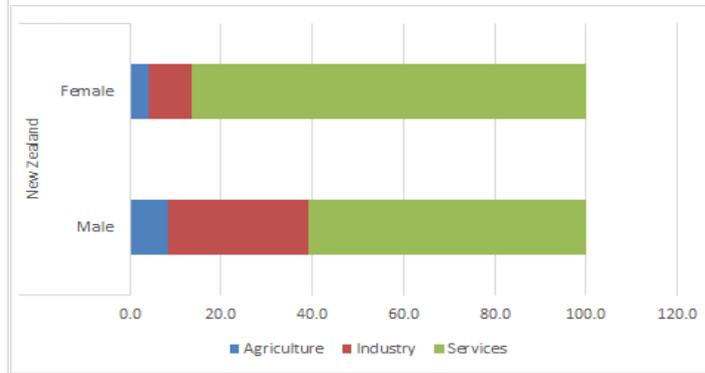
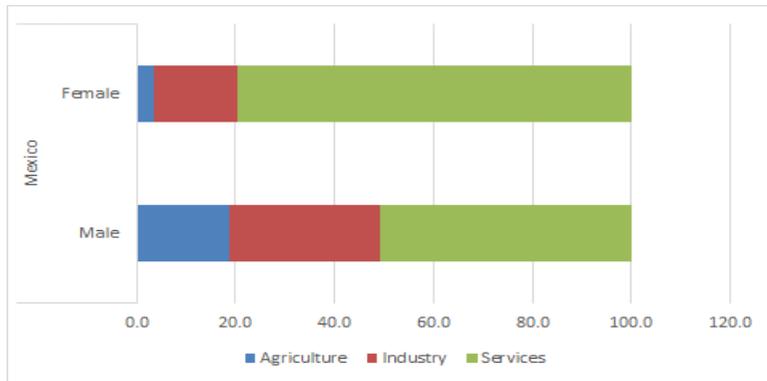


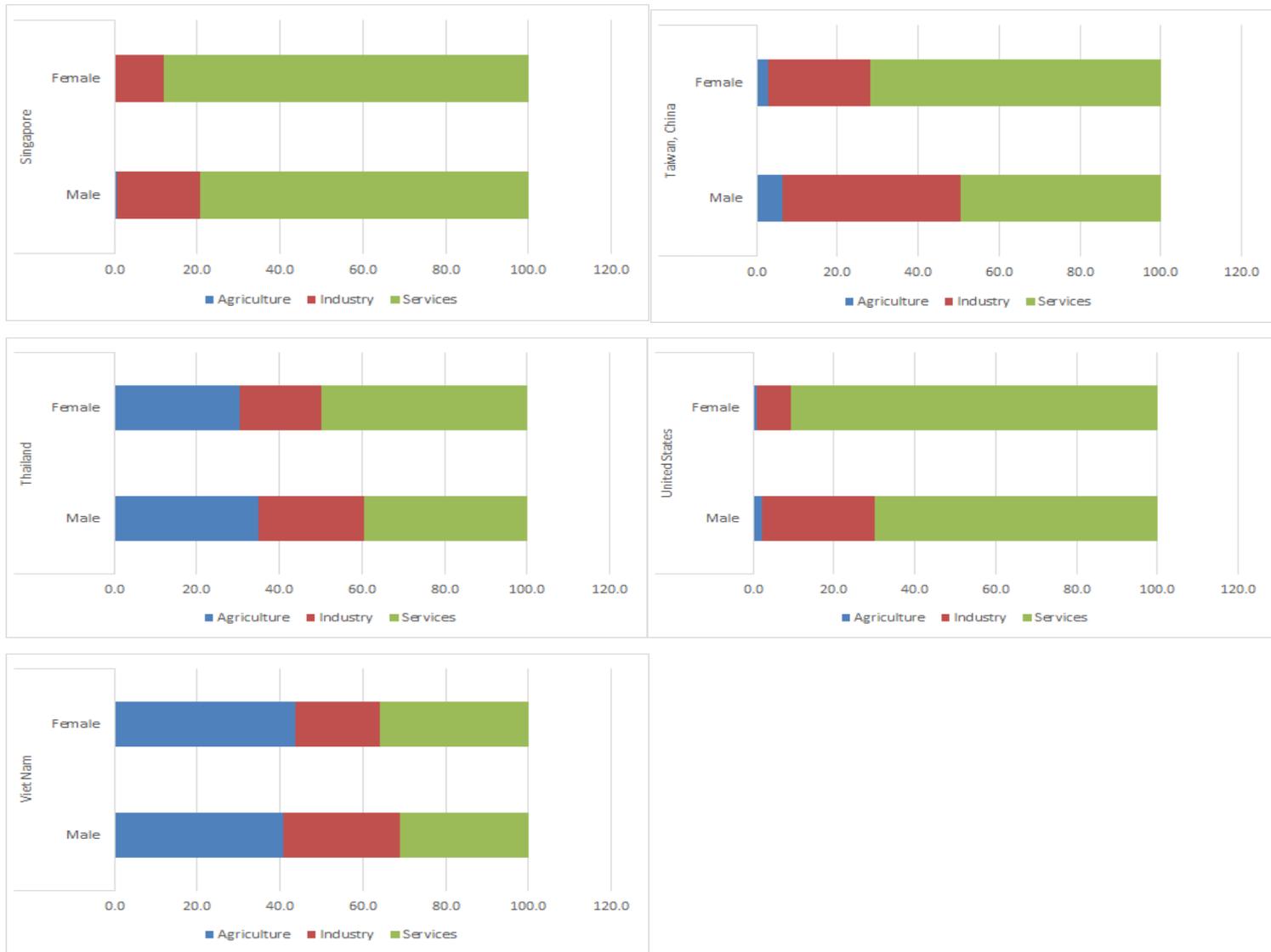
Source:
ILOSTAT(http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jsp?MBI_ID=33).

Figure 1.8 Employment Shares by Sector for the APEC Members (Year: 2015-2017 Average)





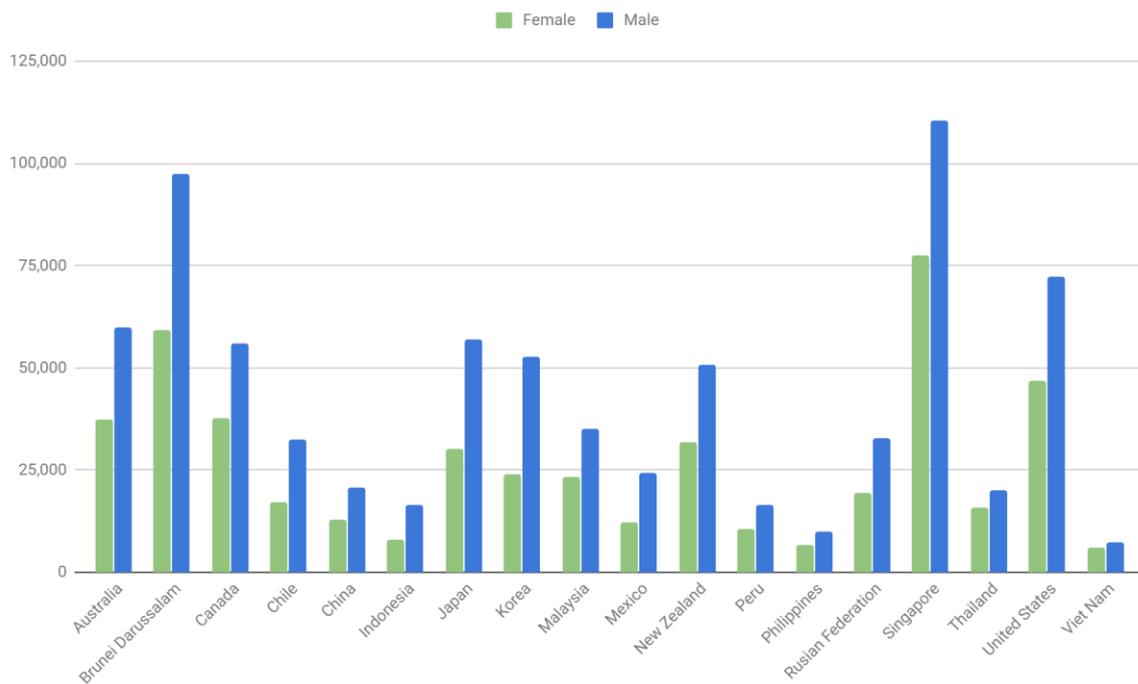




Source: ILOSTAT(http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jsp?MBI_ID=33)

Figure 1.8 shows the estimated earned income by gender for APEC members. As shown, the earned income for female workers is consistently lower than that for male workers.

Figure 1.9 Estimated Earned Income by Gender



Notes: Data not available for Hong Kong, China; Chinese Taipei and Papua New Guinea. Unit: PPP, US\$
 Source: World Gender Gap Report 2018 (http://www3.weforum.org/docs/WEF_GGGR_2018.pdf).

1.4. Productivity of Service Industry

The productivity of companies exporting services is higher than that of companies that do not export. Expansion of service trade contributes to productivity improvement of service industry through increasing the share of high productivity enterprises (Morikawa, 2016)⁹. Education services, for example, have a high degree of intangibility, making the assessment of their productivity difficult¹⁰. What follows are three characteristics of education services in general. (1) It is difficult to hand down the concept of education and the teaching skills to teachers. (2) Because education is affected by personal views of learners, quality of the service highly

⁹ This paragraph draws on the online article “Is the productivity of service industry really low?” (<https://www.rieti.go.jp/jp/publications/rd/025.html>) and 2018 White Paper on Small and Medium Enterprises in Japan (http://www.chusho.meti.go.jp/sme_english/whitepaper/whitepaper.html).

¹⁰This paragraph draws on Hironobu Aoji, “Kyouiku sabisu no gurobaru tenkai niokeru seikou youin (in Japanese) (Success factors of the globalization of education services), a PhD thesis submitted to Waseda University, Japan (downloadable at https://waseda.repo.nii.ac.jp/?action=repository_action_common_download&item_id=14447&item_no=1&attribute_id=20&file_no=1).

depends on teachers/trainers. (3) It is hugely influenced by the teachers/ trainers' experiences and tacit knowledge, which leads to heterogeneity of educational contents.

1.5. Gravity Model

In order to assess the impact of FTAs on trade flows, a gravity model analysis is made in this section¹¹. As is well known, the gravity model estimates the following (the terms are self-explanatory by their names):

$$\text{Trade volume} = \text{Constant} + \text{Coefficient}_1 * \log(\text{ReporterGDP}) + \text{Coefficient}_2 * \log(\text{PartnerGDP}) + \text{Coefficient}_3 * \log(\text{Distance}) + \text{Coefficient}_4 * \text{FTADummy}$$

As for trade data, it should be noted that Mode 1 data alone is covered and the United Nations Comtrade database¹² has been used (the base year is 2016). APEC economies have been considered to the extent possible¹³. The standard Ordinary Least Square (OLS) method has been applied for linear regression. Table 1.1 shows the summary results of the gravity model regression (for further details including diagnostics, see Appendix G). As it is shown, GDP is positively significant for both reporters and partners; distance has a significantly negative impact on the trade volume. And the presence of FTA, captured by the dummy variable of 0 for “non existence” and 1 for “existence” of FTAs for particular bilateral pairs of economies, is significantly positive.

The coefficients on GDP (for both reporter and partner economies) for services are consistently smaller than those for goods; this might possibly imply that trade in services are slightly less affected by the economy size, enabling small scale suppliers and women entrepreneurs to operate a little more smoothly abroad. On the magnitude of coefficients for the other parts, there are mixed results. The presence of FTA is important for promoting trade in services.¹⁴ The next chapter describes more micro, supplier-level aspect of the restrictiveness of service trade policies with regulatory indexation, survey analyses and case studies.

¹¹For a detailed discussion of the gravity model, see, e.g., Anderson (2010).

¹²Its site is <https://comtrade.un.org/>

¹³Due to data availability, some economies' data is missing.

¹⁴In the same sense, freedom of the Internet is expected to boost trade in services in mode 1 (see APPENDIX I for relevant statistics).

Table 1.1 Results of Gravity the Model Analysis (OLS Regression)

	(1) Service import	(2) Service export	(3) Goods import	(4) Goods export
Reporter GDP (in log)	0.660*** (5.57)	0.625*** (5.84)	0.695*** (7.27)	0.690*** (6.90)
Partner GDP (in log)	0.740*** (6.59)	0.774*** (7.64)	0.933*** (10.31)	1.026*** (10.82)
Distance (in log)	-1.375*** (-5.97)	-1.256*** (-6.05)	-1.277*** (-6.88)	-1.341*** (-6.90)
FTA dummy	0.745** (2.00)	1.057** (3.14)	0.933** (3.10)	1.186** (3.76)
Constant	13.016*** (4.26)	12.087*** (4.38)	10.963*** (4.45)	10.157*** (3.93)
Observations	110	110	110	110
Adjusted R-sq	0.474	0.525	0.636	0.649

Notes: ***, **, and * show 1%, 5%, and 10% significance, respectively. T values are in parentheses.

Source: Calculation based on UNCOMTRADE database (<https://comtrade.un.org/data/>) and WTO's database on regional trade agreements (https://www.wto.org/english/tratop_e/region_e/region_e.htm).

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Chapter 2: Review of Methodology for Service Trade Restrictiveness

2.1. Multiple FTAs and APEC Policies for Promoting Trade in Services

This research project addresses further liberalization of trade in services with due consideration being given to SMEs and women entrepreneurs, thereby promoting inclusive growth among the APEC member economies. An important consideration here is the multiple existence of free trade agreements (FTAs). As shown in Table 2.1, multiple FTAs are already in force among the APEC member economies. Existence of multiple FTAs, each of which has a different rules and regulations, might be a source of several unnecessary “trade costs” being incurred resulting in a market failure, hindering the active participation especially of SMEs and women entrepreneurs in a sustainable manner. Especially in order for both the SMEs as well as the women entrepreneurs to actively participate in services trade, economies should remove barriers to trade.

As it is realistic for SMEs with less capital to focus on less capital-intensive service sectors, social sectors, e.g., education services, environmental management services and real estate services (regulated by domestic licensing) are taken up as case studies.

Table 2.1 List of the FTAs in the World (as Reported to the World Trade Organization) as of 7 April 2020

Economy	AUS	BD	CDA	CHL	PRC	HKC	INA	JPN	ROK	MAS	MEX	NZ	PNG	PE	PH	RUS	SGP	CT	THA	US	VN	
AUS		2010*	2018*	2009*	2015*	2020*	2010*	2015* 2018*	2014*	2013*	2018*	1983 1989* 2010* 2018*	1977				2003* 2018*		2005*	2005*	2019*	
BD	2010*			2006*	2005 2007*		1993	2008*	2010*	1993		2006*			1993		2006* 1993		1993		1993	
CDA	2018*			1997*					2015*		1994*	2018*		2009*						1994*		
CHL	2009*	2006*	1997*		2006(2010*)	2014*		2007* 2018*	2004*	2012	1999* 2018*	2006* 2018*		2009*			2006* 2018*		2015*	2004*	2014 2019*	
PRC	2015*	2005 2007*		2006(2010*)		2003*	2005 2007*		2015*									2009*				
HKC	2020*			2014*	2003*																	
INA	2010*	1993			2005 2007*			2008*	2010*	1993					1993		1993		1993		1993	
JPN	2015* 2018*	2008*	2018*	2007*			2008*			2006*	2005* 2018*	2018*		2012*	2008*		2002* 2018*		2007*		2009* 2019*	
ROK	2014*	2010*	2015*	2004*	2015*		2010*					2015*		2011*			2006*			2012*	2015*	
MAS	2013*	1993		2012			1993	2006*				2010*			1993		1993		1993		1993	
MEX	2018*		1994* 2018*	1999*				2005* 2018*				2018*		2012*			2018*			1994*	2019*	
NZ	1983 1989* 2010* 2018*	2006* 2010*	2018*	2006*	2008*	2011*	2010*	2018*	2015*	2010*	2018*						2001* 2006* 2018*	2013*	2005*		2019*	
PNG	1977																					
PE			2009*	2009*	2010*			2012*	2011*		2012*						2009*			2009*		
PH		1993					1993	2008*		1993							1993		1993		1993	

RUS																					
SGP	2003* 2018*	2006* 1993	2018*	2006*	2009*		1993	2002* 2018*	2006*	1993	2018*	2001* 2006* 2018*		2009*	1993			2014*	1993	2004*	1993 2019*
CT												2013*					2014*				
THA	2005*	1993		2015*			1993	2007*		1993		2005*			1993		1993				1993
US	2005*		1994*	2004*					2012*		1994*			2009*			2004*				
VN	2018*	1993	2018*	2014			1993	2009* 2018*	2015*	1993	2018*	2018*			1993		1993 2018*		1993		

Source: Made from WTO's online information on regional trade agreements and inputs from APEC members.

Notes: The asterisk * indicates that the trade agreement has a dedicated agreement/chapter related to trade in services. The abbreviations for economies are as follows. AUS: Australia; BD: Brunei Darussalam; CDA: Canada; CHL: Chile; PRC: China; HKC: Hong Kong, China; INA: Indonesia; JPN: Japan; ROK: Korea; MAS: Malaysia; MEX: Mexico; NZ: New Zealand; PNG: Papua New Guinea; PE: Peru; PH: the Philippines; RUS: the Russian Federation; SGP: Singapore; CT: Chinese Taipei; THA: Thailand; US: United States of America and VN: Viet Nam.

2.2. Scope and Review Methodology

In terms of GATS' service classification, the following three service sectors are considered in this research:

01. D. Real Estate Services (01 means "business services")

05. Educational Services

06. Environmental Services

Among these GATS-defined service sectors, the category of "environmental services" remains relatively under-defined. Based on generally accepted perception, "green economy", a coined phrase for this study, can be defined as economic activities that aim for sustainable development without degrading the environment.

A schematic description is as follows.

Negative environmental impact, "CO₂", is decomposable into three factors:

$$CO_2 = (CO_2/R) * (R/GDP) * GDP$$

where

CO₂: Negative environmental impact (in general, and including CO₂ emissions);

R: Resource used for economic activities;

GDP: Gross Domestic Product.

Then what is so-called "Green Economy" is any type of economic activity that contributes to the increase of GDP and decrease of either CO₂/R (i.e., environmentally cleaner resource use) or R/GDP (more efficient resource use/ usage of resources), with a view to decreasing the level of CO₂ or environmental harm in general.

As for the methodology of this research project, both measurement of service trade restrictiveness and case studies are undertaken. OECD, a forerunner in terms of indexation, lists the following five policy areas as relevant to the indexation of service trade restrictiveness in terms of actual domestic regulations: (1) Restrictions on foreign entry, (2) Restrictions to movement of people, (3) Other discriminatory measures, (4) Barriers to competition and (5) Regulatory transparency (World Bank also covers similar policy areas). While OECD's and World Bank's indices¹⁵ are useful references, they remain partial in terms of covered economies and covered sectors. This project therefore attempts to apply/address (in a modified form) those service sectors that were uncovered by both the World Bank's and OECD's, as a new contribution from APEC.

¹⁵ Online sources are as follows: <https://datacatalog.worldbank.org/dataset/services-trade-restrictions-database> (for the World Bank); and <https://stats.oecd.org/Index.aspx?DataSetCode=STRI> (for OECD).

In order to assess service trade restrictiveness, service-related domestic regulations are examined in the form of database construction. Stocktaking of service trade restrictions is made, with SMEs and women entrepreneurs in focus (since the same regulatory measures might have different impacts on SMEs and women entrepreneurs), as APEC-wide policy frameworks should prioritize these untapped stakeholders. More specifically, the World Bank's index (a set of binary survey questions¹⁶) is adopted since the binary survey questions are comprehensive and objective. APEC has already agreed to use the OECD index as the base; hence we are unsure how this helps the APEC index which uses the "expert weighting methodology", yet the sectors at issue in this project (education, environment and real estate services) are not covered by OECD STRI, and OECD does not have weighting for these. Meanwhile, the World Bank has already developed the binary questions applicable to service sectors at large. Thus, the binary questions based on the World Bank are matched with the OECD policy categories for research purposes.

Then the collected information in the form of the binary database is analyzed in combination with a separate online-survey. The online-survey (<https://jp.surveymonkey.com/r/F7L79CH>, closed at the end of the survey) has been undertaken at the five policy category levels only (for ease of responding), and this survey includes gender- and supplier size- related questions. Also, the weighting is calculated based on the surveys; as there is no expert judgment for sectors at issue (education, environment and real estate services), this is seen as an alternative method. Then the matching of the above-mentioned binary database is done with the online-survey for statistical analyses. On weighting, those policy weights of "similar" service sectors (already covered by OECD) are referenced (in the next section).

2.3. Indexation of Service Trade Restrictiveness

While investigation of service trade restrictiveness (for a few sectors, i.e., real estate, education and environment (subject to revision)) is an important APEC agenda, indexation of the degree of restrictiveness inevitably entails the issue of subjectivity and hence bias in judgement. In this connection, Table 2.2 shows a part of OECD's weighting (as experts' judgement) for construction, legal and distribution services for illustration. Efforts to measure service trade restrictiveness in this project would be a necessary first-step. (In this connection, see

¹⁶ <https://datacatalog.worldbank.org/dataset/services-trade-restrictions-database> (retrieved on 12 April 2019).

APPENDIX J¹⁷ for a GATS based indexation and the result of a statistical verification.) In later chapters, the calculation of index is made sector by sector.

Table 2.2 Experts Judgement Weights of Service Trade Restrictiveness by Policy Area and Sector by OECD

Sector	Restrictions on foreign entry	Restrictions to movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency
Construction	21.97	16.87	22.07	18.57	20.53
Legal	22.28	29.76	15.90	14.41	17.66
Distribution	30.11	10.28	17.67	21.94	20.00

Note: See Appendix D for the full list of OECD's expert judgment for the sectors covered by OECD.

Source: Made by the authors based on Geloso Grosso, M. et al. (2015), Table 4.

In the absence of expert judgment for education, environment and real estate services, the main focus sectors in this report, the World Bank's policy list (matched with OECD's five policy categories, i.e., (1) Restrictions on foreign ownership and other market entry conditions, (2) Restrictions on the movement of people, (3) Other discriminatory measures and international standards, (4) Barriers to competition and public ownership and (5) Regulatory transparency and administrative requirements) is utilized for making a "binary" database (provided in APPENDICES P, Q and R) of existence/non existence of particular regulations.

In the absence of indexation criteria in OECD's indexation for educational, environmental and real estate services, an indexation method must be established. Table 2.3 therefore matches the OECD's five policy measures and the World Bank policy measures for the purpose of this indexation study (this is one of various ways to make the matching). The simple average of this set of binary data is expected to indicate the restrictiveness of trade in services for a sector at issue (e.g., education services, environmental services and real estate services).

¹⁷This analysis was made by Mr Takahide Aoyagi.

Table 2.3 Matching of OECD Policy Measures and the World Bank Policy Measures

OECD Policy Measures	World Bank Policy Measures	(Abbreviation)	Adapted from the World Bank Policy Measures (Description in Detail)
Restrictions on foreign entry	Sector Openness1	FE1	Market entry allowed
Restrictions on foreign entry	Sector Openness2	FE2	Market closed – Citizenship of host economy required
Restrictions on foreign entry	Sector Openness3	FE3	Automatic recognition of foreign license granted
Restrictions on foreign entry	Sector Openness4	FE4	Foreign-licensed professionals eligible to practice subject to conditions
Restrictions on foreign entry	Type of Entry1	FE5	Types of Entry Available
Restrictions on foreign entry	Type of Entry2	FE6	Intra-Corporate Transferee (ICT) – Allowed
Restrictions on foreign entry	Type of Entry3	FE7	Service-Supplying Employee (SSE) of a Firm Based Abroad- Allowed
Restrictions on foreign entry	Type of Entry4	FE8	Independent Professional as Employee of a Local Firm (IPE)- Allowed
Restrictions on foreign entry	Type of Entry5	FE9	Independent Professional as Contractual Service Provider (IPC)-Allowed
Restrictions on foreign entry	Entry Condition1	FE10	Quota for Foreigners
Restrictions on foreign entry	Entry Condition2	FE11	Labor Market Test required
Restrictions on foreign entry	Entry Condition3	FE12	Economic Needs Test required
Restrictions on foreign entry	Entry Condition4	FE13	Quota for Foreigners – ICT
Restrictions on foreign entry	Entry Condition5	FE14	Labor Market Test – ICT
Restrictions on foreign entry	Entry Condition6	FE15	Economic Needs Test – ICT

Restrictions on foreign entry	Entry Condition7	FE16	Minimum Wage/Salary or Wage Parity Requirement – ICT
Restrictions on foreign entry	Entry Condition8	FE17	Limits on the length of stay initially allowed – ICT
Restrictions on foreign entry	Entry Condition9	FE18	Duration of stay initially allowed – ICT
Restrictions on foreign entry	Entry Condition10	FE19	Possibility of extension of stay – ICT
Restrictions on foreign entry	Entry Condition11	FE20	Quota for Foreigners – SSE
Restrictions on foreign entry	Entry Condition12	FE21	Labor Market Test – SSE
Restrictions on foreign entry	Entry Condition13	FE22	Economic Needs Test – SSE
Restrictions on foreign entry	Entry Condition14	FE23	Minimum Wage/Salary or Wage Parity Requirement – SSE
Restrictions on foreign entry	Entry Condition15	FE24	Limits on the length of stay initially allowed – SSE
Restrictions on foreign entry	Entry Condition16	FE25	Duration of stay initially allowed – SSE
Restrictions on foreign entry	Entry Condition17	FE26	Possibility of extension of stay – SSE
Restrictions on foreign entry	Entry Condition18	FE27	Quota for Foreigners – IPE
Restrictions on foreign entry	Entry Condition19	FE28	Labor Market Test – IPE
Restrictions on foreign entry	Entry Condition20	FE29	Economic Needs Test – IPE
Restrictions on foreign entry	Entry Condition21	FE30	Minimum Wage/Salary or Wage Parity Requirement – IPE
Restrictions on foreign entry	Entry Condition22	FE31	Limits on the length of stay initially allowed – IPE
Restrictions on foreign entry	Entry Condition23	FE32	Duration of stay initially allowed – IPE
Restrictions on foreign entry	Entry Condition24	FE33	Possibility of extension of stay – IPE

Restrictions on foreign entry	Entry Condition25	FE34	Quota for Foreigners – IPC
Restrictions on foreign entry	Entry Condition26	FE35	Labor Market Test – IPC
Restrictions on foreign entry	Entry Condition27	FE36	Economic Needs Test – IPC
Restrictions on foreign entry	Entry Condition28	FE37	Minimum Wage/Salary or Wage Parity Requirement – IPC
Restrictions on foreign entry	Entry Condition29	FE38	Limits on the length of stay initially allowed – IPC
Restrictions on foreign entry	Entry Condition30	FE39	Duration of stay initially allowed – IPC
Restrictions on foreign entry	Entry Condition31	FE40	Possibility of extension of stay – IPC
Restrictions on foreign entry	Form of Entry1	FE41	Greenfield branch- allowed
Restrictions on foreign entry	Form of Entry2	FE42	Greenfield subsidiary – allowed
Restrictions on foreign entry	Form of Entry3	FE43	Greenfield subsidiary – max. ownership allowed
Restrictions on foreign entry	Form of Entry4	FE44	Acquisition domestic private entity – allowed
Restrictions on foreign entry	Form of Entry5	FE45	Acquisition domestic private entity -max. ownership allowed by a single entity
Restrictions on foreign entry	Form of Entry6	FE46	Acquisition domestic private entity -max. ownership allowed by a group of entities
Restrictions on foreign entry	Form of Entry7	FE47	Acquisition domestic private entity – controlling stake allowed
Restrictions on foreign entry	Form of Entry8	FE48	Acquisition domestic public entity -allowed
Restrictions on foreign entry	Form of Entry9	FE49	Acquisition domestic public entity -max. ownership allowed by a single entity
Restrictions on foreign entry	Form of Entry10	FE50	Acquisition domestic public entity -max. ownership allowed by a group of entities

Restrictions on foreign entry	Form of Entry11	FE51	Acquisition domestic public entity -controlling stake allowed
Restrictions on foreign entry	Form of Entry12	FE52	Joint Venture -allowed
Restrictions on foreign entry	Form of Entry13	FE53	Joint Venture -max. ownership allowed by a single entity
Restrictions on foreign entry	Form of Entry14	FE54	Joint venture -max. ownership allowed by a group of entities
Restrictions on foreign entry	Form of Entry15	FE55	Joint Venture -controlling stake allowed
Restrictions on foreign entry	Form of Entry16	FE56	Separate legal entity allowed
Restrictions on foreign entry	Form of Entry17	FE57	Limits on ownership or control by foreign citizenships
Restrictions on foreign entry	Form of Entry18	FE58	Percentage of ownership or control allowed to foreign citizenships
Restrictions on foreign entry	Form of Entry19	FE59	Limits on ownership or control by non-locally-licensed professionals
Restrictions on foreign entry	Form of Entry20	FE60	Percentage of ownership or control allowed to non-locally-licensed professionals
Restrictions on foreign entry	Form of Entry21	FE61	Local membership of an international network or association allowed
Restrictions on foreign entry	Licensing1	FE62	License required
Restrictions on foreign entry	Licensing2	FE63	License criteria publicly available
Restrictions on foreign entry	Licensing3	FE64	License automatic if publicly available criteria fulfilled
Restrictions on foreign entry	Licensing4	FE65	Difference in licensing criteria for foreign and domestic applicants
Restrictions on foreign entry	Licensing5	FE66	Limit on number of licenses available

Restrictions on foreign entry	Licensing6	FE67	License allocation-first come first served
Restrictions on foreign entry	Licensing7	FE68	License allocation-through a competitive tender
Restrictions on foreign entry	Licensing8	FE69	License allocation-at the discretion of regulatory body
Restrictions on foreign entry	Licensing9	FE70	License allocation-other
Restrictions on foreign entry	Licensing10	FE71	Length of license
Restrictions on foreign entry	Licensing11	FE72	License renewal required
Restrictions on foreign entry	Licensing12	FE73	If renewal required it is automatic
Restrictions on foreign entry	Licensing13	FE74	Requirement to provide a licensing decision within a timeframe
Restrictions on foreign entry	Licensing14	FE75	Maximum number of days permitted before providing a licensing decision
Restrictions on foreign entry	Licensing15	FE76	Obligation to inform applicants of reasons for license rejection
Restrictions on foreign entry	Licensing16	FE77	License technology neutral
Restrictions on the movement of people	Licensing17	MP1	Residency in the host economy required
Restrictions on the movement of people	Licensing18	MP2	Education – Required
Restrictions on the movement of people	Licensing19	MP3	Education – Foreign degree recognized
Restrictions on the movement of people	Licensing20	MP4	Education – Type
Restrictions on the movement of people	Licensing21	MP5	Education – Number of years

Restrictions on the movement of people	Licensing22	MP6	Training or work experience required
Restrictions on the movement of people	Licensing23	MP7	Training or work experience – Foreign training or experience recognized
Restrictions on the movement of people	Licensing24	MP8	Training or work experience – Number of years
Restrictions on the movement of people	Licensing25	MP9	Passing a professional exam in the host economy required
Other discriminatory measures	Operations1	DM1	Citizenship requirement for employees
Other discriminatory measures	Operations2	DM2	Minimum percentage of domestic employees required
Other discriminatory measures	Operations3	DM3	Minimum number of domestic employees required
Other discriminatory measures	Operations4	DM4	Citizenship requirement for board of directors
Other discriminatory measures	Operations5	DM5	Minimum percentage of domestic board of directors required
Other discriminatory measures	Operations6	DM6	Minimum number of domestic board of directors required
Other discriminatory measures	Operations7	DM7	Domestic residency requirement for board of directors
Other discriminatory measures	Operations8	DM8	Minimum percentage of domestic residents on the board of directors required
Other discriminatory measures	Operations9	DM9	Minimum number of domestic residents on the board of directors required
Other discriminatory measures	Operations10	DM10	Restrictions on repatriation of earnings
Other discriminatory measures	Operations11	DM11	Other forms of discrimination

Barriers to competition	Restriction on Service Providers 1	BC1	Approval required
Barriers to competition	Restriction on Service Providers 2	BC2	Registration required
Barriers to competition	Restriction on Service Providers 3	BC3	Type of investment restricted
Barriers to competition	Restriction on Service Providers 4	BC4	Staffed with professionals licensed to provide the service desired
Regulatory transparency	Regulatory Environment	RT1	Existence of regulatory authority for the sector
Regulatory transparency	Regulatory Environment	RT2	Prior notice of regulatory changes

Note: The abbreviations are as follows. FE: Restrictions on foreign entry; MP: Restrictions on the movement of people; DM: Other discriminatory measures; BC: Barriers to competition; RT: Regulatory transparency. Source: Made by the authors based on OECD and World Bank.

The restrictiveness index takes the value between 0 and 1, i.e., 0 for the least restrictive situation and 1 for the most restrictive situation; the index values are the average of a set of binary data, i.e., 0 or 1 entry for each of the one of the policy categories in Table 2.3. As a matching of OECD’s five categories of restrictions and the World Bank’s binary questions related to service trade restrictiveness. (In connection to the indexation from 0 to 1, see also the “Hoekman Index”¹⁸ calculation results (APPENDIX L for the ASEAN Framework Agreement on Services 10th Package); and APPENDIX M for the Trans Pacific Partnership Agreement).

As for baseline legal information, publicly available information has been collected. APEC’s STAR (Services Trade Access Requirements) database¹⁹ as well as related information has also been consulted where necessary. In the scoring of restrictiveness index (see Chapters 4, 5 and 6 for the results) in this research, “upper” scores are calculated as the

¹⁸The Hoekman Index measures the degree of service trade “liberalization” (rather than restrictiveness) which takes the value between 0 and 1 (for details, see Hoekman, 1995). Although not discussed in depth in this report, it is a similar and useful point of reference.

¹⁹ A relevant website is as follows: <https://apec.org/Publications/2017/04/APEC-Services-Trade-Access-Requirements-STAR-Database>

simple average of the binary data, on the assumption that “when there is no publicly available regulatory information, then the regulation at issue is excluded from the calculation”. “Lower” scores are also calculated as the simple average of the binary data, on the assumption that “when there is no publicly available regulatory information, then the regulation at issue does not exist”.²⁰

2.4. Structure of the Online Survey

This questionnaire (shown in the APPENDIX N) is designed to collect data regarding the overseas expansion of the business run by SMEs and entrepreneurs around the world. Overall, a sample of 120 individuals responded to the questionnaire (The survey was conducted online from 31st of January 2019 to 31st of March 2019). The detailed contents of the samples obtained are shown in APPENDIX O.

In order to collect data regarding the overseas expansion of the business run by SMEs and women entrepreneurship, we created questionnaires and posted it on APEC Facebook group page on 21st Feb, 2019 (<https://www.facebook.com/APECnews/posts/2249566518437358>, closed at the end of the survey period); it was an open questionnaire survey, with information on gender and the size of business organizations the respondents belonged to. Following tables are summary results of the online survey. Table 2.4 shows the survey results (average scores for each category as a summary). Based on the result, a correspondence analysis has been made, as shown in Figure 2.1.

Table 2.4 Average Scores of the Online Survey

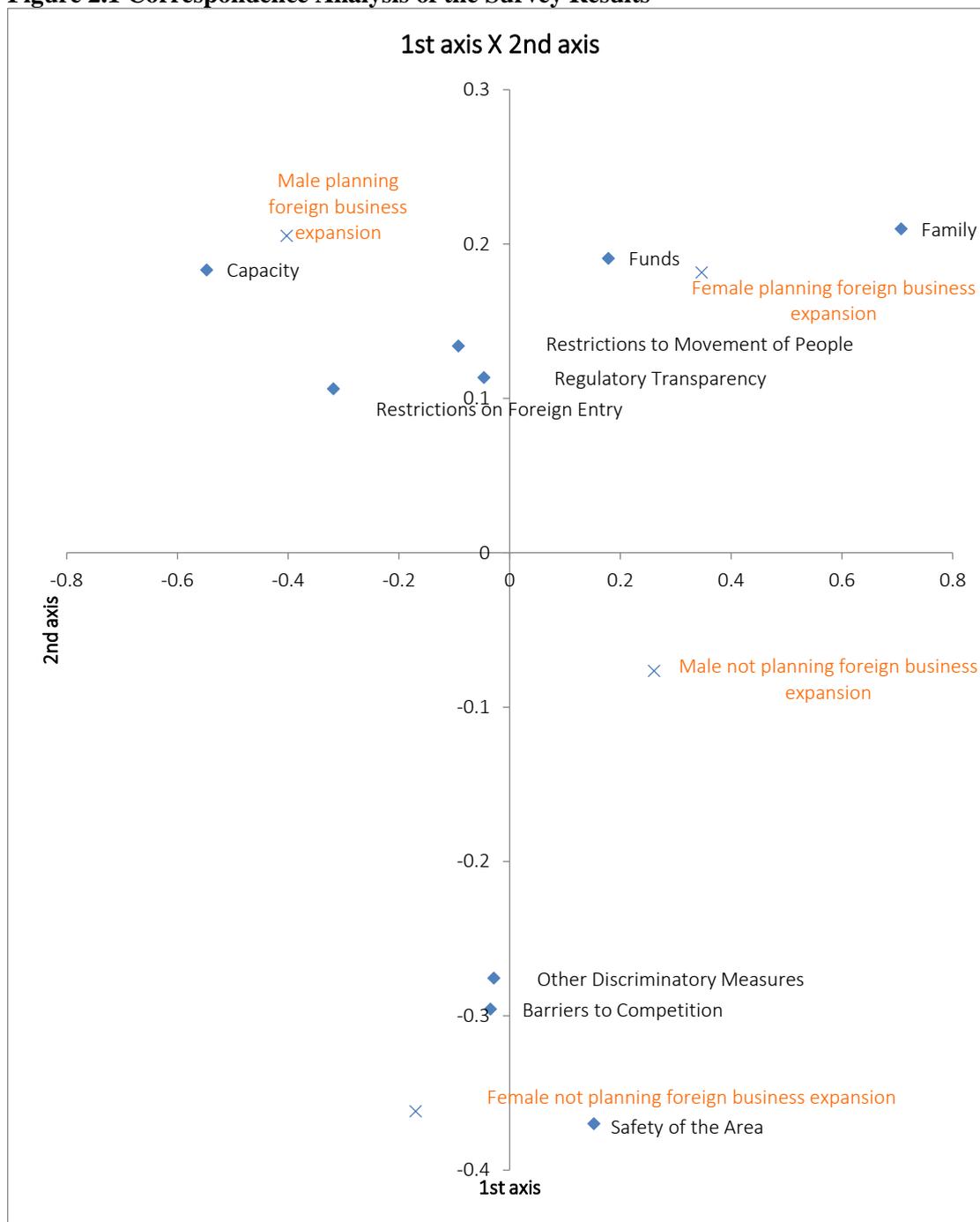
	Female planning foreign business expansion	Female not planning foreign business expansion	Male planning foreign business expansion	Male not planning foreign business expansion
Capacity	3.75	4.50	7.50	5.20
Family	6.25	3.67	4.75	7.20
Funds	7.50	5.75	7.50	7.20
Safety of the Area	5.75	5.92	5.50	6.00
Restrictions on Foreign Entry	5.25	5.42	7.50	5.30

²⁰It is expected that verification of regulatory information by APEC member economies will narrow the gap between the upper and lower scores.

Restrictions to Movement of People	5.75	5.25	7.25	6.10
Other Discriminatory Measures	5.00	5.67	6.50	6.80
Barriers to Competition	5.25	6.00	6.75	7.00
Regulatory Transparency	6.75	6.00	7.75	6.40

Note: Average figures for effective respondents have been calculated for each category in the table.
Source: Online survey for this research.

Figure 2.1 Correspondence Analysis of the Survey Results



Source: Online survey for this research.

When viewed from the combination of individual-level questions and policy-level questions, following are the main findings. As for the category “Female not planning foreign business expansion”, the three policy categories, “Barriers to competition”, “Other discriminatory measures” and “Safety of the area” are their main concerns, rather than individual-level concerns (e.g., Family). Concerning “Female planning foreign business expansion”, the two individual-level items “Funds”, and “Family”, as well as “Restrictions to Movement of people” at the policy-level are the main concerns. On “Male not planning foreign business expansion”, no closely associated components are observed. Regarding “Male planning foreign business expansion”, “Capacity” (at the individual level) as well as “Restrictions on foreign entry” (at the policy level) are the main concerns in considering their business expansion abroad.

2.5. Field Survey Analysis

In order to supplement statistical analyses and online surveys, a field survey was conducted in Manila, the Philippines, from 25 to 26 April 2019. The interviews were coordinated by Ms Rie Tamaki who is a staff member of the NPO IMAGINUS²¹ and a staff worker of DARWIN ENGLISH TUTORIAL INT’L INC. (DETi)²². Semi-structured interviews were undertaken, with some reference to the online-survey questions (questionnaire-based survey results are shown in Table 2.5; selected interviews are described below) concerning service trade restrictiveness.

Interviewee A (Handling Environmentally Friendly Goods, Female)

Our company procures and sells environmentally friendly, upcycled (i.e., recycled from garbages on the street) products. Due to the growing sense of fear that upon expanding their business to overseas market there is a possibility of their business model being imitated/copied. There is a separate manufacturing company (as a partner) for the environmentally friendly products; every Monday, the workers (housewives) come to the office and get their respective material. They create goods and bring the products every Friday and in return, they receive payment. It is easier for housewives to work at home rather than coming to the office everyday. By doing so, the workers can practise effective time management with their domestic chores/manage time for doing house works, while taking care of children and making products.

²¹ <http://imagnus.jp/about/>

²² <http://deti.jp/aboutus/>

Interviewee B at a Service Company (Male):

On the question of what are the good points of expanding their business to overseas, the answer was both “Yes” and “No”; yes in the sense that reaching out to the 3rd locations can capture bigger markets. The one possible reason for the reply “No”, however, is that it is difficult to compete with existing businesses in big economies such as U.S, Japan and China. There is a growing need for “fair” regulations for the competition.

Moving ahead we asked what is a potential way to expand the business for SMEs and women. According to the interviewee, the answer was loud and clear that if only rather big companies could help, by extending/ creating a partnership, it is easier for SMEs and women entrepreneurs to expand their business. At the same time the interviewee acknowledges that, they should have some “interesting” and “new” ideas and that it’s always better to start small rather than doing something big in the first place.

Interviewee E (a female independent business keeper):

Being engaged as an independent business woman in retail services (cross-border e-commerce of selling baby clothes) and related products. This interviewee had displayed that she would like to run her own business at her own initiative. Basically, she has confidence in her online business, although she feels that foreign markets might not receive her business so smoothly simply because of her citizenship. She mentions that formal education in this business field (E-commerce) is not so much needed, but English language skill is important. If the business regulation in the foreign market requires establishment of a local office, then lack of financial support might become an important issue. At this stage of her business endeavour (i.e without an office establishment in the U.S.), she has major confidence in her entrepreneurial sense, and she has an intention to expand her business to the overseas market.

Table 2.5 Result of Interview-Based Surveys (Utilizing the Online Questionnaire)

	Gender	Age	Base economy of the business	Sector	Have you ever thought of expanding your business to overseas?	Which economies would you like to expand your business?	Restriction of Foreign Entry*	Restrictions to movement of people*	Other discriminatory measures*	Barriers to competition*	Regulatory Transparency*
Interviewee A	Female	40-49 years old	Philippines	Other	Yes	U.S., Canada, Australia, Japan, South Korea	1 No barriers at all	5 Somewhat restricted	1 No barriers at all, yet afraid of being copied	1 No barriers at all	1 No barriers at all
Interviewee B	Male	30-39 years old	Philippines	Other business services	Yes	Japan	5 Somewhat restricted	4	3	2	2
Interviewee C	Female	50-59 years old	Philippines	Other business services	Yes	Japan	5 Somewhat restricted	5 Somewhat restricted	5 Somewhat restricted	1 No barriers at all	3
Interviewee D	Male	40-49 years old	Philippines	Other transport services	Yes	Japan	5 Somewhat restricted	1 No barriers at all	1 No barriers at all	2	5 Somewhat restricted
Interviewee E	Female	20-24 years old	Philippines		Yes	U.S.	5 Somewhat restricted	7	5 Somewhat restricted	6	6

Notes: Answers are chosen based on the intensity level of 1-10. 1 indicates no barriers at all, 5 indicates somewhat restricted and 10 indicates no freedom at all.

Source: Collected during the field survey (based on the survey questionnaire in Appendix E).

Interviewee F (interview only): A Female Officer at the Asian Development Bank

In the Philippines, women are active and there are no visible discriminations among men and women. Therefore, the Philippines might be a good sample for women's active participation in workplaces. People in the Philippines value their family members (as reported). They are supportive for women to work not only in the Philippines, but also overseas as well. Grandparents are ready to look after and take care of their grandchildren. This can be seen as an "informal support system" for women to get a job and work outside of their households.

There are many informal businesses in Philippines. For those who are doing informal businesses²³, the idea of expanding business overseas is something beyond their imagination. This is because, expanding their business overseas require "formal" processes to go through and it means revealing own business' illegality. Doing business overseas requires to be "legal" or "formal". Being "legal" or "formal" is quite difficult for people doing local business (informal business) in the Philippines.

From the semi-structured interviews during the field study visit to the Philippines (limited in number in spite of efforts to undertake more interviews), it might be argued that the removal of "implicit barriers" against foreign expansion by SMEs and women entrepreneurs at the societal level as well as at the individual level are crucial for the promotion of trade in services by them.

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²³ In developing societies, women tend to face unequal amount of domestic work, which makes it difficult for them to compete equally with men on a professional level, rather than in the informal sector (Ahl, 2007).

Chapter 3: FTAs AND SIZE OF THE INVESTING SERVICE SUPPLIERS

3.1. Introduction

In this chapter we address from a statistical perspective of the critical impact created by both the size of the firm and the gender related issues surrounding the suppliers of a particular service. The first part of this chapter compares the responses made by both the large firms' and SMEs' to surveys conducted on the topic 'overseas business expansion', with major focus on trade in services. Following the availability of relevant data with regard to the Japanese firms, we first summarize an overview of the business activities of these Japanese firms. Our clear aim is to focus and extract the general policy barriers against SMEs that are either undertaking or considering to expand their business to overseas markets. The second part of this chapter covers the investigation on the conditions pertaining to women entrepreneurs' business, based on an APEC-wide online survey that we had conducted from November to December 2018.

3.2. Factors Inhibiting Trade in Services

This section addresses the several factors that inhibits the trade in services, based on the survey results as given by JETRO (2019). This survey includes firms in the manufacturing sector and the services sector (due to data limitations)²⁴, which is more convenient for the purpose of comparison. Table 3.1 shows the definition of the size of firms considered in this survey.

Table 3.1 Definition of the Size of Firms for the Survey

	Wholesale services	Retail services	Other services	Manufacturing and others
Large enterprises	Paid up capital of more than 300 million yen; or 1001 employees or more	Paid up capital of more than 300 million yen; or 1001 employees or more	Paid up capital of 300 million yen or more; or 1,000 employees or more	Paid up capital equal to or more than 1 billion yen

²⁴ This is partly due to the lack of disaggregated survey results on services firms by size. This section makes a best effort to address service/non service comparisons as well as scale-based differences.

Medium enterprises	Paid up capital of more than 300 million yen and less than 1 billion yen; or 100 employees or less	Paid up capital between 50 million yen and 300 million yen; or no. of employees between 50 and 1,000	Paid up capital of more than 50 million yen and equal to or less than 300 million yen; and less than 1,000 employees	Paid up capital between 300 million yen and 1 billion yen; or the no. of employees between 301 and 3000
Small and medium sized enterprises (SMEs)	Paid up capital between 10 million yen and 100 million yen; or employees between 6 and 100	Paid up capital between 10 million yen and 50 million yen; or employees between 6 and 50	Paid up capital of 50 million yen or less; or less than 100 employees	Paid up capital of more than 50 million yen and less than 300 million yen; and no. of employees between 21 and 300
Micro enterprises	Paid up capital of 10 million yen or less; or 5 employees or less	Paid up capital of 10 million yen or less; or 5 employees or less	Paid up capital of 10 million yen or less; or less than 5 employees	Paid up capital of 50 million yen or less; or 20 employees or less

Source: JETRO (2019).

Table 3.2 shows the existence of overseas bases by category and by size. While there is no discernible difference between manufacturing companies and services companies, it is clear that small and medium sized enterprises (SMEs), manufacturing and service firms put together (due to lack of separate data), tend to not have overseas bases.

Table 3.2 Existence of Overseas Bases (by category and by size)

Unit: percent

	There are overseas bases	There are no overseas bases	No answer
Manufacturing companies (n=1,864)	46.1	53.6	0.3
Service companies (n=1,521)	44.0	55.3	0.7
Large companies (n=615)	83.1	16.6	0.3
SMEs (n=2,770)	36.7	62.8	0.5

Source: JETRO (2019).

Table 3.3 lists the survey results on effective measures for overseas business expansion. As indicated, research on local market as well as local regulations are perceived to be effective measures for overseas business expansion.

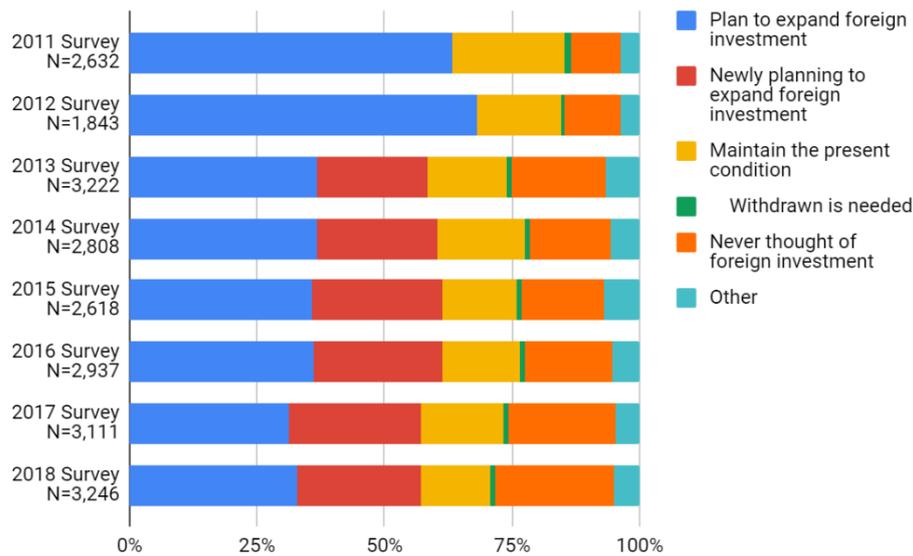
Table 3.3 Survey on Effective Measures for Overseas Business Expansion
(Multiple answers, unit: percent)

	Manufacturing companies (n=859)	Service companies (n=669)
Research on local market (in terms of market size, customer demand and competitiveness)	48.5	53.5
Research on local regulations (in terms of tariff rates, regulations and permissions)	45.5	46.2
Participation in exhibitions and business meetings	21.3	19.3
Development of products and services for local markets	17.8	16.1
Securing and nurturing human resources for overseas business	39.7	41.3
Securing local business partners	45.6	51.3
Intellectual property protection / measures against counterfeit products/services	12.2	6.3
Utilization of electronic commerce	3.4	3.1
Utilization of FTAs and other tariff reduction measures	14.0	9.1
Other	0.8	1.3
No answer	26.7	23.6

Source: JETRO (2019).

It is observed that in the last 3 years, about 57.1 percent of companies answered that they will expand their business overseas although the percentage had remained rather flat since 2016 (Figure 3.1).

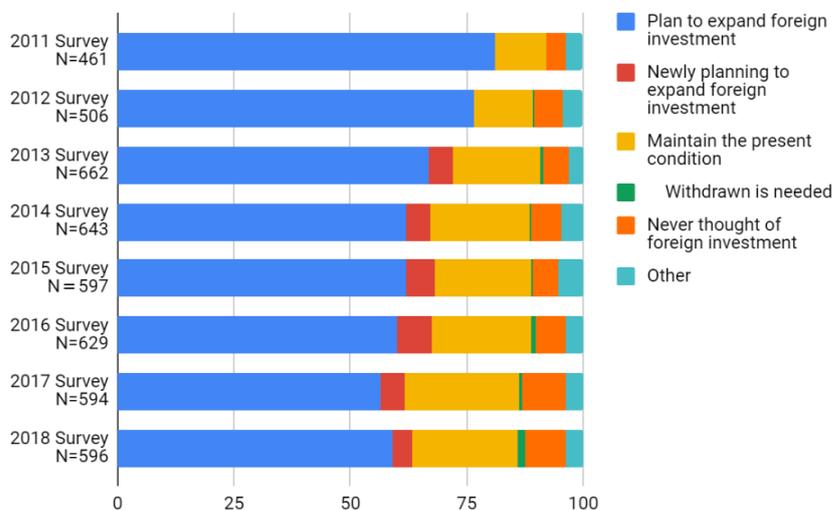
Figure 3.1 Future Plan of Foreign Investment (Total)



Note: Unit: percent.
Source: JETRO (2019), p.17.

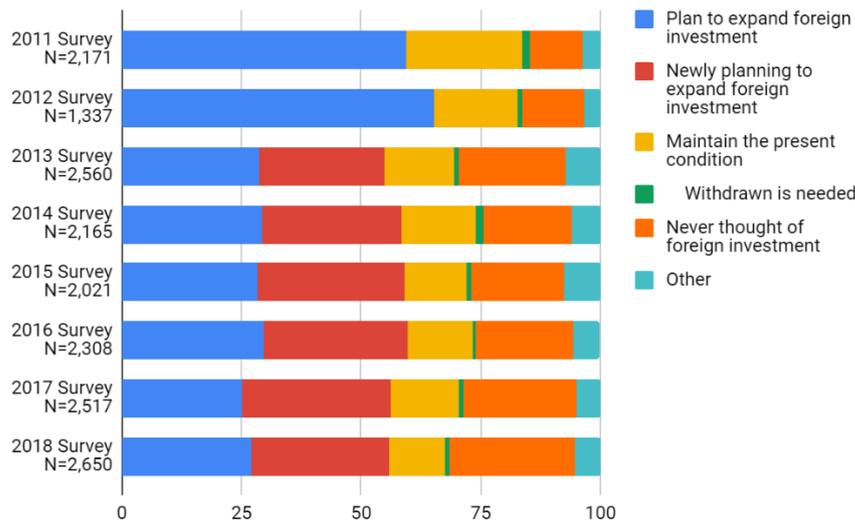
When considering the company size, about 63.3 percent of large companies answered that “(they are) planning to expand their business overseas” and the percentage increased from 61.6 percent (in 2018) (Figure 3.2). On the other hand, about 55.7 percent of SMEs answered, “(they are) planning to expand their business overseas” and it was the same level as the previous year’s 56.1 percent (Figure 3.3).

Figure 3.2 Future Plan of Foreign Investment (Large Companies)



Note: Unit: percent.
Source: JETRO (2019), p.17.

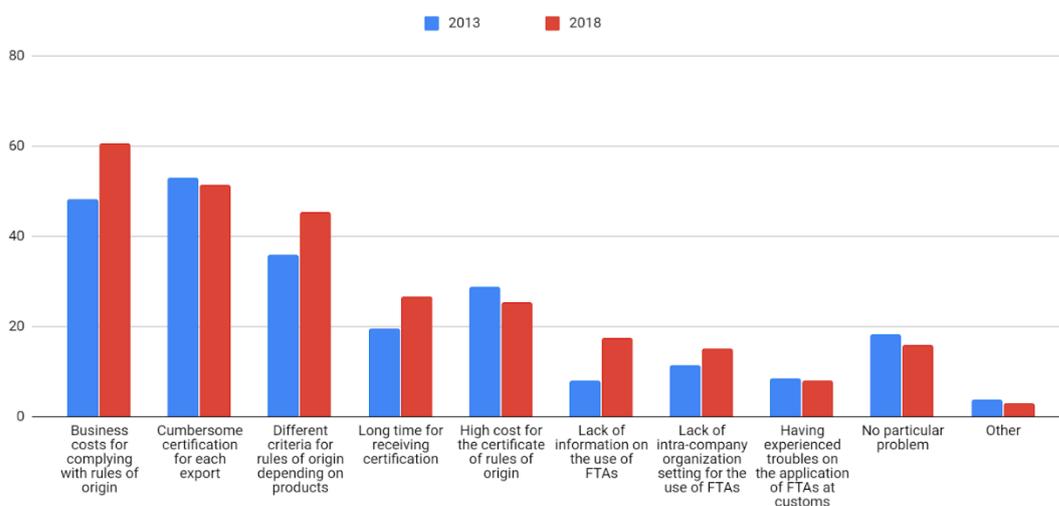
Figure 3.3 Future Plan of Foreign Investment (Small and Medium Companies)



Note: Unit: percent. Due to lack of disaggregated data, both service and non-service companies are included.
Source: JETRO (2019), p17.

As mentioned above, one important reason due to which this desire to enter overseas markets remains unchanged is the lack of human resources. As for the incoming demand from foreign markets, firms tend to deal with this inflow through export. According to Figures 3.4. and Table 3.4., the challenge faced while exporting using the FTA leads to an administrative burden due to satisfying the rules of origin requirements (60.6 percent). Also, the requirement to apply for a certificate to carry out each export is seen as troublesome (51.4 percent).

Figure 3.4 Challenges on Utilizing FTAs (Total, by Time Trend)



Notes: 2013 survey: n=495, 2018 survey: n=710, Companies utilizing FTAs for exporting are covered, Multiple responses, Unit: percentSource: JETRO (2019), p38.

Table 3.4 Challenges on Utilizing FTAs (by Sector)

No. of companies		Business costs for complying with rules of origin	Cumbersome certification for each export	Different criteria for rules of origin depending on products	Long time for receiving certification	High cost for the certificate of rules of origin	Lack of information on the use of FTAs	Lack of intra-company organization setting for the use of FTAs	Having experienced troubles on the application of FTAs at customs	No particular problem	Other
Total	710	60.6	51.4	45.5	26.8	25.4	17.6	15.2	8	15.9	3.1
Large companies	204	66.2	50.5	49	23.5	23.5	14.2	17.6	8.8	14.7	1.5
Small and medium companies	506	58.3	51.8	44.1	28.1	26.1	19	14.2	7.7	16.4	3.8
Manufacturing	511	62.4	51.5	46.6	25.6	23.7	17.8	16.8	8.8	15.3	2.7
Services	199	55.8	51.3	42.7	29.6	29.6	17.1	11.1	6	17.6	4

Notes: Multiple responses, Unit: percent.

Source: JETRO (2019), p38.

It seems that the differences in the trends of expanding the business to overseas markets among the larger firms and SMEs are arising mainly from the following two factors, i.e., first factor being the profitable levels of dollar-yen rate (considering the Japanese markets) and the second factor being overseas production. Regarding the profitable dollar-yen rate, in almost all the industries, SMEs have lower yen tolerance compared to larger and listed companies, and there are situations where their export competitiveness is lower due to the fact that exports are expensive when considering a stronger currency.

Based on the “Survey on service firms’ overseas expansion in 2016”, the following observations have been made as a result for service firms in Japan (see also Figures 3.5-8).²⁵ Regarding the size of the firm, the percentage of SMEs in Japan which are currently expanding overseas is 18.6 percent. While 70 percent of those SMEs are engaged in full-scale business development with a clear focus on further expansion.

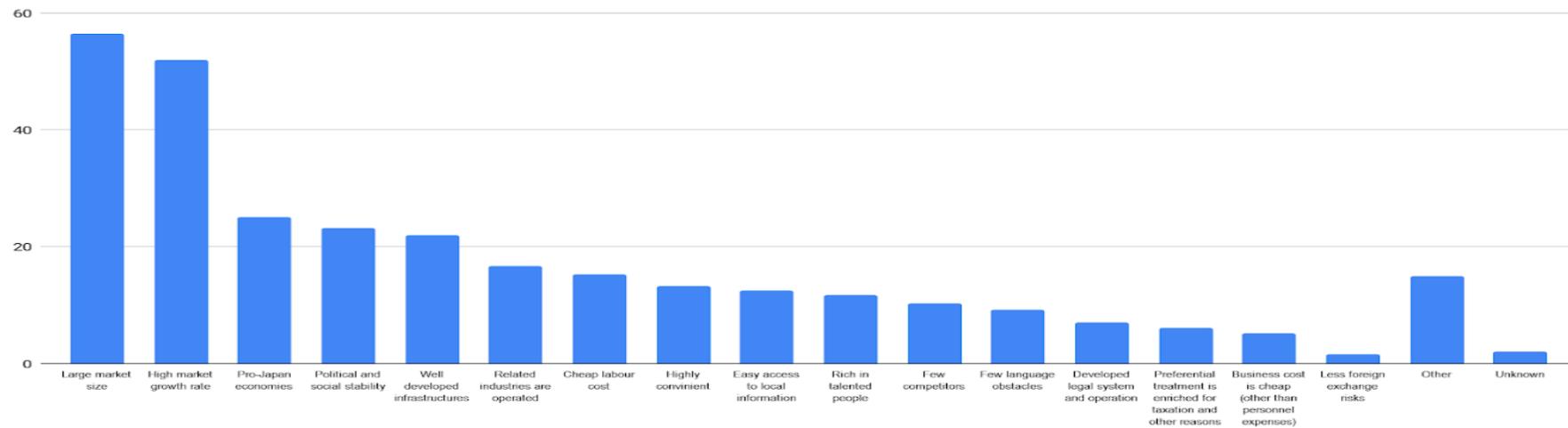
As for “Business to Consumer” companies, they are struggling to deal with the establishment and operation of a personnel evaluation system in the local company. We can identify that out of all the respondents the overall percentage of companies inexperienced with overseas expansion has been recorded to be 60 percent (i.e 932 companies) whereas this percentage stands at 80 percent (i.e 699 companies) in the case of those respondents who manage SMEs.

When we investigate further it became clear that the reason for not expanding overseas is because most companies, irrespective of the size of their firm, place a huge priority to solidify their domestic business in the first place. Another critical challenge was the lack of know-hows

²⁵ The results are available online (https://www.jetro.go.jp/ext_images/_Reports/02/2017/5e5e57b40e80631a/201702-rpsj.pdf).

on overseas expansion as there is a need to acquire competent human resources to be successful in the overseas market. A further analysis on the impact of each of the tasks that has to be undertaken before venturing into the overseas markets has revealed that in order to secure business revenue, it is important to make a stable supply of services locally; then it is also necessary to secure human resources and then tackle the issues related to investment risks and securing funds.

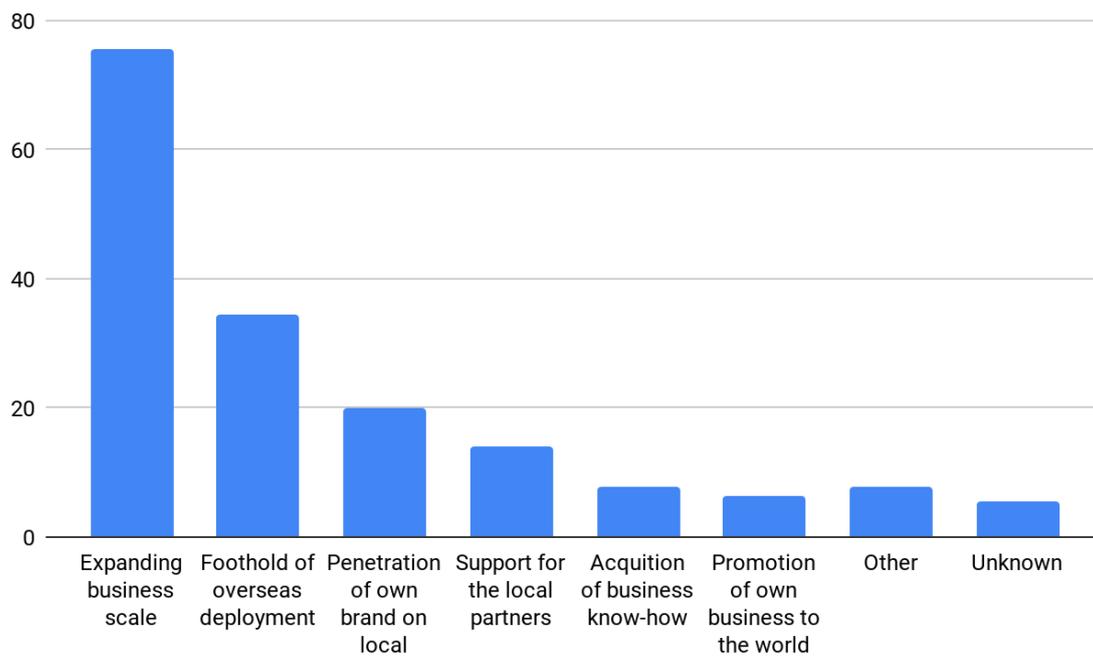
Figure 3.5 Reasons for Overseas Expansion by Service Companies (Total)



Notes: Multiple responses, N=574, unit: percent.
Source: JETRO (2017), p.24.

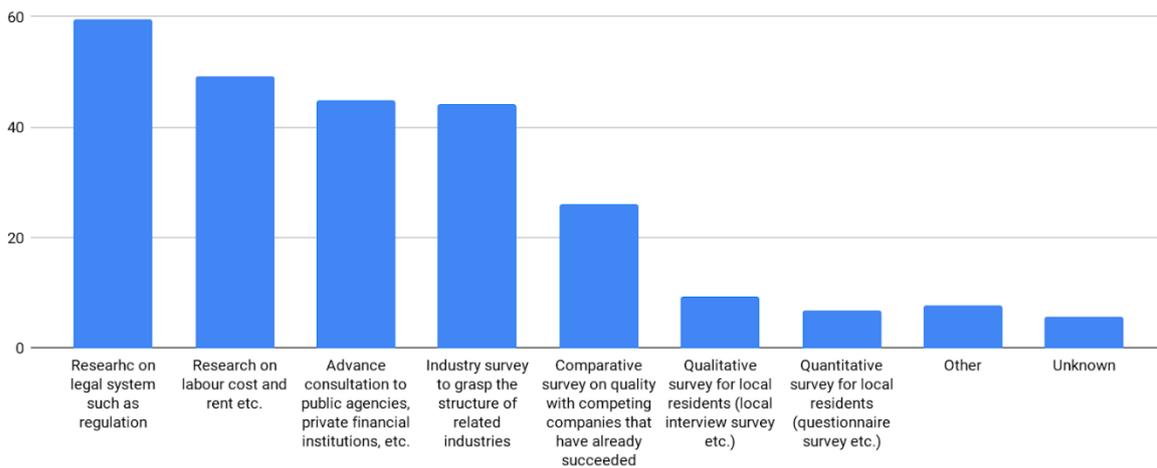
Following are also among the main reasons for overseas investment: partner companies already in operation, presence of trustworthy partners, many enterprises already in operation, requests to open commercial facilities from companies in transaction, a foothold for entering other economies, requests from local governments to enter, many customers and customer base being concentrated.

Figure 3.6 Purpose of Foreign Investment by Service Companies (at the Time of Overseas Expansion)



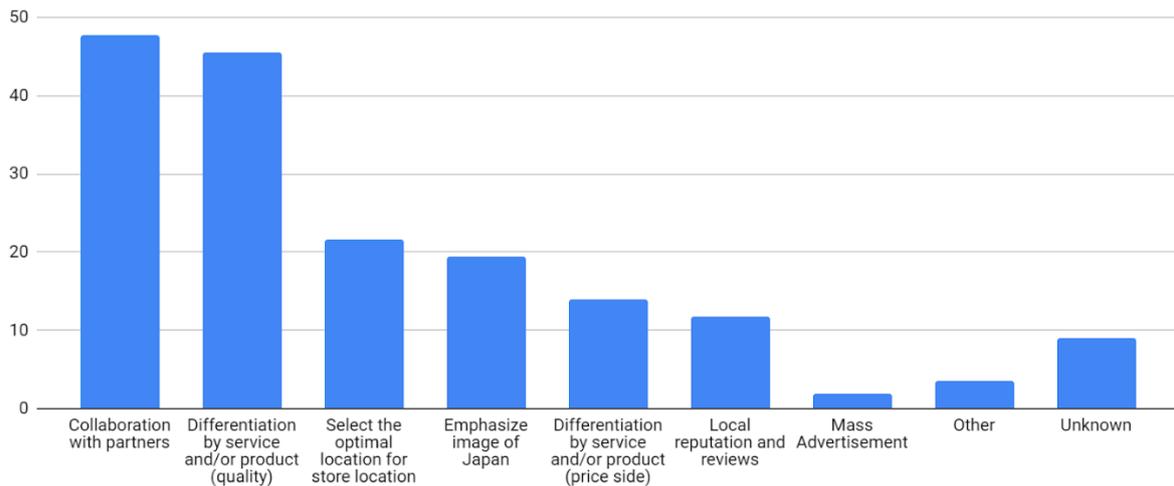
Notes: Multiple responses, N=574, unit: percent.
Source: JETRO (2017). Pg25

Figure 3.7 Preparation for Overseas Expansion by Service Companies (Total)



Note: Multiple responses, N=574, unit: percent.
Source: JETRO (2017), p.25.

Figure 3.8 Business Strategies and Schemes for Overseas Expansion by Service Companies (Total)



Note: Multiple responses, N=574, unit: percent.

Source: JETRO (2017), p.26.

The survey results above imply that sales promotion activities using SNS, acquisition of local companies, collaboration with the host government, aggressive recruitment of local staff workers, and utilizing domestic business relationships are crucial for the success of foreign investment.

3.3. Challenges Experienced by SMEs as They Look to Expand Their Business to Overseas Market

Based on JETRO (2016), the common challenges encountered when expanding a business overseas is summarized as follows, through analyzing the responses gathered from several Japanese companies (see Tables 3.5-3.9.) Majority of the respondents i.e 55.3 percent of the companies answered that “human resource for overseas business” has been the most crucial challenge followed by “(finding) local business partner” (52.1 percent). Thirdly “(collecting) overseas regulatory information” (48.9 percent) was identified as one of the factors that contribute to the challenges faced by these firms that are looking to enter overseas markets with their business ideas.

Gathering the right set of personnel who are competent enough to handle the overseas expansion seems to top the list of challenges. Therefore, it is vital that the companies to begin the process by training the local managers and modifying the management policy as there could be a huge gap between the policies and the actual business climate in the overseas market. It

is highly important to gather the established set of differences between one's company and their competitors.

Table 3.5. Challenges on Human Resources

	Handled properly	Handled rather well	Not handled well	Not handled at all	No. of responses
Securing able full-time workers	18.6	46.5	29.5	5.4	553
Employment of ready-to-contribute workers	12	37	33.3	17.7	543
Securing global human resources	12.7	32.4	41.3	13.6	552
Transfer and sharing of know-how among local workers	8.6	39.5	38.9	13.0	547
Securing of local managerial workers	16.4	39	29	15.6	544
Securing of operation-level workers	14.7	52.9	21.4	11.0	529
Lower turnover rate of local workers	14.2	51	24.8	10.1	537
Enhanced morale among local workers	12.6	57.4	21	8.9	538
Establishment of local evaluation system	10.3	45.7	32.6	11.4	536
Implementation of local evaluation system	9.7	43.9	34.2	12.3	538
Management of local employment and work-related matters	15.1	57.8	17.5	9.7	538
Soaring wage rate of local workers	7.8	52.6	29.9	9.7	538
Other	6.4	34	29.8	29.8	47
Overall degree of the proper handling of human resource matters	6.2	53.1	32.8	8.0	503

Source: JETRO (2017), p.34.

Table 3.6. Challenges on Cost Issues

	Handled properly	Handled rather well	Not handled well	Not handled at all	No. of responses
Securing funds for foreign business expansion	36.7	47.8	12.0	3.5	550
Risk management on investment	14.4	57.8	23.2	4.6	548
Coping with exchange rate risk	11.5	47.3	34.4	6.8	547
Local procurement of funds	18.2	43.0	20.8	18.0	528
Office-related costs	19.4	56.3	16.9	7.3	531
Business costs on infrastructure (including power generation and logistics)	19.6	58.6	14.7	7.1	536
Other	8.9	35.7	32.1	32.1	56
Overall degree of the proper handling of cost issues	17.5	60.7	16.9	4.9	491

Source: JETRO (2017), p.35.

Table 3.7. Challenges on Management

	Handled properly	Handled rather well	Not handled well	Not handled at all	No. of responses
Information on the local situation and business-related systems	16.6	65.0	17.0	1.4	554
Gathering and analysis of information on the local market	14.2	58.5	24.9	2.4	550
Spread of global business orientation inside the company	7.5	41.4	43.4	7.7	548
Localization of management	12.3	32.2	36.4	19.0	546
Establishment of local strategic partnership	13.1	51.6	24.9	10.4	527
Differentiation from rival companies	8.4	50.5	34.8	6.2	546
Other	4.3	34.8	39.1	21.7	46

Overall degree of the proper handling of management issues	9.5	53.3	33.6	3.5	482
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Source: JETRO (2017), p.36.

Table 3.8. Interest in investment abroad

Much interested	3.10 percent
Somewhat interested	13.60 percent
Not so much interested	22.60 percent
Not interested at all	56.90 percent
Unknown	3.80 percent

Source: JETRO (2017), p.39.

Table 3.9. Reasons for Not Investing Abroad

	Applies much	Somewhat applies	Does not apply much	Does not apply at all	No. of responses
Lack of information on foreign markets	22.4	15.3	17.5	44.8	790
Preoccupied with domestic business	37.8	18.7	7.4	36.1	797
Lack of know-how on foreign investment	27.9	11.3	20.9	39.9	795
No human resource for foreign investment	35.2	13.2	14.1	37.6	796
Our goods and services do not fit foreign markets	38.8	15.4	15.9	29.9	819
Wish to concentrate on domestic business for the time being	56.7	17.8	4.6	20.8	797
Large risks associated with foreign investment	33.4	24.9	11	30.7	788
Our business models and know-hows might be leaked	5.9	5.7	35.1	53.3	784
Little merit because of rising wage rates abroad	9.8	13.6	26.3	50.3	787
No merit in foreign investment from cost consideration	20.7	23.1	18.2	37.9	791

Satisfied with business with trading companies	9.2	7.7	15.4	67.7	784
Other	54.3	1.1	1.1	43.5	184

Source: JETRO (2017), p.39.

Based on the above statistical observations, some significant countermeasures that can be implemented are as follows.

(1) Experiences the Overseas Market

When companies are considering an overseas expansion for the first time, there is huge demand to learn more about the society, people, and culture of the foreign location into which they wish to enter. By meeting several people who hail from this specific location the companies may be able to assess whether they are attached to the foreign location and its culture. For small and medium-sized enterprises, it is important that the manager who will carry out the business has the passion to expand the business in the location that is being considered as a potential market. Otherwise, the operation after entering becomes a raider, management does not reach it, and it often fails to be successful.

(2) Understanding of Circumstances Peculiar to the Location for Potential Investment

Another important aspect would be to receive expert advice on the cultures and customs that are unique to the location, and thereby identify the risks based on them. Own risks must be kept to a minimum. There are certain things that cannot be obtained by just analysing the information available on the desk, such as the readiness to consume and execute a business environment that is rooted in the local people's lifestyle. So it is important to experience life in the location into which the companies are trying to expand their current business.

In the case of ASEAN region, the problems related to overseas deployment are "Local labor / personnel management" and "Secure local workforce". "Rising local personnel expenses" accounts for being placed on top of the list when discussing this specific challenge in the ASEAN region and China. On the other hand, in North America / Europe region, "fierce competition with local peers" and "unstable exchange rate" are the major challenges.

It is advised to start approaching the challenge by identifying the scope that will not be fatal to the company. The challenge of overseas expansion can be handled in a positive way by focusing on how well the company is able to absorb all the new experiences. Through that

experience the companies can always learn and accumulate knowledge that can contribute to the growth of the company in the long run. Even if you encounter difficulties, nothing is wasted.

As for SMEs, a prior survey was conducted by JETRO in 2013.²⁶ It can be noted that 53.2 percent of SMEs answered “local business partners” as the most crucial challenge. The top management of a company that is getting prepared for an overseas expansion has to first grasp its strengths.

(3) Secure the Points Over the Cooperating Companies

It is important for SMEs to find out and protect the potential dominant points over its competitors such as technical strength and their position in the market. It is required that the company firmly develops protection measures, such as limiting the scope of patent, technology, and know-how etc. Technical provision can result in rival company’ development, so it is absolutely necessary to take precautions by not disclosing the core part of technology.

(4) Need of a Reliable Partner

The second major challenge experienced by firms when expanding abroad was identifying and nurturing a relationship with a local business partner. Regardless of any form of cooperation, the existence of a reliable partner greatly affects the success or failure of the business flourishing in the overseas market. A thriving partnership can be established through activities , such as matching of business management policies with joint venture partners, and developing new customers by building partnership with technical service provider companies. It is true that "trust" is the basis of a business relationship, regardless of whether the overseas market is an advanced economy or an emerging economy. Maintaining a good relationship with partners will help with risk management up to a certain extent.

(5) In-depth Communication

The key aspect is to have an in-depth communication with the local enterprises, such as joint venture partners and technology providers, are important to build reliable relationships. It is highly beneficial to show respect when working with partners in the overseas market even if it is a wholly owned subsidiary. The company’s resources can be further strengthened by hiring local employees and engaging in a dialogue with local employees in their local language. In order to maintain a healthy network around local business environments which includes

²⁶ The results can be downloaded and analysed at http://www.smrj.go.jp/doc/research_case/renkei.pdf.

business partners and the government officials, it is also effective to regularly create events opportunities to get-together over meals occasionally to exchange information.

(6) Selection of the Appropriate Partner

Many companies would jointly agree that determining an appropriate partner is vital for a business to thrive. Especially, it is necessary to identify the human nature of the top of the other party with management's own eyes. In case of joint venture partners and sales alliances, it is important to strategically select a partner according to the current business requirements, such as the ability to utilize the network the partner has already established in the local market. However, a clear contract with detailed attention to regulations becomes important in order to avoid any misunderstanding with local partner companies.

When we investigate the scenario of Japanese companies that are looking to expand overseas, we should consider that there are only a few cases in which the products and services that were made in Japan are provided in their original form. For the most part, it is necessary to re-tailor and develop customized products for the current consumers in order to adapt to the local market. Sometimes a bold move to advance into areas never experienced in the business environment back in the home economy becomes necessary.

The third major challenge experienced by companies that are looking to expand is "(collecting) overseas regulatory information". In the service industry, it is required that demand (consumption) and supply (production) coincide both in time and geographically. Since this simultaneous trend is observed in the service industry overseas, it is necessary to develop markets and build a production system at the same time. The service industries such as education, medical care, welfare, and transportation have been hampered by strong regulations by the government.

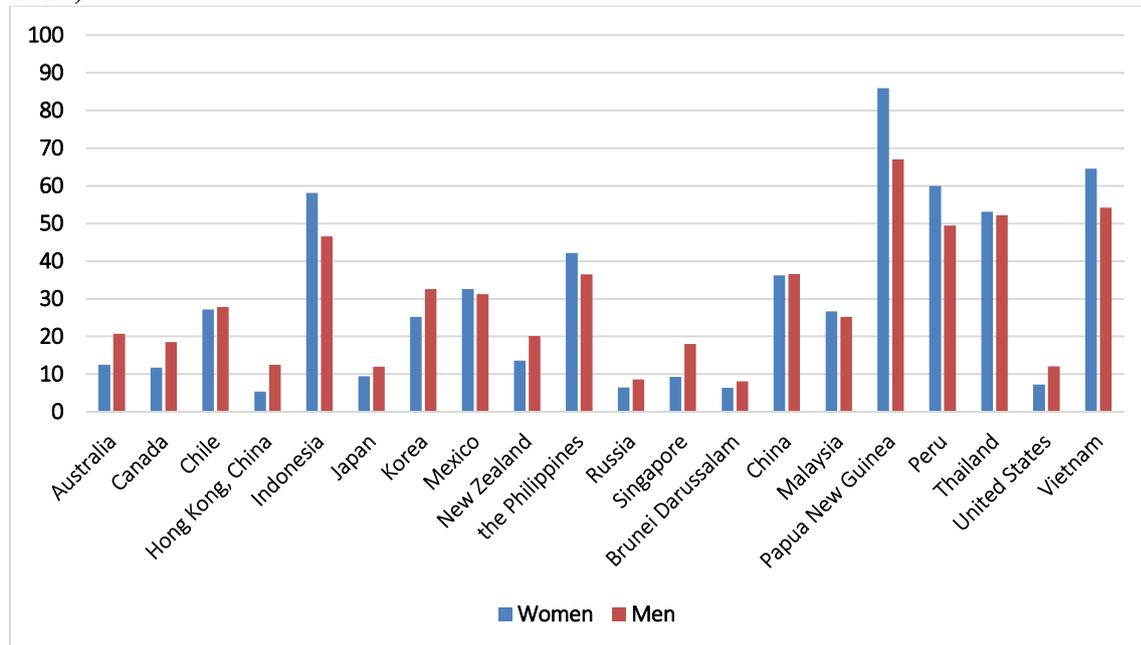
Small and medium-sized retailers and service industries are short of know-hows regarding overseas expansion and face several hurdles along the journey. When it comes to management in the service industry, knowledge and know-how on business management has not been converted to formal knowledge rather it has been treated as "tacit knowledge". The operational know-how of a project belongs to the individual involved, thereby it is taught as tacit knowledge without going through a manual. It can also be stated that companies do not possess a business management know-how on several aspects including the multi-ethnic, multilingual, multi-religious view that are necessary for overseas expansion.

There are plenty of unknown parts such as unique business practices, culture, and laws etc. of the local business partner when entering overseas. A series of investigations is obviously essential. At the same time, it is advised that the companies prepare a set of investigation items similar to those for business development, such as business planning, research on needs of products / services, market size, target and so on.

3.4. Women Entrepreneurs and Service Investment Abroad

The term “entrepreneur” here means an innovative, self-employed business suppliers (persons). As the feature of innovativeness is hard to define, this section simply focuses on self-employed business suppliers (persons). Figure 3.9 shows self-employed rate for women and men in APEC region. As indicated, in some developing economies of the APEC where self employment rate is relatively high, female self-employed rate is higher than for men, which perhaps implies their “untouched” (therefore “self-employed”) and underdeveloped business situation.²⁷

Figure 3.9 Self-Employed Rate for Women and Men in APEC Region (Average 2015-2018)



Note: Data is not available for Chinese Taipei.
Unit: percent.

²⁷Women-owned firms are found in all sectors of the economy, though are more likely to be concentrated in service-based or cottage industries (APEC, 1999). More recently, OECD (2008: 46) notes as follows: Traditional areas of female work including teaching, nursing and social services should be upgraded to reflect their true contributions to the economy and society. Gender segregation in employment characterises male and female positions in the labour market and is a major source of inequalities. The recognised value of jobs and the earnings attached to them vary according to whether they correspond to mainly female or mainly male activities and occupations. In addition, many female-dominated jobs are characterised by precarious employment conditions, a low degree of professionalisation, lower pay and few training and career opportunities.

Source: Based on the World Bank Development Indicators
<https://databank.worldbank.org/data/source/world^development-indicators#>).

As addressed in the previous chapter, we had conducted an online-survey in the APEC region where we gave major importance to gender²⁸ related issues. Lack of human resource capacity serves as a barrier that makes investors less confident, hence they end up not considering an investment abroad.

According to Yousafzai et al., (2018)²⁹, for women there are some additional barriers as women may not have received the experience and training to make them as successful in comparison to their male counterparts. The second concern is that perception on securing funds is rather negative as access to enough capital to establish their business has always been a challenge for female entrepreneurs. The third concern that women entrepreneurs seem to have is over family-related matters as early in their pursuit they need to find a balance between work and home.

In most societies (developed or developing), the responsibility of childcare (family-related responsibility) is considered primarily as women's. This requires potential women entrepreneurs to possess multi-tasking skills as this responsibility of childcare is indispensable while also managing other important responsibilities such as their regular office work or an entrepreneurial venture.

Domestic responsibilities make it difficult for women to compete equally with men on a professional level, particularly in the developing societies where women have always faced the challenge of being given secondary roles. This leads to a major topic of how cultural barriers plays a vital role in preventing women from starting a business and ultimately being successful.

Women are said to have a unique definition of the term “success” in business and this definition differs from the traditional criteria that the performance of the firm dictates how we see success.³⁰ Marlow and McAdam (2013) argues that gendered socio-economic positioning

²⁸The WTO and the World Bank launched (in 2017) a research partnership to deepen understanding of the linkages between trade and gender. This research partnership is expected to generate perspectives on the rationale for addressing gender equality; the gender effects of trade and investment liberalization; challenges and opportunities of 21st century women traders; and policies that can best help women gain from trade (https://www.wto.org/english/tratop_e/womenandtrade_e/reporttradegender18_e.pdf).

²⁹ The rest of this section draws largely on Yousafzai et al. (2018).

³⁰ Hailemariam and Kroon (2018) argue that financial success (increased income), high growth and profit making, self-fulfillment and social contribution are among the considerations that feature success in business. Women entrepreneurs generally place more emphasis on the quality of their family and community relationships (<https://www.businessinsider.com/men-and-women-define-success-differently-and-not-everyone-bases-it-on-money-2015-2>).

ensures women-owned businesses' demonstrating constrained performance yet this is not equivalent to under-performance. Success for potential women entrepreneurs are multifaceted, including success in e.g., child care. Therefore, success in this given context is identified in terms of three areas such as valid stakeholder satisfaction, self-fulfillment and a successful social contribution. It is important for policy makers to understand how the entrepreneurs define their success and what elements contribute to their sense of accomplishment following which the government should support and likewise design policies that enables SMEs especially those led by women entrepreneurs to flourish. This important role of the government is further solidified by looking back at "The Women Entrepreneurs Finance Initiative (We-Fi)" which was announced at the G20 Leaders' Summit in July 2017 and launched by the World Bank. Being designed as a collaborative partnership among governments, multilateral development banks, and other stakeholders with a funding of \$354 million from 14 governments, this partnership provided the much-needed financial breakthrough, mentorship and fantastic opportunities to link local and global markets to women-led/owned businesses in developing economies, especially in the most challenging environments.

Another key factor which becomes crucial to be successful in the effort to expand one's business overseas is to maintain a smooth communication with the employees and local business partners alike. Women entrepreneurs tend to consider that relationships are at the center of entrepreneurship, especially for women who seldom have access to new technologies or capital when they launch a business. The importance of building strong social networks is clear to women entrepreneurs as they continue to build on their relationships with others who contribute equally to the growth of their business and realize that these relationships are often their most valuable currency.

On the other hand, a major barrier can be that male investors preferred pitches presented by male entrepreneurs in comparison with pitches made by female entrepreneurs even when the content of the pitch was the same³¹, so we find that women tend to be financially disadvantaged. Women have preferred to start service-based enterprises over high-technology enterprises precisely because these are sectors with low barriers to entry.³² It is also important

³¹ Based on Gender Gap Portal (<https://gap.hks.harvard.edu/investors-prefer-entrepreneurial-ventures-pitched-attractive-men>).

³² In connection to APEC's recent activities, the La Serena Roadmap for Women and Inclusive Growth (2019-2030) (https://www.apec.org/Meeting-Papers/Annual-Ministerial-Meetings/2019/2019_AMM/Annex-A) seeks to support women's education, training and skills development and access in a changing world of work. More specifically, Counter gender stereotypes in education, training and skills development; Provide basic education as well as support for lifelong learning through education, training, upskilling and reskilling to boost women's

to note that running a service-based business accommodates the current financial and social capital of a women entrepreneur and her need to balance the domestic responsibilities. This common phenomenon of gender specific roles as driven by the society is prevalent in several developing economies around the world.

Access to financial capital has long been perceived as a major criterion for entrance and survival of women entrepreneurs.³³ It also sheds light on the fact that the creation of educational opportunities for these women who invariably show a well rounded social skill-set becomes an absolute necessity. It is also an undeniable fact that the social constraints being imposed on women subdues their potential to perform.

Marlow and McAdam (2013) argue that gendered socio-economic positioning ensures women-owned businesses' demonstrating constrained performance yet this is not equivalent to under-performance. In order to further investigate the challenges faced by SMEs when they are about to venture into an overseas market, it would be important to address the term "entrepreneurship" which means "the process of designing, launching and running a new business, which is often initially a small business³⁴", can have a broader economic impact from the perspective of job and wealth creation. Special attention to the contribution of the women entrepreneurs is needed as is a distinction between businesses owned and managed by women and men; thus, the gender divide observed in the labor market is reflected in entrepreneurship as well.

Comparisons of female entrepreneurs and male entrepreneurs are made below. As seen in Table 3.10, men tend to make decisions quicker and women need more time. Male entrepreneurs focus on making sure costs are under control and are more profit driven. Women

economic empowerment; address barriers to strengthen women and girls' access to and retention in science, technology, engineering and mathematics (STEM) education and careers; promote women and girls' access to information and communication technologies, learning opportunities and digital skills building and training, especially for indigenous women, women in poverty, women with disabilities, and women in remote and rural areas; strengthen the sharing and use of data and best practices, to bridge the digital gender divide.

³³ APEC's La Serena Roadmap for Women and Inclusive Growth (2019-2030) (https://www.apec.org/Meeting-Papers/Annual-Ministerial-Meetings/2019/2019_AMM/Annex-A) seeks to empower women through access to capital and markets: More specifically, promote and facilitate cooperation in the public and private sector to help ensure that women, including women of diverse backgrounds, and women-led micro, small and medium-sized enterprises (MSMEs), can access capital and assets, in both local and international markets; Enhance women-owned and women-led MSMEs' ability to participate in global value chains; provide capacity building activities and opportunities for networking, mentoring, and digital skills-building, among other core skills, to increase women's business competencies and encourage their participation in the digital economy and innovation; exchange experiences and best practices that can effectively increase the participation of women in local, regional, and global markets.

³⁴ Wikipedia on "entrepreneurship".

seek to make a social contribution and want to ensure their quality. It is also arguably said that men and women tend to start different kinds of enterprises.

When it comes to financial risk, men are more willing to undertake the risk than women (Table 3.11). Men and women also differ in how they manage their businesses. Men tend to be more task oriented than women, and the table indicates that male and female entrepreneurs have differing characteristics.

For women entrepreneurs, there are some additional barriers. Women may not have received the experience and training to make them successful that their male counterparts have had. Access to enough capital is also a challenge for female entrepreneurs (Table 3.12). Some banks may not have the confidence in female entrepreneurs that they have in males.

Table 3.10 General Characteristics of Male and Female Entrepreneurs.

Male Entrepreneurs	Female Entrepreneurs
Decision Making Easy	Difficulty in Making Decisions
Business focused on Economy and Cost	Business Focused on Making Social Contribution and Quality
Willing to Take Financial Risk	More Conservative When it Comes to Financial Risk
Task Oriented Managers	Focus on Good Relationships with Employees
Business manufacturing and construction	Business small retail and service orientation

Source: Yousafzai (2018), p.3.

Table. 3.11 Comparison of Risk Tolerance by Male and Female Entrepreneurs

Male Entrepreneurs	Female Entrepreneurs
Less Concerned About Hazards in Business Ownership	More Concerned about Hazards in Business Ownership
Feel Have Enough Information	Require More Detailed Information
Require Less Social Support to Start Business	Require Social Support to Start Business
Willing to Fail in Business	Less Willing to Fail in Business
Propensity for Risk in General	Risk Averse Generally

Source: Yousafzai (2018), p.4.

Table 3.12 Comparison of Financing Aspect by Male and Female Entrepreneurs

Male Entrepreneurs	Female Entrepreneurs
More capital	Less capital
More debt	Low debt
	A lack of track record for financing
Bank trust male	Bank not trust female
Easy to access to capital	Not easy to access to capital

Source: Yousafzai (2018) , p.4.

Tables 3.13 and 3.14 show the comparison of motivation for work and management style by gender, respectively. As shown, female entrepreneurs are, albeit arguably, more autonomous and intuitive thinkers.

Table 3.13 Comparison of Motivation for Work by Male and Female Entrepreneurs

Male Entrepreneurs	Female Entrepreneurs
Externally focused	Autonomous
Strong initiative	More positive
	Good common sense
	Think critically
	Very aggressive
	Own boss
Earning more money	Achieve a sense of accomplishment
Previous experience	

Source: Yousafzai (2018) , p.5.

Table 3.14 Comparison of Management Style by Male and Female Entrepreneurs

Male Entrepreneurs	Female Entrepreneurs
Logical thinkers	Intuitive thinkers
Oriented leaders	Communicative and expressive behaviours
	Communications skills are excellent
	Understand the needs of their employees
Grow their businesses	Grow their businesses
More aggressive when it comes to expansion	Cautious and conservative about expansion

Source: Yousafzai (2018) , p.5.

It can also be difficult for women entrepreneurs to strike a balance work and home. They may not have access to some of large networks that men have (Table 3.15). These networks may provide more financial assistance and mentoring. There are also cultural barriers that can prevent women from starting a business and ultimately being successful. In some cultures, women are not viewed as equal to men and are not given access to the resources they need for their enterprises.

Table 3.15 Comparison of Networking for Work by Male and Female Entrepreneurs

Male Entrepreneurs	Female Entrepreneurs
Large network	Small network
Organizations	Family and friend
More access to network	Less access to network

Source: Yousafzai et al. (2018), p.6

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Chapter 4: CASE STUDY OF SERVICE SECTORS: WOMEN ENTREPRENEURSHIP IN EDUCATION

4.1. Index Analysis of Restrictions on Trade in Educational Service

The results of indexation for educational services are summarized in Tables 4.1 and 4.2 (see APPENDIX P for a binary database constructed for this research based on the publicly available information for research purposes only). While publicly available legal information is limited, following are some of the observations arising from the indexation in this research report.

Some observations are as follows. In the case of 921 (primary education), the index values range from 0.5 to 1.0 (Mode1), 0.6 to 1.0 (Mode3) and 0.63 to 1.0 (Mode4). For the lower score, the values range from 0.00 to 0.22 (Mode1), 0.02 to 0.33 (Mode3) and 0.03 to 0.33 (Mode 4). As for modes, mode 1 seems to be more liberalized than modes 3 and 4. Main features of this sector (921) is that, overall, there are some unique and additional regulations in market entry allowed, license required, and education required. In terms of concrete regulations, following are part of those regulations rather unique to this sector: "the citizenship is often required", "the license is required" and "certain level of education is also required". This is probably because primary education service deals with nurturing identity as an important basis of citizenship and therefore it cannot be assigned to foreign suppliers (teachers and schools)

On 922 (secondary education), the index values range from 0.5 to 1.0 (Mode 1 and 3) and 0.6 to 1.0 (Mode4). For the lower score, the values range from 0.00 to 0.22 (Mode1), 0.02 to 0.35 (Mode3), and 0.03 to 0.33 (Mode4). As for modes, mode 1 seems to be more liberalized than modes 3 and 4. Main features of this sector (922) is that, overall, albeit not so much as in 921, there are restrictions in "market entry allowed" and "license and education required" in most APEC members. This is also because the secondary education period still falls under identity formation and therefore supply of services by foreign teachers and organizations tend to be avoided.

As for 923 (higher education), the index values range from 0.36 to 1.0 (Mode1), 0.5 to 1.0 (Mode3) and 0.39 to 1.0 (Mode4). For the lowest score, the values range from 0.00 to 0.20 (Mode1), 0.04 to 0.36 (Mode3) and 0.00 to 0.31 (Mode4). As for modes, mode 1 and 4 seems to be more liberalized than mode 3. Main features of this sector (923) is that, unlike sector 921 and 922, regulation for "market entry" and "requirements for license" are not strict. This is because higher education period comes after the identity formation and it is also non-

compulsory; then the variety of consumer choices through promoting trade liberalization become more important.

For 924 (adult education), the index values range from 0.5 to 1.0 (Mode 1 and 3) and 0.6 to 1 (Mode4). For the lower score, the values range from 0.00 to 0.18 (Mode1) and 0.00 to 0.33 (Mode 3 and 4). As for modes, mode 1 seems to be a little bit liberalized than modes 3 and 4. Main features of this sector (924, adult education) is that, like sector 923, regulation for market entry, requirements for license and education are not strict. This is because adult education requires more of gaining technical knowledge aspect, rather than identity formation of citizens.

Regarding 929 (Other education), the index values range from 0.33 to 1.0 (Mode1), 0.5 to 1.0 (Mode3) and 0.44 to 1.0 (Mode4). For the lower score, the values range from 0.00 to 0.18 (Mode1) 0.00 to 0.33 (Mode 3 and 4). As for modes, mode 1 seems to be a little bit liberalized than modes 3 and 4. Main features of this sector (929) is that it seems to have the lowest degree of regulation and its average is range from 0.09 to 0.89. The sector seems to be open to everyone (citizenship is the main requirement for the entry.)

Table 4.1 Scores of Restrictive Indices for Education Services (for All Economies)

CPC code	Mode 1		Mode 3		Mode 4	
	Lower Score	Upper Score	Lower Score	Upper Score	Lower Score	Upper Score
921	0.00-0.22	0.50-1.0	0.02-0.33	0.60-1.0	0.03-0.33	0.63-1.0
922	0.00-0.22	0.50-1.0	0.02-0.35	0.50-1.0	0.03-0.33	0.60-1.0
923	0.00-0.20	0.36-1.0	0.04-0.36	0.50-1.0	0.00-0.31	0.39-1.0
924	0.00-0.18	0.50-1.0	0.00-0.33	0.50-1.0	0.00-0.33	0.60-1.0
929	0.00-0.18	0.33-1.0	0.00-0.33	0.50-1.0	0.00-0.33	0.44-1.0

Notes: The CPC codes denotes the following educational subsectors (in parentheses). 921 (primary education); 922 (secondary education); 923 (higher education); 924 (adult education); and 929 (other education).

Source: Calculation based on publicly available online legal information.

Table. 4.2 Average of All Economies and All Modes

CPC code (sector name)	Lower Score	Upper Score
921 (primary education)	0.11	0.90
922 (secondary education)	0.11	0.85
923 (higher education)	0.10	0.82
924 (adult education)	0.08	0.91
929 (other education)	0.09	0.89

Source: Calculation based on publicly available online legal information.

Table 4.3 shows average scores of policy restrictiveness by OECD policy category. Overall, the policy category of “barriers to competition” seems to have the highest barrier for Education Services.

Table. 4.3 Average Scores of Policy Restrictiveness for Education Services (Total) by OECD Policy Category

	All Education Mode 3 average				
	FE	MP	DM	BC	RT
APEC average	0.03	0.12	0.15	0.35	0.00

Note: The abbreviations are as follows. FE: Restrictions on foreign entry; MP: Restrictions on the movement of people; DM: Other discriminatory measures; BC: Barriers to competition and RT: Regulatory transparency.

Source: Authors’ calculation based on publicly available online legal information only.

The indexation results show that overall, the education service remains rather restrictive for investment from abroad at earlier educational stages (i.e., primary and secondary education services to be specific). The category “other education services”, has a rather open policy and thus can have an innovative potential when restrictions are further removed. In terms of contents of regulations listed in APPENDIX P, the licensing requirement is often used as a regulation especially for primary education services.

In terms of actual company performance, Table 4.4 shows the number of domestic companies operating in each of the APEC economies. As shown, SMEs comprise the majority. As for investment (trade in mode 3), Table 4.5 shows the matrix of mode-3 based investment by business companies for education services. The figures in parentheses show the number of

SMEs. As shown, not so many suppliers of education service, especially SMEs, are statistically recorded as investing across APEC members. There is thus much scope for promoting cross-border business expansions of education services.

Table 4.4 Number of Domestic Companies in Education Services and their Size Distribution at the End of 2016

	No. of companies	Very Large		Large		Medium		Small	
		No.	Share	No.	Share	No.	Share	No.	Share
Australia	4,279	0	0.00	222	5.19	2,211	51.67	1,846	43.14
Brunei Darussalam	-	-	-	-	-	-	-	-	-
Canada	19,162	27	0.14	660	3.44	13,183	68.80	5,292	27.62
Chile	7,084	5	0.07	247	3.49	1,024	14.46	5,808	81.99
China	5,391	22	0.41	75	1.39	258	4.79	5,036	93.41
Hong Kong, China	330	6	1.82	94	28.48	204	61.82	26	7.88
Indonesia	1,593		0.00	3	0.19		0.00	1,590	99.81
Japan	5,066	34	0.67	156	3.08	975	19.25	3,901	77.00
Korea	24,690	79	0.32	278	1.13	812	3.29	23,521	95.27
Malaysia	206	8	3.88	42	20.39	46	22.33	110	53.40
Mexico	833		0.00		0.00		0.00	833	100.00
New Zealand	161	3	1.86	33	20.50	83	51.55	42	26.09
Peru	15,823	38	0.24	63	0.40	632	3.99	15,090	95.37
The Philippines	406	2	0.49	15	3.69	107	26.35	282	69.46
Papua New Guinea	-	-	-	-	-	-	-	-	-
The Russian Federation	85,670	26	0.03	175	0.20	6,637	7.75	78,832	92.02
Singapore	36	6	16.67	3	8.33	7	19.44	20	55.56
Chinese Taipei	7	3	42.86	1	14.29	1	14.29	2	28.57
Thailand	449		0.00	6	1.34	46	10.24	397	88.42
United States	18,038	2,009	11.14	6,442	35.71	0	0.00	9,587	53.15
Viet Nam	2,534	10	0.39	1	0.04	7	0.28	2,516	99.29
Average	10,093	142.375	4.26	473	7.96	1,543	20.02	8,144	67.76

Source: Company database ORBIS.

Table 4.5 Matrix of Mode-3 Based Investment (Education Services), at the end of 2016

From→To	Australia	Brunei Darussalam	Canada	Chile	People's Republic of China	Hong Kong, China	Indonesia	Japan	Republic of Korea	Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	The Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam
Australia			4(0)	3(0)		1(1)			1(0)		1(0)	26(4)				1(0)	1(0)			15(0)	
Brunei Darussalam																					
Canada	8(3)								1(0)	1(0)						1(0)				21(0)	
Chile										1(0)	1(1)										
People's Republic of China	14(0)		1(0)																		1(0)
Hong Kong, China	14(1)				1(0)			1(0)													
Indonesia																					
Japan	11(1)				1(0)	1(0)	1(0)					1(0)							2(0)	19(0)	
Republic of Korea	6(0)						1(0)														
Malaysia												2(0)					1(0)				
Mexico				1(0)																	
New Zealand	20(0)																				
Papua New Guinea																					
Peru																					
The Philippines												1(1)									
Russia																					
Singapore	12(1)				2(0)	3(1)					1(1)	1(0)									
Chinese Taipei	1(0)				2(0)																
Thailand	1(0)																				1(0)
United States	48(8)		17(0)	4(0)	1(0)	3(2)		2(0)	1(1)	4(2)	9(0)	5(0)				3(0)					
Viet Nam	1(0)																				1(0)

Note: the unit is number; figures in parentheses indicate the number of companies whose parent company is an SME.

Source: Company database ORBIS.

Educational Services (921 Primary Education)

Below are the top four frequently used restrictions (the same rankings are also listed) in 921 for APEC members (in total, based on the utilization count of each regulation):

- (1) Education required (under the Restrictions on the Movement of people (MP) based on OECD)
- (2) Market entry allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (2) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Market closed – Nationality of host economy required (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Training or work experience required (under the Restrictions on Movement of people (MP) based on OECD)

Table 4.6 shows the average utilization rate of regulations by five OECD categories for primary education services.

Table 4.6. Average Utilization Rate of Regulations by Five OECD Categories for Primary Education Services

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.04
Restrictions on the movement of people (MP)	0.21
Other discriminatory measures (DM)	0.04
Barriers to competition (BC)	0
Regulatory transparency (RT)	0
Average	0.06

Source: Calculation based on the constructed binary database.

Educational Services (922 Secondary Education)

Below are the top five frequently used restrictions (the same rankings are also listed) in 922 for APEC members (in total, based on the utilization count of each regulation):

- (1) Market entry allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Education required (under the Restrictions on the Movement of people (MP) based on OECD)

- (3) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Market closed – Nationality of host economy required (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)

Table 4.7 shows the average utilization rate of regulations by five OECD categories for secondary education services.

Table 4.7. Average Utilization Rate of Regulations by five OECD Categories for Secondary Education Services

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.04
Restrictions on the movement of people (MP)	0.18
Other discriminatory measures (DM)	0.04
Barriers to competition (BC)	0
Regulatory transparency (RT)	0
Average	0.05

Source: Calculation based on the constructed binary database.

Educational Services (923 Higher Education)

Below are the top five frequently used restrictions (the same rankings are also listed) in 923 for APEC members in total (based on the utilization count of each regulation; figures in parentheses denote rankings, categories with the same ranking listed):

- (1) Education required (under the Restrictions on the Movement of people (MP) based on OECD)
- (2) Market entry allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Market closed – Nationality of host economy required (under the Restrictions on foreign entry (FE) based on OECD)
- (4) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)

(5) Foreign licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)

(5) Percentage of ownership or control allowed to foreign nationals (under the Restrictions on foreign entry (FE) based on OECD)

(5) Limits on ownership or control by non-locally licensed professionals (under the Restrictions on foreign entry (FE) based on OECD)

(5) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)

(5) Education Number of years (under the Restrictions on the Movement of people (MP) based on OECD)

(5) Training or work experience required (under the Restrictions on the Movement of people (MP) based on OECD)

Table 4.8 shows the average utilization rate of regulations by five OECD categories for primary education services. As shown, restrictions on the movement of people (MP) has the highest utilization rate.

Table 4.8 Average Utilization Rate of Regulations by Five OECD Categories for Higher Education Services

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.01
Restrictions on the movement of people (MP)	0.08
Other discriminatory measures (DM)	0.04
Barriers to competition (BC)	0
Regulatory transparency (RT)	0
Average	0.03

Source: Calculation based on the constructed binary database.

Educational Services (924 Adult Education)

Below are the top five frequently used restrictions (the same rankings are also listed) in 924 for APEC members (in total, based on the utilization count of each regulation):

(1) Market entry allowed (under the Restrictions on foreign entry (FE) based on OECD)

- (2) Foreign licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Percentage of ownership or control allowed to foreign nationals (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Other forms of discriminations (under the Other discriminatory measures (DM) based on OECD)
- (5) Market closed – Nationality of host economy required (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Joint venture allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Limits on ownership or control by foreign nationals (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Percentage of ownership or control allowed to foreign nationals (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Limits on ownership or control by non-locally licensed professionals (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Percentage of ownership or control allowed to non-locally-licensed professionals (under the Restrictions on foreign entry (FE) based on OECD)
- (5) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Education required (under the Restrictions on the Movement of people (MP) based on OECD)
- (5) Education foreign degree recognized (under the Restrictions on the Movement of people (MP) based on OECD)
- (5) Minimum percentage of national employees required (under the Other discriminatory measures (DM) based on OECD)
- (5) Minimum number of national employees required (under the Other discriminatory measures (DM) based on OECD)
- (5) Nationality requirement for board of directors (under the Other discriminatory measures (DM) based on OECD)
- (5) Minimum percentage of national board of directors required (under the Other discriminatory measures (DM) based on OECD)
- (5) Minimum number of national board of directors required (under the Other discriminatory measures (DM) based on OECD)
- (5) Domestic residency requirement for board of directors (under the Other discriminatory measures (DM) based on OECD)

(5) Minimum percentage of domestic residents on the board of directors required (under the Other discriminatory measures (DM) based on OECD)

(5) Minimum number of domestic residents on the board of directors required (under the Other discriminatory measures (DM) based on OECD)

Table 4.9 shows the average utilization rate of regulations by five OECD categories for adult education services.

Table 4.9 Average Utilization Rate of Regulations by Five OECD Categories for Adult Education Services

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.01
Restrictions on the movement of people (MP)	0.01
Other discriminatory measures (DM)	0.04
Barriers to competition (BC)	0
Regulatory transparency (RT)	0
Average	0.01

Source: Calculation based on the constructed binary database.

Educational Services (929 Other Education)

Below are the top three frequently used restrictions (the same rankings are also listed) in 929 for APEC members (in total, based on the utilization count of each regulation):

- (1) Market entry allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Percentage of ownership or control allowed to foreign nationals (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Limits on ownership or control by non-locally licensed professionals (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)

(3) Education required (under the Restrictions on the Movement of people (MP) based on OECD)

(3) Minimum number of national employees required (under the Other discriminatory measures (DM) based on OECD)

(3) Nationality requirement for board of directors (under the Other discriminatory measures (DM) based on OECD)

(3) Domestic residency requirement for board of directors (under the Other discriminatory measures (DM) based on OECD)

(3) Other forms of discriminations (under the Other discriminatory measures (DM) based on OECD)

Table 4.10 shows the average utilization rate of regulations by five OECD categories for other education services.

Table 4.10. Average Utilization Rate of Regulations by Five OECD Categories for Other Education Services

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.01
Restrictions on the movement of people (MP)	0.04
Other discriminatory measures (DM)	0.06
Barriers to competition (BC)	0
Regulatory transparency (RT)	0
Average	0.02

Source: Calculation based on the constructed binary database.

4.2. Role of Education Services for APEC Economies

This section considers the role of education services for APEC economies at large. From a developmental perspective, education services as basic human needs should be the focus; and when domestic suppliers are in shortage, investment by foreign suppliers would become crucial. From the next-stage, trade-promoting perspectives, service trade liberalization is also desirable for a wider range of educational fields, yet identity related education as a basis of citizenship of each economy should be retained especially in primary education by appropriately skilled domestic suppliers (educationers).

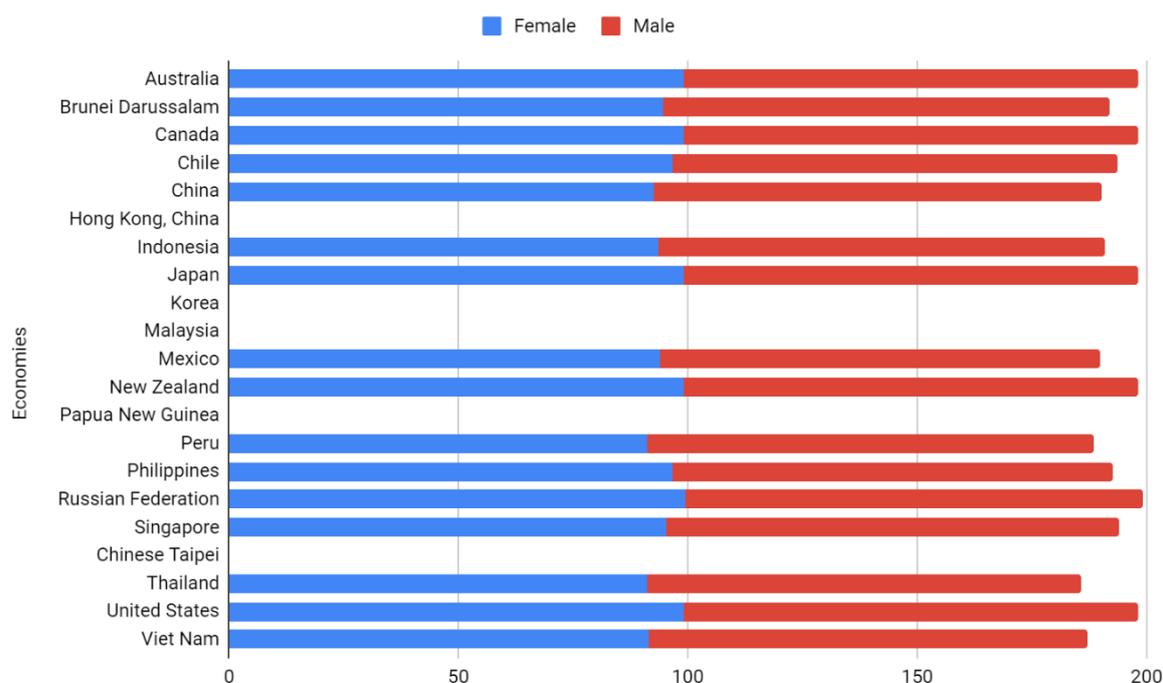
In the context of education services as providers of skills and screening, Stiglitz (2009) addresses a theory of education services from the perspective of information economics. Based on the theory, education can be seen as providing both (1) skills (general as well as specific) and (2) information on the person with a particular educational record. It is also stressed in the theory that education can bring about general skills (e.g., reading, writing, and calculating) as well as specific skills (e.g., operating a factory machine).

The APEC member economies might focus on the balance between private return (with a cost in the form of tuition fee) and social return (with a society-wide cost in the form of economic expenditure on education). Education has a public good nature, in the sense that individual educational effort can influence the society-level, average increase of income.

A hypothesis in connection to women entrepreneurs and SMEs as suppliers of education services is: the initial good start in life, backed by formal educational achievements, is expected to generate high financial returns (Heckman, 2009). High-quality childhood education brings about wide-ranging social benefits to individuals. These include better health, reduced likelihood of individuals engaging in risky behaviours and stronger “civic and social engagement” (OECD, 2015; OECD/ Asian Development Bank, 2015).

Figure 4.1 shows the literacy rates in the APEC economies by gender: it seems that literacy rate, reflecting the society’s basic skill level that must be provided by educational services, is rather satisfactory in the APEC.

Figure 4.1 Literacy Rates in the APEC Economies by Gender (2017)

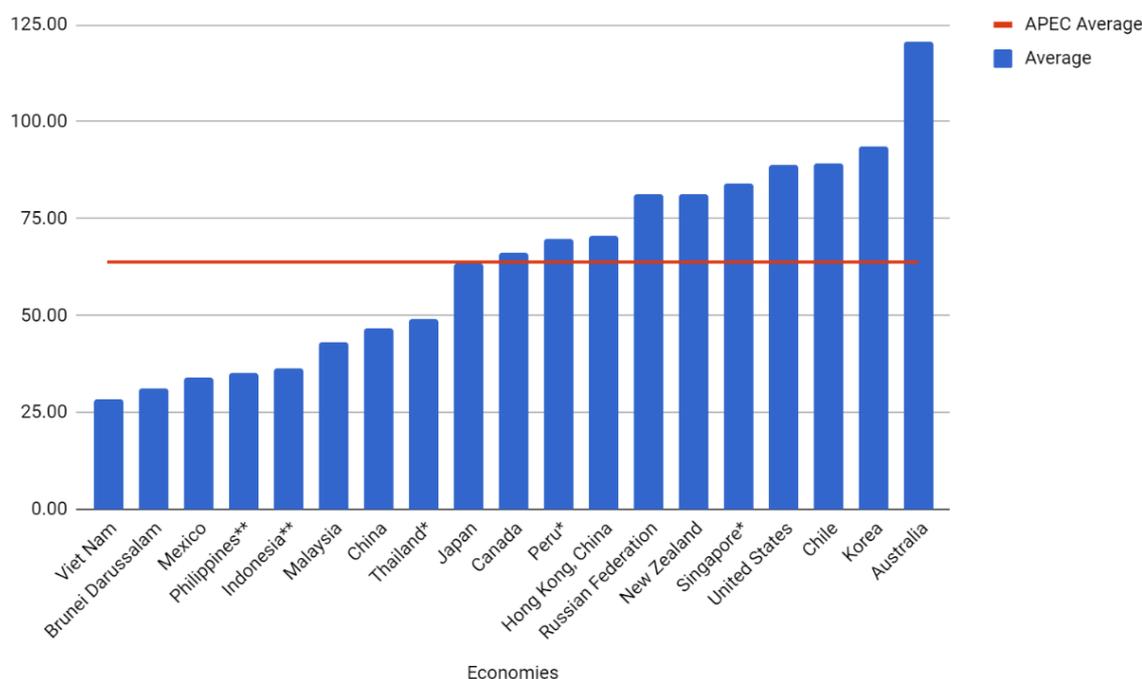


Notes: Datas for Hong Kong, China; Korea; Malaysia; Papua New Guinea and Chinese Taipei are not available.
Unit: Percent.

Source: The Global Gender Gap Report 2018.

Figure 4.2 shows that there are huge differences in rates of university enrolment within APEC economies. There is thus a need to promote educational services, including through the promotion of trade in educational services across APEC economies.

Figure 4.2 Average Rate of University Enrolment in APEC Economies



Notes: * data refers to 2016 only. ** data refers to 2017 only. For others, the average figures of 2015 and 2016 are used. Data for PNG and Chinese Taipei are not available. Due to multiple enrolments, the rate could be over 100.

Sources: UNESCO and GLOBAL NOTE (<https://www.globalnote.jp/post-1465.html>).

Government intervention in educational services is also an important and at times ambivalent consideration in the context of educational contents. Table 4.11 shows the regulatory dilemma of public investment in technical and vocational education and training (TVET) as an illustration. As is indicated in the Table, there are pros and cons about public investment, since educational contents can have both generic (transferable) or public-good nature, and firm-specific, or private-good nature. This dilemma also relates to the regulations for suppliers of educational services, either domestic or foreign.

Table 4.11 Pros and cons on Public Investment in Technical and Vocational Education and Training (TVET)

Against Public Investment	For Public Investment
Employers want “generic” skills and the ability to learn on the job, not TVET skills.	The private sector may be too limited in scope and strength to provide much training. And employers generally tend to under-train.
If skills are needed, employers will train their workers.	The underprivileged will not have access to skills development without government intervention.
If skills lead to well-paying jobs, people will pay to acquire them. And if people are willing to pay, private training providers will respond (supply response).	Private training providers will not fill the skills gaps by themselves; they focus narrowly on low-cost occupations in urban settings.
The high costs of TVET are wasted on people who do not apply the skills, because they enter different occupations, go on to further education, or are unemployed.	In growing economies, TVET can have high returns.
It is just too difficult to do TVET well in most developing economies because of lack of resources and poor institutional capacity.	Externalities occur – a sufficient pool of skilled workers can help attract foreign direct investment. Some TVET systems work well: it is a matter of doing it right.

Source: ADB (Asian Development Bank) (2009), Good Practice in Technical and Vocational Education and Training, ADB, Philippines, www.adb.org/sites/default/files/publication/28624/good-practiceeducation-training.pdf. (OECD/ Asian Development Bank, 2015:171).

4.3. Case Study: PISA Scores and Promotion of Trade in Educational Services

This section addresses the results of the Programme for International Student Assessment (PISA) for the EU and APEC members in comparison (Table 4.11). What is clear in the Table is that there is a greater disparity between APEC members. While some leading APEC economies are ahead of those in the EU, this also gives rise to large differences in the region.

Table 4.12 Comparison of PISA Scores

	Scientific Literacy		Reading Literacy		Mathematical Literacy	
1	Singapore	556	Singapore	535	Singapore	564
2	Japan	538	Hong Kong, China	527	Hong Kong, China	548
3	Estonia	534	Canada	527	Macao	544
4	Chinese Taipei	532	Finland	526	Chinese Taipei	542
5	Finland	531	Republic of Ireland	521	Japan	532
6	Macao	529	Estonia	519	Beijing/ Shanghai//	531

7	Canada	528	Korea	517	Korea	524
8	Viet Nam	525	Japan	516	Switzerland	521
9	Hong Kong, China	523	Norway	513	Estonia	520
10	Beijing/ Shanghai/ etc	518	New Zealand	509	Canada	516
11	Korea	516	Germany	509	Netherlands	512
12	New Zealand	513	Macao	509	Denmark	511
13	Slovenia	513	Poland	506	Finland	511
14	Australia	510	Slovenia	505	Slovenia	510
15	United Kingdom	509	Netherlands	503	Belgium	507
16	Germany	509	Australia	503	Germany	506
17	Netherlands	509	Sweden	500	Poland	504
18	Switzerland	506	Denmark	500	Republic of Ireland	504
19	Republic of Ireland	503	France	499	Norway	502
20	Belgium	502	Belgium	499	Austria	497
21	Denmark	502	Portugal	498	New Zealand	495
22	Poland	501	United Kingdom	498	Viet Nam	495
23	Portugal	501	Chinese Taipei	497	The Russian Federation	494
24	Norway	498	United States	497	Sweden	494
25	United States	496	Spain	496	Australia	494
26	Austria	495	The Russian Federation	495	France	493
27	France	495	Beijing/	494	United Kingdom	492
28	Sweden	493	Switzerland	492	Czech Republic	492
29	Czech Republic	493	Latvia	488	Portugal	492
30	Spain	493	Czech Republic	487	Italy	490
31	Latvia	490	Croatia	487	Republic of Iceland	488
32	The Russian Federation	487	Viet Nam	487	Spain	486
33	Luxembourg	483	Austria	485	Luxembourg	486
34	Italy	481	Italy	485	Latvia	482
35	Hungary	477	Republic of Iceland	482	Republic of Malta	479
36	Lithuania	475	Luxembourg	481	Lithuania	478
37	Croatia	475	Israel	479	Hungary	477
38	Buenos Aires	475	Buenos Aires	475	Slovakia	475
39	Republic of Iceland	473	Lithuania	472	Israel	470
40	Israel	467	Hungary	470	United States	470

41	Republic of Malta	465	Greece	467	Croatia	464
42	Slovakia	461	Chile	459	Buenos Aires	456
43	Greece	455	Slovakia	453	Greece	454
44	Chile	447	Republic of Malta	447	Romania	444
45	Bulgaria	446	Republic of Cyprus	443	Bulgaria	441
46	United Arab Emirates	437	Oriental Republic of Uruguay	437	Republic of Cyprus	437
47	Oriental Republic of Uruguay	435	Romania	434	United Arab Emirates	427
48	Romania	435	United Arab Emirates	434	Chile	423
49	Republic of Cyprus	433	Bulgaria	432	Turkey	420
50	Mordova	428	Turkey	428	Mordova	420
51	Republic of Albania	427	Costa Rica	427	Oriental Republic of Uruguay	418
52	Turkey	425	Republic of Trinidad and Tobago	427	Montenegro	418
53	Republic of Trinidad and Tobago	425	Montenegro	427	Republic of Trinidad and Tobago	417
54	Thailand	421	Republic of Colombia	425	Thailand	415
55	Costa Rica	420	Mexico	423	Republic of Albania	413
56	State of Qatar	418	Mordova	416	Mexico	408
57	Republic of Colombia	416	Thailand	409	Georgia	404
58	Mexico	416	Hashemite Kingdom of Jordan	408	State of Qatar	402
59	Montenegro	411	Brazil	407	Costa Rica	400
60	Georgia	411	Republic of Albania	405	Republic of Lebanon	396
61	Hashemite Kingdom of Jordan	409	State of Qatar	402	Republic of Colombia	390
62	Indonesia	403	Georgia	401	Peru	387
63	Brazil	401	Peru	398	Indonesia	386
64	Peru	397	Indonesia	397	Hashemite Kingdom of Jordan	380

65	Republic of Lebanon	386	Republic of Tunisia	361	Brazil	377
66	Republic of Tunisia	386	Dominican Republic	358	Macedonia	371
67	Macedonia	384	Macedonia	352	Republic of Tunisia	367
68	Kosovo	378	Democratic and Popular Republic of Algeria	350	Kosovo	362
69	Democratic and Popular Republic of Algeria	376	Kosovo	347	Democratic and Popular Republic of Algeria	360
70	Dominican Republic	332	Republic of Lebanon	347	Dominican Republic	328

Source: National Institute for Education Policy Research (2016).

What is required in order to eliminate the disparity in terms of education achievement? The PISA surveys provide good results point to the importance of learning from best practices. As an important example, the educational policy of Finland, a high ranking economy which is famous for the unique “Finnish education method”: this education method is characterized by the following two features:

- (1) The same education for everyone, with no selection until the age of 16.
- (2) The basis for education is what kids can learn by themselves.

These features are at the root of Finland’s high educational performance. The basis of Finland’s education is not rote-learning, but to support self-discovery. There is no obligation to study in order to compete with fellow students. At its heart is what you learn yourself, with an emphasis on promoting group-learning and nurturing the love of learning. The OECD secretariat had pointed out that “as in Finland, it is possible to achieve good results in schools with little difference between them”.³⁵

What can be learned from the Finnish education method for APEC is that it is important that “no one is left behind”; and this could also apply to the level of APEC members at large. If left to compete, that might at times lead to the gap widening further; through cooperation in class and across APEC members, both sides of the students/economies can improve at least in the field of education: since the very contents of education themselves can be polished without diminishing in the process of teaching and/or learning. Ultimately, this is expected to develop

³⁵ OECD, “What will cause a revolution in our schools – the education system through the PISA prism”, an article released in 2004.

the whole educational performance in class. Again, this virtuous scenario, if successfully implemented, offers the possibility of cooperation in education policy at the level of the APEC.

It is clear from the PISA data that post-secondary education is also important for an economy's further development. Seen from a community perspective, it shows that the difference in academic attainment between APEC members is greater than that for the EU. APEC economies are located between the "enormous global "disparity and "the comparatively equitable situation within the EU".³⁶

It is obvious that APEC has a greater gap in educational attainment than the EU. This is because the economic performance of APEC's members is more varied than the EU, and as noted above, economic performance has a significant influence on academic attainments in return. The EU had recognized the importance of education within communities before APEC had even been founded and has preserved this within its current educational policy. It is therefore vital for the APEC to further develop a regional educational policy. One notable point is that APEC is geographically broad, spanning both sides of the Pacific, and socio-culturally diverse. Indeed, one of the keywords describing the policy motto of the APEC is unity in diversity.

However, this diversity itself is important at times. Indeed, diversity has a large and positive role³⁷, with new values emerging from a diversity of views and values and contributing to development through differing comparative advantages. A coordinated educational policy across the APEC region will hopefully eliminate negative type of disparities in basic educational contents (e.g., language and calculation) and achievements across the entire region and increase the prospects for concerted economic growth of the APEC region. Primary education seems to have largely diffused through APEC economies. If the same can happen to higher education through promoting trade in services, economic growth will also be facilitated in APEC region.

4.4. Case Study: Implications of the ASEAN Free Labour Market and Educational Services³⁸

This section draws a lesson on free labour market and educational services. The Association of Southeast Asian Nations (ASEAN) has been piloting an internal market for highly skilled

³⁶ This implies that the APEC's educational policy is vital as a precursor to a global educational policy.

³⁷ As for our lesson at the APEC, there is diversity in the way diversity is felt and expressed at the societal level.

³⁸ This section draws on OECD (2015: 68).

labour since 2015, allowing for the free movement of individuals in selected professions. Under the new system, individuals in white-collar professions will be allowed to move between participating economies to seek employment. A free labour market will progressively expand opportunities for employers and employees. The new labor market system in ASEAN might theoretically help to meet the demand of highly skilled labour if high-skilled emigrants from the more developed economies like Malaysia and Singapore were keen to seek opportunities throughout the rest of the ASEAN region.

However, it is more likely that the best graduates from, e.g., Indonesia, the Philippines, Thailand and Viet Nam, will be drawn to higher-paying jobs in the most advanced ASEAN cities, while employers in their home economies will find it even harder to recruit adequately skilled graduate staff workers. This might give governments an additional incentive to focus on skills training and development, especially at the high end. In order to protect the interests of domestic employers, and avoid a “brain drain”, it is in their best interests to launch specific policy measures aimed at sharpening the professional, managerial and generic skills of their graduates, while emphasising the importance of English as the regional language of business (Economist Intelligence Unit, 2012). Closing Indonesia’s skills gap will require improving education quality at all levels, as well as expanding and improving training centres. Graduates and workers should be equipped with the technical skills they need as well as behavioural skills valued by employers, e.g., discipline, reliability, teamwork and leadership (World Bank, 2014; OECD/ Asian Development Bank, 2015).

At the economy level, many new early childhood institutions are authorised without any clear criteria or standards on educational contents. Some operate without a licence (OECD/ Asian Development Bank, 2015). At an early developmental stage, domestic teachers are under-qualified by cross-border standards, and their remuneration rates and conditions are relatively poor. Facilities and equipment are inadequate. The quality of education, with a few exceptions, is poor, particularly in institutions with insufficient scale to mount broad degree programmes. Many graduates fare poorly in the job market. There can be a significant backlog of unaccredited higher education institutions and study programmes. This problem would degrade the quality of student learning, the job prospects of graduates and the credibility of domestic higher education qualifications (OECD/ Asian Development Bank, 2015:38).

Some universities attract fewer foreign students than other ASEAN universities. Accreditation capacity in that case must be strengthened and stronger regulation is needed to address low quality providers. It will be necessary to take a focused approach to investment in

and internationalisation of research capacity among universities and institutes of technology. (OECD/ Asian Development Bank, 2015:20).

If the extent of internationalisation of higher education remains relatively low, there would be very small inward flows of foreign students. Internationalisation in curriculum development, benchmarking, co-operative degree programmes (such as twinning arrangements, cotutelle and joint or double degrees), and structured student and staff mobility programmes would be indispensable (OECD/ Asian Development Bank, 2015:40.215). Resorting to protectionist economic policies would only hold those economies back by sheltering its firms from competition that drives innovation, reducing its attractiveness to foreign investment, and encouraging an outflow of its most highly skilled people (OECD/ Asian Development Bank, 2015:24). This is a lesson that should be learned by the APEC economies.

4.5. Case of At-Home Ryugaku Produced and Run by Sunshine Maki (Maki Kamiya)

This section takes up the case of an education service supplier At-Home Ryugaku³⁹, run by a female entrepreneur. Ms Maki Kamiya (also known as Sunshine Maki), based in Yokohama, Japan, is a single mother of a child (7-year old girl at the time of the survey) and she started the business “At-Home Ryugaku” (at-home study abroad) in 2014. The business history of the education service is as follows.

August 2014: (365 days free email newsletter) started

October 2014: “Yutori English Salon” started

April 2015: Skype English lessons started

June 2015: Released “At-home songs” (7 songs in total)

April 2016: At-home Ryugaku Tushinkouza started

August 2016: “At-home salon” started

November 2016: “Situmonryoku seminar” started

September 2017: “Idea ryoku seminar” started

October 2017: Started recruitment of “At-home Ryugaku teacher”

November 2018: “At-Home Ryugaku Kids English Salon” started

Ms Maki Kamiya’s dream and vision, as genuine as it sounds, is to bridge children’s “gorgeous sensitivities” with the world: if more children grow with full of love and sensitivities,

³⁹ The organization’s website is as follows: <https://at-home-english.com/>. As the company is planning to propagate its business ideas throughout Japan and hopefully across borders, this case study is an example of how an SME in the field of education can possibly globalize itself.

and able to speak up their own ideas, the Japanese society and the world will be full of love and smile. And it would be a more enjoyable place to live in. She wants her own daughter and her friends, who will bear the future, to be such children. To be their supporter, is her dream. It should be noted that financial profitability is clearly not her top priority in her educational “business”.

For children to be successful in the world, they should be able to get over life challenges by themselves. The ability that they can think through and not give up easily is what is meant here. Having empathy to others and able to talk about own ideas in everywhere. Children can learn about such skills not just at formal schools or cram schools, but from everyday conversation with their parents. Thus, parenting and English conversation are what can be learned at the At-Home Ryugaku. Its educational method is expected to impart tips for how to enjoy (English) conversation with one’s children. It aims to be a place where you can be fully enriched and satisfied with sensitivity and love. Ms Maki Kamiya also created, with her daughter, special activity time for conversation, drawings, and painting pictures. Again, the activity should be full of love. As a practical teaching matter, she finds that for children to be able to speak English (at least in Japan), focusing on concrete “places”, “people”, with “frequency” and attention to “contents of talk” would be useful. The activity aims at learning useful English nurtured over a long-time span (which is natural). It is not based on grammars but based on “what you want to talk about!” Below is the list of other key phrases used in her educational program:

- Learn from daily conversation with your kids (Seeking for “my home” style);
- Daily lives will be used for the context of learning English (Seeking for my home style);
- Develop and grow children’s possibilities;
- Joyful conversation, based on their (children’s) interests;
- Conversation, which evoke curiosity;
- Importance of five senses;
- Small awareness will become a great discovery;
- Be aware of children’s new characters;
- Recognize, respect, and have empathy;
- Children can acquire the ability to express their opinions, ideas and thoughts;
- Children can negotiate and think;
- Adults also start to think in the process of teaching children; and
- Multiplication of ideas.

Ms Sunshine Maki also talked about what it is like to work for the At-Home Ryugaku (Study-Abroad) as a teacher. The organization's concept is "not cut back on the time with your children" when you work. It is a new way of working, in which you can enjoy time with your children and the time with your children will be the business scene itself. You can choose "when to work", "how long", "how often", and so on; depending on your situation, environment, life-work and life-style, teachers can choose and decide at their own initiative. The educational program is aiming for the situation that, sometime in the future, English will be the "petite" official language of each family. It would be better if teachers can speak in English fluently; yet we value their personalities and motivation. We call the person a "teacher", but she/he is more likely to be called an "entertainer".

To be a teacher, as a business matter, you must first be an at-home Ryugaku (Study-Abroad) "student".⁴⁰ And you must attend 2 seminars (seminar on the skill to pose questions and seminar on making ideas).

Thus, the At-Home Ryugaku, run by a women entrepreneur, clearly has unique educational contents (as the "ownership advantage" of suppliers of educational services), and if expanded across borders it is expected to enrich consumer choices of educational services in the APEC region. A foreign expansion through a non-equity mode (e.g., franchising) might be an option.

4.6. Case of Green School in Bali, Indonesia⁴¹

Green School Bali (GSB) has unique educational contents. GSB started when its founder, Mr John Hardy, decided to explore Bali one day. In 2006, he rode a scooter and began exploring the lesser known parts of the area. (This implies that small business starts in a haphazard manner.) Hardy was a jewelry entrepreneur who started selling jewelries in 1975, and his ambition was to establish a good and progressive school before retiring.

⁴⁰The step toward becoming a teacher at the organization is as follows.

First, as the initial requirement (Stage 0 so to speak), study with textbooks and videos (online) phonics, grammar and so on ;(Consultation is available every month)

Team consultation (with your children): parents and children can meet Ms Maki Kamiya, share ideas etc.

Then,

Stage 1 (1st to 2nd months): talk to your friends and make people in front of you (in English), and be happy!

Stage 2 (3rd to 5th months): increase the chances of meeting other families through the use of SNS

Stage 3 (6th to 12th months): increase the number of families wishing to learn English and be happy & smile!

Stage 4 (13th month onward): every time you start a seminar, it will be popular and full!

⁴¹Adapted from an online article "Green School Bali, School with emphasis on Nature that Maket Ban Ki-moon curious" (Source: Accessed 1st October, 2018.

<https://www.jawapos.com/features/15/10/2016/green-school-bali-sekolah-alam-yang-bikin-penasaran-ban-ki-moon> (Accessed October 2018 but page not found in June 2019; see <https://www.greenschool.org> for the school's official website).

After finding a land that has interesting yet unconventional contours, he and his wife Cynthia sold part of the ownership of his Jewelry brand in order to fund the establishment of the school. The current principal of the School, Leslie Medema from the USA, states that one of the most important drives for the Hardys to establish the school was that they were somehow disappointed with the conventional schoolings that their children had received.

GSB was then established based on the core concept of sustainability. This is evident in how the school is being operated, which is uniquely different from other conventional schools in Indonesia. Students at GSB are “blending with nature”. Almost most of the schools are built from natural and local resources. GSB was officially established on September 1, 2008, with initial 97 students from grade 1 to 8. Recently the school expanded to cover pre-school levels and High School.

The school now has 384 students from 33 different citizenships. The faculty members consist of 64 teachers from 15 different citizenships. The electricity for the school is being provided independently from the solar panels and micro hydropower attached to a nearby river. Not only that, the school bus also runs from renewable energy (biofuel). The bus comes from the student’s academic project.

Many publicly known people send their children to go to school at GSB. It is expected that this sort of innovative educational services would enrich the choice of consumers (i.e., students and parents), and without unnecessary regulations, promote further trade in educational and other business-related services, since foreign business persons with their children would also be attracted to the area.

4.7. Insights on Cross-Border Business Expansion of Educational Services

From the general perspective of service investment abroad, the difficulty lies in filling the gap between the language level of employees and the local market demand.⁴² The local market structure means the differences in the ideas about services and in-service content with needs. In the service industry, human resource development is a key for the success; however, training of human resources is not smoothly done. Japanese workers who serve as supervisors to be dispatched from Japan and educate local employees are overwhelmingly in shortage. Even within the same service industry, for example IT companies which, using the Internet, do not necessarily rely on people, are more likely to succeed through a “business model” as a system.

⁴²This paragraph is adapted from “Sabisugyo no kaigai tenkai ga muzukashii riyuu”(Reasons why service business expansion abroad is difficult), 16 August 2016 (<http://www.forward-international.jp/column/2016/08/16/869.html>).

Providing a service through a combination of “person” and “system” alone can lead to a high possibility of success overseas.

In order to promote education service projects, advance investment up to the opening of a new classroom is necessary on a large scale.⁴³ It takes time and cost to prepare in advance for the classroom to be launched safely and get on the right track, and enough financial strength is necessary. As for hardships, localization of teaching materials is difficult. You need to cope with the localization using not only English but also local languages. A large company can do whatever it wants to do with its financial strength and human resources, but if you consider overseas expansion as a company with limited financial and human resources, you have to firmly recognize the strengths and differentiation of what your small company can offer.

⁴³This paragraph is adapted from the online material featuring Shichida Research Institute of education (https://www.jetro.go.jp/ext_images/industry/service/interview/pdf/others_shichida.pdf).

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Chapter 5: CASE STUDY OF SERVICE SECTORS: GREEN ECONOMY IN SCOPE

5.1. Index Analysis of Restrictions for Environmental Services

This section makes an analysis of the regulatory index (discussed in Chapter 2) for environmental services. The results of indexation for environmental services (as introduced in Chapter 2) are summarized in Tables 5.1-5.3 (see APPENDIX Q for individual responses). While publicly available legal information is limited, following are some of the observations arising from the indexation in this report.

As for 941 (Sewerage, sewage treatment and septic tank cleaning services), the index values range from 0.8 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.23 to 0.87 (Mode1, 3 and 4). In the case of 942 (Waste collection services) and 943 (Waste treatment and disposal services), the index values range from 0.8 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.23 to 0.92 (Mode1, 3 and 4). Regarding 944 (Remediation services), the index values range from 0.8 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.18 to 0.92 (Mode1, 3 and 4). As for 945 (Sanitation and similar services), the index values range from 0.8 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.29 to 0.85 (Mode1, 3 and 4). In the case of 949 (Other environmental protection services n.e.c.), the index values range from 0.8 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.23 to 0.85 (Mode1, 3 and 4).

Table 5.1 Indexation Results by Sector and by Mode (Environmental Services)

CPC code	Mode 1		Mode 3		Mode 4	
	Lower Score	Upper Score	Lower Score	Upper Score	Lower Score	Upper Score
94 (total)	0.18-0.85	1.0-1.0	0.18-0.85	1.0-1.0	0.18-0.85	1.0-1.0
941	0.23-0.87	0.8-1.0	0.23-0.87	0.8-1.0	0.23-0.87	0.8-1.0
942	0.23-0.92	0.8-1.0	0.23-0.92	0.8-1.0	0.23-0.92	0.8-1.0
943	0.23-0.92	0.8-1.0	0.23-0.92	0.8-1.0	0.23-0.92	0.8-1.0
944	0.18-0.92	0.8-1.0	0.18-0.92	0.8-1.0	0.18-0.92	0.8-1.0
945	0.29-0.85	0.8-1.0	0.29-0.85	0.8-1.0	0.29-0.85	0.8-1.0

949	0.23-0.85	0.8-1.0	0.23-0.85	0.8-1.0	0.23-0.85	0.8-1.0
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Notes: The CPC classification codes denote the following sectors. 94 (Environmental Services total); 941 (Sewerage, sewage treatment and septic tank cleaning services); 942 (Waste collection services); 943 (Waste treatment and disposal services); 944 (Remediation services); 945 (Sanitation and similar services); 949 (Other environmental protection services).

Source: Calculation based on publicly available regulatory information.

Table. 5.2 Average of All Economies and All Modes for Environmental Services

CPC Code	Lower Score	Upper Score
94	0.55	1.00
941	0.58	0.92
942	0.63	0.92
943	0.59	0.93
944	0.57	0.91
945	0.56	0.88
949	0.57	0.91

Notes: The CPC classification codes denote the following sectors. 94 (Environmental Services total); 941 (Sewerage, sewage treatment and septic tank cleaning services); 942 (Waste collection services); 943 (Waste treatment and disposal services); 944 (Remediation services); 945 (Sanitation and similar services); 949 (Other environmental protection services).

Source: Calculation based on publicly available regulatory information.

Table. 5.3 Average Scores by OECD Policy for Environmental Services (Total)

	All Environment Mode 3 Average				
	FE	MP	DM	BC	RT
APEC average	0.46	0.39	0.72	0.71	0.63

Notes: The abbreviations are as follows. FE: Restrictions on foreign entry; MP: Restrictions on the movement of people; DM: Other discriminatory measures; BC: Barriers to competition and RT: Regulatory transparency.

Source: Authors's calculation based on publicly available regulatory information only.

As for actual company performance, Table 5.4 shows the number of domestic companies operating in each of the APEC economies. As shown, SMEs comprise the majority. As for investment (trade in mode 3). On trade, Table 5.5 shows the matrix of mode-3 based investment by business companies for education services. The figures in parentheses show the number of SMEs. As shown, not so many suppliers of environmental services, especially SMEs, are statistically recorded as investing across APEC members. There is thus much scope for promoting cross-border business expansions of environmental services.

Table 5.4 Number of Domestic Companies in Environmental Services and their Size Distribution at the End of 2016

	No. of companies in environm	Very Large		Large		Medium		Small	
		No.	Share	No.	Share	No.	Share	No.	Share
Australia	3,354	0	0.00	159	4.74	2,727	81.31	468	13.95
Brunei Darussalam	-	-	-	-	-	-	-	-	-
Canada	2012	16	0.80	67	3.33	675	33.55	1254	62.33
Chile	272	3	1.10	3	1.10	12	4.41	254	93.38
China	4,573	19	0.42	713	15.59	1,152	25.19	2,595	56.75
Hong Kong, China	29	1	3.45	3	10.34	17	58.62	8	27.59
Indonesia	142	1	0.70	4	2.82	-	-	137	96.48
Japan	7,476	15	0.20	430	5.75	2,983	39.90	4,048	54.15
Korea	8,480	18	0.21	278	3.28	2,296	27.08	5,888	69.43
Malaysia	72	8	11.11	10	13.89	23	31.94	31	43.06
Mexico	60		0.00		0.00	60	100.00		0.00
New Zealand	27	1	3.70	6	22.22	10	37.04	10	37.04
Peru	810		0.00		0.00	11	1.36	799	98.64
The Philippines	88		0.00	6	6.82	33	37.50	49	55.68
Papua New Guinea	-	-	-	-	-	-	-	-	-
The Russian Federation	13,525	38	0.28	475	3.51	6,525	48.24	6,487	47.96
Singapore	24	4	16.67	6	25.00	3	12.50	11	45.83
Chinese Taipei	54	10	18.52	18	33.33	21	38.89	5	9.26
Thailand	225	3	1.33	9	4.00	39	17.33	174	77.33
United States	5,697	239	4.20	1,865	32.74	0	0.00	3,593	63.07
Viet Nam	730	2	0.27	0	0.00	1	0.14	727	99.59
Average	2,508	24	3.31	238	9.92	922	33.06	1474	55.34

Source: Company database ORBIS.

Table 5.5 Matrix of Mode-3 Based Investment (Environmental Services), at the End of 2016

From--To	Australia	Brunei Darussalam	Canada	Chile	People's Republic of China	Hong Kong, China	Indonesia	Japan	Republic of Korea	Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	The Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam
Australia			5(0)						2(0)			3(0)			1(0)					13(0)	
Brunei Darussalam																					
Canada				1(0)																	235(3)
Chile																					
People's Republic of China	2(0)					1(0)										2(0)	1(1)			2(1)	
Hong Kong, China					19(0)												1(1)			1(0)	
Indonesia																					
Japan	6(4)				4(0)					2(0)	1(0)								2(0)	3(0)	
Republic of Korea																					
Malaysia																					
Mexico																					1(0)
New Zealand	1(0)																				
Papua New Guinea																					
Peru																					
The Philippines	1(0)																				
Russia																					
Singapore	3(1)				2(0)		1(0)			1(0)						1(0)				2(2)	
Chinese Taipei																					
Thailand																					
United States	12(3)		56(0)		2(2)				6(0)	1(0)	3(0)				1(0)	3(1)					1(0)
Viet Nam																					

Note: the unit is number; figures in parentheses indicate the number of companies whose parent company is an SME.

Source: Company database ORBIS.

Next, below are sub-sector level results of index calculation.

Sewerage, Sewage Treatment and Septic Tank Cleaning Services (941)

Below are the top three frequently used restrictions in sewerage, sewage treatment and septic tank cleaning services (941) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

- (1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)
- (1) Nationality requirement for employees (under the Other discriminatory measures (DM) based on OECD)
- (3) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Foreign-licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License criteria publicly available (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License automatic if publicly available criteria fulfilled (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Difference in licensing criteria for foreign and domestic applicants (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Limit on number of licenses available (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-first come first served (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-through a competitive tender (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-at discretion of regulatory body (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-other (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Length of license (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License renewal required (under the Restrictions on foreign entry (FE) based on OECD)
- (3) If renewal required it is automatic (under the Restrictions on foreign entry (FE) based on OECD)

- (3) Requirement to provide a licensing decision within a timeframe (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Maximum number of days permitted before providing a licensing decision (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Obligation to inform applicants of reasons for license rejection (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License technology neutral (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Approval required (under the Barriers to competition (BC) based on OECD)

Table 5.6 shows the Average Utilization Rate of Regulations by Five OECD Categories for Sewerage, sewage treatment and septic tank cleaning services (941).

Table 5.6 Average Utilization Rate of Regulations by Five OECD Categories for Sewerage, Sewage Treatment and Septic Tank Cleaning Services (941)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.51
Restrictions on the movement of people (MP)	0.37
Other discriminatory measures (DM)	0.72
Barriers to competition (BC)	0.70
Regulatory transparency (RT)	0.62
Average	0.58

Source: Calculation based on the constructed binary database.

Waste Collection Services (942)

Below are the top 1 frequently used restriction in waste collection services (942) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

- (1) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Foreign-licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License required (under the Restrictions on foreign entry (FE) based on OECD)

- (1) License criteria publicly available (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License automatic if publicly available criteria fulfilled (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Difference in licensing criteria for foreign and domestic applicants (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Limit on number of licenses available (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License allocation-first come first served (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License allocation-through a competitive tender (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License allocation-at discretion of regulatory body (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License allocation-other (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Length of license (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License renewal required (under the Restrictions on foreign entry (FE) based on OECD)
- (1) If renewal required it is automatic (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Requirement to provide a licensing decision within a timeframe (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Maximum number of days permitted before providing a licensing decision (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Obligation to inform applicants of reasons for license rejection (under the Restrictions on foreign entry (FE) based on OECD)
- (1) License technology neutral (under the Restrictions on foreign entry (FE) based on OECD)
- (1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)
- (1) Nationality requirement for employees (under the Other discriminatory measures (DM) based on OECD)

Table 5.7 shows the Average Utilization Rate of Regulations by Five OECD Categories for Waste collection services (942).

Table 5.7 Average Utilization Rate of Regulations by Five OECD Categories for Waste Collection Services (942)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.50
Restrictions on the movement of people (MP)	0.58
Other discriminatory measures (DM)	0.72
Barriers to competition (BC)	0.75
Regulatory transparency (RT)	0.62
Average	0.63

Source: Calculation based on the constructed binary database.

Waste Treatment and Disposal Services (943)

Below are the top three frequently used restrictions in waste treatment and disposal services (943) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

- (1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)
- (1) Citizenship requirement for employees (under the Other discriminatory measures (DM) based on OECD)
- (3) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Foreign-licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License criteria publicly available (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License automatic if publicly available criteria fulfilled (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Difference in licensing criteria for foreign and domestic applicants (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Limit on number of licenses available (under the Restrictions on foreign entry (FE) based on OECD)

- (3) License allocation-first come first served (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-through a competitive tender (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-at discretion of regulatory body (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License allocation-other (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Length of license (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License renewal required (under the Restrictions on foreign entry (FE) based on OECD)
- (3) If renewal required it is automatic (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Requirement to provide a licensing decision within a timeframe (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Maximum number of days permitted before providing a licensing decision (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Obligation to inform applicants of reasons for license rejection (under the Restrictions on foreign entry (FE) based on OECD)
- (3) License technology neutral (under the Restrictions on foreign entry (FE) based on OECD)
- (3) Approval required (under the Barriers to competition (BC) based on OECD)

Table 5.8 shows the Average Utilization Rate of Regulations by Five OECD Categories for Waste treatment and disposal services (943).

Table 5.8 Average Utilization Rate of Regulations by Five OECD Categories for Waste treatment and disposal services (943)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.50
Restrictions on the movement of people (MP)	0.37
Other discriminatory measures (DM)	0.74
Barriers to competition (BC)	0.70
Regulatory transparency (RT)	0.67

Average	0.60
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Source: Calculation based on the constructed binary database.

Remediation Services (944)

Below are the top four frequently used restrictions in remediation services (944) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

- (1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)
- (1) Citizenship requirement for employees (under the Other discriminatory measures (DM) based on OECD)
- (3) Approval required (under the Barriers to competition (BC) based on OECD)
- (4) Greenfield branch- allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Greenfield subsidiary – allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Greenfield subsidiary - max. ownership allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity - allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity - controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -allowed (under the Restrictions on foreign entry (FE) based on OECD)

(4) Joint Venture -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)

(4) Joint venture -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)

(4) Joint Venture -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)

(4) Type of investment restricted (under the Barriers to competition (BC) based on OECD)

Table 5.9 shows the Average Utilization Rate of Regulations by Five OECD Categories for Remediation services (944).

Table 5.9 Average Utilization Rate of Regulations by Five OECD Categories for Remediation Services (944)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.44
Restrictions on the movement of people (MP)	0.37
Other discriminatory measures (DM)	0.72
Barriers to competition (BC)	0.70
Regulatory transparency (RT)	0.62
Average	0.57

Source: Calculation based on the constructed binary database.

Sanitation and Similar Services (945)

Below are the top four frequently used restrictions in sanitation and similar services (945) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

(1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)

(1) Citizenship requirement for employees (under the Other discriminatory measures (DM) based on OECD)

(3) Approval required (under the Barriers to competition (BC) based on OECD)

(4) Greenfield branch- allowed (under the Restrictions on foreign entry (FE) based on OECD)

- (4) Greenfield subsidiary - allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Greenfield subsidiary - max. ownership allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity – allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity - controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint venture -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Type of investment restricted (under the Barriers to competition (BC) based on OECD)

Table 5.10 shows the Average Utilization Rate of Regulations by Five OECD Categories for sanitation and similar services (945).

Table 5.10 Average Utilization Rate of Regulations by Five OECD Categories for Sanitation and Similar Services (945)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.43
Restrictions on the movement of people (MP)	0.36
Other discriminatory measures (DM)	0.69
Barriers to competition (BC)	0.69
Regulatory transparency (RT)	0.62
Average	0.56

Source: Calculation based on the constructed binary database.

Other environmental protection services (949)

Below are the top four frequently used restrictions in other environmental protection services (949) (all the same rankings are listed) for APEC members (in total, based on the utilization count of each regulation; figures in parentheses denote the ranking):

- (1) Residency in the host economy required (under the Restrictions on the Movement of people (MP) based on OECD)
- (1) Citizenship requirement for employees (under the Other discriminatory measures (DM) based on OECD)
- (3) Approval required (under the Barriers to competition (BC) based on OECD)
- (4) Greenfield branch- allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Greenfield subsidiary – allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Greenfield subsidiary - max. ownership allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity - allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic private entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)

- (4) Acquisition domestic private entity - controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Acquisition domestic public entity -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -max. ownership allowed by a single entity (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint venture -max. ownership allowed by a group of entities (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Joint Venture -controlling stake allowed (under the Restrictions on foreign entry (FE) based on OECD)
- (4) Type of investment restricted (under the Barriers to competition (BC) based on OECD)

Table 5.11 shows the Average Utilization Rate of Regulations by Five OECD Categories for Other environmental protection services (949).

Table 5.11 Average Utilization Rate of Regulations by Five OECD Categories for Other environmental protection services (949)

Type of regulation	Average of utilization rate
Restrictions on foreign entry (FE)	0.45
Restrictions on the movement of people (MP)	0.37
Other discriminatory measures (DM)	0.72
Barriers to competition (BC)	0.7
Regulatory transparency (RT)	0.62
Average	0.572

Source: Calculation based on the constructed binary database.

Judging from the above observations, deregulation of residency and citizenship requirements would be necessary to promote trade in environmental services further. At the same time, prudential enforcement of environmental regulations (mentioned in the APEC Manufacturing Related Services Action Plan) remains important. Further liberalization of trade in environmental services should therefore be implemented within the purview of this prudential concern for the purpose of avoiding market failures in this sector.

5.2. APEC's Environmental Services Action Plan (ESAP)

APEC as a cross-border forum economic cooperation, a body to facilitate and promote the region's economy and trade. It might be thought best to leave environmental concerns to other bodies and allow APEC to focus on its original aims of resolving economic and trade issues. Yet environmental issues have a direct connection to issues of trade and investment. Economic activities begin with the extraction of resources from nature. However, natural resources are finite, and their excessive use will result in the depletion of these resources. Severe deforestation in some part of the APEC region, and the overexploitation of marine resources in the Asia Pacific region, are the examples at issue. Without natural resources, there will be no economic activity in the first place. Also, the atmospheric and marine pollution stemming from economic activities will drastically reduce the benefits of economic activity, while the wastes caused by economic activities affect land usage and will obstruct economic growth. Environmental problems resulting from economic activities will come to limit those economic activities as a repercussion. Environmental degradation will also have a similar effect on trade, e.g., differences in the appreciation of environmental problems and consciousness of the environment between different regions will lead to problems in the standards of traded goods and services.

For APEC in particular, with its diversity in histories, cultures and levels of economic development, there are tremendous differences in awareness about environmental problems between different regions and firms, which has come to hinder beneficial economic and trade activities in the region. To put it another way, it is very likely that good environmental management, a service activity, will be correlated with an increase in the overall economic activity through increasing energy efficiency and reducing costs. In that case, "environment" will shift from being seen as a parasitic negative externality to being inherent to the economy and vital to economic growth. This is indeed what is meant by Green Economy. In this way, environmental problems are also inseparable from issues of trade and investment.

For the above reasons, APEC's response to environmental issues is equivalent to setting the stage for sound economic and trade activities. Therefore, the significance of APEC adopting environmental measures is large. There are many suggestions regarding the environmental policies which APEC may consider. The Environmental Services Action Plan (ESAP) should therefore be seen as a means for APEC to take maximum advantage of various opportunities. More specifically, the Interim Review⁴⁴ of ESAP has identified the following Recommended Action Agendas:

- stocktaking discussions regarding coverage of environmental services through reviewing existing suggestions of classifications of environmental services;
- providing a more comprehensive picture to depict the relationship between environmental goods and services in trade;
- collecting and sharing good regulatory practices from actual cases regarding encouraging trade in environmental services;
- identifying capacity building needs to elevate human resources availability in environmental projects through measures related to technicians and workers; and,
- introducing good precedence or existing initiatives which successfully raised public awareness and help economies achieve sustainable growth, while promoting economic advancement.

Among these recommended agendas, the fourth agenda (“identifying capacity building needs to elevate human resources availability in environmental projects through measures related to technicians and workers”) is relevant to SMEs and women entrepreneurs as suppliers of environmental services (the focus of this report).

5.3. Case Study: Characteristics of Environmental Services through Financial Indicators

This section makes a case study on the characteristics of environmental services (solid waste management business, more specifically) through financial indicators (see APPENDICES S, T and U for detailed financial indicators). Based on the indicators in the APPENDICES, following are some observations.

Regarding profitability, return of asset (ROA) is considerably higher in this sector (solid waste management business) than all industries. The gross income on sales is considerably higher than that of all industries. The ratio of sales to selling and administrative

⁴⁴ Based on the “Environmental Services Action Plan (ESAP) Interim Review” (downloadable online by the same phrase).

expenses ratio is considerably higher than that of all industries. The ratio of sales to labor costs is higher than that of all industries. Turn over of total capital and tangible fixed asset turnover rate are both slightly lower than all industries.

As for safety, the current ratio is considerably higher than in all industries. The capital adequacy ratio is considerably higher than that of all industries. Concerning productivity, value added per employee is almost the same as that of all industries. The sales per employee is considerably lower compared to all industries. In terms of the distribution ratio of selling and administration expenses, labour costs, depreciation costs and taxes and fees are higher in this order. Long-term borrowing ratio in debt / net asset component ratio is higher than in all industries.

5.4. Coco&K: Cocoro International Inc.

The company Coco&K: Cocoro International Inc. imports “upcycling” (recycling for a creative use) products from the Philippines-based KILUS FOUNDATION⁴⁵ through fair trade and sell them in Japan at both online and real shops. Coco&K is the sole general agency which is allowed to purchase goods from KILUS FOUNDATION in Japan. An interview was made with Ms Nobuko Oshita (CEO) and Ms Minako Murakami (Sales Manager) on 22nd November, 2018.

A brief history of the company is as follows.⁴⁶

2001: The owner came across KILUS FOUNDATION, at F.A.M.E. (International Exhibition) in Manila, the Philippines. Started up S.D.S (Select Design Studio) and began to import the recycling bags.

2002: Became the only agent of KILUS FOUNDATION in Japan.

2004: Received the “Good Design Award” from the ASEAN Promotion Centre on Trade, Investment and Tourism (ASEAN-Japan Centre)

2006: Founded Cocoro International Inc. The new brand “Coco&K.” was created and the name was taken after Cocoro International’s “Coco” and Kilus Foundation “K” so that Cocoro and Kilus can collaboratively prosper.

2008: Direct management store, “OR ET ROSE” was opened.

2014: “COCO&K. YOKOHAMA” was opened.

As mentioned in the history above, the owner (Ms Oshita) first met the up-recycled products about 15 years ago (when the KILUS FOUNDATION just started), at an exhibition.

⁴⁵“KILUS FOUNDATION” is an award-winning organization based in the Philippines. According to Ms Oshita, towns where this organization is taking action are known to be clean in the economy. Flower pots are sometimes observed on streets in these towns. And the system of recycling aluminium packs for soft drinks is now functioning in the entire town in which the company is doing business. It is the hope of the organization that this recycling system be spread and scaled up to the entire economy of the Philippines.

⁴⁶Based on the company website: <https://www.coco-k.jp/>.

She immediately felt “So cute! I wish to sell these at a trendy shopping plaza in Japan”, and soon purchased 100 products, which sold well. Her husband and the current owner (Ms Oshita) started this business together. Currently, Ms Oshita takes on the main day-to-day responsibility. For transactions with famous department stores, it is important for this business entity to be a “company”; therefore, the business takes on the form of an incorporated (limited) company. And shareholders are the owner’s family members and acquaintances.

Ms Oshita is reluctant to expand her business on a large scale. Because, it might lead to the upcycling products becoming temporarily popular but might soon be monopolized by other larger-scale companies; this might cause oversaturation as well as obsolescence of the products. In exchange for the sellers’ relinquishing of market opening of the products to any buyers, KILUS FOUNDATION ensures a fixed amount of purchase each year.

Based on the interview, laws on recycling is limited to particular areas and they are not widely spread to the Philippines. About fifty thousand aluminum packs (examples in Figure 5.1) are thrown away each day in the economy. Rivers are sometimes full of garbage and it is difficult to find the way to go through the river by ships. Plastic bottle drinks are expensive and therefore aluminum packs are popular. And a large number of women in the Philippines have no jobs and therefore no cash inflow. To solve these problems, an NGO group called “KILUS FOUNDATION” in the Philippines came up with an idea of producing “upcycle products” (examples in Figure 5.2). The workers produce original bags and sandals from aluminum packs, which used to be “garbages”. This process creates new jobs for women and the workers are able to send their children to schools.

Figure 5.1 Aluminium Packs for Upcycling



Source: <https://www.coco-k.jp/concept/>

Figure 5.2 Upcycle Rroducts



Source: <https://www.coco-k.jp/collection/doypack/>

Makers of the products are relatively uneducated workers in the Philippines, while the company's leaders are educated workers. As for pricing, workers' wages are secured first, and then a fair price is set. (Price negotiation is made occasionally.) Being in a position to actually interact with the Philippines, Ms Oshita thinks that it would be better if the customs duty on imported products go down. Although there is an Economic Partnership Agreement (between the Philippines and Japan) in relation to laws and regulations, there is a limit to it in terms of actual use in business and applying for tax exemption is not cost-effective given the necessary documentation work.

As for difficulties at the start of the business, there was no email and no phone system, but fax only. The workers including the owner used to have a Japanese translator, yet there was no system for products shipping (using English). And they needed to build up the system and build a trust-based relationship with the business partners in the Philippines. This is in a sense a fair-trade business, but in Japan, fair trade is not yet well known, and it costs both time and money to get the certification mark for fair trade.

Also, as a negative aspect of being a small company, funds tend to be in shortage (hence it is difficult to make investment expansions at an appropriate scale), low recognition of their products, and there is also a shortage in talented people and no advertisement opportunities and established distribution systems. The owner's dream is to create the business

environment where its brand name (Coco&K) is found all over Japan, so that any branch shop can be visible on town maps.

5.5. Case Study on the Company “HIES Inc” and “Women in the Environment (WE)”

There are women-owned and women-focused providers of Environmental Services. HIES Inc, as an example, is a woman-owned small business that provides comprehensive services to a wide range of customers from our strategically located offices in Hawaii, California, Guam, Colorado and Japan.⁴⁷ Founded in 1993 in Hawaii, US, HIES Inc., is a women-owned engineering and environmental services company, with its focus in the Pacific Rim. Led by a group of local scientists and engineers, HIES provides the Pacific region with multi-disciplinary Architectural, GIS, Data Management, Fuels Infrastructure, Construction Management, Environmental, and Engineering Services. In 1996, HIES opened its Japan operations located in Kawasaki, Japan with full Japanese licenses capable of servicing clients throughout the region including Okinawa and the Southern Islands. HIES has strategically located offices in Hawaii, Guam, Japan, and the western United States. It services local client requirements with efficiency and is committed to developing long term partnerships with clients while providing real economic value. This is an exemplary company in terms of promoting women entrepreneurship.

Another example is Women in the Environment (WE), which is a US-based group of women who are conquering the challenges of the environmental industries such as recycling companies and co-ops, environmental law, sustainable building and remodeling for commercial and residential real estate, environmental engineering, landfill diversion techniques, and sustainable marketing.⁴⁸ Environmentally friendly industrial activities as propagated by this organization will be further promoted through liberalization of trade in services through which Green Economy type services and products are more freely traded across the APEC.

5.6. Green-Practice Efforts (GPE) at a Hotel near Bangkok, Thailand

There are Green-Practice efforts in various service sectors. Below is an example from Thailand’s hotel located inside a university. The Green-Practice Efforts (GPE) of the hotel in Thailand goes as follows.

⁴⁷ This section draws on <https://hiesinc.com/about/>

⁴⁸ This section draws on the website <http://womenintheenvironment.org/>

- 1:** We stop using plastic laundry bag in hotel rooms. Instead, we produce an in-house fabric laundry bag for our guests' use while staying with us. And, if any guest wishes to purchase, the product is displayed at front office area.
- 2:** We change shampoo and bath gel bottles to be bigger size for guest's use while staying with us, instead of small plastic bottles to take away.
- 3:** We have planted some non-chemical vegetables at our small garden on 6th floor to be used within the hotel; they are pandanus (often for welcome drink), lemons, silli, sweet basil, lemon grass, kitchen mint, acacia pennata, leech lime, wild betel, leaf bush etc.
- 4:** We try to purchase some types of the affiliated University's hydroponic vegetables for salad bar at lunch buffet service, Herb Garden Restaurant 2nd floor, International Building.
- 5:** We use leaves and green plants to decorate the place instead of flowers unless requested by guests.
- 6:** We try not to use paper coaster, in the meantime, we produce our own fabric coaster to be used in restaurants, function service and in all guest rooms.
- 7:** We separate garbage in all offices and guest rooms to put through our recycling system; paper, plastic, glass etc.
- 8:** We turn off lighting for 1 hour at all back of house offices on a daily basis.
- 9:** We practice as a habit in using recycling paper whenever it is appropriate.
- 10:** We are the smoke-free hotel under the Green Leaf Foundation and we have also created "we love our lung" club within the hotel to help smokers to stop smoking.
- 11:** We annually join Earth Hour activity organized by World Wild Fund for Nature encouraging people worldwide to turn off all light for 1 hour from 20:30 to 21:30 on last Saturday of March.
- 12:** We produce our in-house EM (environmental manager) to use as a non-chemical cleaning agent for some parts of our hotel as well as for the gardening so that it is gentle to the environment.
- 13:** We regularly educate our team and student-interns on energy saving; turning off lightings and water tap, garbage separation as well as recycling procedure; all must be our habit of practice. We also have energy consumption report for the team members to acknowledge on monthly basis.
- 14:** We avoid using plastic bag when we sell our "Bake n Bite" product at a Friday market as part of the affiliated university's green campaign.
- 15:** We encourage our in-house guests to join us saving the Earth; like to reduce the amount of cleaning detergent usage by re-using towels, bed sheets etc. if they are still clean; turning off

unnecessary in-room lighting; (enhance) water consumption awareness while brushing teeth or shaving as well as setting in room air-con at 25 degrees etc.

We realize that we still have a lot more to do for our Earth and we will not stop doing it. If you have any feedback or suggestion, please do not hesitate to provide us information on guest comment form provided for you or just simply talk to any of our team member.

In connection to this hotel's concern for "our Earth", the Nordhaus (2017) points out that "it is unlikely that economies can achieve the 2-degree target of cross-border agreements, even if ambitious policies are introduced in the near term." That said, trade in services in environmental services could at least reduce uncertainty concerning hidden environmental impact through economic activities including services.

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Chapter 6: CASE STUDY OF SERVICE SECTORS: SMES IN REAL ESTATE SERVICES

6.1. Index Analysis of Restrictions for Real Estate Service

While publicly available legal information is limited, indexation to measure restrictiveness of real estate services is attempted. Tables 6.1 and 6.2 summarize the results of indexation. Following are some of the observations arising from the indexation in this report (see APPENDIX R for individual responses). In the case of real estate service, the index values range from 0.06 to 1.0 (Mode1, 3 and 4). For the lower score, the values range from 0.00 to 0.30 (Mode1) and 0.00-0.32 (Mode 3 and 4). A main feature of this sector is that, market entry tends to be open to foreigners and citizenship is not necessary for starting the business. Like educational services, the licenses are required, yet the requirement for the license does not seem to affect its restrictiveness. Compared with educational services and environmental services, real estate services seem to be more liberalized or less restricted (Table 6.3). This is presumably because the real estate services sector is under more demand for market opening across APEC economies.

Table 6.1 Range of Restrictiveness Index Values Among the APEC Members for Real Estate Services

	Mode1		Mode3		Mode4	
	Lower Score	Upper Score	Lower Score	Upper Score	Lower Score	Upper Score
Real Estate	0.00-0.30	0.06-1.00	0.00-0.32	0.06-1.00	0.00-0.32	0.06-1.00

Source: Calculation based on publicly available regulatory information.

Table. 6.2 Average Scores of APEC Members by OECD Policy Category for Real Estate Services

	All Real Estate Mode 3 average				
	FE	MP	DM	BC	RT
APEC average	0.07	0.33	0.09	0.06	0.00

Notes: The abbreviations are as follows. FE: Restrictions on foreign entry; MP: Restrictions on the movement of people; DM: Other discriminatory measures; BC: Barriers to competition and RT: Regulatory transparency.

Source: Authors's calculation based on publicly available regulatory information only.

Table. 6.3 Restrictiveness Index: Average of All Economies and All Modes for Educational, Environmental and Real Estate Services in Comparison

	Lower score	Upper score
Education Services (total)	0.10	0.87
Environmental Services (total)	0.58	0.92
Real Estate services (total)	0.11	0.49

Source: Calculation based on publicly available regulatory information.

Table 6.4 shows the number of domestic companies in real estate services and their size distribution at the end of 2016. As reported developing economies tend to have a higher share of small-scale companies. Table 6.5 shows the counts of mode3 based trade (investment, or establishment of commercial presence) for real estate services. As shown, there are not so many statistically recorded investments in the real estate services, hence a need for further trade promotion in this sector.

Table 6.4 Number of Domestic Companies in Real Estate Services and their Size Distribution at the End of 2016

	No. of companies	Very Large		Large		Medium		Small	
		No.	Share	No.	Share	No.	Share	No.	Share
Australia	33,507	112	0.33	1,007	3.01	31,374	93.63	1,014	3.03
Brunei Darussalam	-	-	-	-	-	-	-	-	-
Canada	16,560	115	0.69	340	2.05	5127	30.96	10,978	66.29
Chile	20,409	21	0.10	169	0.83	683	3.35	19,536	95.72
China	65,543	788	1.20	1,555	2.37	2,269	3.46	60,931	92.96
Hong Kong, China	1,485	76	5.12	306	20.61	1,047	70.51	56	3.77
Indonesia	1,809	47	2.60	11	0.61	3	0.17	1,748	96.63
Japan	60,524	333	0.55	2,985	4.93	14,170	23.41	43,024	71.09
Korea	50,351	281	0.56	1,981	3.93	6,963	13.83	41,126	81.68
Malaysia	1778	64	3.60	183	10.29	333	18.73	1,198	67.38
Mexico	408		0.00		0.00		0.00	408	100.00
New Zealand	2,169	21	0.97	554	25.54	1008	46.47	586	27.02
Peru	1,145	6	0.52	8	0.70	36	3.14	1,095	95.63
The Philippines	2,721	63	2.32	297	10.92	1,138	41.82	1,223	44.95
Papua New Guinea	-	-	-	-	-	-	-	-	-
The Russian Federation	235,278	215	0.09	2,676	1.14	41,973	17.84	190,414	80.93
Singapore	338	137	40.53	129	38.17	32	9.47	40	11.83
Chinese Taipei	56	28	50.00	17	30.36	4	7.14	7	12.50
Thailand	9,607	60	0.62	297	3.09	1,284	13.37	7,966	82.92
United States	20,862	755	3.62	4,535	21.74	0	0.00	15,572	74.64
Viet Nam	3,559	47	1.32	37	1.04	42	1.18	3,433	96.46
Average	27,795	176	6.04	949	9.54	5,971	20.97	21,071	63.44

Source: Company database ORBIS.

Table 6.5 Counts of Mode3 Based Investment (Real Estate Services), at the End of 2016

From--To	Australia	Brunei Darussalam	Canada	Chile	People's Republic of	Hong Kong, China	Indonesia	Japan	Republic of Korea	Malaysia	Mexico	New Zealand	Papua New Guinea	Peru	The Philippines	Russia	Singapore	Chinese Taipei	Thailand	United States	Viet Nam
Australia							1(0)		11(1)												
Brunei Darussalam																					
Canada	11(0)																				
Chile																					
People's Republic of China	46(1)							1(0)													
Hong Kong, China	48(5)						2(0)	3(0)													
Indonesia	10(0)																				
Japan	3(1)						19(0)		5(0)												
Republic of Korea	2(0)																				
Malaysia	2(1)						4(0)		2(0)												
Mexico																					
New Zealand	46(7)																				
Papua New Guinea	4(0)																				
Peru																					
The Philippines	4(1)						1(0)														
Russia	3(0)																				
Singapore	70(8)						26(0)	2(0)	1(0)												
Chinese Taipei																					
Thailand	9																				
United States	86(14)						1(0)	6(0)	4(1)												
Viet Nam																					

Note: the unit is number; figures in parentheses indicate the number of companies whose parent company is an SME.

Source: Company database ORBIS.

Below are the top five frequently used restrictions in real estate services for APEC members (in total, based on the utilization count of each regulation) for real estate services (figures in parentheses denote the rankings):

- (1) License required (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Automatic recognition of foreign license granted (under the Restrictions on foreign entry (FE) based on OECD)
- (2) Foreign-licensed professionals eligible to practice subject to conditions (under the Restrictions on foreign entry (FE) based on OECD)
- (2) License automatic if publicly available criteria fulfilled (under the Restrictions on foreign entry (FE) based on OECD)
- (5) Length of license (under the Restrictions on foreign entry (FE) based on OECD)
- (5) License renewal required (under the Restrictions on foreign entry (FE) based on OECD)
- (5) If renewal required it is automatic (under the Restrictions on foreign entry (FE) based on OECD)

Table 6.6 shows the average utilization rate of regulations by Five OECD categories for real estate services (total).

Table 6.6 Average Utilization Rate of Regulations by Five OECD Categories for Real Estate Services (Total)

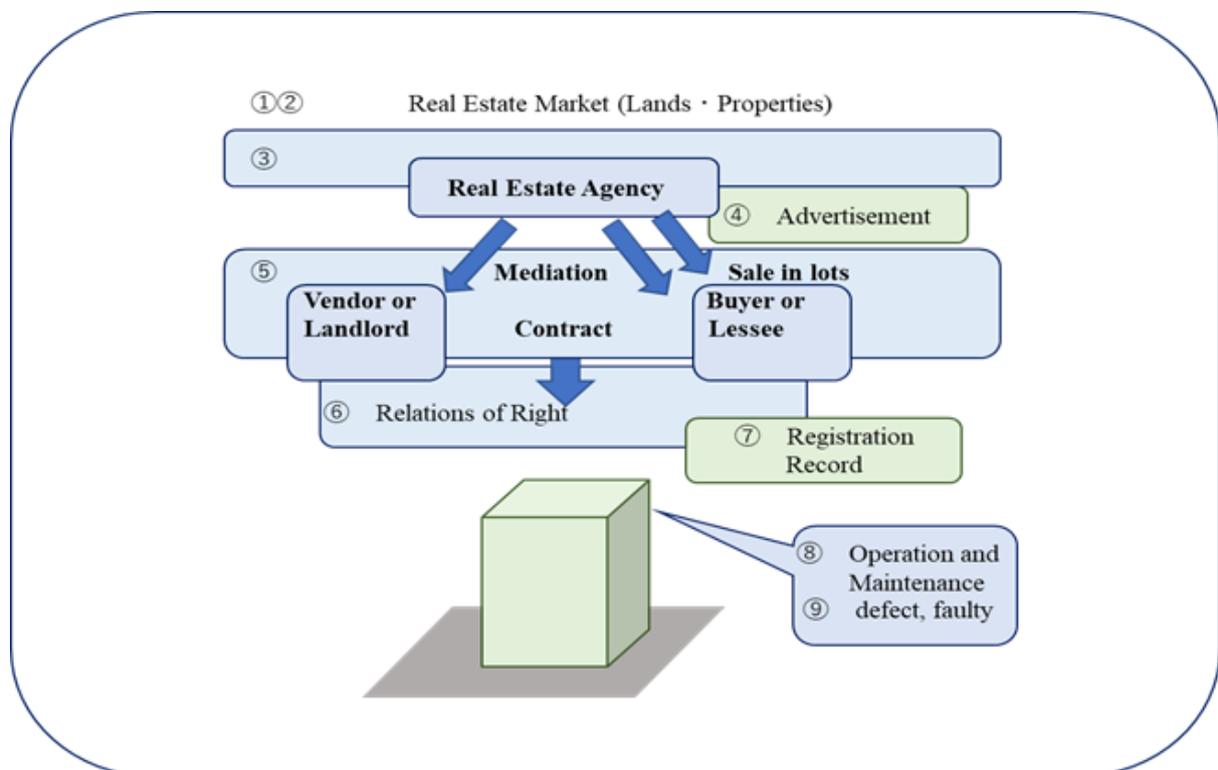
Type of Regulation	Average of Utilization Rate
Restrictions on foreign entry (FE)	0.07
Restrictions on the movement of people (MP)	0.33
Other discriminatory measures (DM)	0.09
Barriers to competition (BC)	0.05
Regulatory transparency (RT)	0
Average	0.11

Source: Calculation based on the constructed binary database.

6.2. Basic Structure of Real Estate Services

Figure 6.1 shows the basic structure of real estate services in general. As real estate services have to take into account location-specific factors including local commercial practices concerning the use of properties, information asymmetry between sellers (landlords) of properties or the right to rent and buyers (lessees) could easily take place; as a large amount of financial flow is also involved in the business transaction, prudential regulations mediating smooth contracting are necessary. That said, there is also a need to promote further liberalization of trade in real estate services through simplification of real-estate related regulations, since a higher presence of foreign suppliers of real estate services would facilitate business mobility in other sectors; striking the right balance between regulation would therefore be crucial, and that is why this sector is taken as a case.

Figure 6.1 Basic Structure of Real Estate Services (in General)



Source: Made by the authors based on publicly available information.

6.3. Case Study: China International Real Estate⁴⁹

This is a company owned by a Japanese, but in effect a company serving specifically Chinese customers. There are two full time Chinese workers, and the company has a network within Japan as well as in China. On 1 of July, 2019 we conducted interviews with the Chinese

⁴⁹ Its website is: <http://dshome.asia/ja/company/>.

workers, based on the online survey questionnaire. One of them (her age group is 30-39 years old) has been working for a real estate agency in Japan for more than 5 years after graduating from a Japanese university. According to her perception, expanding real estate business overseas would be somewhat influenced by her own capacity of running the business. On the other hand, family, funds and safety of the area have no influence on the decision making for investment at all.

As for policy restrictions, foreign entry and other discriminatory measures (language and the differences in the way of thinking in actual real estate business) are recognized. However, she sees no barriers for the movement of people (from China to Japan), since her company is reliable in terms of cooperating with visa issuance for her to stay in Japan. Concerning the barriers to competition and regulatory transparency, these are somewhat restricted according to her perception.

The differences between Japanese real estate agencies and Chinese real estate agencies were asked about. The response is summarized as follows. In China, there is no common rules for the real estate services, and there is more flexibility and the customers have more options to choose from. Also, the process of renting a house is easier in China. For example, turnkey properties (the situation of new residents being able to start living on the day of visiting a real estate agency) are common in China and there is no screening system (yet the customers need to pay the rent for 3 months in advance). In Japan, looking for a place to live in is difficult for foreign people. This is because Japanese companies tend to prefer Japanese lessees and perceive them as more reliable, mainly due to the differences in language, cultures and manners.

Another interview was made at the company with the Chinese female worker (her age group is 50-59 years old) who used to work for a Japanese owned real estate agency in China and now working in Japan. According to her perception, expanding this real estate business overseas would be somewhat influenced by her own capacity of running the business and safety of the area. Shortage of funds would also heavily influence the decision making yet family matter has no influence at all. As for policy barriers, foreign entry, movement of people and other discriminatory measures are somewhat restricted and there are barriers to competition and regulations are not transparent.

6.4. Financial Analysis of Real Estate Services and SMEs

Based on the Association of SME consultants (2015), following are some financial analyses of real estate transactions services in terms of profitability, safety and productivity. (See

APPENDICES S, T, and U for detailed standard financial statements and related financial ratios.)

As for profitability, return of asset is higher than all industries. The gross income on sales is nearly the same as that of all industries. The ratio of sales to selling and administrative expenses ratio is almost the same as that of all industries. The ratio of sales to labor costs is somewhat lower than in all industries. Turn over of total capital and tangible fixed asset turnover rate are both lower than all industries. On safety, the current ratio is lower than in all industries. The capital adequacy ratio is considerably lower than all industries. As for productivity, value added per employee is considerably higher than in all industries. The sales per employee is quite high compared to all industries. In terms of the distribution ratio of selling and administration expenses, labour costs, taxes and fees, advertising expenses are high in the order. And long-term borrowing ratio in debt / net asset component ratio is higher than in all industries.

Regarding real estate lease and management business services, following are the characteristics of financial indicators. As for profitability, the return of asset is slightly lower than all types of industry. The gross income on sales is considerably higher than that of all industries. The ratio of sales to selling and administrative expenses ratio is considerably higher than that of all industries. The ratio of sales to labor costs is higher than that of all industries. Turn over of total capital and tangible fixed asset turnover rate are both considerably lower than all industries. On safety, the current ratio is almost the same as that of all industries. The capital adequacy ratio is higher than that of all industries. Concerning productivity, value added per employee is considerably higher than in all industries. The sales per employee is lower compared to all industries. In terms of the distribution ratio of selling and administration expenses, labour costs, land rents, depreciation costs are higher in this order. Long-term borrowing ratio in debt / net asset component ratio is almost the same as that of all industries.

Overall, real estate services require a large amount of funds; the financial ratios for average SMEs (as shown in APPENDICES S, T and U) indicate that they are having difficulties to cope with this shortage of funds. An enhanced availability of investment money through establishing an APEC-wide mutual recognition of geographically transferable capacity (at the company as well as individual levels) for real estate services could facilitate small scale suppliers of real estate services to invest in other parts of APEC more smoothly. Further liberalization of trade in real estate services would also be needed, not just to promote this sector on the whole but also for promoting other service as well as non-service investment involving mode 4 (i.e., movement of natural persons, or business people).

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Chapter 7: POLICY SUGGESTION: INTRODUCTION OF A FRAMEWORK FOR SERVICE TRADE LIBERALIZATION IN FAVOR OF SMEs, WOMEN ENTREPRENEURS AND GREEN ECONOMY

7.1. Trade in Services and Values of Economic Activities

In order to promote trade in services by SMEs and women entrepreneurs, the fixed cost aspect, including economic costs such as visa and work permit applications and psychological barriers avoiding investment, should be mitigated through APEC-wide “effectuation” policy (beyond formal institutional supports, i.e., “causation” policy) would facilitate reduction of the “fixed costs” when starting and further promoting services trade by SMEs and women entrepreneurs. Given that the actual “marginal cost” of foreign business operation by SMEs does not seem to be drastically disadvantaged, the “fixed costs” of starting and expanding the supply of services abroad should be reduced through APEC’s policy efforts at the practical level; the initial push of reducing policy-related fixed costs by APEC (and in collaboration with ABAC) continues to be indispensable. As for women entrepreneurs in particular, their empowerment strategy includes promotion of access to funds as well as skills and capacity building for entrepreneurship.

7.2. Policy Suggestions for the Promotion of Trade in Service by SMEs

There is essentially no distinction in terms of the desirability of economic development (depicted in Figure 7.1) between large scale companies and small-scale companies. It is only when marginalization of economic activities takes place on the part of SMEs that a separate set of policy measures are needed for promoting trade in services by SMEs. In terms of the seven values introduced in the first section, following are the policy measures for SMEs, in the context of the seven values above and in line with the analyses in the preceding chapters.

1. Life: Survival of the business is crucial for SMEs as it also relates rather directly to the survival of the workers (including owners) due mainly to their financial resilience; as the high fixed costs (financial as well as psychological) of initial investment abroad is the initial barrier for their business operation abroad, priority should be given to reducing unnecessary costs of trade in services through simplifying the type of regulations;

2. Labor: Trade in services especially by SMEs could be promoted through cross-border sharing of training/financial opportunities facilitated by APEC and ABAC;

3. Change (Trade): Further liberalization of trade in services with regulatory reforms could be implemented in line with APEC Services Competitiveness Roadmap as well as APEC Agenda for Structural Reform (RAASR), and with SMEs in focus, so that those SMEs can participate in the change (trade) of their services more actively; regulatory framework should be simplified to the extent possible so that domestically oriented SMEs (especially in the field of environmental and real estate services) can consider investment abroad, as a result of the reduction of fixed costs before investment and variable costs after investment;

4. Growth: The concept of Green Economy is important for the growth or promotion of trade in services in order to mitigate the carbon intensity at the societal levels; practicing the 3Rs of Reduce, Reuse and Recycle especially by SMEs (including from abroad) which comprises majority of business companies in the APEC region, is an effective way of achieving SDGs while advancing the APEC's MSAP (Manufacturing Related Services Action Plan);

5. Selection: Variety of products enriches consumers' selection (choices) based on their preferences; in order for service SMEs (in the field of education, environment and real estate services at least) to be able to invest abroad, simplification of service-related customs procedures, measures related to intellectual property rights, technical regulations, sanitary and phytosanitary (SPS) measures, investment and business related registration, regulations on employment and taxation could be pursued at the APEC level; deregulation of residency and Citizenship requirements would be necessary to promote trade in environmental services further.

6. Order: Small-scale suppliers (especially in real estate services) could respond to the diverse needs of customers especially from the home economies of the SMEs themselves; APEC-wide formulation of model environmental regulations (in line with the APEC's Environmental Services Action Plan and Manufacturing Related Services Action Plan) would secure promotion of trustworthy trade in services.

7. Purpose: The major purpose of SMEs' inclusion in the promotion of trade in services lies in the concerted efforts, SMEs and larger companies alike, to redress market imperfections (including the gap in profitability between differently sized companies); tackling the same issue of service trade promotion with the APEC as the incubator or catalyst is the very purpose of the Asia Pacific Economic Cooperation as a cooperation agency.

7.3. Policy Suggestions for the Promotion of Trade in Service by Women Entrepreneurs

This section makes some policy suggestions for the promotion of trade in service by SMEs and women entrepreneurs. There is no intrinsic distinction between male-oriented economic activities and female-oriented economic activities, as long as the economic activities are smoothly operated. Gender issue, however comes into the picture when there is some sort of gender-oriented gap. Trade in services could be just one vehicle to rectify the social bias, e.g., underutilization of female entrepreneurship. Women entrepreneurs are not necessarily underperforming in the sense of purpose-driven activities: seeking social values including "being with my children even at work", for example, seems to be at least part of the purpose of their motivation in business activities. Women entrepreneurs would, albeit socially desirable, need further policy supports if they are to be visibly successful in business scenes. Following are some concrete policy suggestions in this regard, along the seven values introduced by Kagawa (1936) and in line with the analyses in the preceding chapters.

1. Life: Women entrepreneurs should secure their own work-life balance when participating in trade in services, while based domestically; APEC's role as an advocator of women's economic empowerment is indispensable, since women entrepreneurs have values somewhat different from merely profitability-oriented ones;

2. Labor: To enable women entrepreneurs to expand their business, governments should also increase training and financial opportunities; for instance, assessment of entrepreneurial risks as well as promotion and utilization of special lending programmes for women entrepreneurs could be tailor-made for women entrepreneurs the APEC region⁵⁰;

⁵⁰ In this context, OECD (2008) puts it (and the suggestions are all valid for women entrepreneurs in the APEC region):

Credit provisions should be accompanied by supportive advisory and networking services to provide women with basic marketing information and advice. These include advisory bureaus established at chambers of commerce and industry associations and points of entry on the Internet where female and other ventures can access information, forms and services provided by various public agencies. Business incubators, often established at

3. Exchange (Trading): Liberalization of trade in services would be necessary across the APEC economies; APEC governments should promote capacity building for women entrepreneurs so that they can initiate the process of establishing new companies. Simplifying regulations, enhancing regulatory transparency would also be necessary;

4. Growth: Trade liberalization increases the degree of domestic competitiveness and reduces the degree of export productivity threshold; economies should consider how to support participation in trade; there would then be further promotion of women entrepreneurs as well as the overall performance of individual service companies⁵¹;

5. Selection: Variety of services emerging from unique perspectives from women entrepreneurs can benefit consumer preferences under lower regulatory barriers; for real estate services in particular, female suppliers could effectively serve female workers from abroad in a tailor-made manner especially for foreign women entrepreneurs; some women entrepreneurs opt for staying in their home economy since women may be less mobile than men because of family responsibilities, yet other female and potential entrepreneurs, if the situation allows, would venture into business expansion abroad; some sort of mutual recognition arrangements of real-estate related licenses among the APEC member could therefore be considered;

6. Order: Trade liberalization in, e.g., education services especially related to imparting mathematics, science and engineering skills⁵² using English in a systematic manner, would be beneficial, and consumers (especially female students as future women entrepreneurs) will benefit from the diverse array of educational options; and same goes true for environmental as well as real estate services;

universities or business schools, are of particular value to women entrepreneurs in providing an infrastructure, links to investors and market opportunities as well as personalised assistance and training. Networking programmes have been effective in increasing both the number and success rates of women starting their own businesses. Programmes engaging experienced female business owners in providing advice to potential women entrepreneurs help build such networks. Women entrepreneur associations can be a conduit for dissemination of business information and provide support services for new female-owned start-ups. Initiatives to foster women entrepreneurs should also be part of local development strategies and enterprise creation policies.

Also, the World Bank's Women Entrepreneurs Finance Initiative (We-Fi) (<https://we-fi.org>) is a similar important concept.

⁵¹Various business reports, including "Women in Business and Management" provide insights into how gender diversity at the top improves organizational performance ("Women in Business and Management: The business case for change" https://www.ilo.org/global/publications/books/WCMS_700953/lang--ja/index.htm).

⁵² These subjects are so called STEM Education (Science, Technology, Engineering and Mathematics Education).

7. Purpose: Women entrepreneurs, incumbent or potential, have socially beneficial purposes, that are not straightforwardly linked to immediate financial gains; their visions should be nurtured, with appropriate skills and knowledge; adaptation to new innovation and technology is therefore among the key policy issues for promoting trade in services by potential women entrepreneurs who have already accumulated “transferable” (business-applicable) skills⁵³; the ultimate purpose of APEC doing this is to create intra-regional diversity, i.e., indeed, “diversity promotes innovation, opens doors, and creates partnerships that fuel the economy.”⁵⁴

With the above “value” issues in mind, Table 7.1 shows some concrete examples of options for capacity building and innovative policy practices, in line with the Boracay Action Agenda which was endorsed in 2015 for globalizing APEC region’s SMEs, or including the smallest (micro) business entities, MSMEs. As “next generation regulatory frameworks” for services trade are also needed at the APEC, the use of small-scale ICT devices (e.g., mobile phones, tablet and notebook PCs) could serve as a pivotal role in promoting trade in services by SMEs (MSMEs) as well as women entrepreneurs. The Table builds on the Boracay Action Agenda and makes some practical suggestions in terms both of the policy formulation at the government level, and capacity building for services providers (SMEs and women entrepreneurs).

⁵³ In this connection, HERS (Higher Education Resource Services) provides an important case in point: it is a leadership development and research organization that is dedicated to creating and sustaining a diverse network of women leaders in higher education. Through various programs that support women in every stage of their careers, HERS provides program participants with transformational experiences and opportunities that result in stronger institutions of higher education. HERS believes that impactful leadership not only requires women in leadership positions, but demands that each woman brings her unique voice and perspective to her leadership role (<https://www.hersnetwork.org/>).

⁵⁴ Women's Business Enterprise Center (WBEC) website (<https://wbeceast.com/about>).

⁵⁵ In this connection, WTO (2019) points out that technological progress as well as the widespread use of the internet can promote SMEs' access to foreign markets.

Table 7.1 Policy options for SMEs and women entrepreneurs in line with the Boracay Action Agenda

Boracay Action Agenda item (selective)	Policy option for SMEs and women entrepreneurs	Capacity building for SMEs and women entrepreneurs
1. Facilitate the access of MSMEs to FTAs/RTAs by simplifying and streamlining rules of origin (ROO) procedural and documentary requirements and harnessing IT to ease documentation and procedures.	For small-scale service providers related to merchandise trade, commercially-significant threshold value for the waiver of certificate of origins (COs) as well as the self-certification system could also be considered; the implementation of the Electronic Certificate of Origin (eCO) could be promoted, under the umbrella promotion of Digital Government with the three principles of digital first, one only, and one stop.	An online capacity building portal featuring the use of small-scale ICT devices for model eCOs enabling “application anytime and anywhere” could be developed.
2. Streamline customs-related rules and regulations and assist in the compliance of MSMEs	For small scale service providers, the establishment of commercially useful de minimis values that will exempt low-value express and postal shipments from customs duties and from certain entry documentation requirements, in accordance with economies’ legislation, could be encouraged.	An online capacity building portal for customs-related rules and regulations could be developed.
3. Provide timely and accurate information on export and import procedures and requirements.	Enhance transparency and predictability of regulations related to services trade, through the development of services trade information portals. In this connection, tapping of an ICT support desk and a Chief Information Officer (CIO) at the governmental level could be considered.	Capacity building seminars for the use of information portals providing services trade information could be held, in line with WTO’s Women and Trade ⁵⁶ .

⁵⁶ WTO has launched the "Women and trade" initiative, recognizing the issue that "Trade can play an important role in driving women's economic empowerment" (https://www.wto.org/english/tratop_e/womenandtrade_e/womenandtrade_e.htm).

<p>4. Support measures to widen options on financing for MSMEs and further develop the infrastructure to facilitate lending to them.</p>	<p>Promote inclusive finance mechanisms with focus on broad-based financial products and services such as crowdfunding with block chain-type verification processes.</p>	<p>Capacity building seminars on the use of crowdfunding and other financing schemes to enable MSMEs to strengthen global value chain could be held.</p>
<p>5. Expand internationalization opportunities for micro and small enterprises providing goods and services through ICT and e-commerce.</p>	<p>Cooperate with ABAC in identifying and promoting strategic e-commerce platforms and innovative business models for MSMEs to support services trade; encourage the availability of next-generation online technology in support of SMEs and women entrepreneurs; identify and promote policies and regulatory frameworks for creating conducive environment for e-commerce and address unnecessary regulations that constrain the ability of MSMEs to participate in e-commerce.</p>	<p>In collaboration with ABAC's Cross-Border E-Commerce Training (CBET) Programme and other similar platforms, hold capacity building seminars on the familiarization of new technology (ICT)-based services trade, including the adoption of cross-border (remote) working in mode 1 and provision of ICT-based services (e.g., online viewing of real estate, environment and education services for this research) could be held, in collaboration with ABAC.</p>
<p>6. Strengthen institutional support for MSMEs</p>	<p>Foster clustering of MSMEs, including through non-equity mode and equity-based linkages, to gain economies of scale in services export; build on the existing regional network of MSMEs and women entrepreneurs (APEC SME Service Alliance (ASSA)) to support enterprise creation and increases the innovation capabilities of MSMEs; promote wider linkage between small and large enterprises in pursuing greater MSME participation in regional and global value chains.</p>	<p>Capacity building seminars on the nature of OECD-defined 5 categories as service trade restrictiveness (i.e., restrictions on foreign entry, restrictions on the movement of people, other discriminatory measures, barriers to competition and regulatory transparency) could be undertaken in the form of seminars and online sharing of relevant information portals.</p>
<p>7. Strengthen focus on MSMEs led by women</p>	<p>Promote an understanding of the divergent constraints faced by male and female-led MSMEs in terms of self capacity for business activities, coping with</p>	<p>As women workers tend to feel the individual safety of investment area is the barrier to services trade and they also feel</p>

	family matters, funds availability and safety of invest destinations (focus points in this research).	barriers to competition, seminars on securing the safety of investment area and promoting fair competition as a set through ICT-based technology could be held; especially on the movement of people (mode 4), share online information on eVisa, eWorkPermit applications; as a domestic business support, share next-generation ICT-based services, including, e.g., community-based and online support scheme providing affordable childcare services among registered SME workers and women entrepreneurs.
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Source: APEC website (https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Trade/2015_trade/2015_mrt_standalone.aspx).

In order to avoid the market failure of not utilizing SMEs and women entrepreneurs, the fixed cost aspect (including economic and psychological barriers) should be mitigated through APEC-wide “effectuation” policy (beyond formal institutional supports, i.e., “causation” policy) for business networking by SMEs and women entrepreneurs. Given that the actual “marginal cost” of foreign business operation by SMEs does not seem to be drastically disadvantaged as the “fixed cost” of starting the supply of services abroad, the initial push of facilitating effective business networking by APEC (in collaboration with ABAC) continues to be indispensable. As for women entrepreneurs, their empowerment strategy includes promotion of access to capital and foreign markets, as well as skills and capacity building for entrepreneurship. Adaptation to innovation and new technology is also among the key policy issues for promoting trade in services by potential women entrepreneurs who have already accumulated “transferable” (business-applicable) skills.

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APPENDIX A.

Text Analysis of APEC Leaders' Declarations (1993-2016)

Total number of words: 69,844

Figure A.1 Word Frequency Analysis (1993-2016)

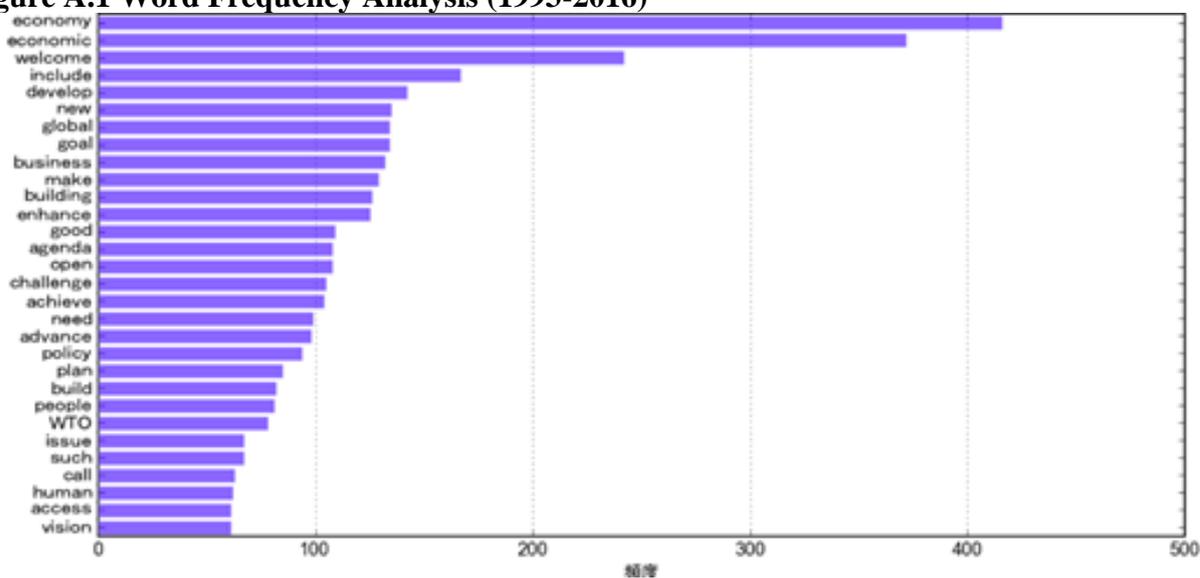


Figure A.2 Frequency Analysis of Modifiers and Modified Words (1993-2016)

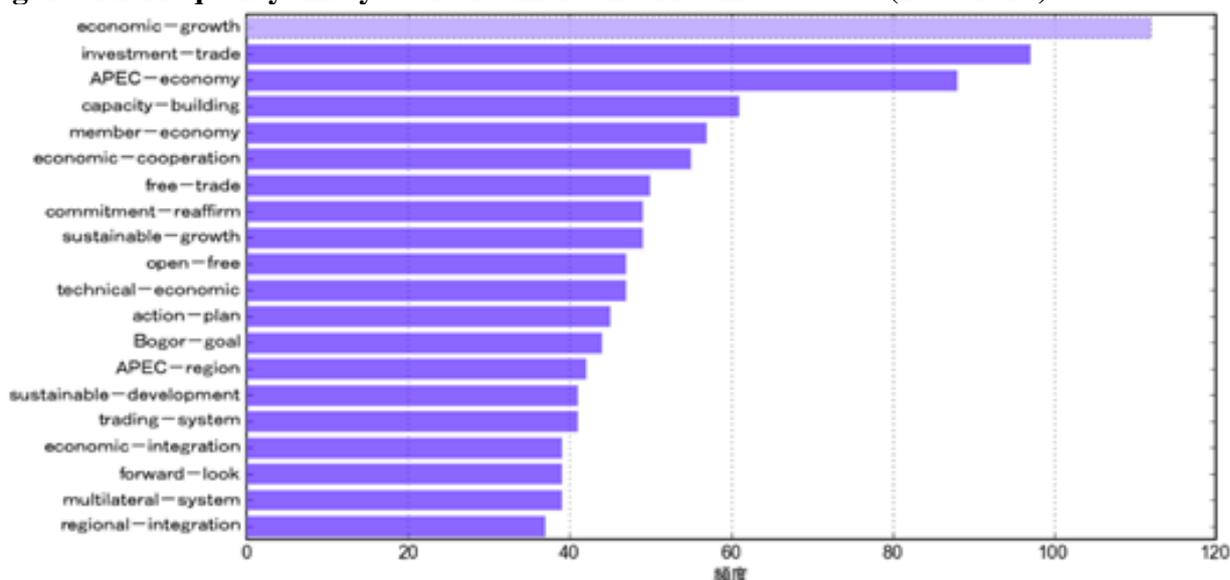
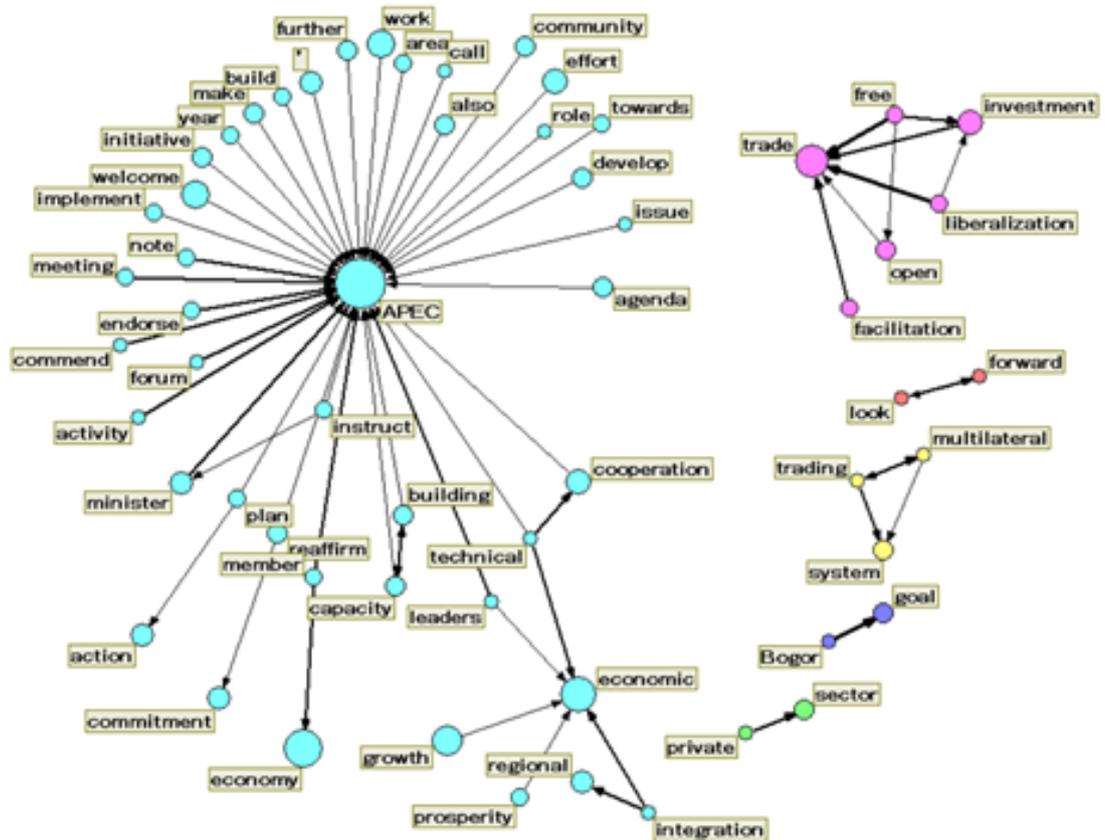


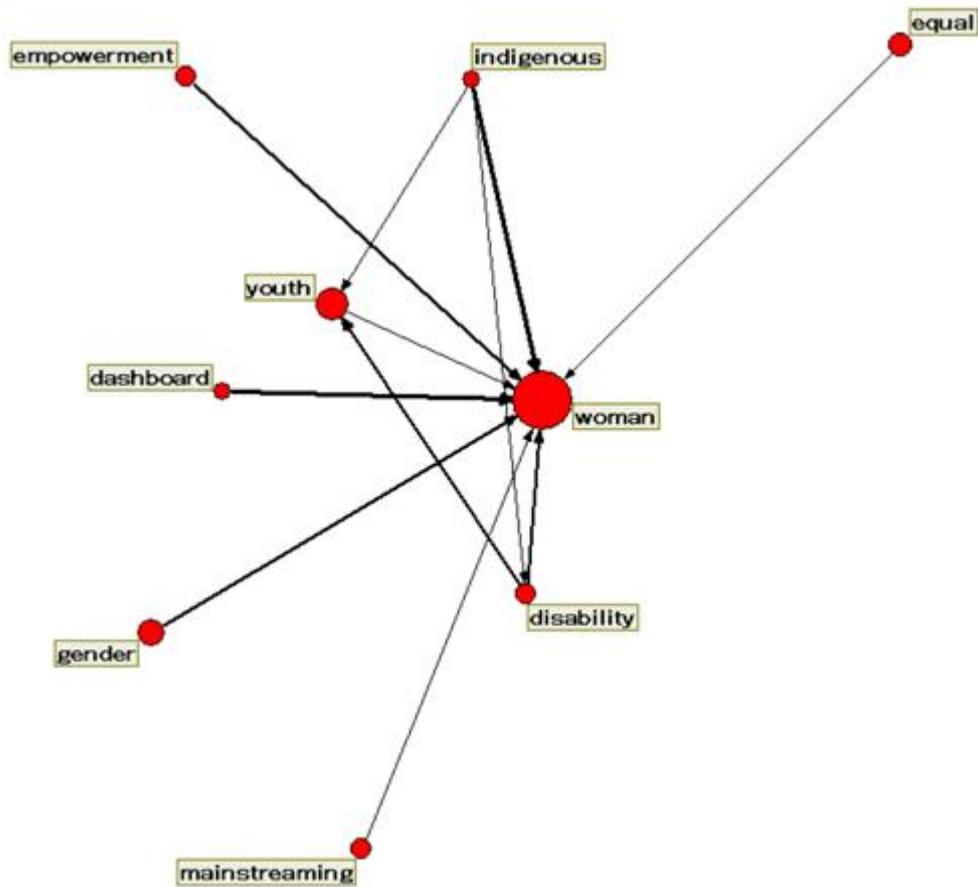
Figure A.3 Word Network (1993-2016)



Note: Extraction of co-occurrence relationship: minimum 40 occurrence

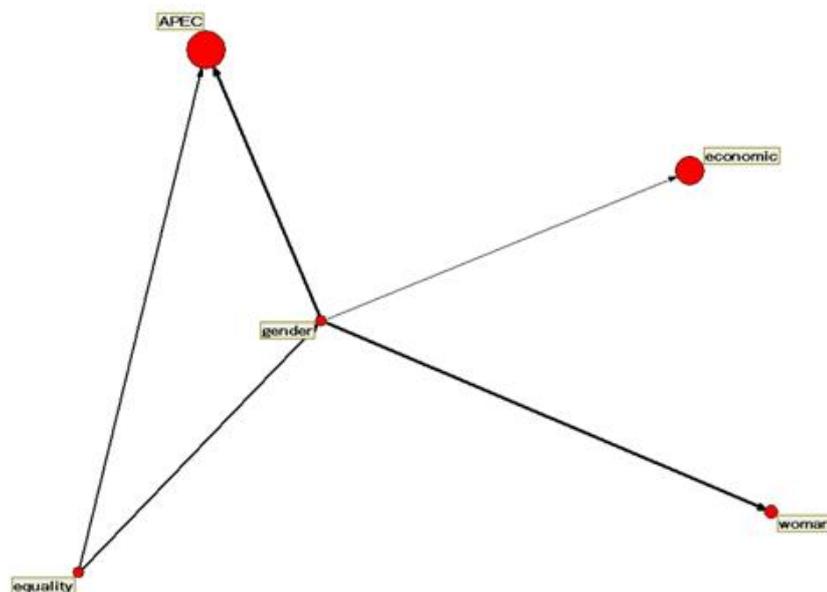
Implication of Figures A.1-3: Overall, services and women (entrepreneurs) are not addressed as high on APEC's agenda.

Figure A.4 Focus Word Analysis; “woman”



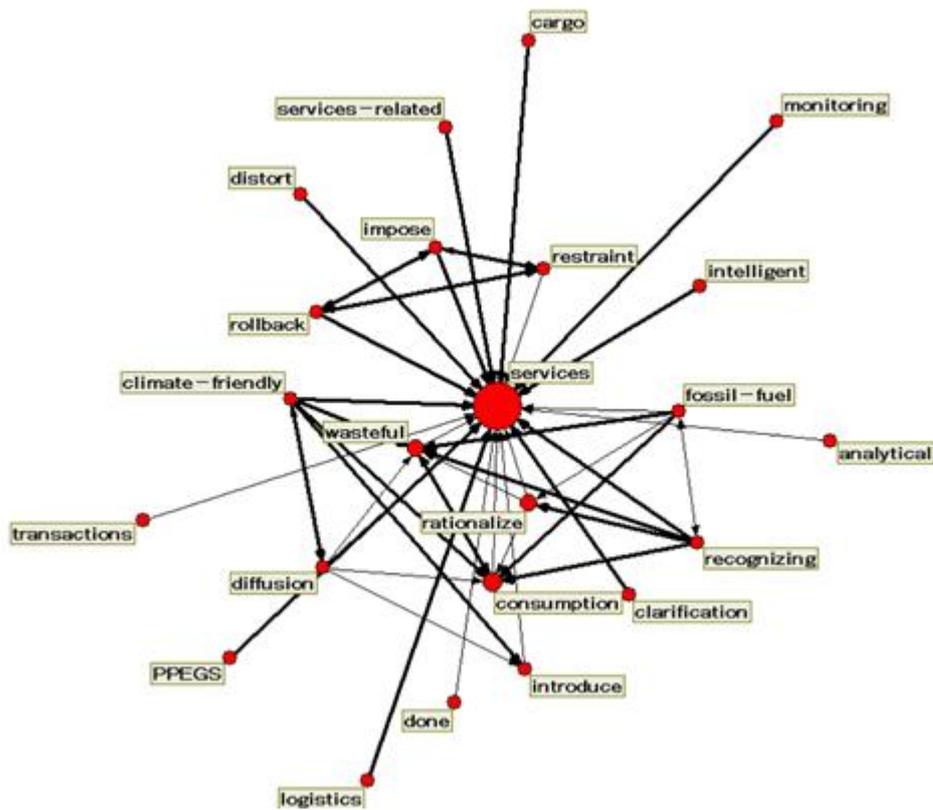
Implication: a focus on “women” reveals the treatment of woman in need of empowerment (but not so strongly)

Figure A.5 Focus Word Analysis: “gender”



Implication: gender issue is treated but not so high on APEC’s agenda

Figure A.6 Focus Word Analysis: “services”



Implication: Services are addressed at APEC in various contexts; “trade” in services has not been high on agenda

APPENDIX B.

A Simulation Analysis About the Impacts of Trade Costs on Extensive Margin and Intensive Margin of Export: From the Perspective of the Melitz Model

By Richard Liang, Chiba University

Abstract

Observable trade restrictiveness such as tariffs on manufacturing sectors is generally low as increasingly liberalization progressed in the context of WTO as well as a flourishing bunch of regional or bilateral trade agreements. Indeed, only the significant progress of tariffs liberalization could not suffice for further genuine economic integration, as many developing economies have been shifting their attention to Non-Tariff Measures (NTMs) which is weakly regulated by the current WTO framework, and more, service sectors are still liberalized in a slow process. Such restrictiveness will impose a great pressure on increasing trade cost to firms, across exporters and non-exporters.

In this sense, the impacts of trade cost affected by NTMs or other kinds of restrictiveness on business of firms are of great research significance. It is worthy to find out the mechanism of how trade costs make effects on trade and market structure from a firm-level perspective, in other words, extensive margin and intensive margin of trade.

Introduction

There are two types of trade costs for a firm to export from home economy to overseas: fixed trade costs and variable trade costs. Examples for fixed costs include the bureaucratic paperwork cost, marketing cost and distribution and logistical cost. It seems that these costs occurred separately and are not strongly associated with firm's consequent exporting behaviors. Variable costs are mainly embodied by transportation costs, tariffs and other costs incurred with subsequent export.

Taking NTMs as an example here, they can impose various trade costs on firms' business, namely, enforcement cost, sourcing cost and process-adaptation cost. Enforcement cost is added as a fixed cost, because compliance with the NTMs will cost firms more time and manpower to proceed paperwork and handle with inspections by specific agencies. Process-adaptation cost is viewed as a fixed cost as it causes firms to replace in-use capital equipment by the more advanced in order to reach the NTMs standards. And since sourcing cost is related

with every unit of production, so it is classified as a variable cost for firms (Ing, Cordoba, & Cadot, 2016).

The existence of trade costs along with related various factors can affect both trade flows and the market structure. In the heterogeneous firm theory, the impact is imposed in different channels: Intensive margin and extensive margin. These two words are widely used in classical economics. In trade, intensive margin indicates average exports per firm, and extensive margin usually refers to the number of exporting firms. Melitz (2003) predicted both variable trade cost and fixed trade cost have negative effects on the extensive margin.

A demonstration of simulation based on Melitz model is given by this study to show the impact of changing trade cost on extensive margin and intensive margin. Firstly, the theory is briefly mentioned in the theoretical section, and following that, results of simulation are displayed.

Theoretical fundamentals

According to the Melitz model (2003), productivity distribution of exporting firms in an open economy is:

$$\mu(\phi) = \begin{cases} \frac{g_{\phi}(\phi_X^*)}{[1 - G_{\phi}(\phi_X^*)]} & \phi \geq \phi_X^* \\ 0 & otherwise \end{cases}$$

Here, productivity ϕ is defined and $g_{\phi}(\phi_X^*)$ is the probability density function of ϕ . $1 - G_{\phi}(\phi_X^*)$ represents the distribution for those who become exporters among all active firms, and ϕ_X^* is the threshold of productivity level that only those firms with a higher productivity level than which can export. Because Pareto distribution can exhibit most characteristics of what described by the Melitz model, in the simulation analysis the general distribution function is in a form of Pareto distribution. In this case, the PDF function of the distribution becomes as below:

$$\mu(\phi) = kx^k \left(\frac{1}{\phi}\right)^{1+k}$$

Where, x is the threshold value of productivity for exporters. With a given value of x , the specific form of the productivity distribution will be known. Meanwhile, under the setting of a Pareto distribution, x can be solved and expressed by a formula with parameters including fx (the trade fixed cost) and τ (this variable can imply the trade variable cost). It makes $\mu(\phi)$ a function carrying variables ϕ , shape parameter k , the fixed trade cost fx , variable cost τ and

so on, in this way we can find the actual impact of fixed cost on the distribution of firm productivity, that is the export extensive margin. It is the same case with the autarky scenario, the only difference is the changed value of x , a lower x is defined in the autarky situation.

Regarding the testable application for the intensive margin, here uses firms' overseas sales as the proxy indicator. The simulated equation about firms' overseas sales is derived from the following function covered by Melitz's paper:

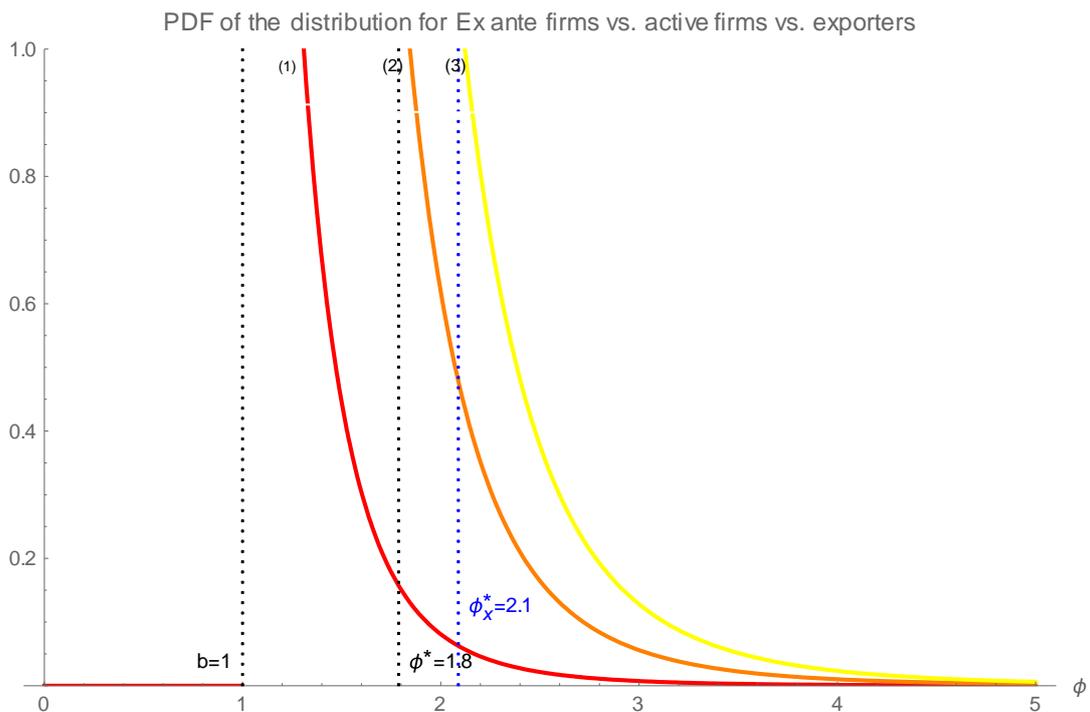
$$r_X(\varphi) = R^* \left(\frac{(\sigma - 1)\varphi}{\sigma\tau} \right)^{\sigma-1} P^*$$

Here, φ is firm productivity as before. σ denotes the elasticity of substitution between two varieties, and τ is the iceberg cost of trade, implying the variable cost of trade. R^* and P^* represent an economy's total expenditure and general price index respectively, because economy symmetry is assumed here, R^* and P^* are parallel between different economies. Based on this equation, simulation process will show us how different trade costs affect the exporting sales, or the intensive margin of trade.

Results

The *Mathematica* helps solve the simulation problem, based on testable applications mentioned above. All the outputs are outcomes by using the *Mathematica*. The simulation is based on Foltyn's work (2009).

Figure B.1 Firm Distribution and Productivity Partitions



In Figure B.1, productivity distribution of firms follows a Pareto distribution. The curve (1) reveals ex ante distribution of firms, the (2) and (3) curves respectively illustrates the distribution of incumbent firms in the domestic market and distribution of exporting firms. The cutoff productivity level for the distribution of incumbent firms in a closed economy is represented by ϕ^* , and ϕ_x^* is the productivity partition between non-exporters and exporters in an open economy. Generally, exporters are more productive than non-exporters bearing that ϕ_x^* is larger than ϕ^* ($2.1 > 1.8$ in this case). With the existence of a fixed trade cost, less-productive firms (usually medium and small enterprises) will be excluded by the cross-border trade market. And an increasing fixed trade cost will lead the curve (3) to move close to the (2), meaning that more firms exit from trade because they cannot afford a higher trade cost. When the trade fixed cost becomes too high for firms to earn profit, all the firms will only produce domestically, and there is no trade anymore. In this way, a fixed trade cost made significant impact on the market structure.

Figure B.2 shows a positive relationship between overseas sales and firm productivity. In contrast of the distribution function, concavity and up-warding are two obvious characteristics of this sales function. A firm with very high productivity, usually a big firm, accounts for more to the total export than a moderate productive firm, so with an increasingly addition of high-productivity firms, the total sales or trade flow (flow of export) will go up largely. The simulating result shows that an expanding variable trade cost could bring about a remarkably

decline of sales/trade flow, that's to say, change of variable trade cost greatly affects the intensive margin of trade.

Figure B. 2 Oversea Sales vs. Productivity

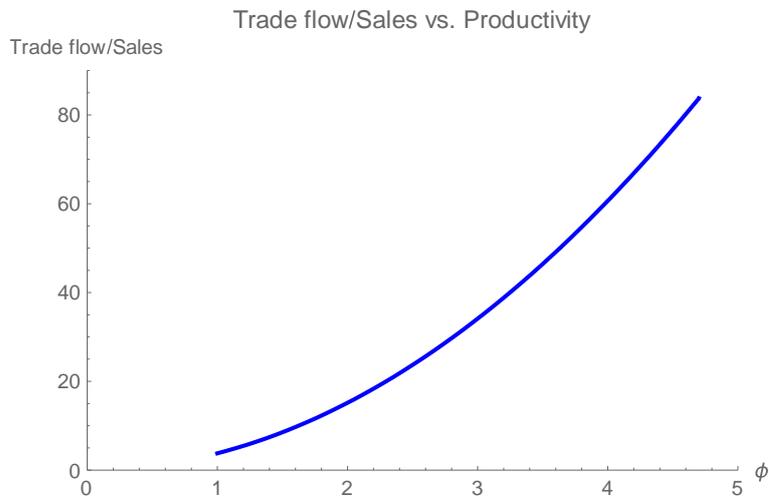


Figure B.3 Oversea Sales After a Higher Fixed Cost Imposed

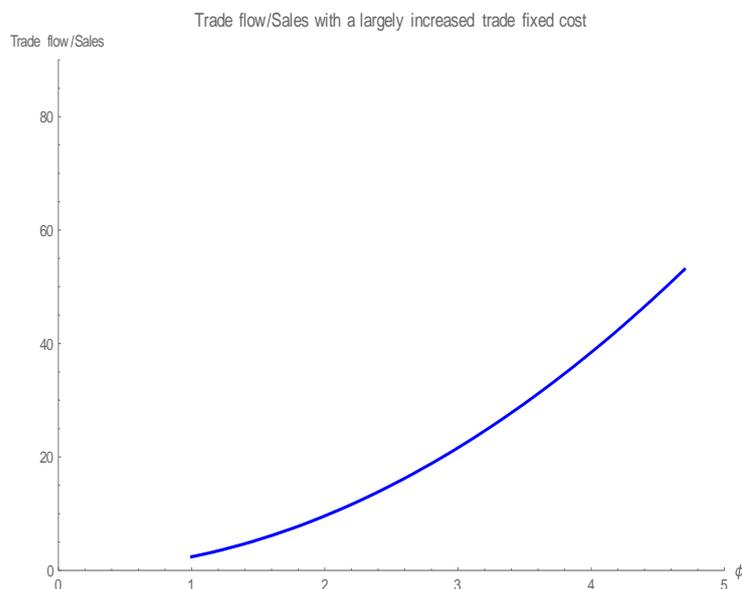
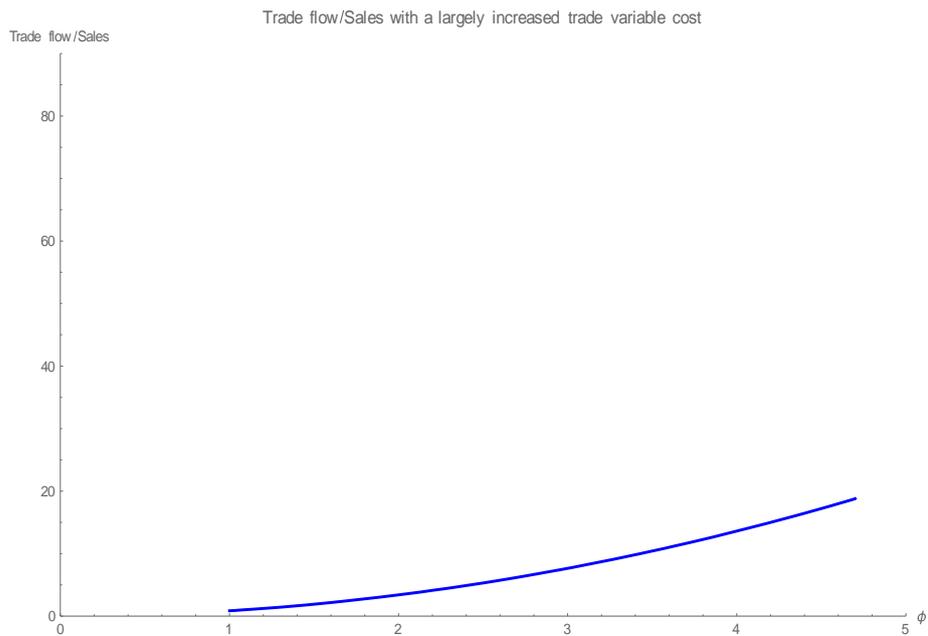


Figure B.3 tells us how the curve moves as a much higher trade fixed cost is imposed. Compared with the curve on Figure B.2, the curve seems to shift to the right from its original location. Since the simulation does not include the association between fixed trade cost and cut-off productivity level, it can not clearly capture firms exiting from cross-border trade due to a higher threshold of export is incurred simultaneously with increasing fixed cost. Anyway, the shift is a paralleling movement but not a rotation, implying that the trade cost leads to all firms reduce overseas sales at an unchanged price level.

Figure B.4 Oversea Sales After a Higher Variable Cost Imposed



In Figure B.4, a larger variable cost changed the total situation. In this case, firm sales reduced dramatically, even those highest-productive firms faced with a severe declining in sales, that's to say, intensive margin are significantly affected by variable cost change.

Conclusion and discussion

Trade cost is highly related with extensive margin and intensive margin of export. Melitz model tells us fixed trade cost would greatly affect the market structure or extensive margin. Variable trade cost dominates the intensive margin.

However, there shows fixed cost having mixed effects on firm's sales in this simulation process, making it ambiguous whether the change of sales is also due to a differentiated fixed trade cost. More explorations about the magnitude of fixed trade cost's impacts on intensive margin should be conducted. Further, related empirical studies should be followed as well.

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APPENDIX C. Composition of Companies

Figure C.1 Composition of Companies (Domestic)

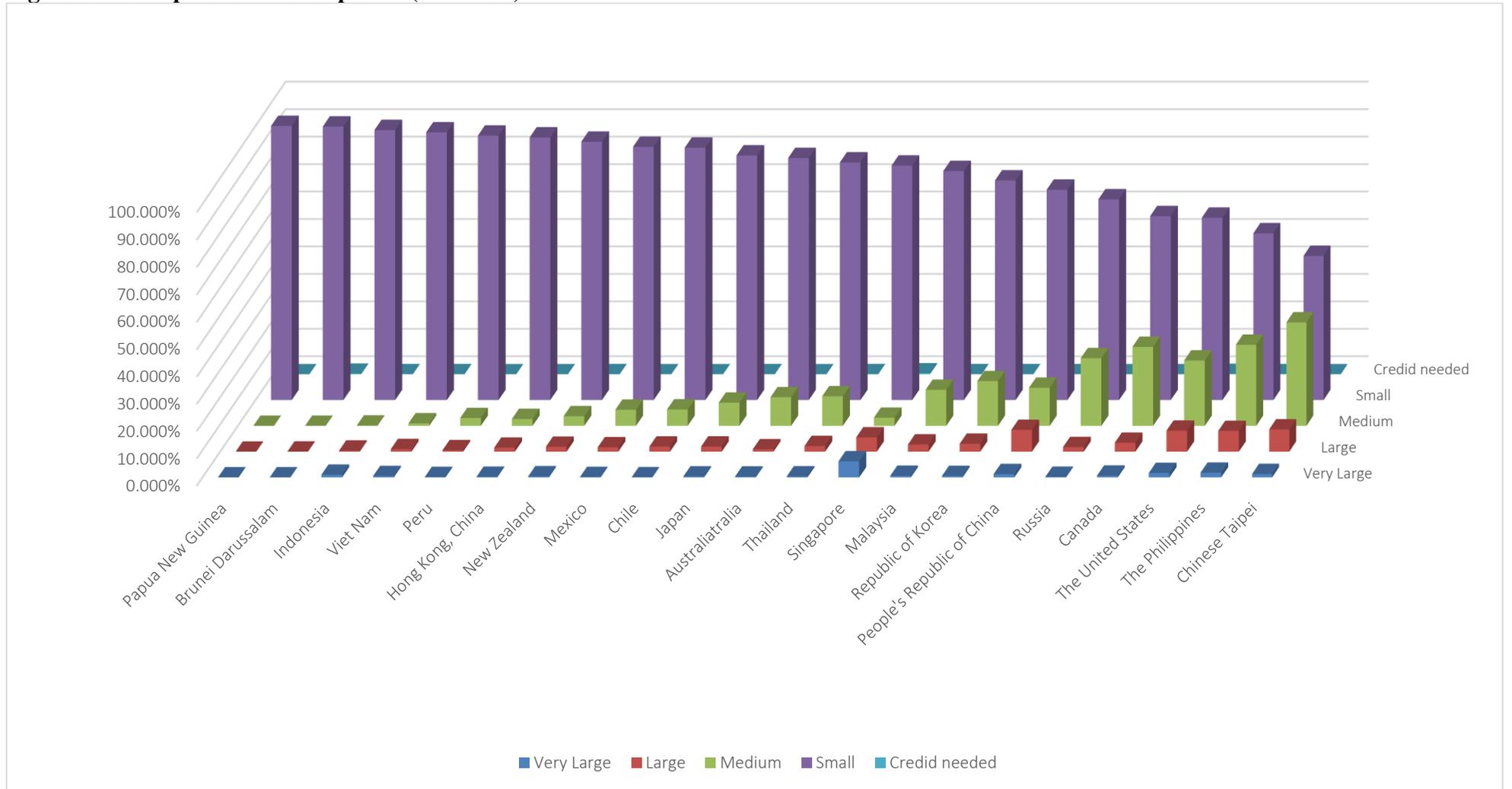
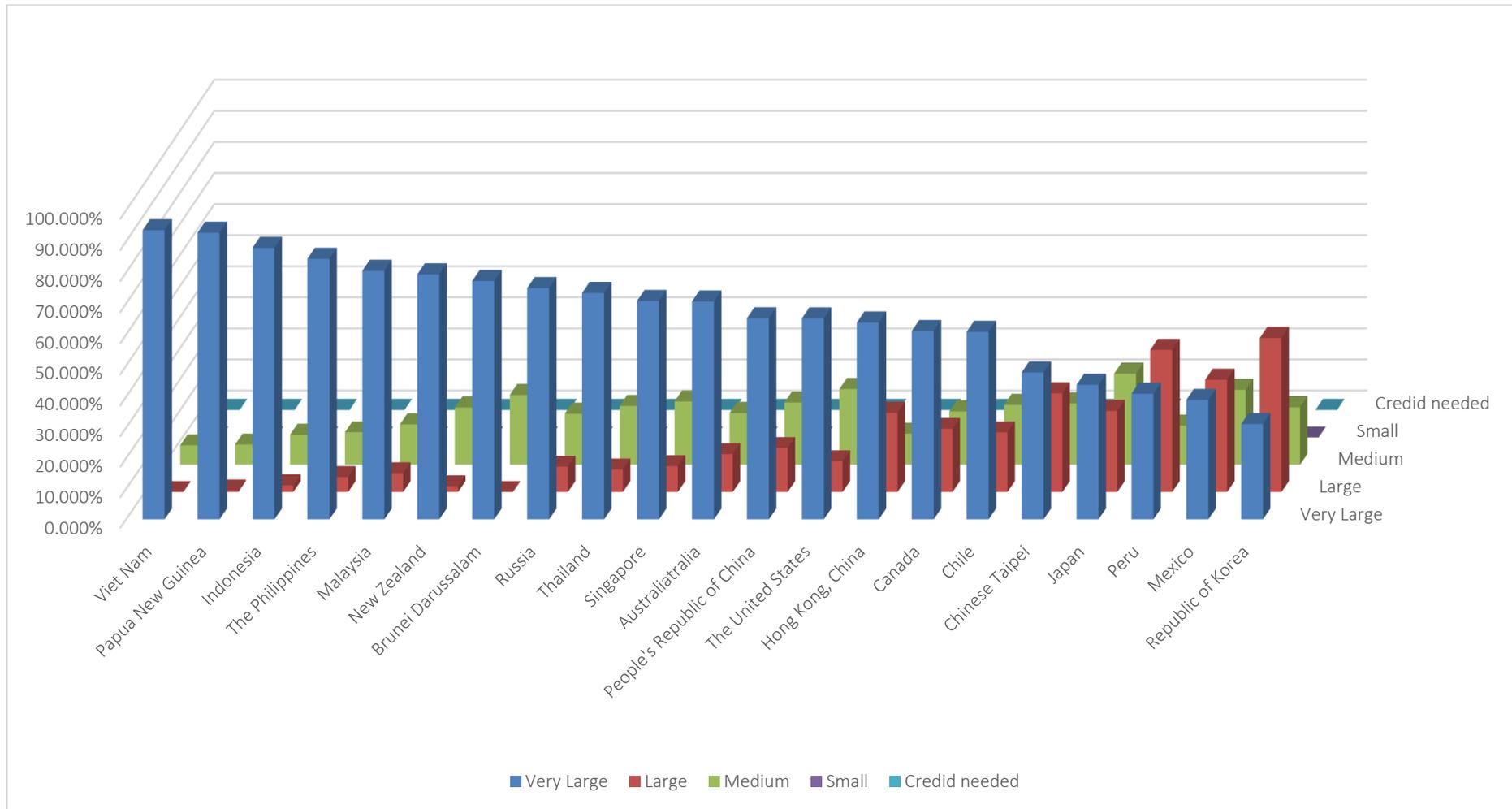


Figure C.2 Composition of Companies (Foreign)



APPENDIX D. List of Companies (Originally from APEC Economies) Investing in a Foreign Economy

(Online file only due to its large size; only the beginning part of the list is in the report)

Figure D.1 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Real Estate Services)

	The total	Company name	Country ISO Code	NACE Rev. 2 Core code (4 digits)	Last avail. year	Number of employees Last avail. yr	P/L before tax m USD Last avail. yr	P/L before tax m USD Year - 1
AUSJPN	56	GOOD MAN JAPAN	JPN	6820	2011	50	12	8
CDAJPN	58							
CHLJPN	6							
PRCJPN	105	GOURIKI PROPERTY DEVELOPMENT CO.,LTD	JPN	6820	2012	0	2	3
INAJPN	4							
HKCJPN	86	GOURIKI PROPERTY DEVELOPMENT CO.,LTD	JPN	6820	2012	0	2	3

Source: ORBIS.

Notes: The four characters in the first column means the source economy abbreviation (first two characters) and the destination economy (the last two characters).

The abbreviations for economies are as follows. AUS: Australia; BD: Brunei Darussalam; CDA: Canada; CHL: Chile; PRC: China; HKC: Hong Kong, China; INA: Indonesia; JPN: Japan; ROK: Korea; MAS: Malaysia; MEX: Mexico; NZ: New Zealand; PNG: Papua New Guinea; PE: Peru; PH: the Philippines; RU: The Russian Federation; SGP: Singapore; CT: Chinese Taipei; THA: Thailand; US: United States and VN: Viet Nam.

Access to the online file: https://drive.google.com/file/d/1F7lIbJZy1Nu-orEmmWbkv5zjXvc_S69O/view?usp=sharing

Figure D.2 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Educational Services)

Company name	THAe tot	Country ISO Code	NACE Rev. 2 Core code (4 digits)	Last avail. year	Number of employees Last avail. yr	P/L before tax m USD Last avail. yr	P/L before tax m USD Year - 1
AUSBD	4						
AUSCDA	477						
QUALITY MANAGEMENT INSTITUTE		CDA	8552		n.a.	n.a.	n.a.
FRASER INTERNATIONAL COLLEGE LTD.		CDA	8552		n.a.	n.a.	n.a.
QMI - SAI CDANADA		CDA	8552		n.a.	n.a.	n.a.
QMI-SAI CDANADA LTD		CDA	8552		n.a.	n.a.	n.a.

Source: ORBIS.

Notes: The four characters in the first column means the source economy abbreviation (first two characters) and the destination economy (the last two characters).

The abbreviations for economies are as follows. AUS: Australia; BD: Brunei Darussalam; CDA: Canada; CHL: Chile; PRC: China; HKC: Hong Kong, China; INA: Indonesia; JPN: Japan; ROK: Korea; MAS: Malaysia; MEX: Mexico; NZ: New Zealand; PNG: Papua New Guinea; PE: Peru; PH: the Philippines; RU: The Russian Federation; SGP: Singapore; CT: Chinese Taipei; THA: Thailand; US: United States and VN: Viet Nam.

Access to the online file: <https://drive.google.com/file/d/1RiLNeXxGxjbJcbKofPZStgTBxbYTt3WY/view?usp=sharing>

Figure D.3 List of Companies (Originally from APEC Economies) Investing in a Foreign Economy (Environmental Services)

Company name	THAe tot	Country ISO Code	NACE Rev. 2 Core code (4 digits)	Last avail. year	Number of employees Last avail. yr	P/L before tax m USD Last avail. yr	P/L before tax m USD Year - 1
AUSBD	4						
AUSCDA	477						
GENESIS RECYCHLING LTD	153	CDA	3811		n.a.	n.a.	n.a.
MOLY COP CDANADA	323.	CDA	3811		n.a.	n.a.	n.a.
MOLY COP CDANADA		CDA	3811		n.a.	n.a.	n.a.
ALTASTEEL LTD	332.	CDA	3811		n.a.	n.a.	n.a.

Source: ORBIS.

Notes: The four characters in the first column means the source economy abbreviation (first two characters) and the destination economy (the last two characters).

The abbreviations for economies are as follows. AUS: Australia; BD: Brunei Darussalam; CDA: Canada; CHL: Chile; PRC: China; HKC: Hong Kong, China; INAIndonesia; JPN: Japan; ROK: Korea; MAS: Malaysia; MEX: Mexico; NZ: New Zealand; PNG: Papua New Guinea; PE: Peru; PH: the Philippines; RU: The Russian Federation; SGP: Singapore; CT: Chinese Taipei; THA: Thailand; US: United States and VN: Viet Nam.

Access to the online file: https://drive.google.com/file/d/17EOgjALfjw_UGdQTo_0GGU6DJ1sPXreF/view?usp=sharing

APPENDIX E. Share of Domestic Companies and Foreign Subsidiaries

Table E.1 Size Distribution of Business Firms in the Home Economy and Abroad

Size	Very Large	Large	Medium
Size distribution of Japanese domestic firms	0.37	1.90	8.51
Size distribution of Japanese firms abroad (total)	43.90	26.50	29.60
Size distribution of Japanese firms in People's Republic of China	61.40	26.30	12.30
Size distribution of Japanese firms in Indonesia	33.3	61.1	5.6
Size distribution of Japanese firms in Republic of Korea	4.8	36.4	58.5
Size distribution of Japanese firms in the Philippines	33.33	33.33	33.33
Size distribution of Japanese firms in United States	66.4	16.3	17.3
Size distribution of Japanese firms in Viet Nam	4	84	12
Size distribution of Chinese domestic firms in People's Republic of China	1.2	8	14
Size distribution of Chinese firms abroad (total)	65.3	14.4	20.3
To Indonesia	75	25	0
To Viet Nam	0	100	0
Size distribution of Indonesian domestic firms in Indonesia	1	0.4	0.1
Size distribution of Indonesian firms abroad (total)	87.9	2.2	9.9
Size distribution of Indonesian firms in Japan	0	0	100
Size distribution of Indonesian firms in Viet Nam	100	0	0
Size distribution of Korean domestic firms in Republic of Korea	0.5	2.9	16.5
Size distribution of Korean firms abroad (total)	33.9	50.5	15.6
Size distribution of Korean firms Indonesia	20	80	0
Size distribution of Korean firms in United States	50	21.4	28.6
Size distribution of Korean firms in Viet Nam	23.8	66.7	9.5
Size distribution of Filipino domestic firms in the Philippines	1.7	7.6	29.8
Size distribution of firms abroad (total)	84.4	4.9	10.7
Size distribution of Filipino firms in People's Republic of China	75	25	0
Size distribution of Filipino firms in Indonesia	0	0	100
Size distribution of Filipino firms in Japan	50	0	50
Size distribution of Filipino firms in Viet Nam	0	100	0
Size distribution of American domestic firms in the United States	1.6	7.7	24
Size distribution of American firms abroad (total)	64.5	10.4	25.1
Size distribution of American firms in Republic of Korea	7.8	33.8	58.4
Size distribution of Vietnamese domestic firms in Viet Nam	0.5	0.9	0.9
Size distribution of Vietnamese firms abroad (total)	93.6	0	6.4
Size distribution of Vietnamese firms in People's Republic of China	100	0	0
Size distribution of Vietnamese firms in Republic of Korea	0	0	100

Note: The unit is percent.

APPENDIX F. Detailed Results of Gravity Model Regressions (Software: STATA)

Service Import

Source	SS	df	MS	Number of obs	=	110
Model	303.024221	4	75.7560552	F(4, 105)	=	25.54
Residual	311.503312	105	2.96669821	Prob > F	=	0.0000
				R-squared	=	0.4931
				Adj R-squared	=	0.4738
Total	614.527532	109	5.63786727	Root MSE	=	1.7224

logSimport	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
logReporterGDP	.6604421	.1184965	5.57	0.000	.4254855 .8953987
logPartnerGDP	.7397337	.1123091	6.59	0.000	.5170454 .9624219
logDistance	-1.374947	.2301674	-5.97	0.000	-1.831327 -.9185674
FTADummy	.7446389	.3732271	2.00	0.049	.0045985 1.484679
_cons	13.0163	3.058028	4.26	0.000	6.952792 19.0798

Service Export

Source	SS	df	MS	Number of obs	=	110
Model	300.43204	4	75.10801	F(4, 105)	=	31.12
Residual	253.413384	105	2.4134608	Prob > F	=	0.0000
				R-squared	=	0.5424
				Adj R-squared	=	0.5250
Total	553.845424	109	5.08115068	Root MSE	=	1.5535

logSexport	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
logReporterGDP	.6246823	.1068781	5.84	0.000	.4127627 .8366019
logPartnerGDP	.7743715	.1012975	7.64	0.000	.5735173 .9752256
logDistance	-1.255791	.2076	-6.05	0.000	-1.667423 -.8441581
FTADummy	1.057024	.3366329	3.14	0.002	.3895432 1.724505
_cons	12.08684	2.758195	4.38	0.000	6.617854 17.55584

Goods Import

Source	SS	df	MS	Number of obs	=	110
Model	374.95975	4	93.7399374	F(4, 105)	=	48.62
Residual	202.44566	105	1.92805391	Prob > F	=	0.0000
				R-squared	=	0.6494
				Adj R-squared	=	0.6360
Total	577.40541	109	5.29729734	Root MSE	=	1.3885

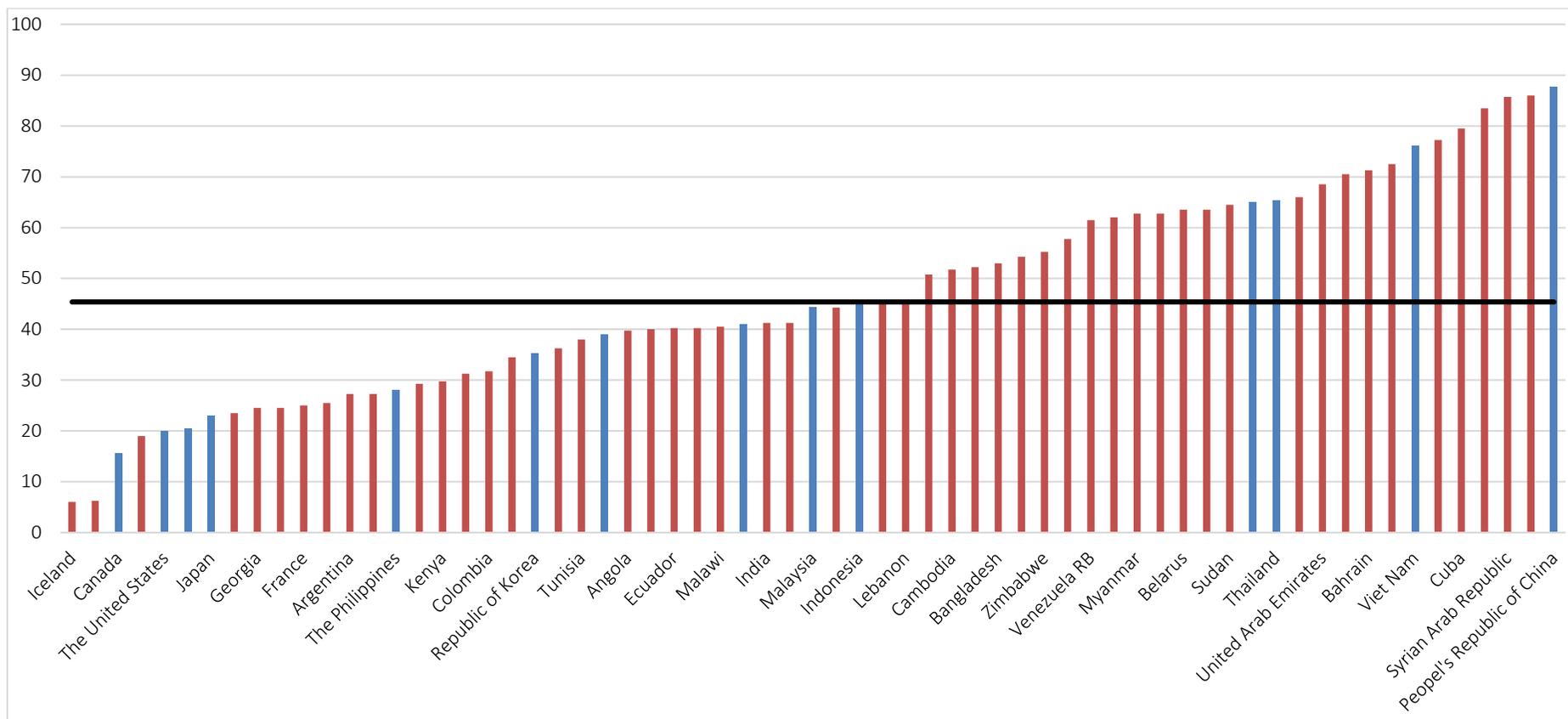
logGimport	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
logReporterGDP	.6949334	.0955275	7.27	0.000	.5055201 .8843468
logPartnerGDP	.9330524	.0905395	10.31	0.000	.7535294 1.112576
logDistance	-1.277452	.1855525	-6.88	0.000	-1.645368 -.9095356
FTADummy	.9333653	.3008819	3.10	0.002	.3367721 1.529958
_cons	10.96294	2.465269	4.45	0.000	6.074766 15.85111

Goods Export

Source	SS	df	MS	Number of obs	=	110
Model	435.218418	4	108.804605	F(4, 105)	=	51.44
Residual	222.10819	105	2.1153161	Prob > F	=	0.0000
				R-squared	=	0.6621
				Adj R-squared	=	0.6492
Total	657.326608	109	6.03051934	Root MSE	=	1.4544

logGexport	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
logReporterGDP	.6901952	.100059	6.90	0.000	.4917966 .8885938
logPartnerGDP	1.026358	.0948344	10.82	0.000	.8383185 1.214397
logDistance	-1.341395	.1943546	-6.90	0.000	-1.726764 -.9560253
FTADummy	1.185883	.3151549	3.76	0.000	.5609889 1.810777
_cons	10.15731	2.582215	3.93	0.000	5.037259 15.27737

APPENDIX G. Regulations for Access of Internet Ranking (2015-2018 Average)



Notes: Bigger the number, more regulated to the access of Internet. The solid horizontal line indicates APEC average. Unit: Points

Source: GLOBAL NOTE (<https://www.globalnote.jp/post-12867.html>)

APPENDIX H. Regression of Gravity Model with Hoekman Index (Under GATS)

As for indexation, Table C-1 shows the “Hoekman Index” as an illustration (based on Hoekman, 1995). This Index measures the degree of service trade opening up (rather than service trade restrictiveness) and takes the value between 0 and 1, the lowest value (0) being least committed and the highest value (1) being fully committed to service trade liberalization (note: OECD’s and World Bank’s service trade restrictiveness indices measure the degree of restriction, hence the higher value indicates a higher barrier in contrast with this Hoekman Index, although the basic nature of indexation, i.e., taking the value from 0 to 1, is common).

Table H.1 Hoekman Index of GATS 2003 Offer by APEC Member Economies

Economy	<u>01.</u> <u>Business</u> <u>Services</u>	02. Communicati on Services	03. Construction and Related Engineering Services	04. Distribution Services	<u>05.</u> <u>Education</u> <u>al Services</u>	<u>06.</u> <u>Environmental</u> <u>Services</u>
Australia	0.53	0.13	0.40	0.58	0.40	0.38
Brunei Darussalam	0.13	0.05	0.00	0.00	0.00	0.00
Canada	0.35	0.27	0.75	0.50	0.00	0.75
Chile	0.04	0.06	0.00	0.00	0.00	0.00
People’s Republic of China	0.34	0.29	0.44	0.48	0.31	0.14
Hong Kong, China	0.19	0.17	0.08	0.08	0.00	0.00
Indonesia	0.05	0.11	0.23	0.00	0.00	0.00
Japan	0.41	0.15	0.50	0.60	0.26	0.48
Republic of Korea	0.33	0.20	0.35	0.41	0.00	0.47
Malaysia	0.30	0.15	0.44	0.00	0.00	0.00
Mexico	0.30	0.19	0.15	0.28	0.55	0.00
New Zealand	0.33	0.11	0.50	0.45	0.45	0.00

Papua New Guinea	0.08	0.23	0.20	0.00	0.00	0.00
Peru	0.03	0.09	0.00	0.09	0.00	0.00
The Philippines	0.03	0.23	0.00	0.00	0.00	0.00
Russia	-	-	-	-	-	-
Singapore	0.21	0.14	0.15	0.00	0.00	0.00
Chinese Taipei	0.65	0.37	0.50	0.60	0.60	0.34
Thailand	0.22	0.12	0.41	0.10	0.30	0.69
United States	0.51	0.51	0.63	0.63	0.11	0.88
Viet Nam	0.34	0.27	0.50	0.25	0.20	0.44
Simple average	0.27	0.19	0.31	0.25	0.16	0.23

Source: Calculated from the specific commitment tables submitted by the WTO members under the GATS.

Based on this indexation method, a gravity model analysis has been applied for the number of firms from APEC economies investing in other APEC economies. Table C-2 shows the result. As shown, the Hoekman Index is positively significant, which indicates that the indexation method is verified from the perspective of the gravity model analysis.

Table H.2 Hoekman PPML for All Service Sectors

▪ Table Heckman PPML for all service sectors

	(1)	(2)
	PPML_1	PPML_2
n_FDI		
Log of GDP of the original country	0.0619	0.0620
	(1.08)	(1.08)
Log of GDP of the destination country	0.364***	0.198*
	(3.33)	(1.91)
Log of distance	0.268	0.356*
	(1.33)	(1.70)
<u>Hoekman index</u>		1.019***
		(2.93)
Constant	-7.791	-4.490
	(-1.62)	(-1.01)
r ²		
ar2p		
N	143	143

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

As shown, The Hoekman Index is positively significant.

APPENDIX I. Expert Judgement Weights by Policy Area and Sector (as Defined by OECD)

Table I.1 Expert Judgement Weights by Policy Area and Sector (as Defined by OECD)

Sector	Restrictions on foreign entry	Restrictions to movement of people	Other discriminatory measures	Barriers to competition	Regulatory Transparency
Broadcasting	39.67	12.00	17.33	17.67	13.33
Motion	27.24	21.84	19.24	13.44	18.24
Sound	12.00	17.00	23.00	27.00	21.00
Construction	21.97	16.87	22.07	18.57	20.53
Courier	27.20	12.20	19.20	21.00	20.40
Computer	17.44	20.84	17.73	20.23	23.76
Distribution	30.11	10.28	17.67	21.94	20.00
Commercial Banking	26.27	12.13	18.67	20.83	22.10
Insurance	31.00	13.80	16.00	19.13	20.07
Accounting	24.97	22.26	15.72	17.11	19.93
Architecture	18.61	25.62	17.11	16.49	22.17
Engineering	19.47	26.58	15.58	15.55	22.82
Legal	22.28	29.76	15.90	14.41	17.66
Telecommunications	24.89	13.07	15.44	26.31	20.29
Air Transport	24.50	14.00	23.75	20.00	17.75
Maritime Transport	35.00	25.00	12.50	14.50	13.00
Rail Transport	24.89	13.07	15.44	26.31	20.29
Road Transport	35.00	15.00	25.00	20.00	5.00
Real Estate ^a	20.95	24.08	18.36	16.49	20.12

Education ^b	20.12	27.32	16.20	15.48	20.88
Environment ^c	21.24	24.40	17.85	16.18	20.34

Notes: ^aWeights are the simple averages of Construction, Architecture, Legal

^bWeights are the simple averages of Legal, Engineering, Architecture

^cWeights are the simple averages of Construction, Engineering, Legal

Source: Geloso Grosso, M. et al. (2015), Table 4.

APPENDIX J. AFAS10 Hoekman Index Average by Sector

Figure J.1 AFAS10 Hoekman Index Average (Real Estate Services)

lar_sec	1	1	1
mid_sec	D	D	D
sector	Business Services	Business Services	Business Services
discription	Real Estate Services	Real Estate Services	Real Estate Services
Mode	1	2	3
MA_Brunei Darussalam	1	1	0.25
NT_Brunei Darussalam	1	1	1
MA_Cambodia	0.5	0.5	0.5
NT_Cambodia	0.5	0.5	0.5
MA_Indonesia	0	0	0
NT_Indonesia	0	0	0
MA_Laos	0	0	0
NT_Laos	0	0	0
MA_Malaysia	1	1	0.25
NT_Malaysia	1	1	0.25
MA_Myanmar	1	1	1
NT_Myanmar	1	1	1
MA_The Philippines	0	1	0.5
NT_The Philippines	0	1	1
MA_Singapore	0.75	1	0.75
NT_Singapore	1	1	1
MA_Thailand	1	1	0.5
NT_Thailand	1	1	1
MA_Viet Nam	1	1	1
NT_Viet Nam	1	1	1

Figure J.2 AFAS10 Hoekman Index Average (Educational Services)

lar_sec	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
mid_sec	A	A	A	B	B	B	C	C	C	D	D	D	E	E	E
sector	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services	Education Services
discription	Primary Education Services	Primary Education Services	Primary Education Services	Secondary Education Services	Secondary Education Services	Secondary Education Services	Higher Education Services	Higher Education Services	Higher Education Services	Adult Education	Adult Education	Adult Education	Other Education Services	Other Education Services	Other Education Services
Mode	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
MA_Brunei Darussalam	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
NT_Brunei Darussalam	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
MA_Cambodia	0	0	0	0	1	0.5	1	1	1	1	1	1	1	1	1
NT_Cambodia	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
MA_Indonesia	0	0	0	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
NT_Indonesia	0	0	0	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
MA_Laos	1	1	0.5	1	1	0.5	1	1	0.5	1	1	1	1	1	1
NT_Laos	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MA_Malaysia	1	1	0.5	0.5	1	0.5	0.5	1	0.5	0.5	1	0.5	0.5	1	0.5
NT_Malaysia	1	1	1	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
MA_Myanmar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NT_Myanmar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MA_The Philippines	1	1	0.5	1	1	0.5	0	1	0.5	0	1	0.5	0	1	0.5
NT_The Philippines	1	1	0.5	1	1	0.5	0	1	0.5	0	1	0.5	0	1	0.5
MA_Singapore	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NT_Singapore	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MA_Thailand	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
NT_Thailand	1	1	0.5	1	1	1	1	1	0.5	1	1	0.5	1	1	0.5
MA_Viet Nam	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1
NT_Viet Nam	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1

Figure J.3 AFAS10 Hoekman Index Average (Environmental Services)

lar_sec	6	6	6	6	6	6	6	6	6	6	6	6
mid_sec	A	A	A	B	B	B	C	C	C	D	D	D
sector	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services	Environmental Services
discription	Sewage Services	Sewage Services	Sewage Services	Refuse Disposal Services	Refuse Disposal Services	Refuse Disposal Services	Sanitation and Similar Services	Sanitation and Similar Services	Sanitation and Similar Services	Other	Other	Other
Mode	1	2	3	1	2	3	1	2	3	1	2	3
MA_Brunei Darussalam	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
NT_Brunei Darussalam	1	1	1	1	1	1	1	1	1	1	1	1
MA_Cambodia	1	1	1	1	1	1	1	1	1	1	1	1
NT_Cambodia	1	1	1	1	1	1	1	1	1	1	1	1
MA_Indonesia	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
NT_Indonesia	1	1	0.5	1	1	0.5	1	1	0.5	1	1	0.5
MA_Laos	1	1	1	1	1	1	1	1	1	1	1	1
NT_Laos	1	1	1	1	1	1	1	1	1	1	1	1
MA_Malaysia	1	1	0.5	1	1	0.5	1	1	0	1	1	0.5
NT_Malaysia	1	1	1	1	1	1	1	1	0	1	1	1
MA_Myanmar	1	1	0.5	1	1	0.5	1	1	0.5	1	1	1
NT_Myanmar	1	1	0.5	1	1	0.5	1	1	0.5	1	1	1
MA_The Philippines	0.5	1	0.5	1	1	0.5	0	1	0.5	1	1	0.5
NT_The Philippines	0.5	1	1	1	1	1	0	1	1	1	1	1
MA_Singapore				0.5	1	0.5	0	1	1	0.5	1	0.5
NT_Singapore				0.5	1	1	0	1	1	0.5	1	1
MA_Thailand	0	1	0.5	0	1	0.5	0	1	0.5	0.5	1	0.5
NT_Thailand	0	1	1	1	1	1	0	1	1	0.5	1	1
MA_Viet Nam	0.5	1	1	0.5	1	1	1	1	1	0.5	1	0.5
NT_Viet Nam	1	1	1	1	1	1	1	1	1	1	1	1

APPENDIX K. Hoekman Index for the Members of Trans-Pacific Partnership (TPP)

code	sub-code	TPP Annex 1 Description	Australia				Brunei Darussalam				Canada				Chile			
			Mode1	Mode2	Mode3	Mode4	Mode1	Mode2	Mode3	Mode4	Mode1	Mode2	Mode3	Mode4	Mode1	Mode2	Mode3	Mode4
1	01Aa	Legal Services	0.5	1	0.5	1	0.5	0	0.5	1	1	1	1	1	0.5	1	1	1
2	01Ab	Accounting, auditing and bookkeeping services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	0.5	1	1	1
3	01Ac	Taxation Services	1	1	1	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	1	1
4	01Ad	Architectural services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	1	1	1	1
5	01Ae	Engineering services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	1	1	1	1
6	01Af	Integrated engineering services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	1	1	1	1
7	01Ag	Urban planning and landscape architectural services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	1	1	1	1
8	01Ah	Medical and dental services	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	1	1	1	1
9	01Ai	Veterinary services	1	1	1	1	0.5	1	0.5	1	1	1	1	1	1	1	1	1
10	01Aj	Services provided by midwives, nurses, physiotherapists and para-medical personnel	1	1	1	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1
11	01Ak	Other	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1
01A:Average			0.86	1	0.86	1	0.5	0.91	0.5	1	0.82	1	0.82	1	0.77	1	0.91	1
12	01Ba	Consultancy services related to the installation of computer hardware	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	01Bb	Software implementation services	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	01Bc	Data processing services	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	01Bd	Database services	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	01Be	Other	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
01B:Average			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Notes: Online file only due to its large size; Only the beginning part of the list is in the report.

Access to the online file: <https://drive.google.com/file/d/1wzKa5ozXOUkrk0vTXwjet9Ue0IERCk7D/view?usp=sharing>

APPENDIX L. Questionnaire Format

CTI 09 2018T: Research on Promoting Trade in Services by SMEs and Women Entrepreneurs

Questionnaire About "an Overseas Expansion in the Service Industry"

<i>Chapter 1. Personal Information</i>	
1. Please tell us your gender	
Gender	
<input type="checkbox"/> Male	<input type="checkbox"/> Female
<input type="checkbox"/> Other	
2. What is your age group?	
Age Group	
	<input type="checkbox"/> 30-39 years old
<input type="checkbox"/> Under 20 years old	<input type="checkbox"/> 40-49 years old
<input type="checkbox"/> 20-24 Years old	<input type="checkbox"/> 50-59 years old
<input type="checkbox"/> 25-29 Years old	<input type="checkbox"/> Over 60 years old
3. Which economy is your business currently based in? Moreover, how many employees do you have? ⁵⁷	
4. Please Select your Industry.	
<input type="checkbox"/> 1. Business Services->A. Professional Services	
<input type="checkbox"/> 1. Business Services-> B. Computer and Related Services	
<input type="checkbox"/> 1. Business Services-> C. Research and Development Services	
<input type="checkbox"/> 1. Business Services-> D. Real Estate Services	
<input type="checkbox"/> 1. Business Services-> E. Rental/Leasing Services without Operators	
<input type="checkbox"/> 1. Business Services-> F. Other Business Services	
<input type="checkbox"/> 2. Communication Services-> A. Postal Services	
<input type="checkbox"/> 2. Communication Services->B. Courier services	
<input type="checkbox"/> 2. Communication Services->C. Telecommunication services	
<input type="checkbox"/> 2. Communication Services->D. Audiovisual services	
<input type="checkbox"/> 2. Communication Services->E. Other	
<input type="checkbox"/> 3. Construction and Related Engineering Services>A. General construction work for buildings	
<input type="checkbox"/> 3. Construction and Related Engineering Services->B. General construction work for civil engineering	
4. Please Select your Industry. (continued)	
<input type="checkbox"/> 3. Construction and Related Engineering Services->C. Installation and assembly work	
<input type="checkbox"/> 3. Construction and Related Engineering Services->D. Building completion and finishing work	
<input type="checkbox"/> 3. Construction and Related Engineering Services->E. Other	
<input type="checkbox"/> 4. Distribution Services->A. Commission Agents & Services	
<input type="checkbox"/> 4. Distribution Services->B. Wholesale trade services	

⁵⁷ This particular question was added on 12th Feb, 2019.

<input type="checkbox"/> 4. Distribution Services->C. Retailing services
<input type="checkbox"/> 4. Distribution Services->D. Franchising
<input type="checkbox"/> 5. Educational Services->A. Primary Education Services
<input type="checkbox"/> 5. Educational Services->B. Secondary Education Services
<input type="checkbox"/> 5. Educational Services->C. Higher Education Services
<input type="checkbox"/> 5. Educational Services->D. Adult Education
<input type="checkbox"/> 5. Educational Services->E. Other Education Services
<input type="checkbox"/> 6. Environmental Services->A. Sewage Services
<input type="checkbox"/> 6. Environmental Services->B. Refuse Disposal Services
<input type="checkbox"/> 6. Environmental Services->C. Sanitation and Similar Services
<input type="checkbox"/> 6. Environmental Services->D. Other
<input type="checkbox"/> 7. Financial Services->A. Financial Services
<input type="checkbox"/> 7. Financial Services->B. Banking and Other Financial Services
<input type="checkbox"/> 7. Financial Services->C. Other
<input type="checkbox"/> 8. Health Related and Social Services->A. Hospital Services
<input type="checkbox"/> 8. Health Related and Social Services->B. Other Human Health Services
<input type="checkbox"/> 8. Health Related and Social Services->C. Social Services
<input type="checkbox"/> 8. Health Related and Social Services->D. Other. Health Related and Social Services->D. Other
<input type="checkbox"/> 9. Tourism and Travel Related Services->A. Hotel and Restaurants (incl. Catering)
<input type="checkbox"/> 9. Tourism and Travel Related Services->C. Tourist Guides Services
<input type="checkbox"/> 9. Tourism and Travel Related Services->D. Other
<input type="checkbox"/> 10. Recreational, Cultural and Sporting Services->A. Entertainment Services (incl. Theater, Live Bands and Circus Services)
<input type="checkbox"/> 10. Recreational, Cultural and Sporting Services->B. News Agency Services
<input type="checkbox"/> 10. Recreational, Cultural and Sporting Services->C. Libraries, Archives, Museums and Other Cultural Services
<input type="checkbox"/> 10. Recreational, Cultural and Sporting Services->D. Sporting and Other Recreational Services
<input type="checkbox"/> 10. Recreational, Cultural and Sporting Services->E. Other
<input type="checkbox"/> 11. Transport Services->A. Maritime Transport Services
<input type="checkbox"/> 11. Transport Services->B. Internal Waterways Transport
<input type="checkbox"/> 11. Transport Services->C. Air Transport Services
<input type="checkbox"/> 11. Transport Services->D. Space Transport
<input type="checkbox"/> 11. Transport Services->E. Rail Transport Services
<input type="checkbox"/> 11. Transport Services->F. Road Transport Services
<input type="checkbox"/> 11. Transport Services->G. Pipeline Transport
<input type="checkbox"/> 11. Transport Services->H. Services Auxiliary to All Modes of Transport
<input type="checkbox"/> 11. Transport Services->I. Other Transport Services
<input type="checkbox"/> 12. Other Services Not Included Elsewhere
5. How many years have passed since you started your business?

Chapter 2. About overseas expansion in service industry.

6. Have you ever thought of expanding your business to overseas?

Yes

No

7. If your answer to Q6 was “yes” then, which economies would you like to expand your

business? And Why?

8. If your answer to Q6 was “no” then, how much will the following factors affect your decision? On a level of 1-10 kindly mark the intensity level of factors.

Capacity

- 1 No Influence at all
- 2
- 3
- 4
- 5 Somewhat Influenced
- 6
- 7
- 8
- 9
- 10 Heavily Influenced

Family

- 1 No Influence at all
- 2
- 3
- 4
- 5 Somewhat Influenced
- 6
- 7
- 8
- 9
- 10 Heavily Influenced

Funds

- 1 No Influence at all
- 2
- 3
- 4
- 5 Somewhat Influenced
- 6
- 7
- 8
- 9
- 10 Heavily Influenced

Safety of the Area

- 1 No Influence at all
- 2
- 3
- 4
- 5 Somewhat Influenced
- 6
- 7
- 8
- 9
- 10 Heavily Influenced

9. Please write the reason so as to why you think the factors you mentioned in Q8 affected your decision.

10. On a level of 1-10 kindly mark the intensity of factors that you can see as a hindrance to your overseas expansion.

Restriction of Foreign Entry

- 1 No barriers at all
- 2
- 3
- 4
- 5 Somewhat restricted
- 6
- 7
- 8
- 9
- 10 No freedom at all

Restrictions to Movement of People

- 1 No Barriers at all
- 2
- 3
- 4
- 5 Somewhat restricted
- 6
- 7
- 8
- 9
- 10 No freedom at all

Other Discriminatory Measures

- 1 No barriers at all
- 2
- 3
- 4
- 5 Somewhat restricted
- 6
- 7
- 8
- 9
- 10 No freedom at all

Barriers to Competition

- 1 No Barriers at all
- 2
- 3
- 4
- 5 Somewhat restricted
- 6
- 7
- 8
- 9
- 10 No freedom at all

Regulatory Transparency

1 No barriers at all

2

3

4

5 Somewhat restricted

6

7

8

9

10 No freedom at all

-End of questionnaire-

APPENDIX M. The Result of Questionnaire Survey (Online) on the Overseas Expansion of Business

Figure M.1 Distribution of Respondents' Economies

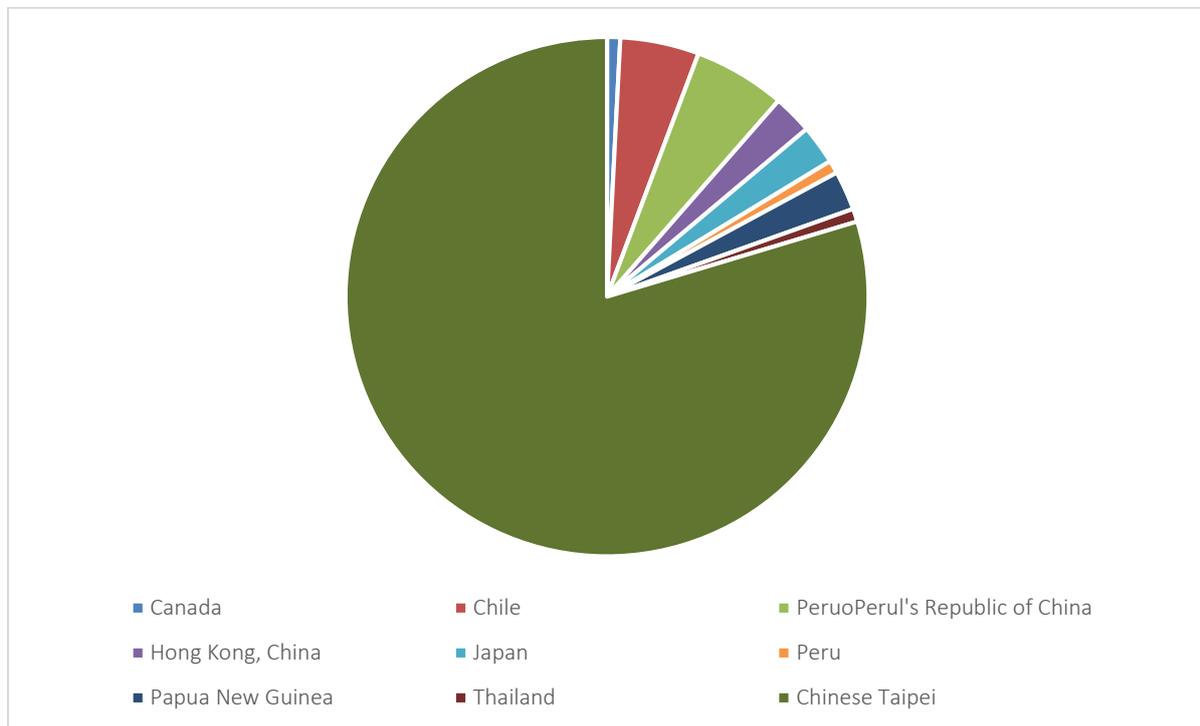
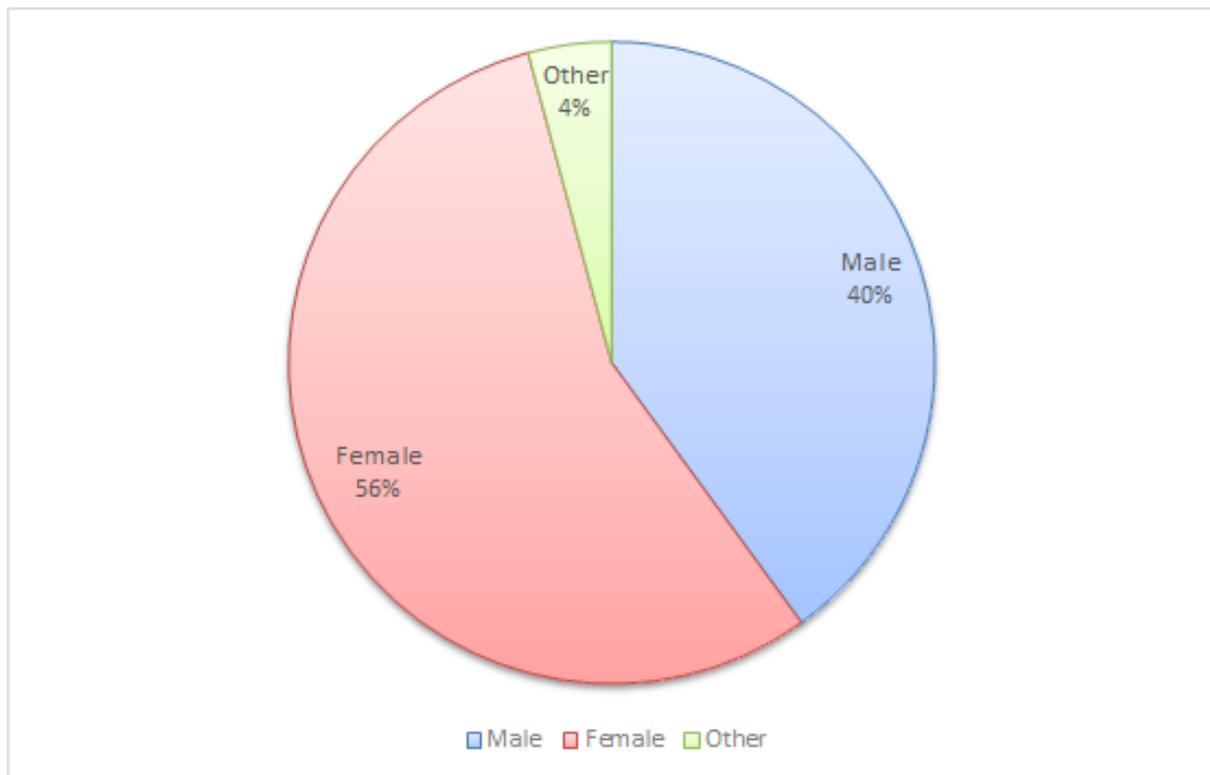


Table M.1 Distribution of Respondents' Economies

Economies	Number
Canada	1
Chile	6
China	7
Hong Kong, China	3
Japan	3
Peru	1
Papua New Guinea	3
Thailand	1
Chinese Taipei	98

Figure M.2 Composition of Gender in Total Responses



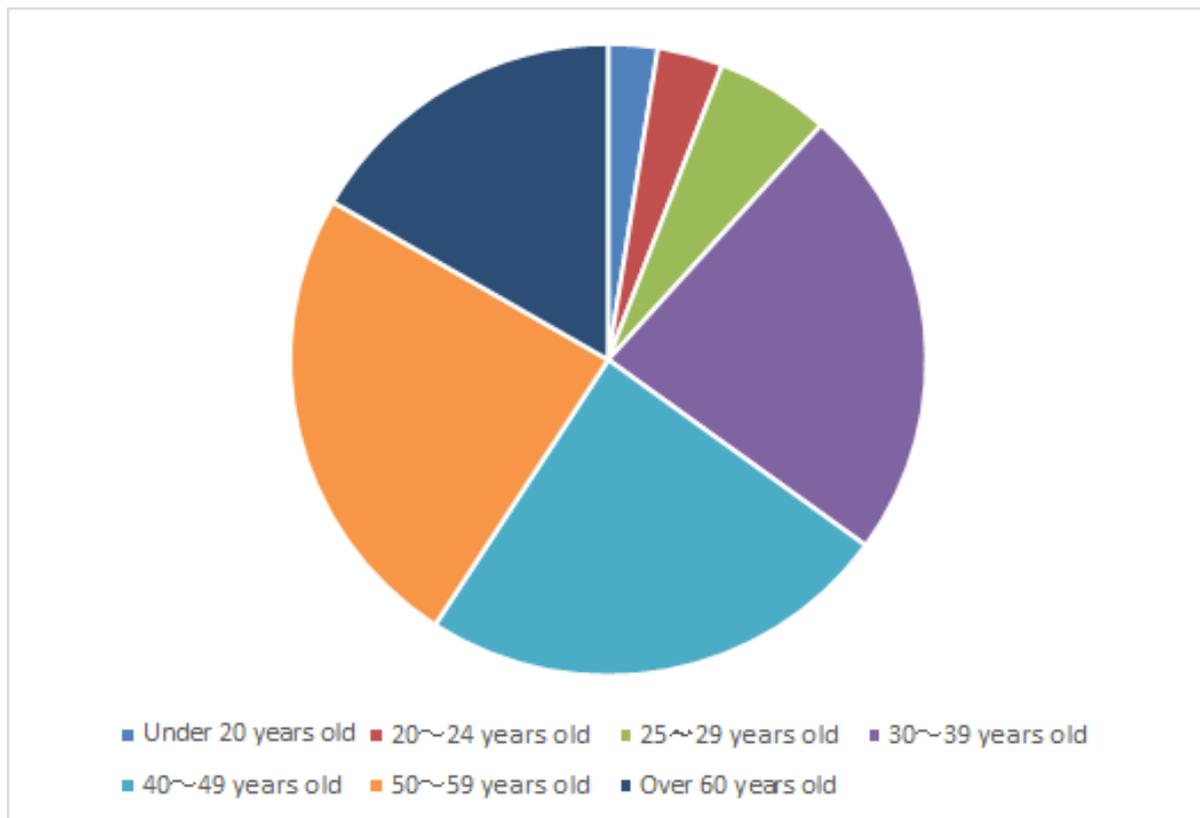
Note: Unit: Percent

Table M.2 Composition of Gender in Total Responses

Gender	Number
Male	48
Female	67
Other	5

Note: Unit: Percent

Figure M.3 Age Groups in Total



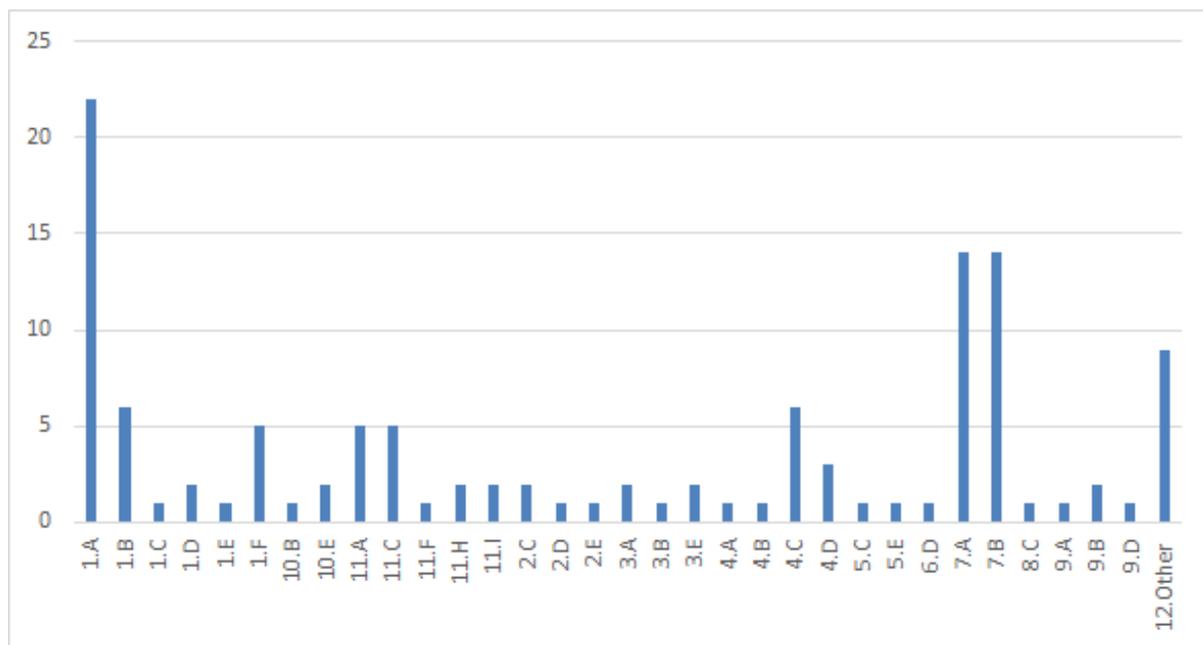
Note: Unit: Percent

Table M.3 Age Groups in Total

Age [↕]	Number [↕]
Under 20 years old [↕]	3 [↕]
20~24 years old [↕]	4 [↕]
25~29 years old [↕]	7 [↕]
30~39 years old [↕]	28 [↕]
40~49 years old [↕]	29 [↕]
50~59 years old [↕]	29 [↕]
Over 60 years old [↕]	20 [↕]

Note: Unit: Percent

Figure M.4 Distribution of Sectors in Total



Note: Unit: Percent

Table M.4 Distribution of Sectors in Total

1.A ^o	22 ^o
1.B ^o	6 ^o
1.C ^o	1 ^o
1.D ^o	2 ^o
1.E ^o	1 ^o
1.F ^o	5 ^o
10.B ^o	1 ^o
10.E ^o	2 ^o
11.A ^o	5 ^o
11.C ^o	5 ^o
11.F ^o	1 ^o
11.H ^o	2 ^o
11.I ^o	2 ^o
2.C ^o	2 ^o
2.D ^o	1 ^o
2.E ^o	1 ^o
3.A ^o	2 ^o
3.B ^o	1 ^o
3.E ^o	2 ^o
4.A ^o	1 ^o
4.B ^o	1 ^o
4.C ^o	6 ^o
4.D ^o	3 ^o
5.C ^o	1 ^o
5.E ^o	1 ^o
6.D ^o	1 ^o
7.A ^o	14 ^o
7.B ^o	14 ^o
8.C ^o	1 ^o
9.A ^o	1 ^o
9.B ^o	2 ^o
9.D ^o	1 ^o
12.Other ^o	9 ^o

Note: Unit: Percent

Figure M.5 Number of Years since Establishment of the Business in Total

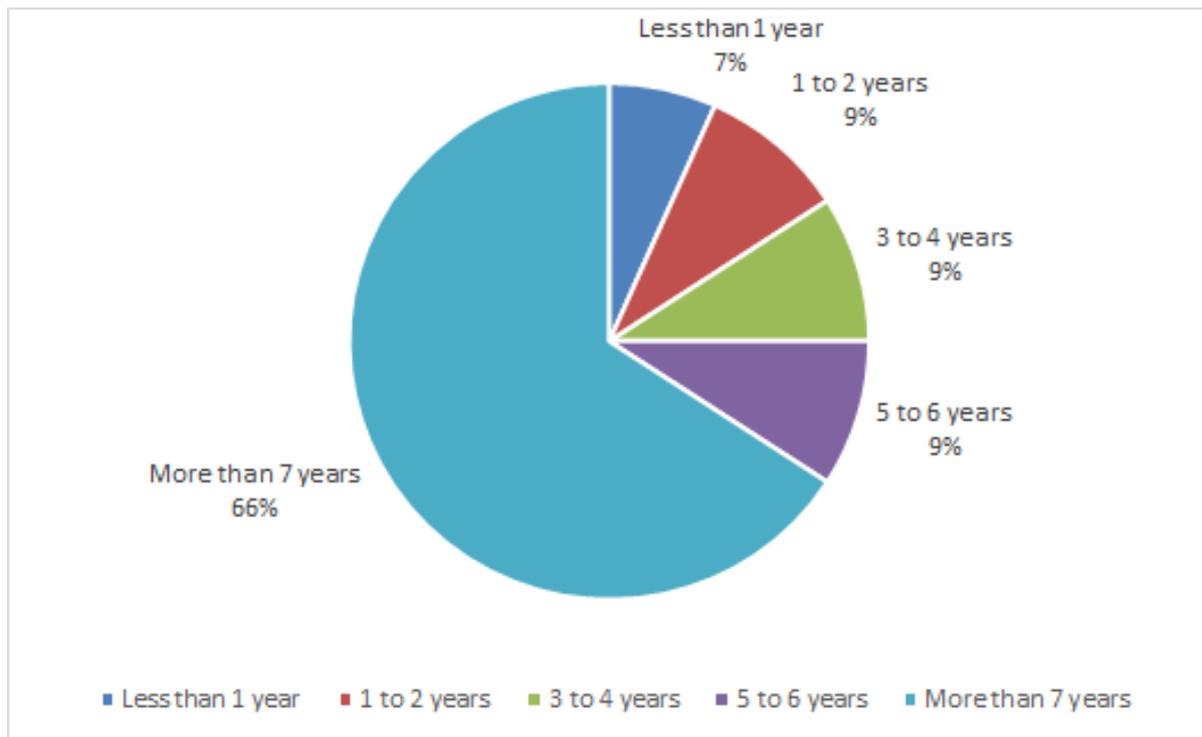


Table M.5 Number of Years since Establishment of the Business in Total

Less than 1 year ^a	8 ^c
1 to 2 years ^a	11 ^c
3 to 4 years ^a	11 ^c
5 to 6 years ^a	11 ^c
More than 7 years ^a	79 ^c

Figure M.6 Distribution of Firm Size Based on the Number of Employees

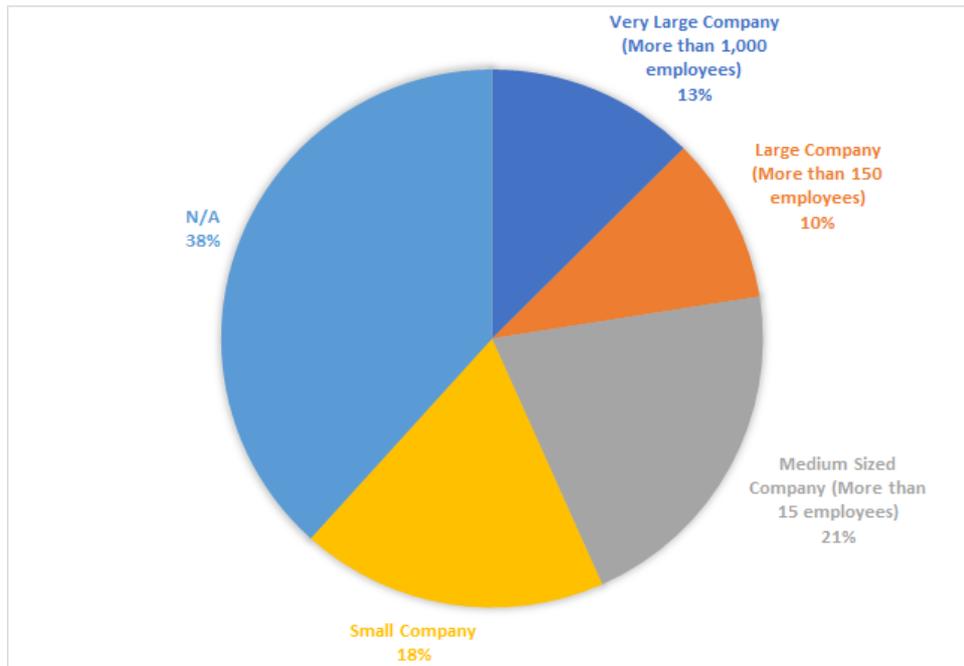


Table M.6 Distribution of Firm Size Based on the Number of Employees

Very Large Company (More than 1,000 employees) [†]	15 [†]
Large Company (More than 150 employees) [†]	12 [†]
Medium Sized Company (More than 15 employees) [†]	25 [†]
Small Company [†]	22 [†]

Figure M.7 Percentage of Respondents Considering Overseas Business Expansion (Total)

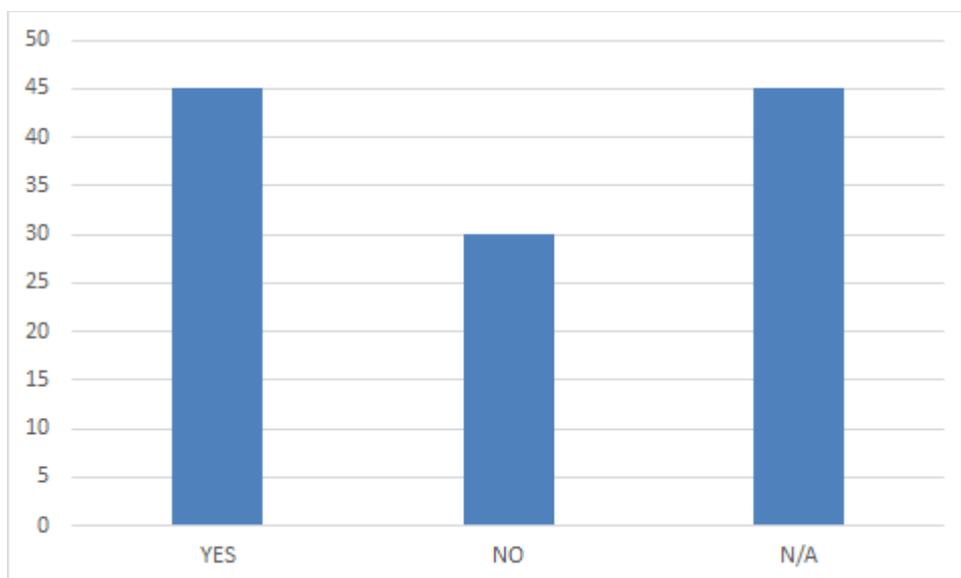


Table M.7 Percentage of Respondents Considering Overseas Business Expansion (Total)

YES [†]	45 ^{††}
NO [†]	30 ^{††}
N/A [†]	45 ^{††}

Figure M.8 Percentage of Respondents Considering Overseas Business Expansion (Those Who Answered Question 6 onward)

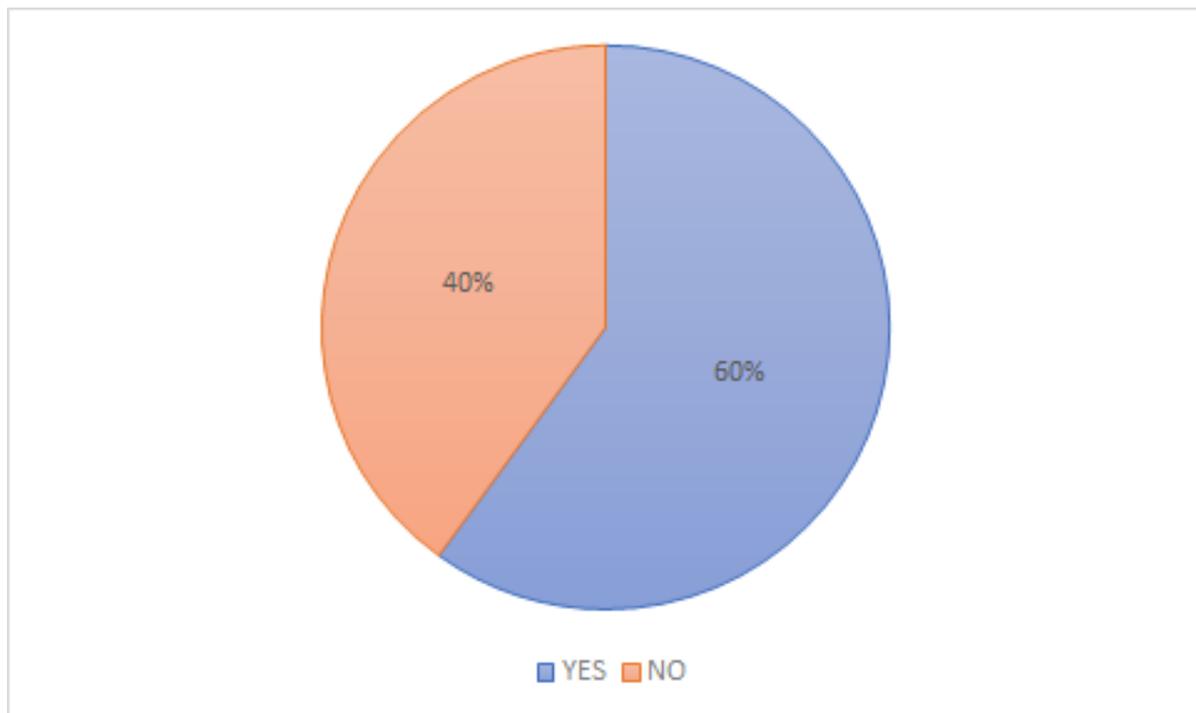


Figure M.9 Distribution of Respondents' Economies (Those Who Answered Question 6 onward)

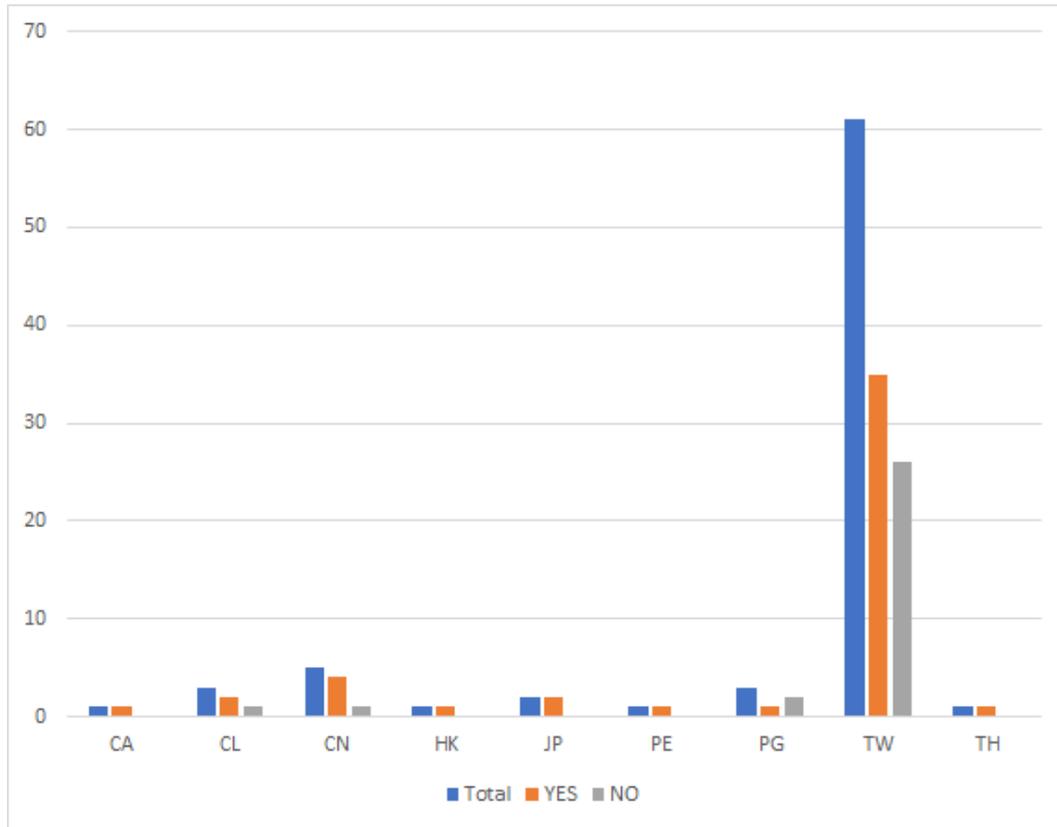


Figure M.10 Distribution of Respondents' Gender (Those Who Answered Question 6 onward)

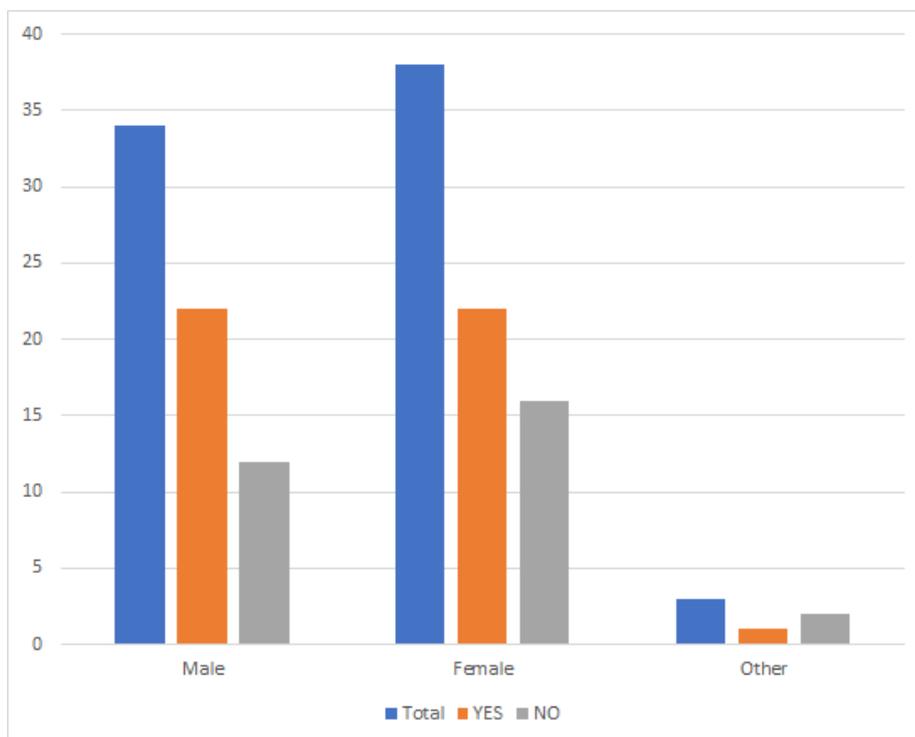


Figure M.11 Distribution of Respondents' Age Groups (Those Who Answered Question 6 onward)

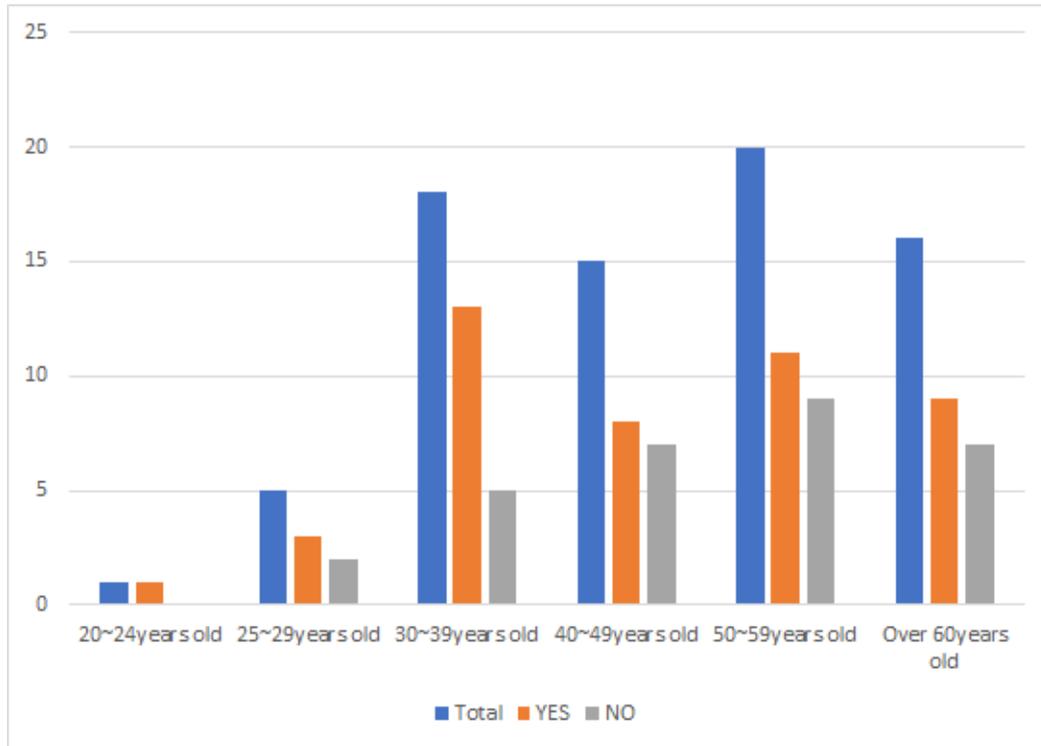


Figure M.12 Distribution of Respondents' Sectors (Those Who Answered question 6 onward)

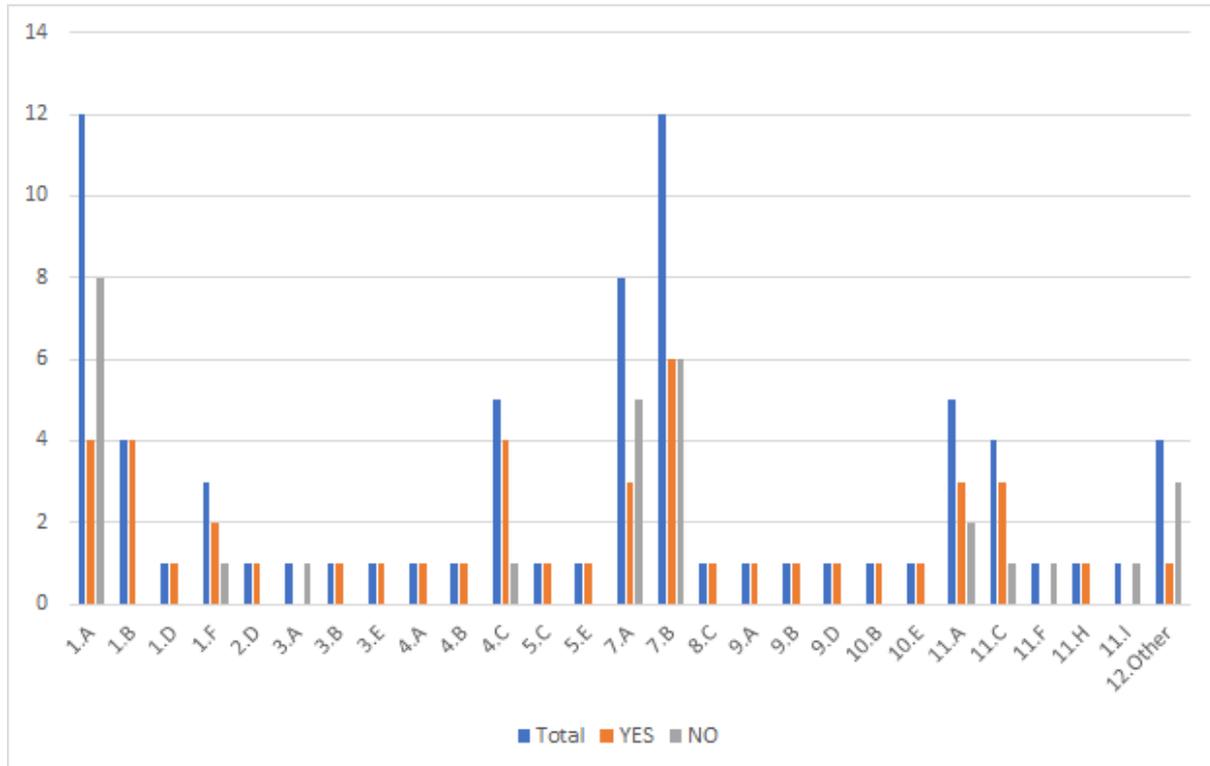


Figure M.13 Number of Years since the Establishment of Business (Those Who Answered Question 6 onward)

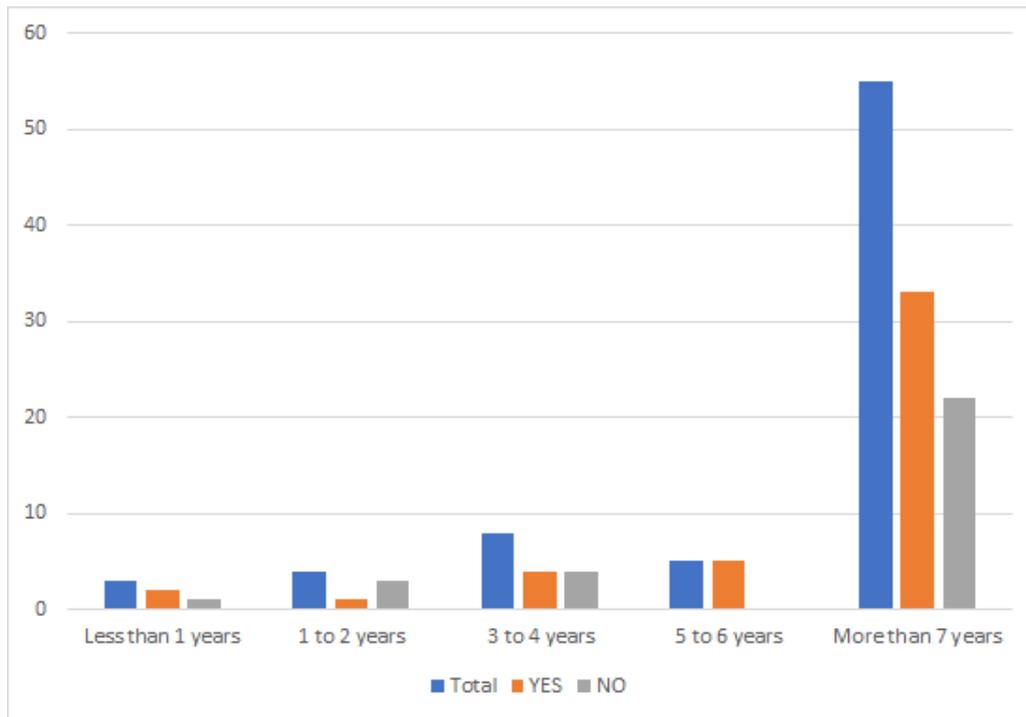


Figure M.14 Distribution of Firm Size Based on the Number of Employees

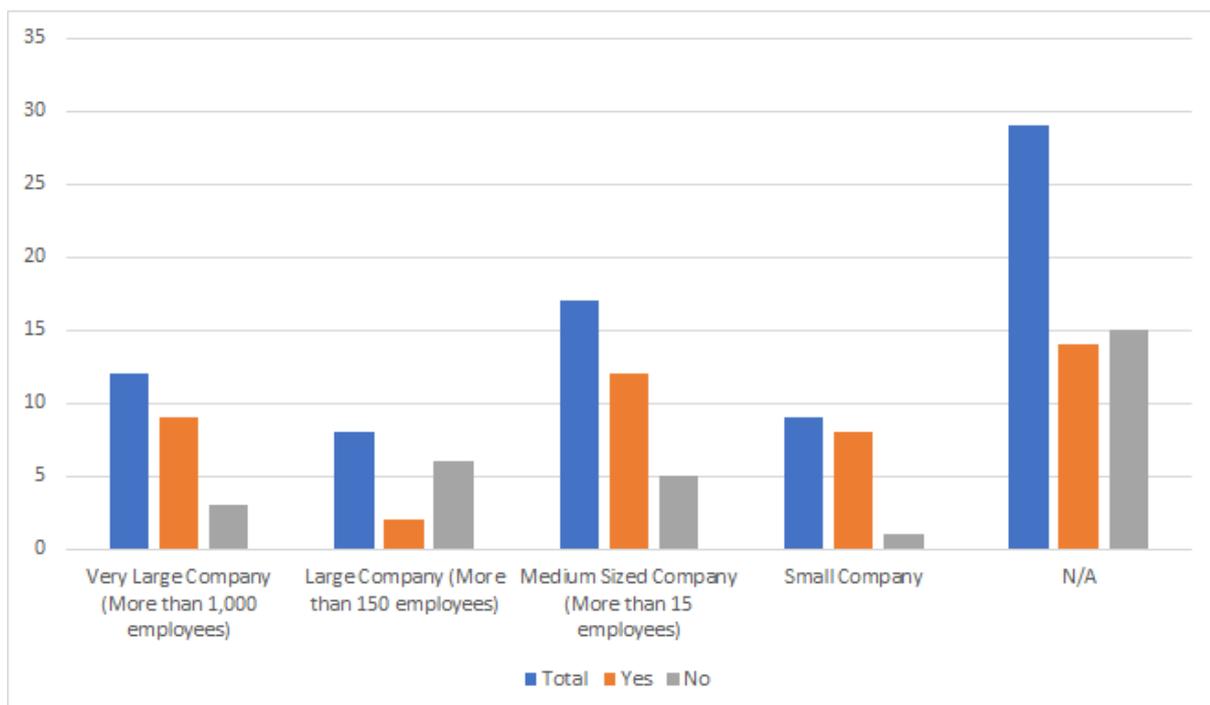


Figure M.15 Responses to the Questions on Restriction (Foreign Entry)

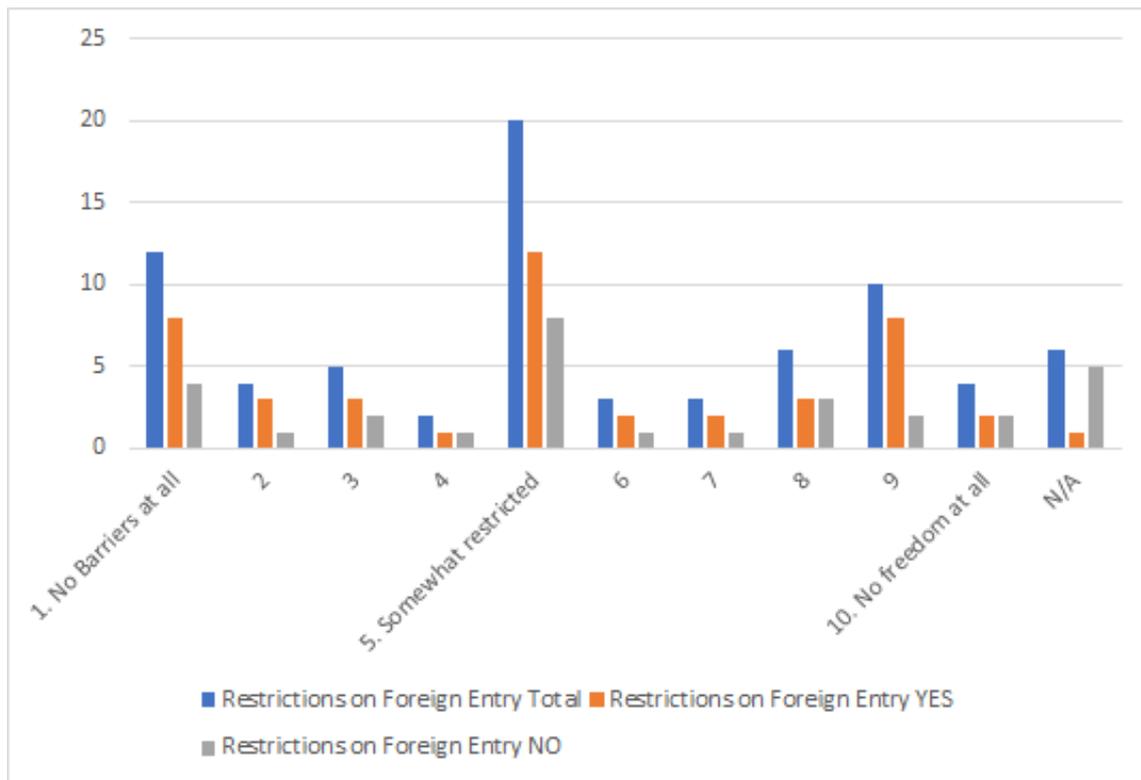


Figure M.16 Responses to the Questions on Restriction (Movement of People)

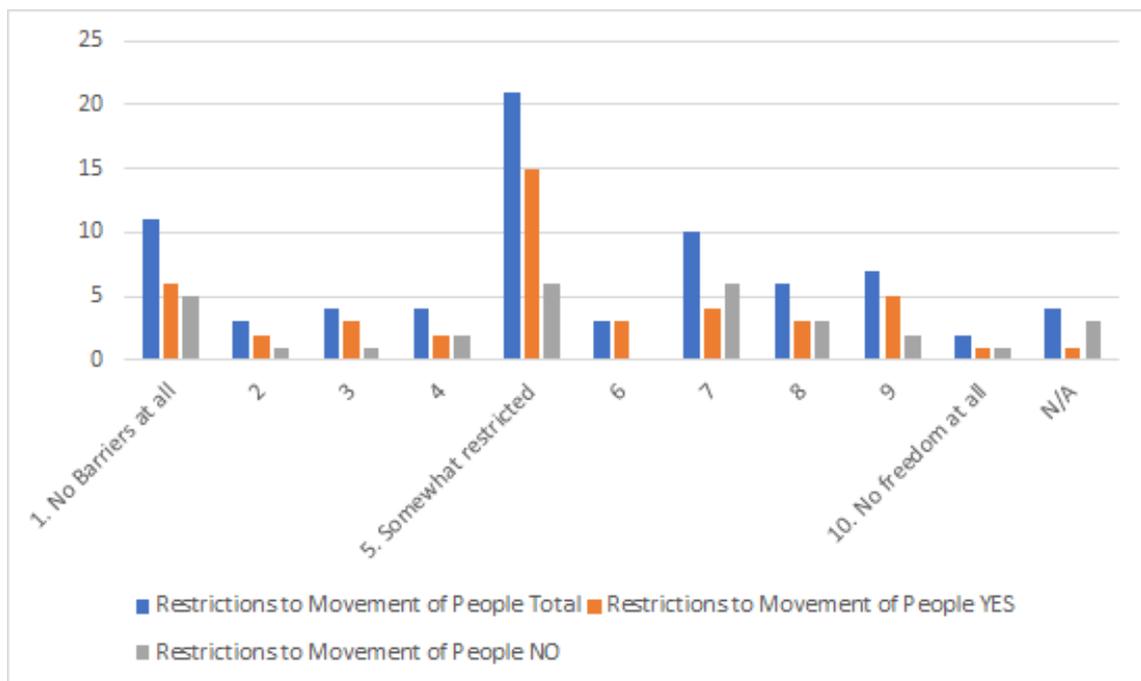


Figure M.17 Responses to the Questions on Restriction (Discriminatory Measures)

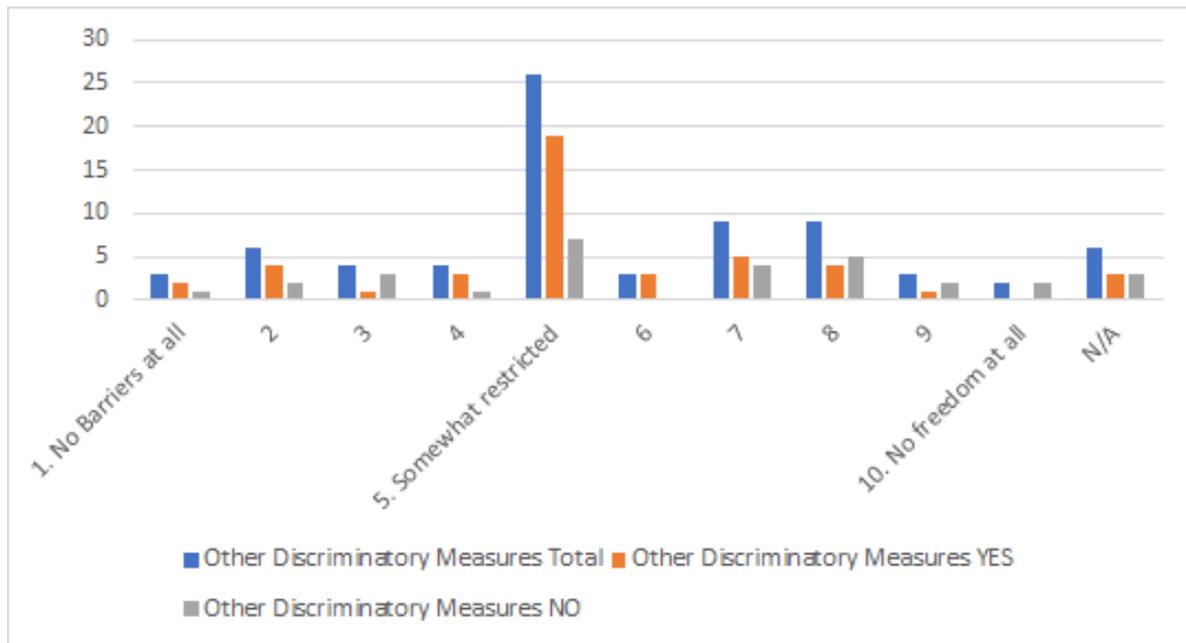


Figure M.18 Responses to the Questions on Restriction (Barriers to Competition)

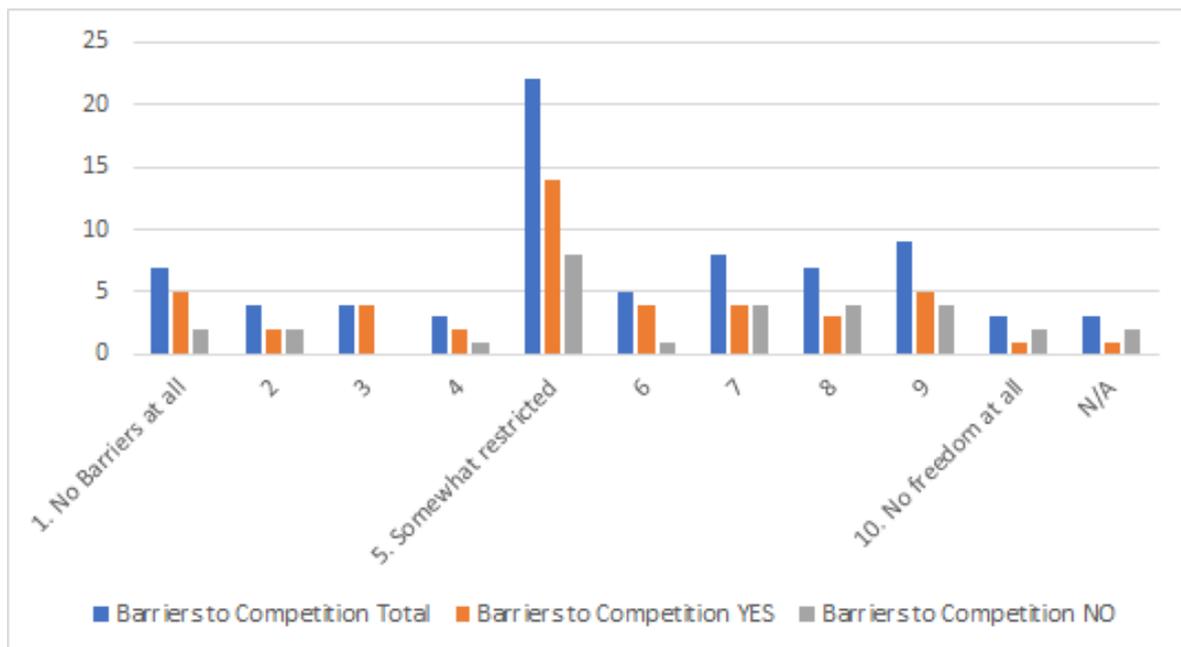


Figure M.19 Responses to the Questions on Restriction (Regulatory Transparency)

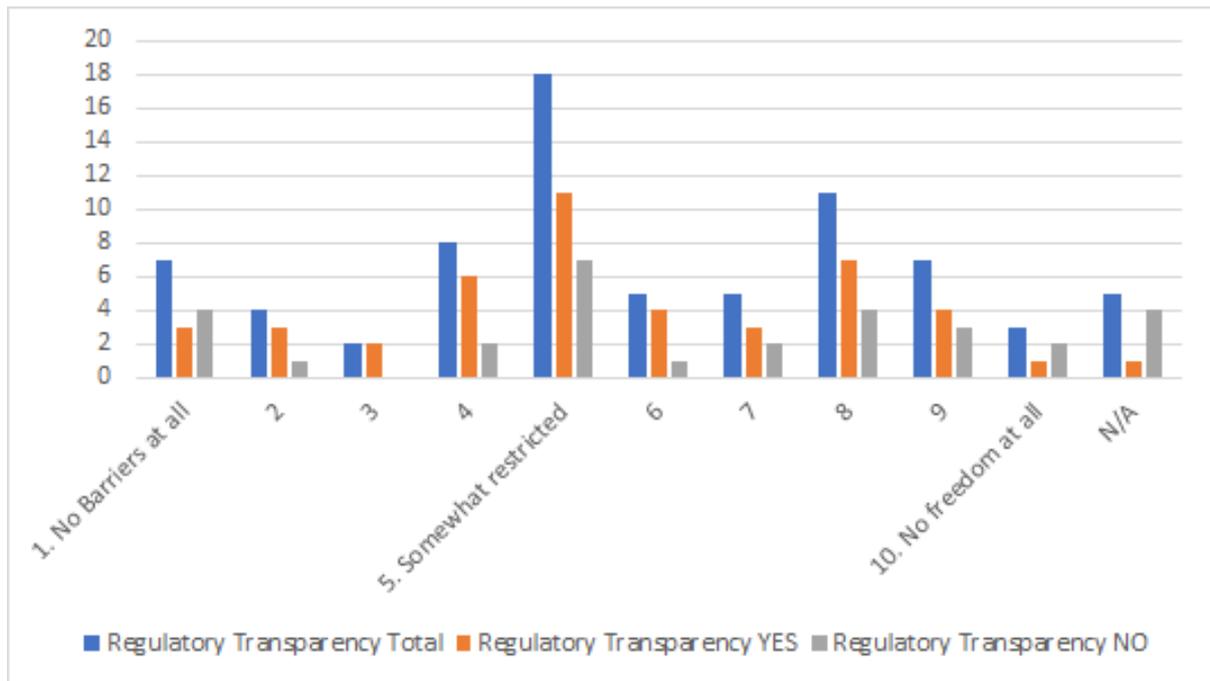


Figure M.20 Yes/No Weighted Average Score

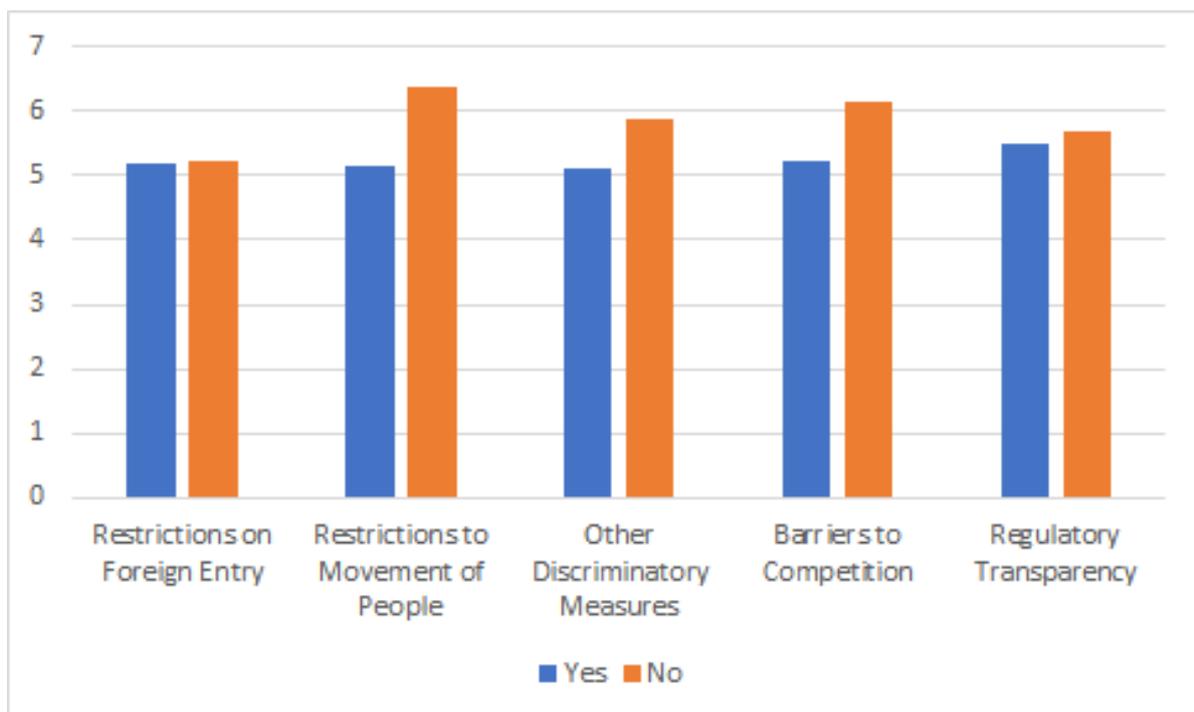


Figure M.21 Gender and Yes/No Weighted Average Score

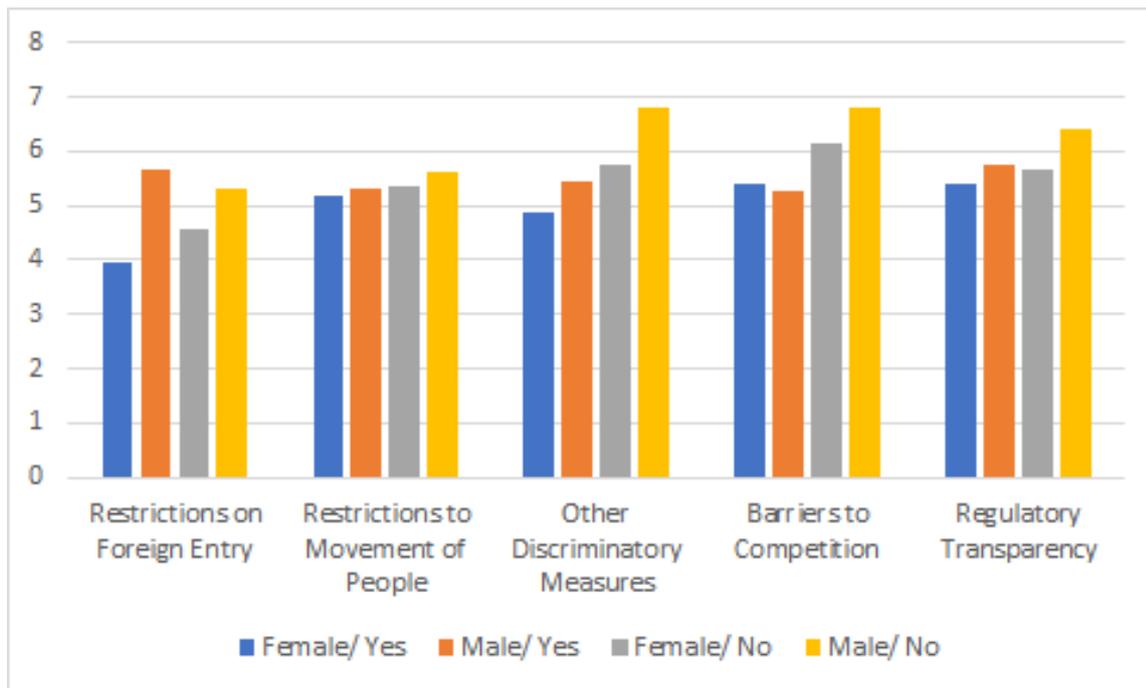


Figure M.22 Responses to the Question “How much will the following factors affect your decision?”

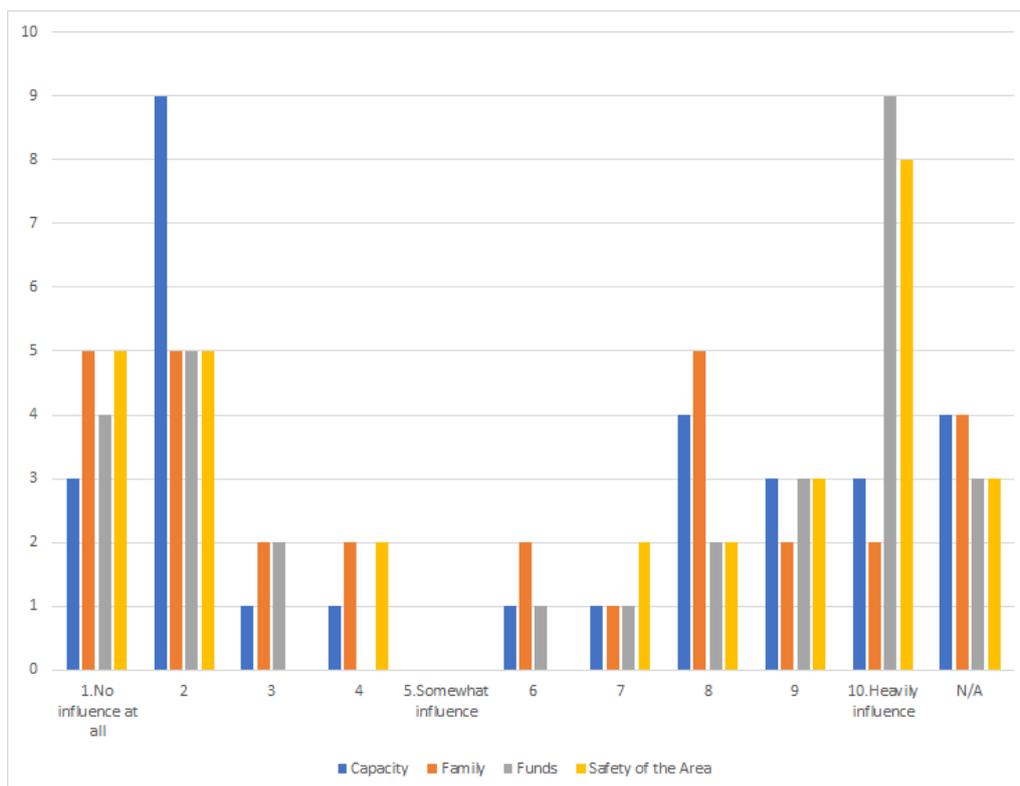


Figure M.23 Number of Sear Since the Establishment of Business (by Gender)

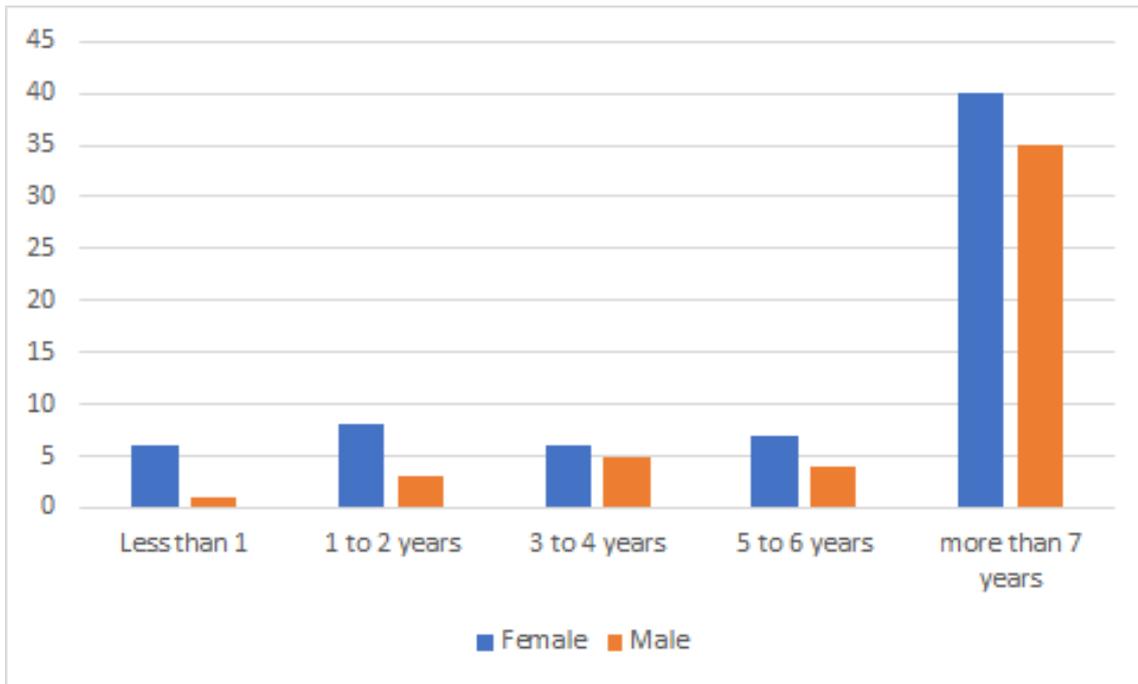


Figure M.24 Distribution of Firm Size (by Gender)

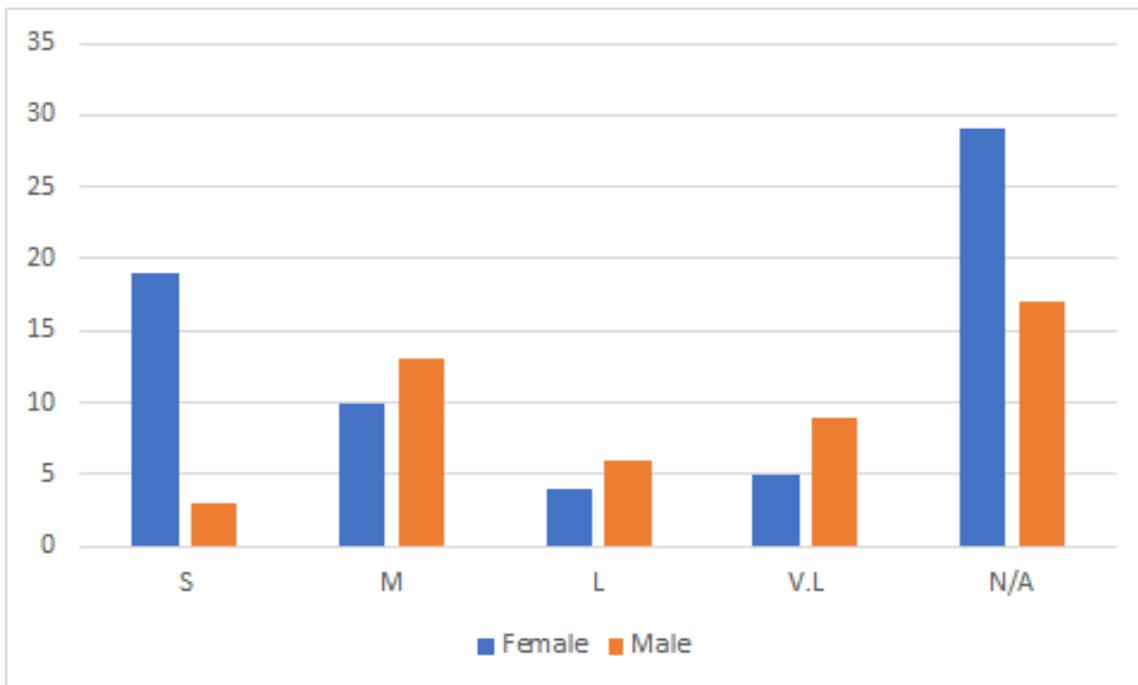


Figure M.25 Results of Logistics Regression Analysis

```
. logit OverseasExpansion Gender Agegroup Numberofyears NumberofEmployee

Iteration 0:  log likelihood = -26.351342
Iteration 1:  log likelihood = -23.309063
Iteration 2:  log likelihood = -23.190067
Iteration 3:  log likelihood = -23.189523
Iteration 4:  log likelihood = -23.189523

Logistic regression                Number of obs   =      43
                                   LR chi2(4)       =      6.32
                                   Prob > chi2      =     0.1762
Log likelihood = -23.189523        Pseudo R2      =     0.1200
```

OverseasExpansion	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Gender	-.2793633	.8422965	-0.33	0.740	-1.930234 1.371508
Agegroup	-.7129687	.3734875	-1.91	0.056	-1.444991 .0190533
Numberofyears	.6602336	.3756603	1.76	0.079	-.0760471 1.396514
NumberofEmployee	-.3922637	.3786066	-1.04	0.300	-1.134319 .3497916
_cons	1.481517	1.801646	0.82	0.411	-2.049645 5.012679

```
. logit OverseasExpansion Gender Agegroup NumberofEmployee Numberofyears IntA IntB IntC
```

```
Iteration 0:  log likelihood = -26.351342
Iteration 1:  log likelihood = -21.586011
Iteration 2:  log likelihood = -21.200953
Iteration 3:  log likelihood = -21.157646
Iteration 4:  log likelihood = -21.140917
Iteration 5:  log likelihood = -21.135264
Iteration 6:  log likelihood = -21.133949
Iteration 7:  log likelihood = -21.13367
Iteration 8:  log likelihood = -21.133607
Iteration 9:  log likelihood = -21.133591
Iteration 10: log likelihood = -21.133588
Iteration 11: log likelihood = -21.133587
```

```
Logistic regression                Number of obs   =      43
                                   LR chi2(7)       =     10.44
                                   Prob > chi2      =     0.1652
Log likelihood = -21.133587        Pseudo R2      =     0.1980
```

OverseasExpansion	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Gender	84.61846	16147.76	0.01	0.996	-31564.42 31733.66
Agegroup	2.202561	2.70187	0.82	0.415	-3.093007 7.49813
NumberofEmployee	-.3371808	.400427	-0.84	0.400	-1.122003 .4476417
Numberofyears	2.164913	1.800919	1.20	0.229	-1.364824 5.694651
IntA	-.6909072	.873422	-0.79	0.429	-2.402783 1.020968
IntB	-13.63037	2691.294	-0.01	0.996	-5288.47 5261.21
IntC	-.4570138	.4789731	-0.95	0.340	-1.395784 .4817562
_cons	-8.458764	9.579003	-0.88	0.377	-27.23327 10.31574

Note: 0 failures and 1 success completely determined.

Note: The two regression results above show that younger generation and longer period of work both lead to the choice of overseas business expansion; gender does not have a significant impact on the choice of overseas business expansion.

```
. logit ResponseYes1No0 RestrictionsonForeignEntry RestrictionstoMovementofPeop OtherDiscriminatoryMeasures BarrierstoCompetition RegulatoryTransparency
```

```
Iteration 0: log likelihood = -44.260386
Iteration 1: log likelihood = -39.99819
Iteration 2: log likelihood = -39.931606
Iteration 3: log likelihood = -39.931471
Iteration 4: log likelihood = -39.931471
```

```
Logistic regression           Number of obs   =           67
                             LR chi2(5)          =           8.66
                             Prob > chi2         =           0.1235
Log likelihood = -39.931471   Pseudo R2      =           0.0978
```

ResponseYes1No0	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
RestrictionsonForeignEntry	.3301847	.2055334	1.61	0.108	-.0726533	.7330228
RestrictionstoMovementofPeop	-.0185654	.2607742	-0.07	0.943	-.5296735	.4925427
OtherDiscriminatoryMeasures	-.4321199	.2529976	-1.71	0.088	-.927986	.0637463
BarrierstoCompetition	-.1854299	.1917917	-0.97	0.334	-.5613347	.1904749
RegulatoryTransparency	.0723938	.2073639	0.35	0.727	-.334032	.4788197
_cons	1.956417	.8283464	2.36	0.018	.3328875	3.579946

Note: The regression result shows that other discriminatory measures of the host economies have a significant negative impact on the choice of overseas business expansion.

Figure M.26 Data Set from the Online Survey

Start Date	Please tell us your gender.	What is your age group?	Which economy is your business currently based in? Moreover, how many employees do you have?	Please select your industry.	How many years have passed since you started your business?	Have you ever thought of expanding your business to overseas?
	Response	Response	Open-Ended Response	Response	Response	Response
2019-03-11 15:42:29	Male	Over 60 years old	Our business is based in Chinese Taipei and we had 8,134 employees in 2017.	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	Yes
2019-03-11 15:15:08	Other	Over 60 years old	123	4. Distribution Services->D. Franchising	More than 7 years	
2019-03-07 16:49:48	Male	30~39 years old	Chinese Taipei	7. Financial Services->A. Financial Services	More than 7 years	No
2019-03-07 16:09:44	Male	40~49 years old	Chinese Taipei	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	Yes
2019-03-07 13:19:37	Female	30~39 years old	Ice cream industry, 6 employees	10. Recreational, Cultural and Sporting Services->B. News Agency Services	5 to 6 years	Yes
2019-03-07 13:05:16	Male	50~59 years old	Japan, 3439	5. Educational Services->C. Higher Education Services	More than 7 years	Yes
2019-03-07 11:59:38	Other	Over 60 years old	Our business based in Chinese Taipei and we had 8,134 employees in 2017.	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	Yes
2019-03-07 10:12:30	Male	40~49 years old	Financial Industry, About 300 people	7. Financial Services->B. Banking and Other Financial Services	3 to 4 years	No
2019-03-07 10:34:27	Other	Over 60 years old	banking, 450	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	No
2019-03-06 17:46:45	Female	50~59 years old	Chinese Taipei	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	No
2019-03-06 17:43:08	Female	Under 20 years old	3000	4. Distribution Services->D. Other	Less than 1 year	
2019-03-06 17:31:17	Other	Over 60 years old	Chinese Taipei, 880 employees	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	No
2019-03-06 16:26:11	Male	40~49 years old	7000	7. Financial Services->B. Banking and Other Financial Services	More than 7 years	Yes
2019-03-06 16:20:24	Female	50~59 years old	Chinese Taipei, 30	4. Distribution Services->B. Wholesale trade services	More than 7 years	Yes

Source: Original Survey Result

Access to online file:

https://drive.google.com/file/d/171ESU9g_Ft_U1hw04b2dnsWBwkMdJ9aR/view?usp=sharing

APPENDIX N. Current Status of Educational Service and STRI

		0 = No restrictions 1 = Restrictions								
Education		Sector Openness								
Economy	Mode	Market entry allowed	Market closed - citizenship of host economy required	Automatic recognition of foreign license granted	Foreign-licensed professionals eligible to practice subject to conditions	Greenfield branch-allowed	Greenfield subsidiary-allowed	Greenfield subsidiary - max. ownership allowed	Acquisition domestic private entity - allowed	
	Mode4		1	1	1	1				
Australia	Mode1		1	1	1	0				
	Mode3		1	1	1	0				
	Mode4		1	1	1	0				
Brunei Darussalam	Mode1		1	0	1	0				
	Mode3		1	0	1	0				
	Mode4		1	0	1	0				
Canada	Mode1		0	0	1	0				
	Mode3		0	0	1	0				
	Mode4		0	0	1	0				

Notes: Scoring therein are based on information obtained from the reference materials (below) and survey/online publications. Online file only due to its large size; Only the beginning part of the list is in the report.

Access to online file: <https://drive.google.com/file/d/1FTNIuD60zWqsKry6rXa-hZAXPhwCSe/view?usp=sharing>

APPENDIX N. REFERENCES

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APPENDIX O. Current Status of Environmental Service and STRI

		Sector Openness1	Sector Openness 2	Sector Openness 3	Sector Openness 4	Form of Entry1	Form of Entry2	Form of Entry3
		Market entry allowed	Market closed - citizenship of host economy required	Automatic recognition of foreign license granted	Foreign-licensed professionals eligible to practice subject to condition	Greenfield branch-allowed	Greenfield subsidiary - allowed	Greenfield subsidiary - max. ownership allowed
		Restrictions on Types of Legal Entity	citizenship Requirements	Licensing and Approval Procedures	Licensing and Approval Procedures	Limits on Foreign Investment	Limits on Foreign Investment	Limits on Foreign Investment
Japan	Mode1	1	1	1	1	1	1	1
Japan	Mode3	1	1	1	1	1	1	1
Japan	Mode4	1	1	1	1	1	1	1
Australia	Mode1		1	1	1	1	1	1
Australia	Mode3		1	1	1	1	1	1
Australia	Mode4		1	1	1	1	1	1
Brunei Darussalam	Mode1	1	1	1	1	1	1	1
Brunei Darussalam	Mode3	1	1	1	1	1	1	1
Brunei Darussalam	Mode4	1	1	1	1	1	1	1

Notes: Scoring therein are based on information obtained from the reference materials (below) and survey/online publications. Online file only due to its large size; Only the beginning part of the list is in the report. Access to online file:

https://drive.google.com/file/d/1N8Mgciq83vUb81Btk_wNINqf4pFPpS2H/view?usp=sharing

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APPENDIX P. Current Status of Real Estate Service and STRI

Real Estate Agency		Sector Openness							
Economy	Mode	Market entry allowed	Market closed - citizenship of host economy required	Automatic recognition of foreign license granted	Foreign-licensed professionals eligible to practice subject to conditions	Greenfield branch-allowed	Greenfield subsidiary-allowed	Greenfield subsidiary - max. ownership allowed	Acquisition domestic private entity - allowed
Japan	Mode1	0	0	1	1	0	0	0	0
	Mode3	0	0	1	1	0	0	0	0
	Mode4	1	0	1	1	0	0	0	0
United States	Mode1	0	1	1	1				
	Mode3	0	1	1	1				
	Mode4	0	1	1	1				
Singapore	Mode1	0	0	1	1				
	Mode3	0	0	1	1				
	Mode4	0	0	1	1				

Notes: Scoring therein are based on information obtained from the reference materials (below) and survey/online publications. Online file only due to its large size; Only the beginning part of the list is in the report. Access to online file:

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APPENDIX Q. Financial Ratios

Table Q.1 Financial ratios for Solid Waste Management Services

Table S-1. Financial ratios for solid waste management services

		Solid Waste Management Business	All types of industry	Service Industries	Solid Waste Management Business (Small-scale)
Profitability analysis	General profitability analysis				
	1. Total capital operating income ratio (%)	5.4	3	1.7	3.4
	2. Return of asset (%)	6.2	3.6	3.2	4.8
	3. Total capital current term net income rate (%)	3.7	2.7	2.3	3
	4. Owned capital current term net income rate (%)	8.2	7.1	6.7	6.5
	Sales amount profit analysis				
	5. Ratio of gross profit to net sales (%)	51	24.5	41.4	60.8
	6. Operating profit on sales (%)	6.2	2.6	2	4.1
	7. Ratio of current profits to assets (%)	7.1	3.1	3.8	5.7
	8. Sales amount current term net income rate (%)	4.2	2.3	2.7	3.7
	9. The sales amount vs. the labour cost ratio (%)	9.5	6.9	21.9	3.3
	10. The sales amount vs. distribution cost ÷ The administrative expense ratio (%)	44.8	21.9	39.5	56.7
	11. The sales amount vs. the personnel expenses ratio (%)	20.5	9.9	20.4	25.1
12. The sales amount vs. the interest expense discount ratio (%)	0.7	0.6	0.4	0.7	

Access to online file:

https://drive.google.com/file/d/1rEvYGzRovZGhOC3xNh3qwmAD_9yu_bZM/view?usp=sharing

Table Q.2 Financial Ratios for Real Estate Brokering Service

Table S.2 Financial Ratios for Real Estate Brokering Service

		Real estate transactions business	All types of industry	Real estate service, Rental and leasing business	Real estate transactions business (Small-scale)
Profitability Analysis	General profitability analysis				
	1. Total capital to operating income ratio (%)	4.5	3.0	2.7	2.1
	2. Return on assets (%)	4.3	3.6	2.7	2.1
	3. Total capital to current term net income rate (%)	3.3	2.7	4.5	1.9
	4. Own capital to current net income ratio (%)	16.8	7.1	11.1	29.9
	Sales amount and profit analysis				
	5. Ratio of net sales to gross profit (%)	25.5	24.5	43.4	23.5
	6. Ratio of sales to operating profit (%)	5.6	2.6	8.9	2.7
	7. Ratio of sales to current profits (%)	5.4	3.1	9.1	2.6
	8. Sales to current net income ratio (%)	4.2	2.3	15.1	2.4
	9. Sales to labour cost ratio (%)	0.4	6.9	0.8	0.2
	10. Sales to distribution cost, administrative expense ratio (%)	19.9	21.9	34.5	20.8
	11. Sales to personnel expenses ratio (%)	7.8	9.9	11.4	7.9
12. Sales to interest expense discount ratio (%)	1.5	0.6	2.8	1.8	

Access to online file:

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Table Q.3 Financial Ratios for Real Estate Leasing and Management Service

Table S.3 Financial Ratios for Real Estate Leasing and Management Service

		Real estate transactions business	All types of industry	Real estate industry / Rental and leasing service	Real estate transactions service (Small-scale)
Profitability analysis	General profitability analysis				
	1. Total capital to operating income ratio (%)	2.3	3	2.7	2.1
	2. Return on assets (%)	2.4	3.6	2.7	2.2
	3. Total capital to current term net income rate (%)	5.2	2.7	4.5	5.5
	4. Own capital to current net income ratio (%)	11	7.1	11.1	11.4
	Sales to profit analysis				
	5. Ratio of net sales to gross profit (%)	70.8	24.5	43.4	81.7
	6. Ratio of sales to operating profit (%)	14.6	2.6	8.9	15.8
	7. Ratio of sales to current profits (%)	15.2	3.1	9.1	16.5
	8. Sales to current net income ratio (%)	33.1	2.3	15.1	42.3
	9. Sales to labour cost ratio (%)	0.9	6.9	0.8	0.6
	10. Sales to distribution cost, administrative expense ratio (%)	56.2	21.9	34.5	65.9
	11. Sales to personnel expenses ratio (%)	15.9	9.9	11.4	17.3
12. Sales to interest expense discount ratio (%)	5.3	0.6	2.8	6.7	

Access to online file:

https://drive.google.com/file/d/1laf5TLA8g_wTFUK1yir5MutQxVKxl-f/view?usp=sharing

APPENDIX R. Profit and Loss Statement (Composition Rate)

Table R.1 Profit and Loss Statement for Solid Waste Management Services

Table T-1. Profit and loss statement for solid waste management services

				Solid Waste Management Business						All industries	Service Industries	Solid Waste Management Business (Small-scale)
				Amount of money (thousand yen)	The sales amount share in total (%)	operating expense share in total (%)	cost of sales share in total (%)	Production cost share in total (%)	Selling and administration cost share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)
Sales				214,227	100					100	100	100
Operating Expenditures (Cost of Sales + Selling Costs)				201,009	93.8	100				97.4	98	95.9
Cost of Sales				105,016	49	52.2	100			75.5	58.6	39.2
	product stocking cost			18,381	8.6	9.1	17.5			38.7	11.4	10.8
	manufacturing cost			86,635	40.4	43.1	82.5	100		36.8	47.2	28.4
	Material cost			8,012	3.7	4	7.6	9.2		10.2	3.7	1
	Labor cost			20,349	9.5	10.1	19.4	2.5		6.9	21.9	3.3
	Subcontract cost			17,909	8.4	8.9	17.1	20.7		10.6	12.2	5.1
	Depreciation cost			4,773	2.2	2.4	4.5	5.5		1	0.7	1.2
	Other costs of sales			35,592	16.6	17.7	33.9	41.1		8.1	8.6	17.9
Gross Profit				109,212	51	54.3				24.5	41.4	60.8

Access to online file:

https://drive.google.com/file/d/1AwfKDw0qQlbt2qv2Y7xr_xcLbUHM6h8o/view?usp=sharing

Table R.2 Profit and Loss Statement for Real Estate Services

Table T.2 Profit and Loss Statement for Real Estate Broker Services

Real Estate Services												
All industries												
Real estate industry ☑ Rental and leasing businesses												
Real estate transactions businesses (Small-scale)												
				Amount of money (thousand yen)	The sales amount share in total (%)	operating expense share in total (%)	cost of sales share in total (%)	Production cost share in total (%)	Selling and administration cost share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)
Sales				263,394	100					100	100	100
Operating Expenditures (Cost of Sales + Selling Costs)				248,550	94.4	100				97.4	91.1	97.3
Cost of Sales				196,254	74.5	79	100			75.5	56.6	76.5
	Product stocking cost			165,227	62.7	66.5	84.2			38.7	36.4	70
	Manufacturing cost☑			31,027	11.8	12.5	15.8	100		36.8	20.2	6.5
	Material cost			3,606	1.4	1.5	1.8	11.6		10.2	1.1	0.3
	Labor cost			1,148	0.4	0.5	0.6	3.7		6.9	0.8	0.2
	Subcontract cost			16,132	6.1	6.5	8.2	52		10.6	4.9	4.3
	Depreciation cost			135	0.1	0.1	0.1	0.4		1	1.7	0
	Others			10,005	3.8	4	5.1	32.2		8.1	11.6	1.7
Gross Profit				67,140	25.5	27				24.5	43.4	23.5

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Table R.3 Profit and Loss Statement for Real Estate Leasing and Management Services

Table T.3 Profit and Loss Statement for Real Estate Leasing and Management Services

Real Estate Services										Real estate industry, Rental and leasing business	Real estate transactions business (Small-scale)	
										All industries		
			Amount of money	The sales amount shares in total	Operating expense share in total	Cost of sales share in total	Production cost share in total	Selling and administration cost share in total	Sales amount share in total	Sales amount share in total	Sales amount share in total	
Sales			80,654	100					100	100	100	
Operating Expenditures (Cost of Sales + Selling Costs)			68,872	85.4	100				97.4	91.1	84.2	
Cost of Sales			23,572	29.2	34.2	100			75.5	56.6	18.3	
Product stocking cost			5,142	6.4	7.5	21.8			38.7	36.4	6.2	
Manufacturing cost			18,430	22.9	26.8	78.2	100		36.8	20.2	12.1	
Material cost			362	0.4	0.5	1.5	2		10.2	1.1	0.5	
Personnel expenses			753	0.9	1.1	3.2	4.1		6.9	0.8	0.6	
Subcontracting cost			3,422	4.2	5	14.5	18.6		10.6	4.9	1.9	
Depreciation cost			2,053	2.5	3	8.7	11.1		1	1.7	2.3	
Other costs of sales			11,840	14.7	17.2	50.2	64.2		8.1	11.6	6.9	
Gross Profit			57,082	70.8	82.9				24.5	43.4	81.7	

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APPENDIX S. Balance Sheet (Composition Rate)

Table S.1 Balance Sheet for Solid Waste Management Services

Table U-1. Balance sheet for solid waste management services

				Solid Waste Management Business			All Industries		Service Industries		Solid Waste Management Business (Small-scale)	
				Amount of money (thousand yen)	The sales amount share in total (%)	operating expense share in total (%)	cost of sales share in total (%)	Production cost share in total (%)	Selling and administrative cost share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)
Assets				244,016	100		100		100		100	
Current assets				123,852	50.8		54.2		60.4		63	
Cash and Deposit				70,673	29		21.1		29.1		45.1	
Notes Receivable / Accounts Receivable				26,483	10.9		15.2		16.6		9.7	
Securities				912	0.4		1.2		0.9		-	
Inventories				1,786	0.7		8.5		2.1		0.6	
Others				23,998	9.8		8.2		11.6		7.6	
Fixed assets				120,041	49.2		45.5		39.3		36.9	
Tangible Fixed Assets				101,141	41.4		32.6		29.2		28.9	
Buildings, Structures, Buildings Accessories,				41,389	17		13		10.2		12.5	

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Table S.2 Balance Sheet for Real Estate Broker Services

			Real Estate Services			All industries	不動産業・物品賃貸業 Real estate industry · Rental and leasing business		Real estate transactions business (Small-scale)	
			Amount of money	Share in total (%)	Share in total (%)	Share in total (%)	Share in total (%)	Share in total (%)	Share in total (%)	Share in total (%)
Assets			510,158	100		100		100		100
Current assets			118,590	23.2		54.2		35.2		23.6
	Cash and Deposit		95,591	18.7		21.1		17.1		19.8
	Notes Receivable · Accounts Receivable		2,034	0.4		15.2		2.2		0.3
	Securities		4,348	0.9		1.2		0.7		0.8
	Inventories		2,261	0.4		8.5		7		0.3
	Other current assets		14,356	2.8		8.2		8.2		2.5
Fixed assets			391,147	76.7		45.5		64.7		76.3
	Tangible Fixed Assets		254,979	50		32.6		44.1		47.7

			Buildings, Structures, Buildings Accessories,	130,235	25.5	13	21	24.3
			Machinery and Equipment	2,518	0.5	3.5	0.7	0.5
			Ship, Vehicle, Tools, Appliance, Equipment	2,134	0.4	2.4	0.7	0.4
			Lease Assets	301	0.1	0.5	0.7	0.1
			Land	130,419	25.6	16	23.1	24.4
			Construction in progress	1,542	0.3	0.3	0.3	0.2
			Other tangible fixed assets	1,544	0.3	0.5	0.3	0.2

		Accumulated depreciation	-13,714	-2.7		-3.6		-2.6		-2.4	
		Intangible Fixed Assets	5,934	1.2		0.7		1		1	
		Investments and other Assets	130,234	25.5		12.1		19.7		27.6	
		Differed Assets	421	0.1		0.3		0.1		0.1	
Debt and Net Assets			510,158		100		100		100		100
		Debt	266,729		52.3		62.6		59.3		51.4
		Current Debt	72,036		14.1		33.2		20.5		13.9
		Acceptance payable, Accounts Payable	2,894		0.6		11.8		1.3		0.2
		Short-term loan (Financial Institution)	15,314		3		7.4		7.8		3

			Short-term loan (Other than Financial Institution)	19,419		3.8		3.2		4.1		4
			Lease Obligations	100		0		0.1		0.1		0
			Other current debts	34,310		6.7		10.7		7.2		6.7
		Fixed Debt		194,693		38.2		29.4		38.8		37.5
			Corporate Bond	3,551		0.7		0.6		0.6		0.6
			Long-Term Debts (Financial Institution)	101,590		19.9		19.1		22.8		20.3

			Long-Term Debts (other than Financial Institution)	29,210		5.7		4.5		6.1		5.7
			Lease Obligations	157		0		0.4		0.1		0
			Other fixed debts	60,185		11.8		4.8		9.2		10.9
	Net Assets			243,428		47.7		37.4		40.7		48.6
	Capital Stock			191,661		37.6		34.3		33.4		37
			Capital	14,412		2.8		4.4		2.9		2.9
			Capital Surplus	16,456		3.2		1.9		2.5		2.3
			Earned surplus	162,765		31.9		286		28.4		32.2
			Treasury Stock	-1,972		-0.4		-0.6		-0.3		-0.4
	Other net assets			51,767		10.1		3.1		7.3		11.5

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Table U.2 Balance Sheet for Real Estate Broker Services

		Real Estate Services			All industries		Real estate industry ☐ Rental and leasing business		Real estate transactions business (Small- scale)	
		Amou nt of money	Sh ar e in to tal %	Share in total%	Sha re in tot al %	Share in total%	Share in total%	Shar e in total %	Share in total%	
Assets		510,158	100		100		100		100	
Current assets		118,590	23.2		54.2		35.2		23.6	
Cash and Deposit		95,591	18.7		21.1		17.1		19.8	
Notes Receivable Accounts Receivable		2,034	0.4		15.2		2.2		0.3	
Securities		4,348	0.9		1.2		0.7		0.8	
Inventories		2,261	0.4		8.5		7		0.3	
Other current assets		14,356	2.8		8.2		8.2		2.5	
Fixed assets		391,147	76.7		45.5		64.7		76.3	
Tangible Fixed Assets		254,979	50		32.6		44.1		47.7	

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Table S.3 Balance Sheet for Real Estate Leasing and Management Service

Table U.3 Balance Sheet for Real Estate Leasing and Management Service

		Real Estate Services			All industries		Real estate industry ☐ Rental and leasing business		Real estate transactions business (Small-scale)	
		Amount of money (thousand yen)	The sales amount share in total (%)	Operating expenses share in total (%)	Cost of sales share in total (%)	Production cost share in total (%)	Selling and administration cost share in total (%)	The sales amount share in total (%)	The sales amount share in total (%)	
Assets		510,158	100		100		100		100	
Current assets		118,590	23.2		54.2		35.2		23.6	
Cash and Deposit		95,591	18.7		21.1		17.1		19.8	
Notes Receivable☐Accounts Receivable		2,034	0.4		15.2		2.2		0.3	
Securities		4,348	0.9		1.2		0.7		0.8	
Inventories		2,261	0.4		8.5		7		0.3	
Other current assets		14,356	2.8		8.2		8.2		2.5	
Fixed assets		391,147	76.7		45.5		64.7		76.3	
Tangible Fixed Assets		254,979	50		32.6		44.1		47.7	

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