Perspectives on the Socio-Economic Impacts of Foreign Labor in the Japanese Senior Care Industry: Survey Evidence from the Three Major Stakeholders in Rural Society

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A Dissertation Submitted to the
Graduate School of Social System Studies
at the University of Kitakyushu
Ph. D. Program in Social System Studies

January 2022

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エグゼクティブ サマリー

日本は、いくつかの特有な社会的そして経済的問題に直面している国である。年齢層の変化、寿命の延伸、人口増加率の低下、及び補充的役割を担う外国人人口不足は、国の長期的な持続維持に影響を与えているいくつかの要因となっている。その中で最も大きな影響を受けた業界の1つは、高齢者介護業界である。高齢者の寿命が他のどの先進国よりも劇的に伸びているのと同時に、質の高い高齢者介護サービスの需要は国内の労働力が提供できる範囲をはるかに超えているのだ。 日本政府は深刻な介護労働者不足の問題に高い注意を払っており、技能を持つ外国人介護労働者をより多く獲得するために国の移民政策を見直し始めた。しかし、現在日本で雇用されている外国人介護労働者の総数は、2020年2月に1万6000人未満と、まだ非常に少ない。日本政府の移民政策における改革が日本社会からの十分な支持を得ているかどうか、また、どの要因が外国人介護労働者の受け入れに対する社会的な態度に影響を与えているかを検証する必要がある。

この研究論文の目的は、日本の制限的移民政策に関するこれまでの学術研究を踏まえ、日本の地方社会における3つの利害関係者の外国人介護労働者への態度を調べ、比較することに焦点を当てた独自の実証研究を行うことである。ここでは、地方社会を、政府、地域コミュニティ、そして事業者の3つの利害関係者に分類している。そのため、3つの異なるアンケート調査を広島県、山口県、島根県の各利害関係者の考え方を探るために作られた。この研究論文ではこの3つの県を西中国地方と呼んでいる。数少ないこれまでの地方社会に関する学術研究はこれら利害関係者1つの視点のみから検討されていた。この研究は、地方社会における外国人労働者に対するさまざまな利害関係者の態度を理解するために、より客観的な分析を行う。日本の農村や大都市圏外の地方圏における高齢化社会の問題が大き

く、外国人介護労働者の割合が低いため、これら地域の利害関係者を対象とする研究が急務となる。 次の3つの研究問題が設定されている。

- 1)介護業界の外国人介護労働者に対する地域コミュニティの人々の考え方/態度に影響を与える要因はどれですか?
- 2) 地方老人介護事業の責任者の外国人介護労働者に対する考え方/態度はどのようなものですか?
- 3) 高齢者介護事業者と外国人居住者の両方を支援することに対する、地方自治体リーダーの考え方/態度はどのようなものですか。

記述統計は、各利害関係者の調査回答で実行され、共通の懸念事項のいくつかの領域に注目した。地域コミュニティへのアンケート調査の結果、参加者は、1) 高齢者介護労働者の移民(受け入れ)を支持する。2) 外国人介護労働者と国内介護者の質の違いは感じない。3) 社会における外国人介護労働者の重要性を理解している。事業アンケート調査の結果はまた、社会における外国人介護労働者の受け入れへの支持を証明しているが、さらに次のことを明らかにしている。1) 事業者は需要の増加と労働供給の減少による圧力を感じている。2) 事業者は外国人介護労働者のニーズを完全にサポートすることができない。3) 事業者は政府からさらに多くの支援を望んでいる。4) 事業者は、地域社会が外国人居住者のための基盤とサポートプログラムの両方で改善する必要があると思っている。政府へのアンケート調査結果は次のことを示している。1) 支持的な公共政策またはプログラムの欠如。2) 利用可能な公的資金の不足。3) 地元企業との戦略的パートナーシップの欠如。4) 地元の市/町が外国人介護者にとってまだ魅力的ではないかもしれないということを認めている。

ロジスティック回帰モデルに基づく統計分析結果は、いくつかの興味深い発見を提供した。地域コミュニティメンバーの態度に焦点を当てた分析は、以前の外国人との交流経験、医療部門での現在の雇用、高等教育レベル、および男性の性別が、統計的に有意なプラスの影響を与える重要な変数であることを示している。企業の利害関係者の態度に焦点を当てた分析は、顧客数が多く、外国人従業員を持つという基盤のある施設が、外国人労働者の介護の同等性と外国人介護者を支援するのに役立つ専門的な企業文化の重要性について、統計的にプラスの影響を示している。さらに、営利事業は、非営利事業とは対照的に、統計的に有意な従業員に対する強いニーズを示している。 最後に、外国人従業員を抱え、事業期間が長い企業は、地元の市町や国の政府ではなく、都道府県のみからの支援を認めている。 これらは、地方の高齢者介護事業分野で質の高い研究が大いに不足しているため、既存の文献に貢献する重要な分析結果である。

以上の分析結果を踏まえ、筆者は外国人介護者の受け入れを円滑に進めるためのいく つかの提案を以下のように提言した。

- 1) 国内女性はさらなる移民改革を思いとどまらせる可能性が高いため、女性有権者を対象としたより多くの情報キャンペーンを行う。
 - 2) 国際交流要因の影響を重視し、日本人と外国人との交流を一層深める。
 - 3) 地方自治体内で、より(外国人に優しい)細かい生活の質の改善を実施する。

Executive Summary

Japan is a nation faced with several unique social and economic challenges. The shifting age demographics, increased longevity of life, decreasing population growth rate, and the lack of a supplemental foreign population are combined factors that are impacting the long-term sustainability of the nation. One particular industry that has seen the highest impact is the senior care sector. Population aging in Japan has been more dramatic than in any other developed country and the high demands for quality senior care services has grown beyond what the domestic labor pool can provide. The Japanese government has been paying high attention to the severe problem of care worker shortage and has begun to revise national immigration policy for efficiently receiving larger amount of skilled senior care labor from foreign countries. However, the total number of foreign caregivers currently employed in Japan is still very small, less than 16,000 in February of 2020. It is necessary to examine whether Japanese governmental reforms in immigration policy have enough support from the Japanese society and which factors are affecting the attitudes of societal members towards receiving foreign senior care workers.

The purpose for this research paper was to both build off prior academic research on Japan's restrictive immigration policy system and to conduct an original empirical study focusing on examining and comparing the attitudes of three stakeholders within rural Japanese societies towards foreign senior caregivers. Societies are divided into three categories of stakeholder: government, community, and business. Therefore, three different surveys were created to seek the perspectives of each stakeholder within Hiroshima, Yamaguchi, and Shimane prefectures, referenced in this research paper as the Western Chugoku Region. Compared to the limited previous studies on rural Japan, which are usually examined from only one of these stakeholder viewpoints, this study provides a more robust analysis understanding the various attitudes of

different stakeholders towards foreign workers in rural society. There is an urgent need for research within the rural areas of Japan and outside the major metropolitan statistical areas since these stakeholders are facing greater effects of an aging society and a low concentration of foreign caregivers. The following three research questions were asked:

- 1) Which factors affect community member attitudes towards foreign workers in the senior care industry?
- 2) What are the attitudes of rural senior care business leaders towards foreign care labor?
- 3) What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?

Descriptive statistics were performed with each stakeholder survey response and noted several areas of shared concern. The community survey results show that participants: 1) do support immigration for senior care givers; 2) do not perceive a difference with quality between foreign caregivers and domestic caregivers; and 3) understand the value of foreign caregivers in society. The business survey results also evidence the acceptance of foreign caregivers in society, but further reveal that: 1) businesses are feeling the pressures with increasing demand and a declining labor market; 2) businesses cannot support the full needs of foreign caregivers; 3) businesses desire more support from the government; and 4) businesses believe the community should improve in both infrastructure and support programs for foreign residents. The government survey results demonstrate: 1) a lack of supportive public policies or programs; 2) a lack of public funding available; 3) a lack of a strategic partnership with local businesses; and 4) the admittance that the local city/town may not be the best at attracting and retaining foreign caregivers.

The statistical analysis results based on logistic regression model provided some interesting findings. The analysis focusing on the community member's attitude show that previous foreign experience, current employment in the medical care sector, higher education level, and male gender are key variables that positively impact survey responses with statistical significance. The analysis focusing on the business stakeholder's attitudes demonstrated that facilities with a higher customer count and a foreign employee base have answered positively with statistically significance on the equivalency of foreign care and the importance of a professional corporate culture conducive to supporting foreign caregivers. Furthermore, the for-profit businesses have demonstrated a stronger need for employees with statistical significance as opposed to the non-profit sector. Lastly, businesses with foreign employees and longer business operating length have approved of the support from the prefectural government only, instead of including the local and national governments. These are important findings that will contribute to the existing literature since there is a significant lack of quality research within the rural senior care business sector.

Based on the above analysis results, the author put forward a few suggestions for smoothly promoting the receiving of foreign caregivers as follows.

- 1) Engage in greater information campaigns specifically targeted to domestic female voters since this group is more likely to dissuade further immigration reform.
- 2) Focusing on the foreign acquaintance or relationship factor in order to establish more exchanges between Japanese citizen and foreign individuals with incentivization.
- 3) Implementing minor quality-of-life improvements within the local municipalities.

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Abstract

Japan is a nation faced with several unique social and economic challenges. The shifting age demographics, increased longevity of life, decreasing population growth rate, and the lack of a supplemental foreign population are combined factors that are impacting the long-term sustainability of the nation. One particular industry that has seen the highest impact is the senior care sector. Population aging in Japan has been more dramatic than in any other developed country and the high demands for quality senior care services has grown beyond what the domestic labor pool can provide. The Japanese government has been paying high attention to the severe problem of care worker shortage and has begun to revise national immigration policy for efficiently receiving larger amount of skilled senior care labor from foreign countries. However, the total number of foreign caregivers currently employed in Japan is still very small, less than 16,000 in February of 2020. It is necessary to examine whether Japanese governmental reforms in immigration policy have enough support from the Japanese society and which factors are affecting the attitudes of societal members towards receiving foreign senior care workers.

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- 3) Implementing minor quality-of-life improvements within the local municipalities.

Chapter 1. Background and Purpose of the Study

1.1 Introduction to Japan and the 21st Century Dilemma

The nation of Japan is a very special country with a truly unique culture. A complex and strong nation with a history of resilience amongst the numerous challenges island nations face with few natural resources. Japan is only 31% habitable with most of the population residing around the river basins and lowlands (CIA, 2020). In the early periods of civilization, life would have been viewed as harsh and challenging for the societies to grow and flourish as in comparison to Europe, India, and China. This has shaped the society to be very collective, enduring, and dependable. However, this has also shaped the population to be somewhat protective and insular. As Japan moved into the 20th century, the culture that developed centuries ago remained and began to shape Japan's public policy and societal structure. The Meiji Restoration brought social and economic changes to the country and western innovations began to drive Japan into the developed nation it is today. After World War II, the country began to see capital infusion from other developed nations. Post-war communities were restored, the commercial and industrial sectors were revitalized, and the population began to increase. Japan emerged as a developed nation and started to realize a strong Gross Domestic Product (GDP) annual growth rate that outpaced other developed nations. Between 1961 and 1973, Japan reported an average annual GDP growth rate of 8.88% (World Bank 2019) which was during Japan's rapid growth period (1950 – 1973). In the fifty years from 1960 to 2010, the total population grew from 93 million to 128 million (World Bank 2020). This represents a 37% increase in national population. The country maintained a reasonable level of growth through the stable growth period (1974-1991). However, the economic situation began to change from a number of factors referred to in this paper as the Japanese dilemma. Japan is in the current period of economic stagnation (1992 – present), defined as a period of slow to weak economic growth within a country. Current GDP growth is a meagre 0.27% in 2019 and the average GDP growth over the previous twenty years is only 0.83% (World Bank 2019). **Figure 1** shows the various periods of the Japanese economy and the GDP growth trends.

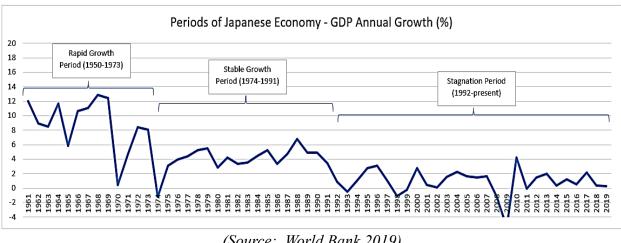


Figure 1. GDP Growth Historical Trend Since 1961

(Source: World Bank 2019)

The economic stagnation period has continued into the present day and poses severe and long-term systemic risks to the nation's economic sustainability. While there are numerous factors that contributed to the decline in the Japanese economy, this research paper focuses on the factors relevant to the senior care industry and categorizes them into two groups: Demographic Shifts and Labor Market Shifts. The two categories are changing the social landscape in Japan and, to include other economic factors, have elevated Japan to an outlier nation amongst other industrialized OECD nations, and ultimately into a welfare state. Without augmented immigration, the population is expected to decrease over 20% from 127 million to 101 million by 2060 as forecasted by the National Institute of Population and Social Security Research (2016). Furthermore, the high age concentration in Japanese society is expected to shape Japan into a social welfare state and put further pressure on the national government. The national challenges to supporting this system will continue to burden policy makers and taxpayers alike for years to come as the nation's economy continues to decrease in what this research paper refers to as "right-sizing" the economy commensurate to the population size and complexity.

A brief outline of the factors to the Japanese dilemma are: 1) An increase in life expectancy; 2) Dramatic increase in senior demographic (+65 in age); 3) A high senior concentration in current Japanese society; 4) Decreasing population growth of youth category (14 and younger); 5) Senior care labor market shortages; 6) Lack of foreign population to supplement the shifting demographics, population decline, and economic spending. **Table 2** summarizes the two major categories Japan is experiencing with the senior care industry in a table reference.

Table 2. The Japanese Dilemma in Senior Care Industry

	An increase in life expectancy		
Demographic	Dramatic increase in senior demographic (+65 in age)		
Shifts	High senior concentration in society		
	• Decreasing population growth of youth category (14 and younger)		
Labor Market and	Senior care labor market shortages		
Economic Shifts	 Lack of foreign population to supplement the shifting demographics, population decline, and economic spending 		

The Japanese immigration policy has become more lenient and accepting over the last few decades as a result of the concerns noted above. However, the current immigration policy, framework, and social support programs are not reaching far enough to attract and retain qualified foreign labor as noted in academic research. The lack of foreign labor resources within the nation's borders is just one of the challenges Japan faces; nonetheless, it is also one of the solutions that can bring the country back to an acceptable level of prosperity and high quality-of-life for the senior population. The method to achieve this has been the foreign immigrants themselves, since they would supplement the shifting negative demographics, mitigating the population decline, and provide better economic spending in the local areas. Specifically for the senior-care industry, the additional benefit of migration to fill a labor resource would be the infusion of caregivers to the

local labor pool to continue to provide a high level of senior care. Many other developed nations, such as the United States, Norway, Germany, have a mix of foreign populations to supplement the native citizen base and maintain a reasonable GDP and population trend (World Bank 2019). Japan's insular systems are beginning to adjust favorably to migration out of reaction from these internal social-economical concerns. It is important to react in the short term to reverse the negative trends since foreigners are becoming harder to attract due to further deteriorating economic conditions in Japan.

While this national dilemma that has been made very clear by the government, academic institutions, and journalists as noted in the preceding chapters, current research has been either theoretical, comparative, or based on national macro and micro data. There is a lack of data and research within the rural areas of Japan and outside the major metropolitan statistical area since these stakeholders are incurring the most negative externality brought about by national immigration strategy. The rural areas are defined in this research paper as second level administrative (or geographic) autonomous areas, to include cities, towns, or villages outside the major metropolitan statistical areas. An impact study is needed to examine how national immigration aspects and various socio-economic factors directly affect the primary stakeholders within society. Therefore, the purpose for this dissertation paper is to build off prior academic research on Japan's restrictive immigration policy and conduct original research to measure and authenticate how societies are balancing the level of demand for senior care services in the local communities with the lack of foreign labor to supplement the current domestic workforce. The primary research method will include original survey research to collect the opinions of survey participant in the local communities within the Western Chugoku geographical region of Japan. Societies are divided into three categories of stakeholders: government, community, and business.

Therefore, three separate surveys will be provided to each of these major stakeholders in society with a different level of baseline question. The following research questions were considered:

Research Questions

- 1) Does the community support migration and which factors affect their perception of receiving care from foreign caregivers?
- 2) What are the impacts and consequences of foreign immigrants as a labor force in the business sector?
- 3) What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?

1.2 The Japanese Dilemma – Demographic Shifts and Labor Market Concerns

As previously mentioned, this research paper focuses on the factors relevant to the senior care industry and categorizes them into two groups: Demographic Shifts and Labor Market Shifts. The two categories are changing the social landscape in Japan and, to include other economic factors, have elevated Japan to an outlier nation amongst other industrialized OECD nation and ultimately to a welfare state.

1.2.1 Demographical Shifts in Population

The first major category of the Japanese Dilemma is the shifts within the current age demographic composition. The first factor to mention is the increase in life expectancy and the dramatic increase in the senior population +65 in age, which is the foundation and the cause of the other major factors. The World Bank (2019) has revealed the average life expectancy in Japan is 84.36 years old. This life expectancy has set new records on an international scale and has surpassed the OCED Nation life expectancy index average at 80.25 years old. Increased age longevity is considered a great success for public policy and highlights an achievement of society

to extend life of the average citizen. The negative externality of this achievement is the longevity of age and the enormous socio-economic pressures that eldercare brings upon the population. Several academic researchers have identified correlated factors to an increased life expectancy in Japan, to include a healthier diet than comparable industrialized nations (Koga et al. 2017, Sekikawa et al. 2015), the extended work years for seniors beyond the maximum retirement age from either labor deficiency or financial pressures on public programs (Hurd and Rohwedder 2016, Wu et al. 2016, Kachan et al. 2015), the improved bio-medical technology and surgery dynamics (Lichtenberg 2017, NML Labs 2020), and the increase in quality of life programs for seniors and the creation of artificial companionship (Nojima 1994, Lufkin 2020). Together, these factors have improved quality of life and decreased mortality rates from non-communicable diseases, such as ischemic heart disease, cerebrovascular disease, and cancers (Adair et al. 2019). Figure 3 provides a graphical representation of Average Life Expectancy and Figure 4 shows a Population Growth Comparison.

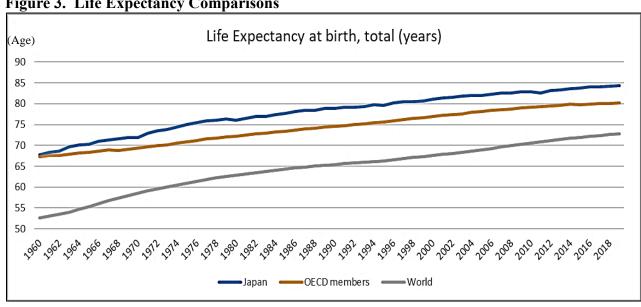


Figure 3. Life Expectancy Comparisons

(Source: World Bank 2019)

Population growth (annual %)

4

3.5

3

2.5

2

1.5

1

0.5

0

-0.5

-1

1961 1963 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019

— Japan — OECD members — World

Figure 4. Population Growth Comparisons

(Source: World Bank 2019)

A major consequence of the increased age longevity is the growing senior concentration within the population. As of 2020, Japan's senior population concentration reached the highest in comparison to other developed nations at 28.39%, which is a significant growth from the 1960 senior concentration percentage of 5.62. In other words, more than one out of every four residents are classified as seniors +65 years of age. The Statistics Bureau (2018) projected out the age concentrations to 2060 and compared it to that of the several other developed nations. Table 5 demonstrates that Japan will surpass all other nations in the +65 years and older category, follow closely behind by Korea. The National Institute of Population and Social Security Research (2016) also developed a projection, based off a medium fertility assumption model, to conclude that 39.2 million of Japan's population is projected to be elderly by the year 2040 (35%) and 33.8 million people are projected to be elderly by the year 2065 (38.4%). An underlying assumption in the projection model was the survey forecasted a decreasing total population from 127 million down to 110.9 million in 2040 and a further decreasing total population to 101 million in 2065. The dwindling population will reveal a smaller working age pool, and it can be assumed that there will be a smaller labor pool to the growing senior population, without assuming foreign migration.

Table 5. Average Life Expectancy and Population Growth Comparison

	2015			2060 (projection)		
Country	0-14 years	15-64	65 and over	0-14 years	15-64	65 and over
Japan	12.6	60.7	26.6	10.2	51.6	38.1
Korea, Rep. of	13.9	73.1	13.0	12.2	50.7	37.1
Italy	13.7	63.9	22.4	13.2	53.3	33.4
Germany	13.1	65.8	21.1	13.6	54.8	31.7
China	17.7	72.6	9.7	13.8	55.7	30.5
Brazil	22.5	69.5	8.0	14.0	58.8	27.3
Canada	16.0	67.9	16.1	15.1	57.7	27.2
France	18.3	62.8	18.9	16.2	56.9	26.9
U.K	17.6	64.3	18.1	16.1	57.3	26.7
Sweden	17.3	63.1	19.6	16.8	56.9	26.3
Russia	16.8	69.7	13.5	17.6	58.5	23.9
U.S.A	19.2	66.1	14.6	17.1	59.3	23.6
India	28.7	65.7	5.6	17.5	65.8	16.7

(Source: Statistics Bureau 2018)

The last major factor to attribute to the demographic shift is the decrease to the current youth category (0-14), which is not replenishing sufficiently to offset the growing number of seniors in society. The youth demographic has started to see a reversal of growth in the last four decades. In 1978, the total population composition of Japan was 24.1% youth, 67.5% working age, and 8.4% senior. These concentrations were comparable to other industrialized nations in the 1970s since the growth of Japan followed the same patterns as other industrialized nations. However, these numbers began to shift and the consensus in 2020 identified the total population concentration of Japan was 12.45% youth, 59.15% working age, and 28.40% senior. The youth category has decreased -48% within the last four decades and is more drastic in comparison to the OECD nation's average and the United States. The national challenge of a decreasing fertility rate is not uncommon in the late 21st century. Nargund (2009) has summarized the main factors for lower fertility rates as citizen lifestyle choices associated with economic affluence, low mortality rates, easy accessibility to birth control, and the fear of an economic drain caused by housing, education cost and other cost involved in child rearing. Macunovich (1996) has highlighted that more women are entering the workforce and choosing careers over families. Female education has directly correlated with fertility (Pradhan and Canning 2015; Roser 2017). Lastly, the social

structure and religious beliefs in each country are likely to affect birth rates as well as abortion rates. With regard to Japan, the absence of a strict national religion with traditional views on fertility and contraception usage have influenced fertility rates. Traditional religious beliefs such as with Catholicism and Islam do dissuade contraception usage and support fertility (McQuillan 2004). Furthermore, Japan follows the international trend of educated women. Japanese women are waiting later in life to get married and start a family in pursuit of their own professional careers Rutherford et al (2001) has summarized women are becoming and/or personal agendas. increasingly well-educated, outward-looking, and egalitarian in their views, and they are showing signs of dissatisfaction with traditional female and male gender roles within the family structure. The Employment Security Bureau (2018) summarized data revealing the increase of women in the workplace. The percent of women in the workplace was 51.5% in 1973 and increased to 67.4% in 2017. With this change in social structure and the deviation to traditional gender roles, the result is fewer marriages; fewer marriages result in fewer children. The ministry has also identified the number of children born to a single woman was on average 4.54 children in 1947, 2.00 children in 1960, 1.75 children in 1980, 1.36 children in 2000, and 1.34 children in 2020 (MHLW 2020).

1.2.2 Labor Market Shifts

The second major category of the Japanese Dilemma are the shifts within the labor market. Japan has neither predicted nor effectively addressed a major consequence of such a significant social demographic swing – supporting the labor pool to care for this growing senior population. The stark truth is that Japan does not have enough certified domestic workers to match both the current demand and the future expected growth in demand from the senior age demographic. A study by Daiwa Institute of Research (Kumagai 2018) has found that, with no change in the current employment structure, the number of employed persons in Japan is expected to decrease by

approximately 6 million in 2030, and around 23 million by 2060. The government and private sector models seem to indicate one thing: Japan needs to revise their public policy framework for the acceptance and retaining of foreign labor to fill the labor gap. Businesses also need to advance foreign worker outreach, culture development, and retaining strategies. This is more prevalent in the senior care sector.

A Ministry of Health, Labour and Welfare (MHLW) 2018 report cited contributing factors to the senior care worker shortage as low-wages, low status, and poor working conditions. Furthermore, job separation rate amongst care workers and home-helpers in 2007 was 21.6%, which was significantly higher than the average for all other occupations at 16.2% (MHLW 2008). The MHLW (2016) has reported that Japan has more than tripled its domestic senior care workforce from 549,000 in 2000 to 1.83 million in 2016. While this appears positive, Japan still remains at a deficit to the level of demand needed to match full senior demand. The MHLW (2016) projected an estimated 400,000-600,000 more care workers would be needed over the next ten years to effectively support the long-term care program, which brings the ideal labor target at 2.45 million health care workers. This target figure is in addition to the current level of growth for nursing graduates (OECD 2020). Domestic nurse graduation rates are lower than other OECD nations at 52.9 nursing graduate per 100,000 citizens. This means only 67,000 nurses have entered the workforce in 2020 (OECD 2020). At a constant amount, and without considering the senior care turnover out of the medical industry, the target set by the MHLW could be achieved. However, the nursing graduation levels are declining (OECD 2020) and turnover within the nursing field is growing. A labor survey performed by the Nursing Care Stability Center through the MHLW (2016) has evidenced this by concluding that businesses are experiencing two primary triggers for labor shortage: (1) Hiring Difficulty at 88.5% of responses and turnover at 18.4% of responses. In regards to the employees, the same survey cited 21.93% of nurses resigned during 2017 year. Out of this number, 36.1% resigned before their first-year anniversary and 37.4% resigned before their third-year anniversary. The primary reasons provided from the nurses who resigned were a lack of proper coworkers to assist, low wages, and difficulty in taking paid leave. The average salary for home helpers was 220,400 yen a month and the average salary for welfare facility caregivers was 219,900 yen a month. This is nearly a third less than the total country salary average of 304,300 yen a month in 2017 (MHLW 2016)

The lack of a foreign population and a restrictive immigration policy with Japan is the final piece of the Japanese dilemma. There are many benefits to migration that are widely known in the academic field. Broadly speaking, migration increases both regional and national levels of Gross Domestic Product (GDP) through greater economic spending (Dai and Hatta 2019; Saito et al. 2017; World Bank 2019). Hugo and Morén-Alegret (2008) has noted that the impact of ageing and fertility decline has been exacerbated in rural areas by outmigration so that immigration can potentially play a major role in reversing population decline and maintaining economic and social sustainability. Arora (2014) states that countries that promote free migration of labor are far richer than countries that restrict labor migration because immigrants diversify the workforce and increase productivity and output. Saito et al. (2017) uses a proprietary model to evidence that unskilled foreign workers increase output for all major economic sectors within the economy. Elena-Alexandra (2019) identifies that highly qualified immigrants boost innovation output and their cultural diversity may produce positive spill-overs, especially in host countries and represent an important channel for transferring technology from destination countries back to origin. Binci (2012) states that remittances provide a significant source of foreign reserves and financial support to immigrant families in the source nation. Lowell (2001) argues the remittances of the highly skilled favorably impact sending country development and has contributed to specific value for developments in investment and banking. Finally, Pîrvu and Axinte (2012) evidence how return

migration can bring new experiences, educational opportunities, and/or entrepreneurial spirit with them upon return to their source countries.

Critics of migration have cited a decrease to domestic Japanese wages (Friedberg and Hunt 1995; and Saito et al. 2017 through authors negative output of model) and the perceived increase of crime in correlation to immigrant inflows (Mukherjee, Adams and Molina 2018; Gambetta and Hertog 2017; Ward 2019) as the primary disadvantages to migration theory. In fact, these two concepts match the two majority findings in the public opinion polls conducted by the Japanese Cabinet Office (1990, 2000, and 2004) and a concerning trend in a 2018 Pew Research Center Survey (Stokes and Devlin 2018), which identified that 33% of the public considers more immigration to increases the risk of terrorism in Japan and about 40% claim that immigrants are indeed more at fault for lawbreaking throughout Japan. Lastly, the World Values Survey Wave 7 (Inglehart et al. 2019) results show that 40.1% of respondents agree that the effects of immigrants on Japan have increased the perception of a higher crime rate. The natural biases with foreigners and the protection of the national identity are a very real part of the human experience and have degrees of impact across all countries even if there is no simple link between immigration and crime (Feltes et al. 2018; Bell 2014; Lee and Martinez 2009).

Regardless of the opinion-based impacts to security and wage deterioration, the reality is that the Japanese economy is dependent on migration more than it realizes. Japan's aging population and extremely restrictive immigration policy, combined with a highly educated younger generation uninterested in menial labor, has created a shortage of workers willing to do what Connell (1993) describes as the dirty, dangerous, or demeaning work. This is often overlooked within native populations despite the major contribution that these individuals produce in society. Bennett, Alpeyev, and Hagiwara (2011) illustrations the earthquake in Iwate Prefecture and the subsequent Fukushima Power Plan disaster in 2011 displaced nearly 113,000 temporary workers

who were working in Japan on a temporary foreign worker trainee program visa. These workers left Japan to return to China and the loss of labor devastated the various industries within the local economy. This example highlights the dependence many industries have for foreign workers.

With all the aforementioned benefits that transmigration beings, it is an interesting question as to why Japan has not embraced greater immigration sooner. Japan is still an outlier nation with respect to transnational migration. Traditionally, Japan has followed policies around social and cultural isolationism with minimal trade links established between foreign nations in the past. The ideas of ethics and cultural homogeneity was still heavily promoted by the Japanese government and widely accepted by the Japanese population well into the 20th century. There are many academic theories to explain the public policy delays and low level of support for migration specific to Japan. Through a compilation of research by Bartram (2005), several researchers argue that Japan did not have a significant need to import labor in the past because the current domestic labor stock was sufficient to handle the economic growth. The domestic labor was therefore pulled out of the rural areas into the urban industrial areas to meet labor demand. Reubens (1981) also emphasized this point, yet further added that low-level work is not stigmatized as is the case with other industrialized nations. Therefore, it would be easier to attract domestic labor to handle undesirable positions as opposed to importing foreign labor to meet this demand. Howell (1996), talks about Japanese homogeneity at shaping the sense of national identity. Siddle (2011) points to the internalization of this 'collective picture' amongst common Japanese.

When there are labor shortages in the domestic market outside of what the normal business sector can control, immigration policy revisions are usually performed by the national government to allow inflow of qualified foreign labor. However, Japan is one of the lowest countries with a reportable foreign population in comparison to other develop countries. The Japanese Ministry of Justice (2017) reported a total foreign population of 2.56 million residents out of the 126.8 million

total residents residing in Japan. This represents roughly 2.08% of the total population living in Japan. Nonetheless, net migration trends have been increasing in the last several decades. Net migration is defined as the total number of immigrants less the annual number of emigrants, including both citizens and noncitizens. This will provide a net figure of immigrants during the period. **Table 6** shows a growth of migration in the 1960s brought about by post-war ethnic Japanese war orphan and family migration. The 1980s and 1990s brought a slow period of foreign growth with a negative net migration and began to see immigration reform, which will be mentioned in the next section. All of Japan's migration trends are materially different from the OCED average migration trends of the industrialized nations.

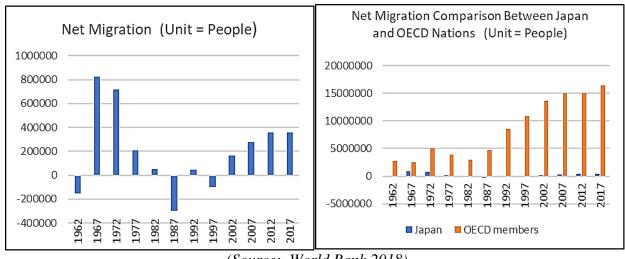


Table 6. Legal Immigrant Flow in Japan Since 1962, and in Comparison, to OECD

(Source: World Bank 2018)

Foreign labor is very important for Japan's continued sustainability. This is the natural evolution of a developed nation to allow ease of access for immigrant to meet the business sector's labor demands. A model by Daiwa Institute of Research (Kumagai 2018) has found that in order to maintain the scale of Japan's economy in the year 2060, there would have to be net inflow of foreign workers totaling between 70,000 and 310,000 per year, which means raising the percentage

of foreign workers from the current 2% to somewhere between 7% and 25% in 2060. A recent study from Takahashi (2018) compared Japan to other developed industrialized nations with regards to senior caregivers. In Japan, the rate of foreign nurses was 0.2% and foreign caregivers was 0.6% in the same year. By comparison, foreign caregivers represented 23% of the total number of caregivers in the USA in 2010, 72% of those in Italy, and over 50% of caregivers in Israel, Austria, Korea, France and Italy. While Japan is experiencing low levels of immigrant stock in comparison to other industrialized nations, the trend in foreign labor growth is starting to increase. Despite national migration trends, the senior care industry is seeing an increased level of migration. According to the Statistics Bureau of Japan e-Stat database (2018), Japan reported the rate of foreign nurses and foreign caregivers as 0.08%, which represents about 20,500 foreign workers. The total number of immigrants into the medical field has outpaced the total immigrant flow data from other industries.

The two categories of demographic shifts and labor market changes have placed a significant burden on the senior care industry. These impacts at the national level are magnified at the local rural levels within the smaller towns around Japan. For the purposes of this paper, the eldercare industry is defined as an industry sector that provides specialized care provided by skilled professionals to improve the quality of life for senior citizens through various stages of their life. Services can range from basic life support, medical care, dementia care, or daily task assistance for seniors. This definition encompasses everything from assisted living care, nursing home care, adult day care, home visit care, and even hospice care around Japan.

1.3 Japan's Immigration Policy Reform: Progress and Limitations

When there are labor shortages in the domestic market outside of what the normal business sector can control, immigration policy revisions are considered by the national government to allow the inflow of qualified foreign labor resources. Transnational migration is now a dually important domestic and international policy focus in many countries, and Japan is beginning to understand the importance of regulatory flexibilities despite the slow-moving reforms taken. Nonetheless, the immigration reform process has been very slow and measured for Japan. The most significant public policy changes that impacted migration reform, and is still highly relevant today, occurred in the 1990s. This period in Japanese history resulted in several major reforms brought about by societal pressures. This is the most appropriate time period to begin the discussion on immigration reform and my dissertation survey. The reforms in the 1990s led to a significant expansion of elder care public services. The policy revision that is most relevant to this research project is the Long-term Care Insurance (LTCI) program that was implemented in 2000. This program was a complete overhaul of the previous needs-based elder care system to provide an improved public-funded medical care system for seniors and individuals with disabilities. These public policy changes were passed due to broad political support from key internal and external stakeholders. Social care reforms were supported not only by their obvious policy advocate groups, such as the women's movement and non-governmental organizations representing the interests of elderly people and social service recipients, but also by politicians and bureaucrats, particularly the Ministry of Health and Welfare, local governments, and city mayors most impacted by the changes (Campbell 1992). These add up to significant welfare policy changes, not simply because they involve programmatic and institutional structure changes, but also because they mark an apparent shift in the conceptualization of the government's role in relation to the family unit (Peng 2016). Public opinion polls began to suggest a noticeable change in public attitude towards elderly care. For example, government polls conducted in 1995 showed that 57% of Japanese adults strongly agreed with the statement: "It's the children's duty to care for their elderly parents." The same question was asked in 2003 and 73.3% of survey respondents believed elder care was both family and state responsibility (Cabinet Office 2003, Peng 2016).

1.3.1 Basic Plans of Immigration

The implementation of the Long-Term Care Insurance program brought some negative externalities. The broad demand for care needed for such an significant expansion required a sufficient labor structure. The shortages of domestic care workers soon became apparent to the nation and prompted the government to consider further immigration reform. The first step taken was a government policy review processes that began in the late-1990s to address this problem. The Ministry of Justice, which has the sole jurisdiction over immigration policy in Japan, established several policy advisory committees and policy taskforces members consisting of experts and key stakeholders to review existing immigration policies and to make improved public policy recommendations. The MOJ established the first Roundtable Conference on Immigration Control Policies in 1990 with the purpose of reducing the level of discourse amongst policy makers and bringing together various experts to revisit current immigration policy. The first roundtable resulted in the revision of the Immigration Control and Refugee Recognition Act of 1951 by establishing greater national policy guidelines on immigration. The revision was followed in 1992 by the well-known release of the 1st Basic Plan for immigration control. The 1st Basic Plan reflected the prevalent political atmosphere in the 1990s by reaffirming the existing immigration policy; however, focusing on measures to promote the "smooth exchanges of personnel" and to counter "illegal foreign workers" (MOJ 1992). A similarly limited view towards immigration is evident in the minutes of the first roundtable conference as summarized by Peng (2016). However, as the country's social and economic contexts began to shift over the following years, subsequent roundtables and Basic Plans adopted more liberal views of immigration.

The 2nd edition of the Basic Plan was released in 2000 and resulted in the roundtable taking planned steps towards expanding the inflow of foreign workers in an attempt to curve the demographic shifts that have become prevalent. The roundtable understood the concerns with the aging population, the decreased number of childbirths, and the overall population decline. However, the roundtable maintained the need for controlled immigration (MOJ 2000), which was interpreted as the accepting of foreigners that would cause little friction with society.

The MOJ introduced the 3rd edition of the Basic Plan in 2005. Statements from the 3rd Basic Plan roundtable (MOJ 2005) were similar to the 2nd basic plan and re-emphasizing the deterioration to the nation's productive population and the need to reverse this trend through controlled migration. However, the roundtable maintained the stance that it would not be appropriate to simply supplement the productive population decline by accepting foreign nationals alone and called upon the Immigration Control Administration to conduct a better impact study to consider what the appropriate acceptance of foreign workers would be in a period of population decline. Another interesting stance taken by the roundtable is the mentioning of the nursing aid worker and the special considerations for workers in this industry. The 3rd Basic Plan was published after the implementation of the LTCI in 2000 and preceding the introduction of the various regional trade agreements known as the Economic Partnership Agreements (EPAs) that would ultimately be created in the late 2000s.

The direction of the roundtable began to change and express a greater sense of desperation in 2010 when the MOJ introduced the 4th edition of the Basic Plan. The position taken by the roundtable was similar from the previous MOJ Basic Plans and re-highlighted the serious decline in the population resulting from a declining birthrate and an aging society. However, the tone of the roundtable expressed greater urgency to attract foreign nationals who will be able to revitalize

Japanese society. It was implied that these foreign nationals would consist of skilled labor to offset deterioration to the population and the economy.

In the most recent 5th Basic Plan (MOJ 2015), Japan has adapted a more progressive approach to foreign migration. Some of the highlights are a more proactive acceptance of foreign nationals who vitalizing the Japanese economy and society, a safer technical intern training program to developing countries, a better strategy to co-exist with foreign nationals, and the better promotion of appropriate and prompt asylum for refugees as the duty of a contributing member in the international community. This is evident with the recent conflict in the Middle East and the call for countries to grant asylum for refugees fleeing the areas of war. Lastly, a greater focus on tourism has been mentioned more likely in light of the planned 2020 Olympic Games.

1.3.2 Concerns in Immigration Policies Needing to be Studied

The slight progression of Japan's immigration reforms are reasonable indicators that the government is trying to reverse the current economic situation and provide greater intrinsic quality of life for its citizens. However, calls for greater immigration policy reform have arisen from various employer groups, non-governmental organizations, academics, and policy experts. The recent reforms made to the immigration policy do not go far enough to improve economic stagnation, reverse population decline, and improve senior citizen quality of life in the local Japanese communities. They also have proved to be not as effective as compared to the original intent. This can be evidenced in the Economic Partnership Agreements that will be discussed later.

Japan has long practiced a closed-door immigration policy that only allowed highly skilled individuals to enter and prevented the acceptance of unskilled individuals. Politically, the government cannot take greater action steps to open up the borders as immigration is not entirely popular within Japanese society. Therefore, Japan uses what Brettell and Hollifield (2015)

reference as a "side-door policy," which provides an indirect migration path into Japan to fill unskilled and/or semi-skilled jobs that are in high demand by small and medium size businesses in Japan. These individuals come in the form of company trainees, students, entertainers, and ethnic Japanese foreigners who are descendants of Japanese emigrants abroad through their jus sanguine status with Japan. In the past, this so-called side-door policy enabled the country to manage minor labor shortages in several manufacturing and service sector industries while maintaining the official "non-immigration" policy set by the government. One example is the Japanese industrial trainee program which provided entry to unskilled workers from developing nations based on bilateral agreements managed by the Japan International Training Cooperation Organization in 1991 (Xiang 2012). However, since the 1990s, it has become increasingly difficult for the Japanese government to maintain its non-immigration policy with the continued and growing deficit in labor needs. The immigration issue has become much more noticeable because of the increased visibility of the Nikkeijin population (Peng 2016), and because of a growing shortage of nurses and care workers in elder care services.

The first area in immigration policy needing to be studied is the impact to the rural areas around Japan. Most data and impact studies come from national sources heavily weighted from data of major metropolitan statistical areas within Japan, such as with Tokyo, Yokohama, Osaka, Nagoya, and Sapporo. However, a major question to ask is if these same trends appear within the smaller cities, towns, or villages. The Lamb Survey used qualitative methods to extract this information by collecting perspectives and opinions from the three major stakeholders within these rural societies. Each stakeholder has a separate survey to measure societal impacts independently.

The second area in immigration policy needing to be studied further is the ability for Japan to retain foreign immigrant once they have been granted a VISA to enter the nation. Two important employment concepts in the business sector are recruitment and retention. Recruitment is the

concept to attract and employ skilled candidates and retention is the concept to maintain these employees to reduce hiring costs and maintain long-term business knowledge. The positive financial impacts are widely studied and known with the academic fields through cost savings (Cascio 2006; Goldschmidt 2019) and customer satisfaction and increased revenues (Williams et al. 2019). Immigration policy has traditionally been used to allow qualified immigrant to reside within the nation and does not specifically support the nation's efforts to keep the immigrants within Japan, which has traditionally been the job of the private sector as the employer and sponsor. The challenges to retain qualified employees varies across industries. For the senior care industry, careful planning needs to occur to maintain high-quality employees. The Lamb Survey was designed to ask the business sector leadership participants their opinions in this area.

The third area of study is the local government's ability to support the business sector, the community, and the immigrant themselves through proper regulation and effective partnership. Incentivizing programs and extending opportunities will help the immigrant remain within the nation and provide longer intrinsic value within the communities. Public policy should balance out the full interests of the community and ensure all societal members benefit. The Lamb Survey was engineered to assess the public support programs and partnerships within rural governments.

1.4 Purpose of Study

The purpose of this chapter was to highlight the national dilemma that Japan is facing and to explain some of the causation behind the trends. The purpose for this dissertation paper is to build off this prior academic research on Japan's restrictive immigration policy and conduct original empirical research to measure and authenticate how societies are balancing the level of demand for senior care services in the local communities with the lack of foreign labor to supplement the current domestic workforce. The primary research method will include original

survey research to collect the opinions of survey participant in the local communities within the Western Chugoku geographical region of Japan. There is a need for data and research within the rural areas of Japan and outside the major metropolitan statistical area since these stakeholders are incurring the most negative externality brought about by national immigration strategy (i.e., lack of labor resources, tax revenues, stagnate growth). The format of the survey to be conducted builds from prior surveys conducted by both the Japanese government and non-governmental organizations, which will be discussed within subsequent chapter, and seeks to apply them to the senior care industry to provide a better impact study. Societies are divided into three categories of stakeholders: government, community, and business. Therefore, three separate surveys will be provided to each of these major stakeholders in society with a different baseline question.

The survey will help answer three following academic research questions: 1) which factors affect community member's attitudes towards foreign workers in the senior care industry? 2) what are the Attitudes of Rural Senior Care Business Leaders towards Foreign Care Labor? 3) what are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents? The empirical piece of this dissertation will include the statistical analysis of survey results through a Binary Logistic Regression model. The Lamb Survey has collected several independent variables in the form of individual data (i.e., age, gender, education, etc.) and socio-economic factors (GDP, Location, Population, etc.) to test seven hypotheses, which will be introduced in chapters 3 and 4.

1.4.1 Important Definitions

Several definitions need to be made to clarify the three stakeholders in society. For this dissertation, the term "Government Stakeholder" refers to the senior public administrators who

have direct oversight of senior care administration or the appropriate knowledge of senior care policies to answer questions competently on the behalf of the municipality.

The <u>municipality</u> term is defined as a second level administrative (or geographic) area below prefecture level government and with autonomy. Examples include city, town, and villages. The <u>Rural</u> definition is used frequently in this paper as a general term to reference the non-major metropolitan areas of Japan. Nine sample municipalities within this research paper are considered cities and three are considered towns.

The term "Business Stakeholder" refers to the management team within the organization who can provide the most accurate guidance on current business conditions. The actual title of the individual will vary based on the company asset size and organizational structure. Examples would include senior-level management, owners of the facility, or director-level participants. The term senior care business is defined as the senior care facility that is providing the direct service to the senior care customer and is unambiguous to either a public or private legal structure.

The term "Community Stakeholders" refers to two separate groups. The first group consists of the employees and residents working or residing at the senior care center. The second group includes general members of the community chosen at random either within the municipality or within close proximity to the municipality. The desire is to have a well-diverse sample of individuals who can provide their perceptions on several different situations, to include their opinions on senior care serves and demands within their local society and their attitudes on foreign immigrant within this sector.

1.5 Structure of this Dissertation

This academic dissertation will be classified as an investigation dissertation since it will revolve around the collection of original source data through a survey to provide facts and

recommendations on immigration reform. Three separate surveys have been created for each primary stakeholder in society: government, business, and community members. These surveys are a major part of the dissertation and the complete copies are included in the appendix. The dissertation will be organized into six (6) chapters.

The first chapter will highlight the national dilemma the country of Japan is facing and briefly explain the situation in detail. The chapter will then transition to discussing the actions taken by the national government and the unique political and cultural challenges hindering growth within the domestic Japanese citizen population. Lastly, chapter 1 will introduce the purpose of the Lamb Survey and the desire for empirical research to collect data on attitudes.

The second chapter will introduce the Lamb Survey as the method for qualitative analysis. The chapter will highlight the need for original approach to collect data and will summarize the main purpose. The chapter will then define the survey design and methodology, which will highlight the survey objective, survey layout, sample selection, and survey deployment. This chapter will set the stage for the preceding chapters by properly outlining the survey and providing the reader with confidence in the survey quality. Lastly, the model used for data analysis will be introduced.

The third chapter will introduce the community as the first major stakeholder in society and will ask the research question: Which factors affect community member's attitudes towards foreign workers in the senior care industry? The chapter will define the unique challenges within the communities and will explain how the Lamb Survey will be administered to this stakeholder group. The chapter will then transition to summarize the key survey findings of the Lamb Survey using descriptive statistics. The chapter will finally introduce the four hypotheses made by the author and interpret the results to the reader.

The fourth chapter will introduce the senior care business sector as the second major stakeholder in society and will ask the question: What are the Attitudes of rural senior care business leaders towards foreign care labor? The chapter will define the challenges within the business organizational structure to recruit, retain, and support foreign workers. The concepts of growing service demand and reduced labor supply will be mentioned. The chapter will explain how the Lamb Survey was administered and summarize key survey findings. Lastly, the chapter will introduce the three hypotheses made by the author and interpret the results to the reader.

The fifth chapter will introduce the government stakeholder as the third major stakeholder in society and ask the following question: What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents? The chapter will define the challenges experienced within the government sector, to include fiscal constraints, aging population pressures, and the opportunities to partner with the other society participants. Lastly, the chapter will explain how the Lamb Survey was administered and summarize key survey findings noted with survey data.

The final chapter 6 will briefly summarize the Japanese dilemma again and will reintroduce all the key survey findings. The chapter will then transition to provide policy recommendations at the local and national levels. Several recommendations would be provided that could ease pressures on foreign senior care workers and will help retain them. The successful retention of foreign workers will improve the local economy, bring value to local society, and ensure a high-quality level of care for Japanese seniors.

The last section in the dissertation will be the appendix. This is quite an extensive section since the survey is a major component of the dissertation. This part will evidence all relevant documents and work papers, to include: the solicitation letter sent to potential survey participant, each survey template for the three stakeholders; statistical output reports, work papers to support

sampling methodology, and other supporting documents to evidence an original and high-quality research project.

1.6 Academic Contributions of this Study

There are three desired academic contributions with the completion of this original research paper. The first academic contribution to the field of social sciences is that, as an empirical study focusing on the rural area, this study demonstrates the real attitude towards foreign caregivers from rural societal members and examines its underlying factors. This study is based on original survey research conducted in 12 cities and towns within the Western Chugoku region of Japan. This data will also serve as important reference data for future researchers to use in further studies on the immigration system reform within Japanese rural areas. Since foreign workers in the rural senior care industry is a new area of research in Japan, this findings of this study can provide a valuable base for discussion and further study.

The second academic contribution is that this study examines and compares the attitudes of three stakeholders within rural Japanese society (i.e., businesses, governments, and community members) towards foreign senior caregivers. Compared to the limited previous studies on rural Japan, which are usually examined from only one of these viewpoints, this study can provide more rich information for understanding the various attitudes of different stakeholders towards foreign workers in rural society. Descriptive statistics were performed with each stakeholder survey response and noted several areas of shared concern. The community survey results show that participants: 1) do support immigration for senior care givers; 2) do not perceive a difference with quality between foreign caregivers and domestic caregivers; and 3) understand the value of foreign caregivers in society. The business survey results also evidence the acceptance of foreign caregivers in society, but further reveal that: 1) businesses are feeling the pressures with increasing

demand and a declining labor market; 2) businesses cannot support the full needs of foreign care givers; 3) businesses desire more support from the government; and 4) businesses believe the community should improve in both infrastructure and support programs for foreign residents. The government survey results demonstrate: 1) a lack of supportive public policies or programs; 2) a lack of public funding available; 3) a lack of a strategic partnership with local businesses; and 4) the admittance that the community may not be the best at attracting and retaining foreign caregivers.

The third academic contribution is that the statistical analysis results, which are based on survey data and the use of a logistic regression model, provide some interesting findings. The analysis focusing on the community member's attitude show that previous foreign experience, current employment in the senior care sector, higher education level, and male gender are key variables that positively impact survey responses with statistical significance. There were no significant findings noted with the age variables as with national studies weighted toward urban societies. This was quite interesting and has clearly evidenced the difference in family support structure between urban and rural societies. Meanwhile, the analysis focusing on the business stakeholder's attitudes demonstrated that facilities with a higher customer count and a foreign employee base have answered positively with statistically significance on the equivalency of foreign care and the importance of a professional corporate culture conducive to supporting foreign Furthermore, the for-profit businesses have demonstrated a stronger need for caregivers. employees with statistical significance as opposed to the non-profit sector. Lastly, businesses with foreign employees and longer business operating length have approved of the support from the prefectural government only, instead of including the local and national governments. This could evidence a desire to maintain positive relations or future incentives with this level of government. These are important findings that will contribute to the existing literature since there is a significant lack of quality research within the rural senior care business sector.

Chapter 2. Survey Introduction and Methodology

2.1 <u>Introduction to Survey</u>

Japan is a nation facing several social and economic challenges as highlighted in the chapter 1. The shifting age demographics, decreasing population growth rate, and the lack of a supplemental foreign population are contributing factors that are impacting the long-term financial sustainability of the nation. These challenges are forcing the economy to further retract, or shrink, to the intrinsic economic state of a much smaller nation Japan is becoming. While this national dilemma that has been made very clear by the government, academic institutions, and journalists as noted in this research paper, current research has been either theoretical, comparative, or based on national macro data more weighted to metropolitan statistical results. There is a lack of impact data on the rural Japanese societies and within the senior care industry. There are few answers to the general question: How is this impacting me in my local community? Foreign workers and their families could help mitigate population decline, increase economic consumption, and support the elder citizens through labor injection. This area needs to be studied more and the unique rural perspectives need to be analyzed.

Therefore, the purpose for this dissertation paper is to conduct original research to measure and authenticate how societies are balancing the level of demand for senior care services in the local communities with the lack of foreign labor to supplement the current domestic workforce. To achieve this, a mechanism needs to be developed to both collect data and analyze data.

The primary qualitative method for this research paper will include original survey research to collect the attitudes and perceptions of survey participant in the local communities within the Western Chugoku geographical region of Japan. This chapter introduces the survey methodology,

design, and process used to analyze survey data for full transparency and academic quality This survey, which will be referred to as the <u>Lamb Survey</u>, builds off the prior reputable surveys conducted in Japan (NGO and Government) and applies them to the senior care industry by asking more precise questions about the impacts of foreign labor, market conditions, support structures, and general perceptions on foreign workers. Societies are divided into three categories of stakeholders: government, community, and business. Each stakeholder is interdependent on the other and its actions, or inactions, affect one another. Therefore, three separate surveys will be provided to each of these major stakeholders in society with a different baseline research question.

2.2 Survey Design and Methodology

A proper survey design is paramount to completing an effective and reputable research project. There are several factors to consider for the actual survey design that will directly impact the success and quality of the data. Proper survey design involves two steps according to Levy and Lameshow (1999). The first step is to define a sufficient sampling plan methodology that will be used to effectively make estimates about the population as a whole and outline the process of administering the survey delivery. The second step is to outline procedures for obtaining population estimates from the sample data and for estimating the reliability of those population estimates for further statistical analysis. The following section highlights the survey design and the methodology considerations used on the Lamb Survey.

2.2.1 Survey Objective

The objective for the Lamb Survey is to collect perspective data of the individuals who are most impacted by Japanese immigration trends assess several variables with foreign labor to ultimately provide suggestions for immigration reform on the local and national levels.

Perspective data is important since this could be considered the sentiment of the population that isn't always captured in macro and micro economic data. The Lamb Survey seeks to answer the following research questions specifically about the lack of foreign immigrant in the communities.

Research Questions

<u>Research Topic</u>: Perspectives on the Socio-Economic Impacts of Foreign Labor in the Japanese Senior Care Industry

Research Questions:

- 1) Which factors affect community member's attitudes towards foreign workers in the senior care industry?
- 2) What are the Attitudes of rural senior care business leaders towards foreign care labor?
- 3) What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?

2.2.2 Target Audience

The Lamb Survey will consist of three surveys targeting each stakeholder in society: Government, Business, and Community stakeholders. For the purpose of this survey, the term "Government Stakeholder" refers to the senior public administrators who have direct oversight of senior care administration or the appropriate knowledge of senior care policies to answer questions competently on the behalf of the municipality. The term "Business Stakeholder" refers to the management team within the organization who can provide the most accurate guidance on current business conditions. The term "Community Stakeholders" refers to two separate groups. The first group consists of the employees and residents working or residing at the senior care center. The second group includes general members of the community chosen at random either within the municipality or within close proximity to the municipality.

2.2.3 Survey Layout

A questionnaire-based survey will be the primary vehicle for collecting framework source data to analyze the socio-economic impacts that foreign senior care workers have in the local societies. Surveys continue to be a useful source of data collection for assessing broad market sentiment and are well suited to gathering data that describe the composition of the sample (McIntyre 1999). The survey methodology used for data collection on this research project will be a mixed-method format utilizing a series of demographic questions and multiple-choice questions. This method combines quantitative research strategies (questionnaires with numerically rated items) with qualitative research strategies (comment section) that will provide key information on the impacts of foreign care, as well as provide empirical data for further analysis. The questionnaire will allow for a data set and the comment section will provide insight into a unique situation or emotion experienced by a survey participant. The surveys have been created in both the English language and Japanese language by a third-party professional business translator. The appendix in this dissertation includes the original English versions of the survey, as well as other work papers.

The survey will follow a professional structure with an appealing design. Each question will be very consistent (i.e., size, colors, spacing, formats, etc.) and will attempt to stimulate interest in the topic. The font is large enough for a senior to read comfortably. Each question will follow a similar style; for example, answer one will always be a polar opposite of answer four. This consistency will make answering the question more convenient and reduce confusion, thus decrease the time for completion. The survey will come with a personal invitation from the author, a clearly defined purpose of the survey, evidence of university affiliation, and a pre-paid envelop for the return mail. Convenience and professionalism will be positive contributors to receiving more surveys back and reducing denial rates.

The layout of the survey is grouped in four (4) general sections. Each section will have several questions that are focused on collection demographic data, assessing stakeholder awareness, and assessing stakeholder perception. The survey consists of twenty (20) questions and a short demographic identification section. The survey questions are presented in a "plain writing style" to eliminate confusion and misunderstanding. The survey will also have a section for open input. It is intended for survey takers to document any additional information they want to share.

- 1. <u>Demographic Data Collection</u>. The first section will have a purpose of capturing initial demographic data of the survey participant. The collection of demographic information will provide insight into the background characteristics of an audience or a municipality. This information will be used in the empirical analysis since they will serve as the independent variables for how the survey participants answer the questions and how their responses can represent the entire population.
- 2. Participant Situational Awareness. This section will ask a series of questions revolving around the topics of current impact or personal opinions. The goal is to collect the participant's opinions on the current environment or about foreign workers. This is the most important part of the survey since it will directly support the hypothesis made with this dissertation.
- 3. Participant Perception. This section will ask the participant on their opinion or knowledge on several relevant topics to the situational awareness section. However, all three stakeholders will be asked similar questions. The goal is to ask each of the three stakeholders the same questions and see how responded to them. This strategy will identify any deviations in experiences by sector.

4. General Comment Section. This section allows the survey participant to provide additional comments/ concerns that can provide value-added contribution to the research subject. This is a highly encouraged section for the participant because it documents actual emotions or experiences with the participant limited to a few standardized responses.

2.2.4 Sample Geographical Location

The geographical location will be the Western Chugoku region of Japan. This region is further defined as cities, towns, and villages within Hiroshima, Shimane, and Yamaguchi prefectures. The best sampling size would include source data from all 47 prefectures in Japan. However, there would be many financial burdens and time constraints to a researcher who wants to conduct a broad national survey of this scope. Japan has a homogenous society and this factor can justify a smaller sample size in a local region under the Degree of Variability consideration (Israel 1992; Kish 1965). For example, a town in Hokkaido prefecture would have both similar population demographics and governmental structure in comparison to a town within the Yamaguchi prefecture. Under this assumption, results from the three prefectures of Hiroshima, Shimane, and Yamaguchi could reasonably represent the population of Japan while staying within available resource parameters.

2.2.5 Sample Selection

Sampling is a reasonable methodology to collect source date that represent the population in an unbiased method. A random sampling methodology was utilized during the survey through an online random generator tool. The base sample of the government municipality listing is the most important since it would dictate the additional sample of businesses within that municipality. To ensure there was no bias, the independent research company of Research Randomizer was used (Urbaniak and Plous 2013). Once the initial government sample was created, a sequential

sampling was created from the listing of senior-care businesses. If a government or business refused to participate in the sample, an additional sample was created using the same random sampling process.

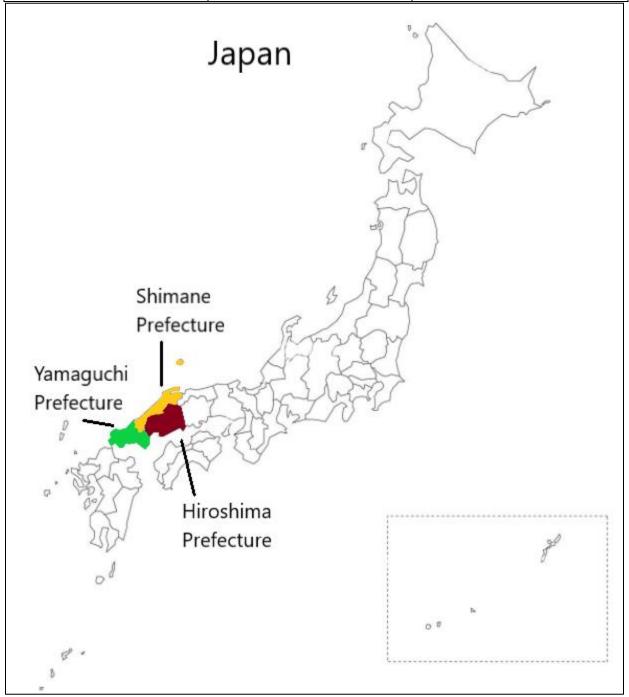
2.2.6 Sample Stages in Order

All three samples were organized into a sequential pattern. The initial sample collected will be the government sample and would establish the geographical location for the next two samples. There are sixty-one local municipalities within the three prefectures of Hiroshima (23 total), Shimane, (19 total) and Yamaguchi (19 total). A sample of 12 municipalities has been selected in an evenly distribution across the three prefectures. **Figure 1** reveals the locations of the three prefectures within the nation of Japan and **Figure 2** highlights each sampled municipality location within the three prefectures. This sample represent 19.67% of the total population within these three prefectures.

Once the primary municipality sample has been completed, the next step is to identify how many Japanese senior-care related businesses are in the same local municipalities. According to LIFULL Senior Company, a third-party advertiser for senior care in Japan, there are 997 senior care centers in Hiroshima, 557 in Yamaguchi, and 351 in Shimane (LIFULL Senior 2020). These figures are the total of all different types of senior-care categories, such as hospitals, group homes, and intensive care facilities. It has been determined that four (4) senior care businesses per municipality would support a relevant sample size. This will provide a total of 48 senior care businesses surveyed for the dissertation, or 2.5% of the entire population within three prefectures.

Figure 1. Sampled Municipalities List Within Japan

Hiroshima Prefecture	Shimane Prefecture	Yamaguchi Prefecture
1. Akitakata City	5. Gōtsu City	9. Kudamatsu City
Hatsukaichi City	6. Unnan City	10.Nagato City
3. Kure City	7. Tsuwano Town	11.Shimonoseki City
4. Sera Town	8. Okinoshima Town	12.Iwakuni City
		·



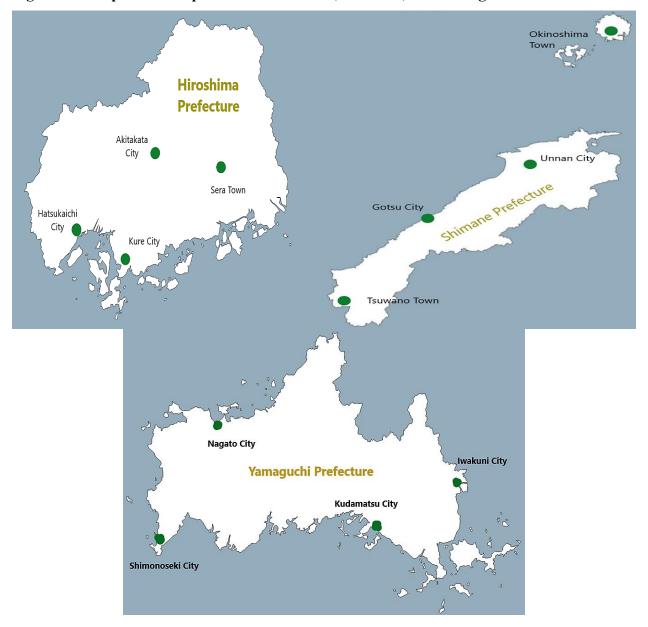


Figure 2. Sampled municipalities in Hiroshima, Shimane, and Yamaguchi Prefectures

The community survey sample will include three separate categories: general community participants, residents receiving care at the senior care organizations, and employees of the senior care businesses. The general community participants will be randomly chosen and weighted evenly around the three prefectures. This sample was generated with the support from the third-party company of NTT Research. The purchased number of individuals was 317 and the sample was generously funded by the Asian Growth Research Institute. The second and third group

consisted of employees at the senior care organizations and actual residents receiving care at the senior care organization. Each business was asked if they could distribute ten surveys out to residents and/or employees during the telephone solicitation phase. The best situation would be to collect a total of 480 employee and resident participant surveys. Residents and employees of the senior care business are important since they would be the best stakeholder to comment on current labor pressures in their facility and the opinion on foreign workers as caregivers or coworkers. Initial feedback was the residents may need some help to complete the surveys due to cognitive ability/physical capability. The plan for these individuals was to ask a caregiver to provide direct support with answering the survey.

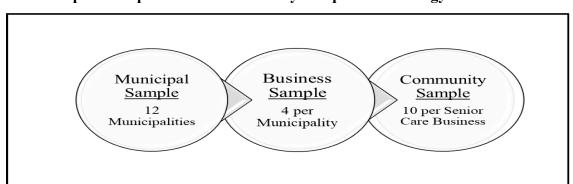


Figure 3. Graphical Representation for Survey Sample Methodology

2.2.7 Survey Deployment Phases

The ideal situation is to receive verbal agreement from the survey participants to complete the survey. This method is more effective than random mailing and will provide a higher response rate. Therefore, the deployment plan involved the initial telephone contact with each stakeholder within the municipality sample and the senior-care sample to inquire on their willingness to participate in the survey. The third-party translation company of Explore Translations was used to contact each municipality and senior care facility. This is a private business that conducts custom translation services within the Iwakuni area.

The first step is for the translator to call the municipality or organization and ask to speak to either the senior public official or high-level manager available who could answer a senior care survey knowledgeably. The translator was instructed to provide a formal introduction of the research project and summarized the contributions to the social science academic field in Japan. If the stakeholder agreed, then they were recorded as a recipient of the formal survey in the mail. If the stakeholder did not agree to participate, then another participant was selected from the list. If the stakeholder agreed, and did not respond for three weeks, the translator was instructed to call back to remind the stakeholder to complete the survey. If the stakeholder still does not respond, another was selected.

A formal survey package was provided to all the stakeholders who agreed to participate. Great emphasis was placed on the contents to look very professional and easy to navigate. The goal was to maximize the survey response rate and emphasize the message that responses will make a difference in the future of Japan. The contents of the survey package included:

- 1) A formal introduction to survey letter;
- 2) University of Kitakyushu Verification of Attendance certificate;
- 3) Appropriate survey for the stakeholder (municipality or business);
- 4) Ten (10) Additional surveys for residents (if senior care business); and
- 5) Prepaid envelope with self-addressed return address for ease of mailing.

2.2.8 Deployment Timeframe

Both the municipal and the Business participant survey deployment and collection period lasted approximately 90 days between June 15, 2020 and September 12, 2020. The community stakeholder survey deployment and collection period lasted between June 15, 2020 and February 24, 2021.

2.2.9 Challenges Expected

Conducting a survey is not without certain challenges that could impact the results. There are several challenges that can be expected when performing the survey and the proper risk-mitigation strategies need to be considered. The first concern is the bias in question responses. Survey participants may answer questions untruthfully on certain controversial topics due to perceived correctness, which makes it harder to assess the actual opinions. This is of greater relevance if a foreign individual was asking domestic Japanese citizens to take the survey. However, a risk-mitigation strategy taken on the Lamb Survey was to clearly identify the purpose of the survey and explain how the information will be used. If a link is created between the participant and the purpose, then the participant may feel motivated to provide a truthful response. Furthermore, a Japanese translator was used to ensure comfort on the topic for the survey participant in answering truthfully. The translator was made available under a fee-for-service agreement to answer incoming calls for survey clarification.

The second concern could be miscommunication from the survey participant over the survey translation. Different questions could be misinterpreted for each participant or with each stakeholder group. This could present a different response that could impact the research project. A risk mitigation strategy taken on the Lamb Survey was to have the survey translated by a reputable third-party translation business. Results were then reviewed by a few close Japanese citizens under a general reasonableness assessment. Confusion or deviations were sent back to the third-party translation business for re-interpretation. Another mitigating step was to have a sufficiently large sample to cover up any outlier responses due to confusion by a single participant.

The third concern was the delay in answering the survey from governmental or commercial sources. Municipalities are somewhat obligated to answer questions posed by external third parties. However, this could take time depending on both the motivation and/or the data collection abilities

of the municipality. Senior-care businesses may also delay in the answering of the survey due to personal interests and/or focusing on business operations. A risk-mitigation strategy for the Lamb Survey was to set a follow-up schedule to maintain focus on the survey. This was established three-weeks after a confirmation was collected.

The fourth concern was the understanding of survey errors. Survey research does have a few distinct disadvantages as noted in Dillman et al. (2014). The four biggest challenges to survey research have been coverage error, sampling error, measurement error, and nonresponse error. Nonetheless, there are ways to mitigate the risk by developing a full strategy in deploying a survey. Coverage error is the unknown or zero chance of individuals in the population being included the sample. A main risk-mitigation strategy to overcome coverage area is engage in sampling. The Lamb Survey includes a sufficient sampling methodology. Therefore, the risk of this error is very small. Sampling error is the risk that individuals included in the sample do not represent the characteristics of the population. A risk mitigation strategy to overcome this is to clearly understand and identify your population of interest, as well as develop a sufficiently large and random sampling methodology. Also, careful attention was paid to measurement error and non-response error.

2.3 <u>Data Collection and Analysis</u>

This section highlights data collection and analysis part of the survey. Once all the surveys have been collected, the responses will be manually reviewed and input into a Microsoft Excel spreadsheet. There are two steps that will occur: the data review phase and the data statistical analysis phase.

2.3.1 Response Organization by Question

The initial phase is the organization of the stakeholder response data into a descriptive statistical (concentration) analysis for each answer, expressed as the form of a percentage. This will measure comprehensive perception from all the stakeholders in aggregate. This is a useful approach to identify collective areas of concern for each survey stakeholder. The results of the concentration analysis will be summarized into common findings; the common findings will then be compared to the chapter categories of questions to measure various attitudes on responses.

2.3.2 Statistical Analysis Model

The second phase will be to conduct a statistical analysis on the survey responses to validate survey participant attitudes (responses) and correlate them to the independent variables collected. A Binary Logistic Regression model will be used to analyze the survey data since this type of model is effective at analyzing the relationship between multiple independent variables and a categorical dependent variable expressed as a probability of occurrence of an event by fitting data to a logistic curve. A Binary logistic regression is typically used when the dependent variable is dichotomous, or has two categories, and the independent variables are either continuous or categorical. Kleinbaum & Klein (2010) and Park (2013) example the logistic model as an appropriate statistical analysis model within the nursing and medical industries.

The basic equation describes the probability of an event happening as a function of X variables, which is the vector of explanatory variables. For the Lamb Survey, the probability is the likelihood a survey participant will answer a given survey question. The selection of a specific response would be considered a 1, from a binary perspective, and the selection of the other responses would be a 0. The multiple binary logistic regression model equation can be visually noted below (The Pennsylvania State University 2018):

$$P = \frac{\exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}{1 + \exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}$$

$$= \frac{\exp(\mathbf{X}\beta)}{1 + \exp(\mathbf{X}\beta)}$$

$$= \frac{1}{1 + \exp(-\mathbf{X}\beta)}$$
(1)

Based on the equation (1), it is easy to calculate the odds ratio. The odds of success formula is noted below:

$$\frac{P}{1-P} = \exp(X\beta) \tag{2}$$

The logistical regression model will be applied to analyze the effects of various attributes of survey participants on their particular response to the survey questions. The estimation results on the coefficients of various independent variables (attributes of survey participants) and the corresponding odds ratios will be reported in chapter 3 and chapter 4 since these two chapters have a sufficient level of sample data that can be used for analysis.

2.4 Chapter Conclusions:

The Lamb Survey was created to collect perceptions, attitudes, and opinions from the three separate stakeholders in society. The format of the three separate Lamb Surveys builds off prior studies, which will be discussed in each subsequent chapter, and applies them to the senior care industry to provide a better impact study in the rural areas of Japan. Each question was carefully engineered from previous studies and the responses were organized into a logical spectrum of

positive to negative. Each survey provided participants a mix of independent question and similar questions to be used for comparative analysis.

The statistical analysis piece of the surveys will include two phases. The first is the concentration analysis phase. This will measure comprehensive perception from all the stakeholders in aggregate and is a useful approach to identify collective areas of concern for each survey stakeholder. The results of the concentration analysis will be summarized into common findings; the common findings will then be compared to the chapter categories of questions to measure various attitudes on responses. The second phase will be to conduct a statistical analysis on the survey responses to validate survey participant attitudes (responses) and correlate them to the independent variables collected. The model used will be a binary logistic regression statistical analysis. Results should provide conclusions on stakeholder attitudes with statistical significance.

A significant amount of time and effort was made to ensure reliable and relevant data was collected for this research project. One of the unforeseen challenges to this survey method was the COVID-19 global pandemic of 2020. The pandemic will prevent on-site visit requested for senior care facilities and restricted travel to municipalities. Furthermore, the seniors within the facilities are categorized as higher risk and more vulnerable to exposure. A greater reliance on the third-party interpreter and the Japanese postal system is needed for survey deployment.

Chapter 3. Which factors affect community member's attitudes towards foreign workers in the senior care industry.

3.1 Chapter Introduction

Immigration control remains a highly debated public policy topic in many developed countries around the world. In contrast to other developed countries, Japan maintains tight regulations on immigration regardless of its rapidly declining working-age population, accelerated population aging, and low fertility rates. Without changes in immigration policy, Japan's population of roughly 127 million is forecasted to decline by 25.7% into the year 2065 according to the National Institute of Population and Social Security Research (2016). Moreover, 38.4% of the Japanese population will be included in the senior demographic, defined as 65 years of age and older. With the average Japanese woman having only 1.34 children (MHLW 2020), it is apparent that the next generation of native-born Japanese will be smaller than the current generation. Japan's economic sustainment depends heavily on the future of its demographic situation. However, why is immigration so unpopular to the Japanese society? This chapter aims to reveal the attitudes of community members in rural Japan (non-metropolitan areas) towards foreign caregivers/immigrants and confirm the factors that affect community perception of receiving care from foreign caregivers based on the key descriptive statistic findings of the Lamb Community Survey and the results of logistic regression analysis. There are few empirical studies using first hand survey data around this topic.

There are many benefits from foreign immigration that are widely known in the academic field. Immigration can increase both regional and National GDP of receiving countries (Dai and Hatta 2019; Saito 2017; World Bank 2019). However, there are still barriers to immigration that are prevalent in the Japanese collective society. Domestic workers often oppose inflows of

immigrant due to threatened employment opportunities and/or lower wages in the domestic labor market. This is the most common excuse provided during public opinion polls and through empirical analyses confirming these effects: Saito et al. (2016) with Japan, Borjas (2003) with the U.S., and Felbermayr et al. (2010) with Germany. Academic research on the determinants of people's attitudes towards immigration has largely focused on two main categories of explanations as defined by Nakata (2017). The first emphasizes the importance of socio-cultural factors, which imply individuals are against immigration because foreigners represent different values and traditions that possibly pose a threat to the national identity or the traditional way of life. Much of the emphasis in this literature is placed on prejudice and stereotyping as the source of hostility to immigration (Nakata 2017; Sides and Citrin, 2007). The second strand of explanations is rooted in economic considerations. Its focus is on how attitudes are shaped by individuals' concerns about competition for scarce resources and the consequent distributional effects of immigration (Dancygier and Donnely, 2013; Dustmann and Preston, 2006; Nakata 2017).

While previous investigation surveys ask very generic and macro-level questions on immigration topics and citizen attitudes, which will be discussed later in the paper, the Lamb Survey is a more specialized survey intended to better understand the Japanese behaviors and how this impacts foreign immigrant who are employed in the Japanese senior care sector. This main audience for this paper focuses on the community sector of society with respect to the three stakeholders in society (Williams 2020). The community is viewed as the secondary support structure for the foreign care givers and their families outside of what direct economic benefits the immigrant's primary employment provide. The community is an important factor to consider in the long-term retention of foreign immigrant. The main research question for this chapter is as follows: Which factors affect community member's attitude towards foreign workers in the senior care industry? To test this primary research question, a reasonable sample was collected.

The first survey collection included the employees and residents within the senior care businesses. These survey participants were given a survey during the initial senior care business survey deployment cycle. Each senior care facility was provided 10 extra community member surveys to distribute to their employees, residents, and/or to the appropriate family members. A total of 520 requests were made (10 community stakeholder surveys × 52 senior care business). Approximately 246 surveys were returned, thus demonstrating a response rate of 47.3%. The second survey collection was through the third-party survey company (NTT Com Online Marketing Solution) and generously funded by the Asian Growth Research Institute (AGI) in Kitakyushu. An additional 317 general community member surveys participants were collected and evenly selected within the three prefectures of Hiroshima, Shimane, and Yamaguchi. The community stakeholder survey deployment and collection period lasted between June 15, 2020 and February 24, 2021.

The responses for each question were plotted in a Microsoft Excel database for analysis. Then, the effects of various independent variables, including community characteristics and the individual attribute of community members, on the dependent variables (responses for each question) are analyzed using a logistic regression model.

3.2 <u>Previous Studies on Community Member Attitude Towards Foreign Workers</u>

The most significant public policy changes that impacted Japan's immigration policy reform, and are still highly relevant today, occurred in the 1990s. This period in Japanese history marked several major reforms brought about by societal pressures. This is the most appropriate time period to begin the discussion on immigration reform as it relates to the use of surveys. Surveys are a useful method to collect data on public sentiment and is often a strategy of government. The reforms in the 1990s led to a significant expansion of public services in the area

of elder care as a result of these demographic pressures. The policy revision that is most relevant to this research project is the Long-term Care Insurance (LTCI) program that was implemented in 2000. This program was a complete overhaul of the previous needs-based elder care system and provide an improved public-funded medical care system for seniors and individuals with disabilities. These public policy changes were passed due to the broad political support from key internal and external stakeholders.

During this time in history, the government engaged in widespread information dissemination programs to sway public opinion in support of this governmental initiative. Public opinion polls began to suggest a noticeable change in citizen sentiment towards elderly care. For example, polls in 1995 showed that 57% of Japanese adults strongly agreed with the statement: "It is the children's duty to care for their elderly parents." In 2003, the same question was asked and 73.3% of 2003 survey respondents believed elder care was now both family and state responsibility (Cabinet Office 2003). This period of time also marked a paradigm shift in the attitudes of the family structure. There were several unexpected negative externalities that came to surface after the government's implementation of the Long-Term Care Insurance program. The specialized level of labor needed to support such a large public program were quickly becoming evident. The government of Japan estimated that a sufficient labor structure, to include more nurses and senior care staff, would be needed to maintain the quality of senior care and match the growing level of demand. The Ministry of Health, Labour and Welfare (2016) has reported that Japan has more than tripled its domestic senior care workforce from 549,000 in 2000 to 1.83 million in 2016. While this appears positive, Japan still remains at a deficit to the level of demand needed to match full senior demand. The MHLW (2016) projected an estimated 400,000-600,000 more care workers would be needed over the next ten years to effectively support the long-term care program,

bringing the ideal labor target to 2.45 million health care workers in addition to current domestic senior care growth rates.

The Japanese government began to test the public sentiment on the topic of foreign laborers in the 1990s and, ultimately, on the usage of foreign nurses and foreign care workers in the elder care sector into the 2000s. In combination with surveying the public, the government started an awareness campaign in the effort to generate widespread public awareness of the issue and generate strong public consensus in support of social care. Beginning in the early 2000s, and well into the 2010s, various articles were published in public magazines, academic journals, and newspapers by leading experts, reporters, and opinion leaders on immigration. These published articles were meant to address the immigration challenges with receiving immigrant to support the senior care industry. However, public opinion polls show almost no change, or even a slight backlash towards more positive views on immigration expansion and recruitment. This trend can be observed graphically in **Table 1** since it summarizes and organizes the findings conducted by the Cabinet Office (1990, 2000, and 2004) polls. Unfortunately, the conclusions are that the widespread governmental information dissemination efforts were largely unsuccessful at swaying public opinion substantially.

A research assessment was completed by Peng (2016) to review the media discourse at this time in Japanese history by reviewing 178 articles from the Yomiuri Shimbun and the Asahi Shimbun over the period of 1995 until 2014. Peng noted that 90 articles were pro-immigration, 71 were neutral, and 17 were anti-immigration. Peng confirmed public sentiment remained ambivalent despite positive media communication and the liberal immigration policy messaging attempts by the government. The Japanese Cabinet Office changed the question format on the public opinion polls in 2010 after consistently receiving less than satisfactory responses from the

Table 1. Public Opinion Poll in Favor or Against Both Immigration and Immigrant Nursing Care Workers to fill Labor Shortages

With the control of t									
Public Opinion on Immigration									
Public Opinion Pro-Immigration Neutral/Mixed Against Immigration									
1990 Public Poll – Q7	14.1%	56.5%	14.1%						
2000 Public Poll – Q7	16.3%	51.4%	21.2%						
2004 Public Poll – Q6 16.7% 39% 25.9%									

Public Opinion on Accepting Foreign Labor to Fill Senior Care Labor Shortage									
Public Opinion Pro-Immigration Neutral/Mixed Against Immigration									
1990 Public Poll – Q11	* 18.9%	49.1%	26.6%						
2000 Public Poll – Q11	17.1%	53.2%	23.1%						
2004 Public Poll – Q7 15.3% 45.0% 29.1%									

Source: (Cabinet Office 1990, Cabinet Office 2000, Cabinet Office 2004)

Japanese public. A new survey was created that focused less on the close-ended explicit questions about the approval of foreign workers and more on the opinions of both Japanese citizens and foreigners working abroad. This new survey was titled as: "Public opinion survey on workers' international mobility" (Cabinet Office 2010). Survey questions were categorized in two parts: 1) Awareness of working in a foreign country for Japanese citizens; and 2) Awareness of Foreign Workers within Japan. Peng (2016) concludes the change in the public opinion survey direction may be because by 2008 Filipina and Indonesian nurses and care workers de facto had already begun entering the country through the Economic Partnership Agreement program. In the light of negative public sentiment, the Japanese government used economic and foreign policy tools to recruit foreign nurses and care workers. This created a new immigration channel for semi-skilled and low-skilled foreign workers to enter the country without visibly altering the existing immigration policy.

The Japanese Cabinet Office (2020) conducted the most recent survey in 2020 by surveying 1,572 Japanese citizens to assess the public's consciousness about the acceptance of foreign workers. Again, this survey asked about certain quality of life questions instead of the explicit

^{*} Note: 1990 public poll question asks about skilled labor shortages instead of nursing labor shortages

^{**} Note: Numbers do not equal 100% since "No Answer" responses were omitted

opinion on immigration. The survey revealed that 74.3% of survey respondents claimed the country needs to improve the environment and enhance living conditions for foreign residents. The follow-up question revealed a need to improve administrative concerns and matters related to daily life, such as residence status procedures, medical treatment, child care and legal protection to ensure safe working environments, as well as multilingual support and disaster preparedness.

There are several surveys conducted by various academic organizations, private organizations, and non-governmental organizations (NGOs) aimed as assessing Japanese perception on immigration. An example is a 2018 survey completed by the Pew Research Center (Stokes and Devlin 2018) that identified a mixed sentiment with regards to allowing more The Pew Research Center is a US-based nonpartisan research immigration into Japan. organization that provides information on social issues, public opinion, and demographic trends with both the US and internationally. When asked about allowing more immigrant to enter Japan, only 23% concurred. When asked whether Japan should accept more, fewer, or about the same number of immigrants, the majority (58% of sample) voiced the opinion that immigration numbers should stay the same, 23% believed Japanese should allow more immigrant, and 13% believe Japan should accept fewer immigrant. A second survey to example the efforts to understand Japanese perception is the World Values Survey institution. The World Values Survey (WVS) is an international research organization that administers a representative comparative social survey to many countries around the world every 5 years. With respect to Japan, responses reflect a deteriorating sentiment on immigration opinion from 2005 until 2019. The Wave 5 2005 (Inglehart et al. 2005) survey asked the participant what the government should do with people who come here from other countries for work. The survey showed that 2.6% agree with allowing anyone to enter Japan, 39.1% agree with allowing immigration as long as there are jobs, 46.2% agree with placing strict limits on immigration, and 4.2% agree with prohibiting all immigration. The 2019

version of the survey (Haerpfer et al. 2020) shows a deteriorating level of acceptance with immigration over the previous 5 years with a sample size in Japan of 1,353 individuals. The survey showed that 1.5% agree with allowing anyone to enter Japan, 39.4% agree with allowing immigration as long as there are jobs, 52.3% agree with placing strict limits, and 0.8% agree with prohibiting all immigration. The major increase between these two surveys is in the category of placing strict limits on the number of foreigners.

The Lamb Survey, including community survey, business sector survey, and government sector survey, builds off these previous surveys by incorporating more specialized questions about the impacts to immigrant within the senior care sector, as opposed to macro-level questions on the acceptance of foreigners in general. The communities are an important support structure to retain immigrant and this should be an area of focus for the government to consider.

3.3 Data from Lamb Community Survey

3.3.1 Introduction to the Lamb Community Survey

As discussed in chapter 2, the Lamb Survey was engineered to collect the perspectives of the community members and to understand which factors affect community members' attitudes towards foreign workers in the senior care industry. There is a need for data and research within the rural areas of Japan and outside the major metropolitan statistical area since these stakeholders are incurring the most negative externality brought about by national immigration strategy. Twenty questions will be asked of each individual who is willing and able to take the survey and the results will be introduced in the subsequent sections.

3.3.2 Sample Characteristics

The valid sample of 563 community participants has provided some important characteristics to highlight. **Table 2** displays a descriptive statistics summary of the various variables (attributes) used in the Lamb Survey.

Table 2. Summary of Relevant Survey Characteristics

Relevant Variables	Results				
Sample Distribution by Location	Total samples of Hiroshima Prefecture: 174 Akitakata City: 21; Hatsukaichi City: 83; Sera City: 45; Kure City: 25 Total samples of Yamaguchi Prefecture: 171 Kudamatsu City: 41; Nagato City: 11; Hōfu City: 25; Shimonoseki City: 66; Iwakuni City: 28 Total samples of Shimane Prefecture: 218 Gōtsu City: 46; Unnan City: 132; Tsuwano City: 10; Okinoshima City: 30				
Age	Total sample (563) mean age: 53.07 Employee avg age: 46.94 Senior patient avg age: 85.44 Other community member avg age: 54.47				
Gender	Male (n=213, 37.83%), Female (n=350, 62.17%)				
Education Level	Less Than High School (n = 19, 3.44%) High School Equivalent (n = 229, 41.41%) College/Technical School (n = 305, 55.15%)				
Medical Industry	n= 108 Private Company Employee (会社員) n= 11 Government Employee (公務員) n= 3 Doctor (医師) n= 219 Other Medical Personnel/ Senior Care n= 7 Welfare personnel (福祉関係者) n= 0 Specialist (Accountant, Lawyer, etc.) n= 40 Self-employed n= 24 Part-Time Employee n= 0 Student (学生) n= 140 Not Working/ Home Spouse/ Retired n= 18 Other (その他)				
Manager Role	n= 135 Manager or Lead Level n= 259 Non-Manager Level n= 169 No Response, unemployed, other				
Foreign Experience	Yes: n = 172 (30.77%) No: n = 387 (69.23%)				

^{*} Note: Survey participants who did not respond were omitted from the figures and calculations above

One of the two unique observations noted of the employee data was the concentration of female survey participants in the senior care industry. Females make up 77.48% (n=172) of the senior care sector and 62.17% (n=350) of the entire sample population. This finding corresponds to the conclusions that females dominate the nursing and nursing aid fields (Ushiro and Nakayama 2010; Sakashita 2018).

The second observation is the high age level in the sample that is commensurate with the national age demographics, as well as the high level of age within the senior care labor force. The sample showed the average age was 46.94 years out of the 222 senior-care employees surveyed. These demographic observations parallel the Kaigo Long-Term Care Labor Stability Center (2018) nursing aid survey findings. The high average age evidences the negative trend that the nursing field is not replenishing with younger workers, which ties to the lower nursing graduation rate in Japan (OECD 2019). This trend will continue to degrade the situation without more foreign immigrant filling in the employment gaps. **Figure 3** provides a graphical representation of the age categories.

Age of Senior Care Gender of Employees Surveyed Respondents 70 and Below 30 ■ Male ■ Female older 5% 2% 60-69 14% 30-39 23% 19% 50-59 24% 40-49 77% 36%

Figure 3. Gender and age of Employees Surveyed

Source: (Lamb Survey 2020)

3.3.3 Five Categories of Questions

The Lamb Survey was structured to ask detailed questions in five categories in order to answer the main research question for this chapter: Which factors affect community member's attitude towards foreign workers in the senior care industry? The questions are as follows.

- ① Will the community confirm that foreign senior care givers also experience difficulties in the following service areas: medical care, educational opportunities, financial services, shopping & quality of life services, and legal services in support of the Cabinet Office (2020) survey findings?
- ② Will the community participants perceive equivalence in quality of care from foreign caregivers in comparison to domestic Japanese caregivers supporting the MHLW (2019) Guidebook for Care Service Providers on Employment of Foreign Care Workers survey and JOPUS (2019) published survey on communication barriers between Japanese and foreigners?
- 3 Do the survey participants in the senior care topic believe discrimination is still present in the communities as reported by the MOJ (2017) survey, the Worlds Value Survey Wave 7 (Haerpfer et al. 2020) and the Pew Research Study (2017)?
- ④ Is the community satisfied with the local and national governmental support structure for foreign workers as supported by the World Values Survey Wave 7 (Haerpfer et al. 2020)?
- (5) Will the community members agree that the senior care situation will continue to worsen in support of the Japanese government MHLW (2016) forecasts?

3.3.4 Results of Community Survey by Question

This section highlights the survey results, to include both the number of responses to each question and the percentage concentration in responses. The first question is a five-part question on the quality-of-life concerns that immigrant may have, which will be summarized in the next

section. The rest of the 19 remaining questions, which corresponds to five categories introduced above, are presented in **Table 4**.

Table 4. Results of Community Survey by Question

	N=	Response A	Response A Response B Response C Response D		Response E						
Question #2	563	 2. Do you feel the local economy will improve with the infusion of more foreign caregivers? (a) The economy will grow from job creation, spending, and resident retention. (b) The economy will increase, but there will be outflow of resources (remittances). (c) The economy will grow anyways, without foreign labor. (d) No material growth is expected. (e) I don't know or not applicable. 									
Question #3	563	23 (4%) 299 (53%) 144 (26%) 27 (5%) 70 (12%) 3. Will you have difficulty communicating your senior needs to a foreign individual? (a) I do not believe I will have difficulty in communicating my needs. (b) I may have a little difficulty, but believe I can still communicate my needs. (c) I will have great difficulty in communicating my needs to immigrants. (d) I will not be able to communicate my needs. (e) I don't know or not applicable.									
Question #4	563										
Question #5	563	94 (17%) 261 (46%) 36 (6%) 17 (3%) 155 (28%) 5. Could a foreign population change your culture and local way-of-life? (a) The foreign population will not change my culture; they will only enrich it. (b) The foreign population will not disrupt my culture entirely. (c) The foreign population will disrupt my culture. (d) The foreign population will disrupt my culture significantly. (e) I don't know or not applicable.									
	563	183 (33%)	284 (50%)	18 (3%)	5 (1%)	73 (13%)					
Question #6		6. Have you seen or heard about discriminatory demonstrations or street propaganda activities against foreigners in Japan? (a) I have never heard of any. (b) I have heard on national or local news. (c) I have personally witnessed these demonstrations or street propaganda. (d) I have participated in, or have a strong following with them. (e) I don't know or not applicable.									
Question #7	563	88 (16%) 7. How did it make you for (a) Uncomfortable. (b) Negative. (c) Negative, but cur (d) Positive. (e) I don't know or n		73 (13%) d about the propaganda?	4 (1%)	321 (57%)					
Question #8	563	181 (32%) 8. Do you think the foreig (a) I think the foreig (b) I think the foreig (c) Slight discriminat	88 (16%) In care givers will be discr In immigrants could be dis In immigrants will be discr It ion is an unfortunate part Iny cases of discrimination	criminated against (directl iminated against (indirectl : of migration.		114 (20%)					

	563	115 (20%) 272 (48%) 54 (10%) 21 (4%) 101 (18%)								
Question #9	 9. Do you consider foreign caregivers to contribute value to your community? (a) Foreign caregivers bring value to the community (business, government, society). (b) Diversity is good. However, there are challenges for foreigners. (c) Foreign caregivers are good. However, they tend to take advantage of opportunities in the local community. I wish they would be more respectful. (d) It is possible that foreign residents will weaken the local community. 									
	(d) It is possible that foreign residents will weaken the local community. (e) I don't know or not applicable.									
Question #10	563	88 (16%) 288 (51%) 71 (13%) 29 (5%) 87 (15%) 10. Would you be open to receiving care from a foreign caregiver? (a) I am open to receiving care from a foreign caregiver. (b) I have a few reservations, but am open to receiving care. (c) I would be respectful, but would have bias or uncomfortableness. (d) I would not be open to receiving care from a foreign caregiver. (e) I don't know or not applicable.								
Question #11	563	27 (5%) 195 (35%) 90 (16%) 44 (8%) 207 (37%) 11. Do you consider foreign caregiver quality the same as from a domestic Japanese worker? (a) It is my opinion that foreign care quality is better than domestic care. (b) I believe domestic and foreign care are both identical. (c) I believe foreign care is slightly behind domestic care. (d) I believe foreign care is inferior to domestic care. (e) I don't know or not applicable.								
Question #12	563	100 (18%) 143 (25%) 42 (7%) 12 (2%) 266 (47%) 12. Does your primary caregiver appear stressed, or have you heard or seen anything negative about your primary caregiver's workload? (a) I have heard my caregiver express concerns about the lack of support. (b) I have seen stress from my caregiver. (c) I have not witnessed any issues with my caregiver's workload. (d) My caregiver appears relaxed with normal (minimal) stress. (e) I don't know or not applicable.								
Question #13	563	19 (3%) 173 (31%) 155 (28%) 213 (38%) 3 (1%) 13. Are you knowledgeable with the current Economic Partnership Agreement (EPA)? (a) I fully understand what the Economic Partnership Agreement is. (b) I have heard what the Economic Partnership Agreement is. (c) I am unaware of this international agreement.								
Question #14	563	(d) I don't know or not applicable. 14 (2%) 103 (18%) 136 (24%) 35 (6%) 275 (49%) 14. Do you feel the local government (Shi-Chou-Son) has provided enough support for foreign care givers? (a) Foreign caregivers have ample resources and a positive support structure. (b) Reasonable, but government could do more to help. (c) Not enough support is provided from the local government. (d) There is no support from the local government. (e) I don't know or not applicable.								
Question #15	563	25 (4%) 105 (19%) 156 (28%) 12 (2%) 265 (47%) 15. Do you feel like the national government has provided enough support for foreign caregivers? (a) National government provides ample programs. (b) Reasonable, but national government could do more to help. (c) Not enough support is provided from the national government. (d) There is no support from the national government. (e) I don't know or not applicable.								
Question #16	563	26 (5%) 139 (25%) 128 (23%) 59 (10%) 211 (37%) 16. Is community infrastructure supportive enough for foreign residents (schools, public transportation, medical, shopping, internet, banking, etc.)? (a) Community has sufficient infrastructure in place for foreign residents. (b) Community has appropriate infrastructure in place, but could improve in areas. (c) Improvement is needed in many sectors (schools, public transport, shopping, internet) (d) We do not have appropriate infrastructure in place. (e) I don't know or not applicable.								

_	563	313 (56%)	110	(20%)	20	(4%)	11	(2%)	109	(19%)
Question #17		 17. Do you think community senior care demands are increase in your community? (a) Demand for senior care is increasing greatly. (b) Demand for senior care is increasing very slightly. (c) Demand for senior care has stabilized; no growth at this time. (d) Demand for senior care is decreasing in my community. (e) I don't know or not applicable. 								
	563	15 (3%)		(15%)	120	(21%)	241	(43%)	104	(18%)
Question #18	18. Do you feel you have enough money for your care now, or in the future? (a) I am prepared for all senior care expenses that I may pay. (b) I am prepared for minor senior care deductibles, or minor expenses. (c) I am saving right now, or I have a small amount saved. (d) I don't have enough, or I am planning to start saving. (e) I don't know or not applicable.									
	563	25 (4%)		(28%)	128	(23%)	80	(14%)	172	(31%)
Question #19		 19. Do you see any advantages to receiving care from foreign caregivers? (a) I believe there are many advantages. (b) I believe there are several advantages. (c) I see foreign care as similar to Japanese care. (d) I do not see any advantages and see a few disadvantages. (e) I don't know or not applicable. 								
	563	35 (6%)		(42%)		(25%)	52	\ - · <i>I</i>	95	(17%)
20. How do you feel about your family members receiving care from foreigner caregivers, or how do think members will feel about you receiving care from foreign caregivers? (a) I think it is positive. (b) I do not think it will be bad (c) I do not have an opinion on it. (d) I feel negatively about it. (e) I don't know or not applicable.							o think your fa	mily		

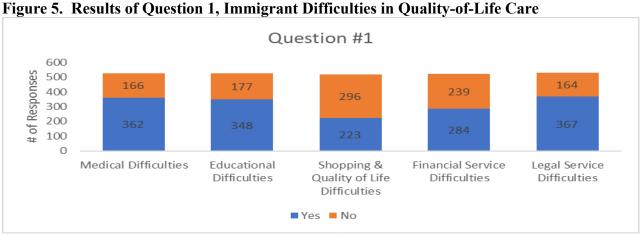
3.3.5 Results of Response to the Survey Questions

The following section examines the concentration of responses per each question to compare to the original five research questions. As a special note, the response of "I Don't Know or Not Applicable" has been omitted from the analysis to highlight actual responses.

<u>Survey Finding #1 – Quality of Life Challenges (Question 1)</u>

The first category of questions is designed to validate the quality-of-life claims made in the Japanese Cabinet Office (2020) survey and see if they are similar to the Lamb Survey results. The first survey finding is that immigrant face challenges with receiving acceptable medical care, educational opportunities, financial services, and legal services/representation. The major assumption made is that the majority of community members will confirm that foreign care providers will experience difficulty with the quality-of-life services while residing in Japan, thus indicating an understanding of the struggle foreign residents may have. The result indicated the

question is true through descriptive statistics of the question with the total of aggregate consensus of 60% of survey participants consider immigrants to experience significant challenges with several quality-of-life services – satisfactory receiving medical care, educational opportunities, financial services, and legal services/representation. These findings are less severe as noted in the Japanese Cabinet Office (2020) survey, which revealed that 74.3% of survey respondents claimed the country needs to improve the environment and enhance living conditions for foreign residents. Further result breakdowns show immigrants will experience difficulty with medical care (68.6% agreement), educational opportunities (66% agreement), shopping & general quality of life difficulties (43% agreement), financial Serviced (54% agreement), and legal Support (69% agreement). The question results are evidenced graphically in Figure 5 below. Difficulty accessing services and support can contribute to poorer health, education, employment and social outcomes according to the Australian Institute of Health and Welfare (2016) and Schunck, Reiss, & Razum (2015) for a German study. Reduced access to services and support will also reinforce existing inequalities (Newman, Javanparast, Baum, & Hutchinson 2015). The challenges explained above are very similar challenges that most nations experience. Australia, for example, is experiencing significant challenges with communicating government support serves to refugees and immigrants from culturally and linguistically diverse backgrounds (O'Mara and Carey 2019).



(Source: Lamb Survey 2020)

Survey Finding #2 – Quality of Foreign Care Vs Domestic Care (Question 2, 3, 10, 11, 19, 20)

The second category of questions for the Lamb Survey asked if the community survey participants perceived any difference in quality of care between Japanese domestic care givers and foreign care givers. Furthermore, the questions attempt to assess if foreign immigrants are beneficial to the community and if they will not create any challenges to the level of care expected by the customers (i.e., communication of needs). It is assumed the majority of community survey participants and/or their extended family will not perceive a difference between foreign caregivers in comparison to domestic Japanese caregivers and agree that foreign immigrants provide value to the community. Not only will this survey piece provide important insight on quality-of-care equivalency and acceptance of foreign care, but it will also serve to understand if the foreign immigrants have a positive work environment to remain in Japan for the long-term, thus increasing the intrinsic value to the community and nation. The Lamb Survey questions were influenced from the International Labour Organization Survey (2019) on public attitudes towards immigrant workers in Japan, the JOPUS (2019) private survey, and the Ministry of Health Labour & Welfare (2019) Guidebook for Care Service Providers on Employment of Foreign Care Workers. Key findings for the Lamb Survey reveal the research question is true and individuals agree that the quality of care between foreign workers and domestic Japanese workers is equivalent and they create value in society.

• Question #2. This question assesses the individual's opinion if the local economy will improve with the infusion of foreign care givers. This question assesses the community survey participant's opinion on the understanding of the intrinsic benefits of foreign workers in the local economy. Roughly 270 community survey participants (69% of sample) perceived foreign immigrants as value-added and 124 respondents (31% of sample) did not have a positive perception of foreign migration. The senior care facility and government participants

were asked the same question. The majority of senior care facility survey participants (29 participants or 76% of sample) answered that the economy will increase from job creation, spending, and resident retention. The majority of governmental survey participants (9 participants or 75% of the sample) collectively responded favorably on foreign resident value in the community.

- Question #3. This question asked the individual if they perceive difficulty in accurately communicating their senior care needs to a foreign individual. Roughly 322 participants (65% of sample) stated that they would have little to no difficulty communicating their senior care needs to a foreign immigrant. When the survey responses were further constrained to only the senior care staff and residents, the answer were even more optimistic with (196 senior care participants or 83% of sample) stating they would have little to no difficulty communicating their needs, thus indicating a strong sense of equivalency.
- Questions #10, #11, and #19. These questions assesses if the community survey participant if they perceive the quality of care between a foreign worker and a domestic Japanese worker as equivalent and then asked the community survey participant if they would be receptive to receiving care directly from a foreign caregiver. Roughly 376 participants (79% of the sample) have stated that they would be open to receiving care from a foreign caregiver. For question #11, only 222 participants (62% of sample) have answered that quality between Japanese domestic workers and foreign workers is near equivalent. While the "I don't know" category has been omitted in these series of questions, it was interesting to note the concentration of community survey participant responses were within the "I do not know" category at 207 answers (37% of sample). This could indicate that no positive or negative opinions were formed, which could support positive neutrality on the concept of equivalency. Question #19 builds off question #10 by changing the thought process with looking at immigrant advantages.

When asked if the community survey participant could see any advantages to receiving care from foreign caregivers, 183 participants (47% of sample) stated they foreign caregivers presented advantages, 128 participants (33% of sample) stated equivalency, and 80 participants (20% of sample) stated the foreign care giver had some disadvantages.

• Question #20. This question was the last question to gauge labor equivalency by trigger an emotional response with introducing the family element to the community survey participant. Exactly 416 participants (89% of sample) would feel comfortable with a foreigner providing care for their family member.

Survey Finding #3 – Discrimination in Local Community (Questions 4-9)

The third category of questions for the Lamb Survey focuses on the topic of discrimination and tries to understand how the various stakeholders perceive foreign residents in their communities. Discrimination is an unfortunate cultural stigma that is deeply engrained in societies around the world. Japan is no different and the society is known for discriminatory practices deeply rooted in the culture, which draws into the political system, judicial system, and societal structure (Matsuura 1980; Arudou 2015; Aspinall 2017; Gong 2015). In the last several decades, the government of Japan has begun to identify discriminatory practices within its population and increase its regulatory posture to ensure equal protections. This happen in conjunction with the deficit of foreign labor within the economy. The Japanese Ministry of Justice (MOJ) has played a significant role in conducting several surveys with foreigners to collect their opinions on discriminatory practices by the Japanese citizens. An important survey commissioned by the MOJ (2017) and conducted by the Center for Human Rights Education and Training was the "Analytical Report of the Foreign Residents Survey." The Lamb Survey is influenced by this survey. It is assumed the Japanese community survey participants will not perceive a difference between the

qualities of foreign caregivers in comparison to domestic Japanese caregivers and that there are beneficial sentiments from foreign care providers. Key findings for the Lamb Survey reveal this assumption is false. Individuals still believe discrimination is prevalent in the local community and presents challenges for the long-term retention of foreign care givers.

- Question #4. This question assesses if the community survey participant expects the foreign senior caregivers to assimilate to the local society by assessing the level of discrimination in the local population based on the answers from the sample. Indirect discrimination can occur when individuals consider a foreign group as needing to conform to the culture of the native group. Exactly 270 participants (59% of sample) admitted that immigrants must assimilate to the community and share their cultural differences. Cultural assimilation is defined as the process in which a minority group resembles the values and behaviors of the majority group.
- Question #5. This question assesses the emotional impact that a community survey participant would experience at interacting with a foreign caregiver. This question was meant to trick the participant since selection "A" is the only response that indicates someone is unbiased on the topic of foreign senior care. Exactly 314 participants (77% of sample) identified that the survey participant will experience some form of negative disruption. Only 94 participants (23% of sample) stated that foreign caregivers will not change my culture, they will enrich it. This would be considered the most favorable response.
- Question #6 and Question #7. These two questions are a two-part inquiry meant to gauge discriminatory practices by the individual and tests how the respondent felt about the situation. Exactly 307 participants (55% of the sample) have seen or heard of demonstrations or street propaganda events and 256 (33% of sample) have not heard of or do not know of these events. This is a high concentration of people in general who have been exposed in some capacity to hate speech or street demonstrations around the three prefectures. The next question asks the

survey participant how they felt about the events or demonstrations. The majority of respondents (321 participants or 57% of sample) chose not to respond or didn't know. The next concentration (238 participants or 42% of sample) felt uncomfortable or negative about the propaganda. Only 4 participants (1% of sample) claimed to express positive feelings from the demonstrations.

- Question #8. This question assesses if the community survey participant feel foreign caregivers could be directly discriminated against by the community. Exactly 429 participants (96% of sample) perceived that foreign caregiver will be discriminated against in some capacity by selecting responses A, B, or C. The governmental stakeholders and the senior care services business stakeholders were asked the same question in their survey and the senior care services stakeholders had similar results.
- Question #9. This question assesses if the community survey participant if they consider foreign residents to contribute value to the community. It is a straight-forward question that indicates the participant's knowledge of various migration research topics. Exactly 387 participants (84%) perceive the foreign caregivers as value added to the community. The governmental stakeholders and business stakeholders were asked the same question in their survey and the results were similar.

Survey Finding #4 – Government Support (Questions 13-16)

The fourth category of questions is designed to identify the community survey participant's opinion on the governmental support structure available in their local communities. Retaining immigrants for the long-term must be a task taken by all three stakeholders in society. However, the government must play a primary role to ensure an adequate support structure for immigrant. Primary research for the engineering of these questions were based off the World Values Survey

Wave 7 (Haerpfer et al. 2020) which asked the community survey participant how confident they are in their government and the Pew Research Center (2017) survey on US government sentiment. The fourth research question asked if the community is satisfied with the local and national governmental support structure for foreign workers. **Key findings for the Lamb Survey reveal the community would like better support from all three structures of government (national, prefecture, local) with regard to foreign workers.** As a special note, it could be organized on the level of support per participant in the following order of preference: local government first, the prefectural government second, and the national government last.

- Question #13. This question assesses the community stakeholder's knowledge on current regional trade agreements in place, known as the Economic Partnership Agreements (EPAs). Exactly 371 participants (66% of sample) do not possess any knowledge on the EPA; only 31% have hear about it and 3% understand it. However, the opposite is true for the senior care services business stakeholders and government stakeholders who, on the average, knew more about this regional agreement that the community participants. The majority of senior care services business stakeholders (37 participants or 71% of sample) claimed to have at least a minimal understanding and the majority of government survey participants (9 participants or 75% of sample) are aware of the international agreement.
- Question #14 and Question #15. These questions assess the opinion of the community survey participant on the level of support the local and national governments have provided with respect to immigration and foreign labor. Exactly 171 participants (59% of sample) stated that the local government was not providing enough support and 168 participants (56% of sample) stated that the national government was not providing enough support. The support for local and national governments were 41% and 44%, respectively. The senior care services business stakeholders were asked this question during their respective survey. The majority of senior

care services business survey participants (20 participants or 51% of sample) have stated that local government does not provide enough support the foreign residents in the community senior care services business and 16 participants (38% of sample) stated the national government doesn't provide enough support for foreign workers.

• Question #16. This question assesses the participant's opinion on infrastructure within the local community to support foreign caregivers. Having sufficient and ample infrastructure in place will help retain them within Japan for the long-term. Exactly 187 participants (53% of sample) stated that the community does not have basic infrastructure in place to support foreign caregivers by selecting C and D. The government stakeholders were asked the same question in their respective survey and 11 participants (92% of sample) stated there is not sufficient infrastructure in place.

Survey Finding #5 – Pressures from Growth In Senior Care Industry (Questions 12, 17, 18)

The fifth category of questions is designed to identify if the community perceives continued growth in the senior care industry and understands the stresses that domestic care givers experience in the workplace. Senior care needs are growing and the community understands this. The senior care services business surveys indicated that the majority of senior facilities are at full occupancy, or quickly heading to full occupancy. Many of the domestic care employees are above the age of 45 and there are not enough recent graduates replacing them. When employees are too stressed to maintain their composure, this indicates a lack of labor resources for the senior care services business. These survey questions are an attempt to assess participant opinion on this situation. The survey questions were influenced from the MHLW (2016) projections. **Key findings for the Lamb Survey reveal the community perceives continued growth in the senior care industry and understands the pressures on the domestic care givers.**

Question 12. This question assesses the sufficiency of labor resources by asking the participant's opinion on the various work-life balance stresses that the senior care workers experience. Senior care needs are growing and the senior care services business surveys indicated that the majority of facilities do not have occupancy or are facing their limit. Exactly 243 participants (82% of sample) stated that they have heard their caregiver express concerns about the lack of support or appear to have a high level of stress. Only 54 participants (18% of sample) feel that the level of work stress is appropriate for the workplace.

Question #17. This question assesses the participant's opinion on the level of consumer demands within the senior care industry. The results identifies that community demands for senior care are perceived to be increasing. Exactly 313 participants (69% of sample) stated that the level of demand for senior care is growing significantly. The remaining 141 participants (31% of sample) perceive minor growth, stability, or a decline of growth. The government participants and the senior care services business participants were asked the same question in their respective survey. The majority of government participants (9 participants or 75% of sample) perceived a high level of growth in senior care demand and 13 senior care services business participants (25% of sample) stated that demand is increasing greatly in the local area and 29 participants (56% of sample) see slight growth.

Question #18. This question assesses if the participants possesses sufficient financial resources to pay their senior care costs right now or in the future. The purpose of this question is to assess the participant's awareness of the senior care sector and to understand how the participant embraces this in their normal lives through financial resources. Exactly 361 participants (79% of sample) indicated the participant does not have enough funds saved for their own senior care needs. Only 98 respondents (21% of sample) stated they have adequate reserves in place to pay senior care expenses.

3.3.6 Conclusions About Data

Although the response result tables provide interesting and detailed information on the community member's attitude towards foreign senior care workers in the 12 cities/towns within the Western Chugoku region of Japan, it is still difficult to clearly judge or identify which factors have statistically significant effect on community member's attitude. In the section 3.4, a Logistic Regression model will be used to analyze the effects of community member's individual characteristics and their community socio-economic features on their response to the questions of Lamb Survey.

3.4 The Model Used for Statistical Analysis in this Chapter

3.4.1 Introduction to the Binary Logistic Regression Model

The primary research purpose within this section is to recognize which variables affect survey participant perception of receiving care from foreign caregivers. A Binary Logistic Regression model will be used to analyze the survey data since this type of model is effective at analyzing the relationship between multiple independent variables and a categorical dependent variable expressed as a probability of occurrence of an event by fitting data to a logistic curve. Chapter 2 introduces the model and highlights is usage on participant responses. The formula is expressed again below:

$$P = \frac{\exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}{1 + \exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}$$

$$= \frac{\exp(\mathbf{X}\beta)}{1 + \exp(\mathbf{X}\beta)}$$

$$= \frac{1}{1 + \exp(-\mathbf{X}\beta)}$$
(1)

Where, P (dependent variable): a probability of selecting an answer to a special question.

x_i: explanatory variable, selected from variables reflecting community member's individual characteristics and their community socio-economic features (see Table 6-b).

3.4.2 The Variables in the Model Used in This Chapter

Base on four hypotheses, which will be introduced in next section, eight independent variables are selected for analysis in **Table 6-a** below. The summary statistics for these variables is shown in the following **Table 6-b**.

Table 6-a. Description of Independent Variables

Independent Variable	Description
Population	- The population of the municipality
	- Displayed as actual number
GDP per Capita	- The Per Capita GDP (PCGDP) within municipality
	- Displayed as actual number
Age	- The age of the individual survey participant
	- Displayed as actual number
Gender	- The gender of the individual survey participant
	- Male = 1, Female = 0 categorical data
Highest Education	- The education level of the survey participant
	- Years of education (High school = 12, Bachelors = 16, etc.)
Medical Industry	- The categorization of participant employed in or outside medical sector
	- Employed in medical field = 1, Not employed in medical field = 0
Manager Role	- The categorization of participant employed as manager or non-manager
	- Supervisory Role = 1, Non-Supervisory Role = 0
Foreign Experience	- A previous association, friendship, or relationship with a foreign individual
	- Foreign Interaction = 1, No Foreign Interaction = 0

Table 6-b. The Summary Statistics for Independent Variables

Variable	Observations	Mean	Std. Dev.	Min	Max
Population	563	89,922.29	80,457	8,814	260,897
GDP per Capital	563	3,585,451	691620.2	2,826,072	5,290,142
Age	563	53.0657	14.7410	22	96
Gender	563	0.4725	0.4997	0	1
Education Level	563	14.1297	2.2878	9	18

Medical Industry	563	0.3890	0.4880	0	1
Manager Role	563	0.2291	0.4207	0	1
Foreign Experience	563	0.3055	0.4610	0	1

3.4.3 The Four Hypotheses

The following hypotheses were made before running the survey data into the model. The purpose is to test how individuals respond to the survey, thus indicating certain attitudes on the chapter research topic. The four hypotheses are as follows:

- 1. Hypothesis #1. Individuals employed within the senior care industry, individuals who have had a previous foreign association, and individuals hold a manager-level position will express a more positive perception of foreign senior care givers.
- **2.** Hypothesis #2. Females, who usually have a more negative perspective on immigrant than males, will view foreign workers within the senior care industry more favorably than outside the industry.
- **3.** Hypothesis #3. Individuals who received higher education will have a more positive perspective on the acceptance of foreign senior care workers.
- **4.** Hypothesis #4. Individuals who are older in age (thus, probably more conservative) will have more negative perspective on the acceptance of foreign senior care workers.

Hypothesis #1

The first hypothesis combines three independent variables by stating individuals employed within the senior care industry, individuals who have had a previous foreign association, and individuals hold a manager-level title will express a more positive perception of senior care givers and not show signs of any communication barriers. Individuals who are employed in the senior care industry should have more empathy towards foreign immigrants and support the additional inflow, specifically into the senior care industry. The independent variable on individuals within

the senior care sector was influenced on previous national and academic studies on the shortage of caregivers (MHLW 2016, 2018, 2020; Peng 2016; OECD 2020; Cabinet Office 1990, 2000, 2004). The foreign experience variable supports previous research by Yamamura (2012) and Tomiura et al. (2016) that foreign associations, relationships, or acquaintances tend to evidence better support for immigration. Lastly, Tomiura et al. (2016) further clarifies that management-level employees favor immigration. All 19 Lamb Survey questions were run through a logistic regression model by using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative.

Hypothesis #2

The second hypothesis is a two-part claim to assess if females will view immigration within the senior care industry more favorably than outside the industry. Women are significantly more likely to be protectionists and, at the same time, against immigration than men are. This female negative attitude toward globalization is confirmed even after controlling for one's occupation and education (Tomiura, Mukunoki, and Wakasugi 2016; Mayda 2008; O'Rourke and Sinnott 2006). The first claim is if the female demographic will perceive foreign workers more favorably as either coworkers or caregivers within the industry since a concentration of the community survey sample consists of customers and nurse aids at the senior care facilities. It is expected that female employees and female customers will have a more favorable view on immigration as opposed to the perception expressed in previous surveys. In consideration of the nursing shortage and the growing demand for senior care services within the industry, females could augment their attitudes on migration to alleviate some of the work pressures with an inflow of foreign caregivers. The second claim is that individuals who are female will be more receptive to seeing female foreign workers within the senior care industry instead of males. This is more impactful within senior care

since the nursing and senior care industry is more concentrated in female workers. Previous studies have shown that female immigrants are perceived more favorable than male immigrants. Males are perceived as threatening to the domestic population due to outgroup threats in intergroup conflict from evolutionary theory (Navarrete et al. 2010), realistic and symbolic threat (Stephan & Stephan 2017) and male dominated violent crimes (Gambetta and Hertog 2017). Ward (2019) and Gereke, Schaub & Baldassarri (2020) also conducted perception surveys and noted the male demographic as the most stigmatized. All the 19 Lamb Survey questions were run through a logistical regression model and using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative. The independent variable of gender is categorized into either male or female.

Hypothesis #3

The third hypothesis claims that individuals who possess a tertiary level of education (4-years of college education or greater) will understand the value of foreign senior care employees even in the senior care sector. Previous studies have linked higher education with greater support or understanding of immigration, as noted in Hainmueller et al. (2015), Mayda (2006), and the Pew Research Center (2017) survey. Furthermore, Nakata (2017) compared the level of education with gender and noted that tertiary education has positive impacts on the level of support for immigration for female, but has no impacts for male. Since previous research correlates education level with a positive view on migration, the same outcome should be evidenced within the Lamb Survey. All the 19 Lamb Survey questions were run through a logistical regression model and using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative. The independent variable of education uses continuous data and is recorded by individual.

Hypothesis #4

The fourth hypothesis claims that individuals who are older in age (40 years of age or greater) will be less inclined to receiving care from a foreign senior care worker, thus evidencing a negative perspective on the acceptance of foreign senior care workers similar to that of previous studies. Previous academic studies support the idea that younger adults are the most positive towards immigration and this diminishes as you move down the age spectrum (Pew Research 2017; Tomiura et al 2016; Calahorrano 2013; Winkler 2015). These trends are expected to be similar to the senior care industry. All the 19 Lamb Survey questions were run through a logistical regression model and using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative. The independent variable of age includes continuous data that is listed out by individual.

3.5 Result of Logistic Regression Analysis

3.5.1 Analysis Results for Hypotheses #1

The first hypothesis combines three independent variables by stating individuals employed within the senior care industry, individuals who have had a previous foreign association, and individuals who hold a manager-level title will express a more positive perception on senior care givers. Results of the analysis support the hypothesis with individuals who have a foreign association or individuals within the medical industry demonstrating the most support. However, the claim that participants who are managers also demonstrate support for foreign caregivers is not supported with the survey results since there were no statistically significant findings to fully evidence that management roles correlate to a more lenient immigrant perspective. This finding contradicts Tomiura et.al (2016) who noted through their proprietary model on behavior bias and

trade policy preferences that managers were in favor of immigration. It is concluded that managerlevel titles have no influence on the survey response from this study. The questions of 2 and 19 were used to test the first hypothesis and the model output is as follows:

Table 7. Analysis Results of Question 2

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 2

Do you feel the local economy will improve with the infusion of more foreign caregivers?

- (a) The economy will grow from job creation, spending, and resident retention.
- (b) The economy will increase, but there will be outflow of resources (remittances).
- (c) The economy will grow anyways, without foreign labor.
- (d) No material growth is expected.
- (e) I don't know or not applicable

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	z	P>z (Wald)	
Age	563	53.066	14.741	0.0052	1.0052	0.0064	0.82	0.4140	
Gender	563	0.528	0.500	-0.0881	0.9157	0.1806	0.45	0.6550	
Education Level	563	14.130	2.288	0.0722	1.0749	0.0429	1.81	0.0700	
Medical Indust.	563	0.389	0.488	0.6068	1.8345	0.3830	2.91	0.0040	
Manager Role	563	0.229	0.421	0.0508	1.0521	0.2237	0.24	0.8110	
Foreign Exp.	563	0.306	0.461	0.4086	1.5047	0.2868	2.14	0.0320	
LR chi2(6) = 21.61		Prob > chi2 = 0.0014		Log likeliho	Log likelihood =-378.96515			Pseudo R ² = 0.0277	

Question #2 assesses the individual's opinion if the local economy will improve with the infusion of more foreign care givers. From the analysis results on Question 2 in **Table 7**, we can find that the variable **Medical Industry** and the variable **Foreign Experience** have a statistically significant positive effect on the probability of selecting a survey response of either (A) or (B), with a P-Value of 0.004 and 0.032, respectively. The Odds Ratio shows that survey participants within the medical industry are 1.83 times more likely to select a response of (A) or (B) as opposed to a survey participant employed outside the medical industry, while survey participants with a foreign experience are 1.50 times more likely to make the same selection than a survey participant who has never had a foreign experience. These results demonstrate that survey participants employed within the medical industry and/or survey participants who possess a foreign

acquaintance or relationship are likely to believe the local economy will improve overall from an increase in immigration with statistical significance. This is a reasonable conclusion since individuals in the medical industry may have witnessed or trained foreign caregivers and have a more favorable opinion on their skill and the benefits they can share within the communities. Individuals who have held a foreign relationship could also have more broad awareness on the value foreigners could provide.

Unfortunately, there were no statistically significant effects to the manager level variable on survey participant response. However, the analysis revealed that the **Highest Education Level** variable, while not statistically significant, reveals a P-Value of 0.070 that is within the 90% confidence range. Education has been demonstrated in previous studies and surveys as an important influencer on behavior.

Question 19 was meant to gauge the equivalency of foreign care in comparison to domestic care. Responses (A) and (B) would indicate the opinion that survey participants perceive foreign senior caregivers are beneficial and a response of (C) would indicate equivalency between the two caregiver categories. From the analysis results in **Table 8**, we can find all three *positive* statistically significant variables as **Foreign Experience**, **Gender**, and **Medical Industry** with P-Values as 0.004, 0.013, and 0.000, respectively. These results are reasonable since individuals within the medical either witnessed foreign senior care provider care, interacted with them, or trained foreign senior care providers themselves or have a favorable view on their performance. The gender variable is quite an interesting finding that yields a positive statistically significant impact for males as opposed to females. The Odds Ratio shows males as 1.65 times more likely to view foreign caregiver care as equivalent as or better than domestic care. The other side of this is that females are more conservative, or possibly more critical, of the quality level of foreign caregivers. This trend has been noted in previous studies, but has not been applied to the senior care sector.

Table 8. Analysis Results of Question 19

(Dependent Variable: the response of the question. A response of A, B, or C is set as 1 and a

response of D or E is set as 0)

Question 19

Do you see any advantages to receiving care from foreign caregivers?

- (a) I believe there are many advantages.
- (b) I believe there are several advantages.
- (c) I see foreign care as similar to Japanese care.
- (d) I do not see any advantages and see a few disadvantages.
- (e) I don't know or not applicable

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)	
Age	563	53.066	14.741	0.0006	1.0006	0.0064	0.09	0.9280	
Gender	563	0.472	0.500	0.5039	1.6551	0.3367	2.48	0.0130	
Education Level	563	14.130	2.288	0.0460	1.0470	0.0422	1.14	0.2540	
Medical Indust.	563	0.389	0.488	0.7841	2.1905	0.4731	3.63	0.0000	
Manager Role	563	0.229	0.421	0.3285	1.3889	0.3082	1.48	0.1390	
Foreign Exp.	563	0.306	0.461	0.5713	1.7705	0.3515	2.88	0.0040	
LR chi2(6) = 39.97		Prob > chi	Prob > chi2 = 0.0000		Log likelihood = -367.16211			Pseudo R ² = 0.0516	

Foreigner experience is an important factor to consider as survey participants answer differently if they have previously interacted with a foreigner acquaintance or colleague. The magnitude of this effect is sizable and suggests the important role of personal attachment or human network in the formation of policy preferences. The effect of personal acquaintance with foreigners on individual attitudes should be particularly strong in rural Japan where foreign residents are extremely few. This strong effect of personal attachment is in-line with previous report from Japan by Yamamura (2012) and Tomiura et.al (2016).

3.5.2 Analysis Results for Hypotheses #2

The second hypothesis is a two-part claim to measure if the gender of the survey participant influences survey response. The first claim is if the female demographic will perceive foreign workers more favorably as either coworkers or caregivers within the industry since a concentration of the community survey sample consists of customers and nurse aids at the senior care facilities.

The second claim is that female individuals will be more receptive to seeing female foreign workers within the senior care industry. Females dominate the nursing, nursing aid, and senior care giver fields according to the Lamb Survey and previous studies (Ushiro and Nakayama 2010; Sakashita 2018). In consideration of the nursing shortage and the growing demand for senior care services within the industry, females could augment their attitudes on migration to alleviate some of the work pressures with an inflow of foreign caregivers.

The second hypothesis was ultimately not supported since the female group demonstrated either a negative view or a more conservative view consistent with previous studies and surveys. There is no difference in the female attitude within the senior care industry despite the labor pressures faced or the significant female concentration in the work force. However, males have demonstrated a strong positive view of foreign caregivers. The questions of 10 and 11 were used to test the second hypothesis and the model output is noted below.

Table 9. Analysis Results of Question 10

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 10

Would you be open to receiving care from a foreign caregiver?

- (a) I am open to receiving care from a foreign caregiver.
- (b) I have a few reservations, but am open to receiving care.
- (c) I would be respectful, but would have bias or uncomfortableness.
- (d) I would not be open to receiving care from a foreign caregiver.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)	
Age	563	53.066	14.741	0.0099	0.9994	0.0066	-0.09	0.9320	
Gender	563	0.528	0.500	-0.3730	1.5882	0.1342	2.17	0.0300	
Highest Edu.	563	14.130	2.288	0.0221	1.0491	0.0445	1.13	0.2580	
Medical Ind.	563	0.389	0.488	0.0476	3.1153	0.7302	4.85	0.0000	
Manager Role	563	0.229	0.421	0.0401	1.1452	0.2756	0.56	0.5730	
Foreign Exp.	563	0.306	0.461	0.2902	1.5303	0.3293	1.98	0.0480	
LR chi2(6) = 42.23		Prob > chi2	Prob > chi2 = 0.0000		Log likelihood = -336.77865			Pseudo R ² = 0.0590	

The purpose of question 10 was to assess if the survey participant would be receptive to receiving care directly from a foreign caregiver, potentially indicating a reduced bias or comfortableness with foreign care quality. From the analysis results in **Table 9**, we can observe that **Gender** variable has a *positive* statistically significant effect on selecting a survey response of (A) or (B) with a P-Value of 0.030. The Odds Ratio demonstrate that males are 1.59 times more likely to select both (A) or (B) responses as opposed to females. This is a very interesting finding as females do not seem to indicate a comfortableness with foreign caregiver quality as opposed to males. This conclusion matches previous studies, most notably Nakata (2017), who indicated males are more positive on immigration policy. However, the Lamb Survey has received the same result when applied to the senior care industry. As a special note, the analysis of the question also revealed that **Foreign Experience** and **Medical Industry** variables are *positively* significant with P-Values as 0.048 and 0.000, respectively. This directly supports the first hypothesis.

Table 10. Analysis Results of Question 11

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 11

Do you consider foreign care quality the same as from a domestic Japanese worker?

- (a) It is my opinion that foreign care quality is better than domestic care.
- (b) I believe domestic and foreign care are both identical.
- (c) I believe foreign care is slightly behind domestic care.
- (d) I believe foreign care is inferior to domestic care.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)	
Age	563	53.066	14.741	0.0099	1.0100	0.0065	1.54	0.1250	
Gender	563	0.528	0.500	-0.3730	1.4521	0.1368	1.88	0.0600	
Highest Edu.	563	14.130	2.288	0.0221	1.0223	0.0413	0.55	0.5850	
Medical Ind.	563	0.389	0.488	0.0476	1.0488	0.2235	0.22	0.8230	
Manager Role	563	0.229	0.421	0.0401	1.0409	0.2229	0.19	0.8520	
Foreign Exp.	563	0.306	0.461	0.2902	1.3366	0.2561	1.51	0.1300	
LR chi2(6) = 10.87		Prob > chi2 = 0.0924		Log like	Log likelihood = -372.13368			Pseudo R ² = 0.0144	

Question 11 is similar to question 10 and further assesses the survey participant's opinion on the equivalency of care. The analysis results in **Table 10** have identified the variable **Gender** to have a *positive* effect on the probability of selecting the response of (A) or (B), with a P-Value of 0.060. This result is not statistically significant at 95% confidence. However, it is within the 90% confidence range. The Odds Ratio shows that males are 1.42 times more likely to select (A) or (B) as opposed to females. This is an interesting result that contrasts with question 10. Japanese domestic care survey participants could be either instructors or coworkers to these foreign employees. While they have a positive attitude toward foreign caregiver, as noted in question 10, these individuals (within the medical industry) and those with higher education could possess a natural inclination to perceive a difference between themselves and with foreign caregiver quality. They may not be comfortable in selecting a response that identifies foreign caregivers as superior to their own abilities. Lastly, the variable foreign experience is not significant, but shows a positive effect on the participant selecting an (A) or (B) survey response to this question.

3.5.3 Analysis Results for Hypotheses #3

The third hypothesis tests the claim that individuals who possess tertiary level of education will have a better perspective on the value of foreign senior caregivers unique to the senior care sector. Since previous research correlates education level with a positive view on migration, the same outcome should be evidenced within the Lamb Survey. The third hypothesis was ultimately supported by showing education level to have statistical significance with survey response. Question 4 was used as a test question since the topic revolves around tolerance and openness to foreign community members. The output of question 4 is as follows:

Table 11. Analysis results of Question 4

(Dependent Variable: the response of the question. A response of A, B, or C is set as 1 and a response of D or E is set as 0)

Question 4

Do you expect foreigners to assimilate to your local society?

- (a) Foreigners should not assimilate; they should express their own cultural differences.
- (b) Migrants must assimilate basic Japanese cultural needs, but remain unique.
- (c) Migrants must assimilate to the community and share their cultural differences.
- (d) Migrants must assimilate because they reside in Japan and interact with Japanese.
- (e) I don't know or not applicable

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	z	P>z (Wald)	
		IVICUIT			Ouus nuno	Jtu. Liii	-	· ` '	
Age	563	53.066	14.741	0.0102	1.0103	0.0069	1.50	0.1340	
Gender	563	0.528	0.500	-0.3163	1.3720	0.1600	1.44	0.1500	
Highest Edu.	563	14.130	2.288	0.1046	1.1102	0.0490	2.37	0.0180	
Medical Ind.	563	0.389	0.488	1.3721	3.9437	0.9874	5.48	0.0000	
Manager Role	563	0.229	0.421	0.2976	1.3467	0.3500	1.15	0.2520	
Foreign Exp.	563 0.336 0.461		0.461	0.3487	1.4172	0.3205	1.54	0.1230	
LR chi2(6) = 53.41		Prob > chi2	Prob > chi2 = 0.0000		Log likelihood =-313.84406			Pseudo R ² = 0.0784	

Question #4 asked the survey participant to gauge their own tolerance on foreign residents within their community and the direction that these foreign residents should take on managing their own cultural identity within the community. From the analysis results in Table 11, we can find the variable **Highest Education** has a *positive* statistically significant effect on the probability of selecting a response of either (A), (B), or (C) with a P-Value of 0.0180. This result reveals that highly educated individuals will avoid the most negative response of (D) or (E). The Odds Ratio demonstrate that more educated individuals are 1.11 times more likely to make this selection than participants with less years of education. As a special note, the variables of age, gender, and foreign experience do display a positive effect of selecting a response of (A) or (B) despite not being statistically significant.

3.5.4 Analysis Results for Hypotheses #4

The fourth hypothesis claims that individuals who are older in age will be less inclined to receiving care from a foreign senior care worker, thus evidencing a negative perspective on the acceptance of foreign senior care workers, similar to that of previous studies. All the 19 Lamb Survey questions were run through a logistical regression model and using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative. Actual age data disclosed on the surveys was used, which is defined as continuous data.

Unfortunately, no statistically significant findings were noted to evidence in support of the fourth hypothesis. Previous studies have noted that elder individuals are more traditionalists and are less in support of immigration reform. One possible explanation for the lack of age variable significance could be the difference between the urban areas and the rural areas. In the urban areas, parents are usually living separately from their children or relatives as opposed to families in the rural areas who often live together or close by. Therefore, age may not be statistically significant because there is no pressure on the family to accept foreign caregivers to meet their future senior care needs since the family will provide this quality-of-life care.

If compared to Dai (2022), which focused on urban area and reported the positive effect of age variable of attitudes to foreign caregivers, the rural family support traditional and the data bias of Lamb Survey (high presence of care service sector employees: young but have positive attitudes) should be mentioned. However, since Dai (2022) has not been published, these comparisons and discussions are not necessary. Instead, the Lamb Survey has neither supported this claim nor opposed this claim, reflecting the higher demand of aged population for foreign caregivers.

3.6 Chapter Summary

Academic research on the determinants of people's attitudes towards immigration has largely focused on the importance of both socio-cultural factors and economic factors. These socio-cultural factors imply individuals are against immigration because foreigners represent different values and traditions that possibly pose a threat to the underlying culture; the economic factors focus on how attitudes are shaped by individuals' concerns about competition for scarce resources and the consequent distributional effects of immigration. The Lamb Survey community member survey is meant to consider these two factors within the senior care industry, which is under a greater demand and supply pressure. A combination of increased consumer demand for senior care services in Japan from an aging population, as well as a stable domestic Japanese labor structure that is not growing commensurate to meet this demand has created a deficit that continues to intensify. Traditionally, immigrants would fill these roles when the domestic workers labor supply was not sufficient to meet demand. Tolerance for foreign immigrants would be shaped by these social-economic pressures. The Lamb Survey is an attempt to quantify these considerations and test several relevant research questions about the community stakeholder's perception

The Lamb survey has identified that the community survey participants do support immigration, in the aggregate, by positively answering many questions pertaining to both their tolerance of foreign caregivers and their understanding of the various challenges and barriers that immigrants face. Consensus from community survey participant have note the following conclusions:

① Community survey participants agree that immigrants will face challenges with satisfactory receiving medical care, educational opportunities, financial services, and legal services/representation.

- ② Community survey participants do not have a perceived difference on the quality of foreign caregivers in comparison to domestic Japanese caregivers, indicating improved sentiment.
- 3 Community survey participants understand that discrimination is still prevalent in the local community and presents challenges for the long-term retention of foreign care givers.
- 4 The community would like better support from the government on foreign workers.
- The community perceives continued growth in the senior care industry and understands the pressures on the domestic care givers.

These findings provide interesting and detailed information on the community member's attitude towards foreign senior care workers in the 12 cities/towns within the Western Chugoku region of Japan. However, it was still difficult to clearly judge or identify which factors have statistically significant effect on community member's attitude. Therefore, a Logistic Regression model was used to analyze the effects of community member's individual characteristics and their community socio-economic features on their response to the questions of the Lamb Survey. Four hypotheses were made using previous studies to test relevance within the senior care industry.

The first hypothesis made was to test if individuals employed within the senior care industry, individuals who have had a previous foreign association, and individuals hold a manager-level position will express a more positive perception of foreign senior care givers. The model output revealed this hypothesis was partially true with statistical significance. Participants employed within the healthcare sector and have a foreign acquaintance or relationship are statistically to believe the local economy will improve overall from an increase in immigration or perceive relative ease when gauging the level of quality between domestic Japanese and foreign caregivers. Foreigner interaction is an important factor and the magnitude of this effect is sizable and suggests the important role of personal attachment or human network in the formation of

policy preferences. In regards to the management-level independent variable, there were no statistically significant findings to fully evidence that management roles correlate to a more lenient immigrant perspective, which slightly goes against previous studies.

The second hypothesis made was if gender influences the behaviors of survey participants on the Lamb Survey questions. Results from the survey questions have shown statistical significance on several questions with regards to the male gender answering more positively. The Lamb Survey supports previous studies where males are more liberal on immigration policy as opposed to females who appear to be more traditional or conservative.

The third hypothesis made was if individuals who received higher education will have more positive perspective on the acceptance of foreign senior care workers. Results from the statistical modeling reveal statistical significance when the survey participant was asked to gauge their own tolerance on foreign residents within their community and the direction that these foreign residents should take on managing their own cultural identity within the community. These finding parallels previous studies that correlate education with immigration theory, with the only difference being they are less relative in the senior care industry.

The fourth hypothesis made was if older individuals will be less inclined to receiving care from a foreign senior care worker, thus evidencing a negative perspective on the acceptance of foreign senior care workers, similar to that of previous studies. This hypothesis was not supported with the Lamb Survey and no statistically significant findings were noted with age. This could possibly be explained by a difference in family support structure between urban and rural societies.

Chapter 4. Attitudes of Rural Senior Care Business Leaders towards Foreign Care Labor

4.1 Chapter Introduction:

The Japanese senior care business sector continues to feel the pressures from the growing level of demand for their services and the lack of labor needed to provide those services. Senior care service demands have seen significant growth over the last several decades from a dramatic increase in the senior demographic (65 or older in age) and a high senior concentration in the current Japanese society brought about by age longevity. Another factor is the improved quality standard of care and greater accessibility provided under the governments revision of the Gold Plan in 1990 to the Long-term Care Insurance (LTCI) program in 2000. In the first few years the LTCI program has been implemented, entitlements and utilization rates in Japan have grown tremendously as evidenced by Mitchell et al. (2008) who conducted an empirical study using prefectural-level data to study the empirical factors associated with entitlement and utilization rates to identify the increased public demand for services.

The supply side is also suffering from both a decreasing population growth of youth category (14 and younger) to fill in as future labor and a static graduation rate of new nursing that is not growing commensurate with the demand. The government has begun to understand these detrimental factors and further revised national immigration policy to categorize senior care aid workers as skilled labor in the 3rd Edition of the Basic Plan (MOJ 2005). All the factors of the growth in demand for senior care services, the static domestic labor structure, and the new leniency of immigration policies has created various opportunities for foreign workers who are considering Japan as their new country of residence. The greater inflow of immigrants into Japan could be a solution to alleviate the labor shortage in the senior care industry

However, there is a significant difference between attracting foreign immigrants to the Japanese senior care industry and retaining the immigrants once they are working in their full capacity. The long-term satisfaction of foreign caregivers is dependent on the support provided from all three stakeholders in society: the government, the broader community, and the business sector. Therefore, it is necessary to understand their attitudes towards foreign senior care workers.

Most of the survey efforts made by the government have been to assess broad citizen sentiment. The business sector is infrequently asked their opinions on immigration topics since it could be implied that internal and external stakeholders of the business would be included in these individual surveys. This chapter focuses on the local senior care business sector of society with respect to the three stakeholders in society. A survey method was utilized to better understand the labor pressures and growing demands as it relates to the senior care sector and within the rural areas (non-metropolitan area) of Japan. For the purposes of this paper, the term senior care business is defined as the senior care facility that is providing the direct service to the senior care customer and is unambiguous to either a public or private legal structure.

The business sector is heavily influenced by both societal needs and administration from the municipal government. These businesses are often considered the primary support structure for the foreign worker as they provide the opportunity for immigrant to leave their host country in pursuit of better economic conditions. The local business stakeholder has an interdependent effect on the other two stakeholders and provide jobs to the community, taxes to the governments, and quality of life care to the senior demographic. Thus, the business sector is very important for foreign immigrants since they will be the ones to sponsor, employ, support, and retain foreign immigrants. The main research question that will be focused on for this chapter is as follows:

What are the attitudes of rural senior care business leaders towards foreign care labor?

Understanding this question is important to consider since the business sector can influence the

immigration policy framework as they are often the intermediary between the government of Japan and the foreign immigrant.

To help assess and answer the primary chapter research question, an independent survey was conducted for the senior care business sector within the local rural societies to collect their opinions on the various supply and demand trends impacting the national scene. As introduced in Chapter 2, the individuals asked to perform the survey were the owners or high-level leaders who are considered the most powerful and influential members of each senior care facility. A formal solicitation call was made by the third-party translator company of (Explore Translation) to the various senior care businesses requesting their participation in the academic survey. The total number of senior-care facilities within the three prefectures of Hiroshima, Yamaguchi, and Shimane amounted to 1,905. Roughly 84 facilities within 12 municipalities were selected for sample and 52 senior care facilities agreed to participate. The sample goal was to collect four senior care facilities per municipality and, if a business did not want to participate, another business was selected at random until the appropriate target was collected. The senior care business participant survey deployment and collection period lasted approximately 90 days between June 15, 2020 and September 12, 2020. As stated, significant effort was made to ensure a balanced sample representation between each local municipality. This was achieved for the most part. However, there were two examples of low participation rates and the lack of substitute senior care facilities to enforce this target. The municipality of Sera only had two interested facilities and the municipality of Tsuwano only had one interested facility. To fill the deficit, a higher sample was collected from other locations within the prefecture. In this example, the municipality of Okigun provided six facilities surveys and they were all used. The responses for each question were plotted in a Microsoft Excel database and descriptive statistics were used to find common themes and trends with responses.

In this paper, the municipal is defined as a second level administrative (or geographic) area with autonomy, including city, town, or village. The purpose of this chapter is to identify if the rural senior care business survey participants are experiencing the same social and economic pressures that have been observed on the national front, as well as examining and assessing the attitudes from business stakeholders on foreign caregivers in the senior care business sector based on survey data.

4.2 <u>Does Rural Japan Mirror the Trends from the National Industry?</u>

The government of Japan and various NGOs, academic institutions, and private research organizations have already brought to light the pressures on the senior care industry from the expanded service offerings under the LTCI, greater coverage for seniors, higher utilization rates, expanding home care services, and the labor shortages experienced from the public demand on the senior care system. However, these are national trends and may not accurately represent the state of senior care in the various rural areas in Japan. The Ministry of Health, Labour and Welfare (MHLW) serves as the primary agency responsible for providing oversight into labor and public health as it related to the impacts on Japanese citizens. Over the last few decades, the ministry has been publishing various analysis and reports highlighting the growing caution with the senior care industry. One such report highlights a critical nursing aid shortage. Nursing occupations are growing in size. However, they are not growing commensurate with the age longevity and new seniors entering the market in Japan. The MHLW (2020) expects a significant shortage of nurses by 2025. To mitigate the outflow of skilled health care workers, the ministry has been trying to understand the state of nursing and improve the level of working conditions in the field, where overwork, low pay, low status of the job, and poor working conditions are common problems (MHLW 2008; 2020).

The MHLW (2017) conducted such a test in 2017 in collaboration with other organizations to assess the broad market sentiment of the nursing care employees. The survey cited 21.93% of nurses resigned during 2017 year. Roughly 36.1% resigned before their first-year anniversary and 37.4% resigned before their third-year anniversary. The primary reasons provided from the nurses who resigned were a "Lack of proper coworkers to assist," "low wages," and "difficulty taking paid leave." All of these reasons for turnover reflect the situation of overstressed facilities with not enough employees and too much demand. Salaries were also considered when compared to the total national salary average of 304,300 yen a month in 2017. The average salary for home helpers was 220,400 yen a month and the average salary for welfare facility caregivers was 219,900 yen a month. This is nearly a third less than the average of national monthly salary.

Final conclusions from the MHLW (2020) were: "A labor shortage is becoming increasingly serious as the country's population declines rapidly. So, it is necessary to bring more women and the elderly into the labor market, encourage workers to develop their potential and create an environment in which employees can demonstrate their abilities. It is vital to boost labor productivity in medical and welfare facilities so that they can operate with fewer workers. It is also important to help increase healthy life expectancy and reduce demand for medical and welfare services. The fundamental cause of a labor force shortage is the declining birthrate. It is therefore crucial for the nation to take comprehensive steps based on a long-term vision.

These studies refer to the national trends on senior care demands and the declining labor resources available to meet these demands. However, there are few academic impact studies to ask the rural communities how the national trends are impacting their own senior care business. Are rural senior care businesses facing the same dilemmas as declared by the national government? This is an important question to explore and seek the opinions on various senior care businesses

within the local areas since there is an explicit difference between the urban (metropolitan) areas and rural (non-metropolitan) areas.

Both rural and urban senior care businesses are limited on the amount of revenue potential for their goods and services caused from government control on pricing. Therefore, the business strategy of maximizing revenues is not a lucrative business strategy as is the case with some other westernized capitalist countries. Furthermore, the revision of the previous needs-based senior care system to the LTCI has continued to put more downward pressures on revenues for private businesses within the senior care industry despite the growing level of healthcare expenditures realized year-over-year that coincide with more senior demand (OECD 2019). The program is administered by municipalities, which both set premiums and licenses providers. Providers range from for-profit companies to non-profit companies. Fees for services are established by the national government and are reviewed once every three years (JHPN 2021).

In regards to the customers, rural seniors live longer than urban seniors, but urban elders enjoy a longer duration of being free from physical disabilities than rural elders (Ogawa, 2004). This is partly because urban elders are more likely to be influenced by institutional factors such as retirement age since they are more likely to be in a highly organized labor market than are rural elders (Ogawa, 2004). In other words, urban elders are more likely to retire before their health deteriorates and may have more time to detect and recover from their health problems in early stages by going to see doctors than do rural elders. Another reason as pointed out by Tanaka et al (2010) could be differences in the types of jobs elders hold in rural areas versus urban areas. Rural elders tend to be involved in jobs related to agriculture, forestry, or fishing than urban elders, and these jobs not only encourage rural elders to work until their health deteriorates, they also may increase their risk of musculoskeletal injuries. Thus, although rural nostalgia often depicts rural elders to be happier than urban elders, surrounded by their family members, rural elders can be

more socially vulnerable than urban elders, especially if they do not have siblings, spouses, or children. To support any policy emphasis on community care, family members continue to take major roles in the past and present Japanese social care policy (Tokoro 2009). Regardless of the differences between rural and urban seniors, businesses have adapted locally to render senior care services to the local senior populations to support the new dynamic family structures.

Irrespective of their business model challenges and the increasing demand and growing requirements for services, it is hard for rural facilities to receive the ideal labor supply needed to offer their full range of senior aid services. Available skilled labor pool resources are more difficult to attract and retain in the rural areas due to the following variables: internal outmigration from local employment and wage differences (Ohta 2005; Xulu 2017; Higuchi 1991, Lee 2012), preference for residing in urban communities for younger individuals (Bjerke & Mellander 2017), the urban-rural wage gap (Hashimoto 2006; Minami 2008), lack of opportunities with higher education and human networks (Isoda 2009; Ishiguro et al. 2012), and deteriorations in the local economy and employment due to factors including the shock of a strong yen to manufacturers, a decrease in public works, and population decline (Masuda 2014). Florida (2002) argues that immigrant have a preference with larger urban areas since they are more open and tolerant toward minority groups.

Furthermore, there are difficulties in retaining domestic employees due to the stresses experienced in the senior care industry. Existing research on the caregiving workforce mainly focused on a high burnout and high turnover leading to low levels of job satisfaction among these care providers (Chamberlain, Hoben, Squires, & Estabrooks, 2016; Saito et al. 2018). There is also a reliance on aged employees as noted in the Kaigo Long-Term Care Labor Stability Center (2018) survey. This was also observed in the Lamb Community Survey in Chapter 3 where the average age was 46.94 out of the 222 senior care employees surveyed.

There are two broad strategies for recruiting senior care employees from the local business's perspective. Without an adequate supply of labor, it is difficult for businesses to attract talent and earn revenues through the use of that employee through service offerings. This doesn't only apply to senior caregivers. Matsumoto et al. (2018) conducted a longitudinal study that showed that physicians in Japan's rural hospitals are older than physicians in urban hospitals and the age gap between rural and urban hospitals has been widening rapidly. The first strategy businesses can do to recruit from within the domestic labor market is to hire new graduates or poach employees working with competitors. Given the low levels of immigrant stock in Japan, these employees have traditionally been Japanese citizens. Retention of the employee is more difficult since this requires many more variables and company attributes to increase or maintain moral, such as a positive company culture, reward systems, job engagement, and/or career development (Sepahvand & Khodashahri 2021; Plenda 2018; Sheridan; 1992). The second is the recruitment in an external labor pool from other countries. Japan has established Economic Partnership Agreements (EPAs) with several nations allowing the inflow of skilled labor to help out in the industries most impacted by the labor deficits. The MHLW (2019) Guidebook for Care Service Providers on Employment of Foreign Care Workers outlines the process for all businesses around Japan to pursue either a foreign care service provider seeking employees or a technical training intern aspiring to be a nursing aid. Each path requires Japanese language proficiency classes or pre-exam classes, certified care worker accreditation, and financial support from the receiving organization in several different forms. Each method a business can take to seek qualified employees has its advantages and disadvantages against the operational structure of the organization, either through financial impacts, cultural impacts, or opportunity impacts. Takahashi (2018) identifies a strong monetary burden on the hospital and the lost business opportunity caused by giving the foreign senior care workers study time a disadvantage to recruiting abroad through

the EPA. In regards to the effectiveness of the EPAs, Yagi et al, (2013) cites the weakness of the nursing credentialing program and the Japanese language barriers and low passing rates. Furukawa et al. (2012) also concluded that the qualification examination for nurses and care workers to become certified in Japan is extremely difficult for people who do not have Japanese language skills. Hirano et al (2010) mentions the gender dimension, noting the distinct difficulties that women face in working separately from their families. Furthermore, there are several changes needed with the corporate cultural to accommodate foreign residents, such as allowing for religious practices or providing other food options suitable to the foreign residents, if applicable. The financial impacts can be expensive and the average foreign care service provider could cost 567,900 Yen (US \$5,679, \$1 = \frac{1}{2}100) in initial costs, \frac{1}{2}20,000 (\frac{1}{2}200, \frac{1}{2}1 = \frac{1}{2}100) in annual fees, and other supplementary costs including travel expense for participating in local group seminars (MHLW 2019). The technical training interns are much more expensive and involve more education expenses in addition to a higher daily living support cost.

4.3 <u>Data from the Senior Care Business Participant Survey</u>

The following chapter section introduces the method for data collection and highlights the survey results. Once the surveys were received and sorted, the data was organized into response concentrations that would indicate what the majority consensus for each question.

4.3.1 Introduction to Business Participant Survey Responses

The business participant survey was engineered to collect the attitudes of rural senior care business leaders towards foreign care labor and to understand which factors affect survey responses. There is a need for data and research within the rural areas outside the major metropolitan statistical area since these stakeholders are incurring more negative externality

brought about by national immigration strategy. Twenty questions were asked of each senior care business manager who was willing and able to take the survey and the results-will be introduced in the subsequent sections. In order to answer the main research question of this chapter, what are the attitudes of rural senior care business leaders towards foreign care labor?, the business participant survey was structured to ask four categories of questions, as follows.

- 1. Are the local senior care businesses feeling the pressures of growing demand and a declining labor market as claimed in the MHLW (2008; 2017; 2020) reports and Mitchell et al. (2008)?
- 2. Are rural businesses experiencing difficulties in supporting the needs of foreign caregivers?
- **3.** Is the rural senior care business community satisfied with the local and national governmental support efforts of foreign immigrants and do they believe the government could provide more assistance as supported by the World Values Survey Wave 7 (Haerpfer et al. 2020) survey?
- **4.** Do the local senior care business survey participants believe the foreign immigrants will experience challenges when living in their communities, as demonstrated in the MOJ (2017) survey, the Worlds Value Survey Wave 7 (Haerpfer et al. 2020), the Pew Research Study (2017), and the Cabinet Office (2020) survey?

4.3.2 Sample Characteristics

The selected sample of 52 senior-care businesses has provided some important characteristics to highlight. A brief summary of descriptive statistics is noted below in **Table 1**.

Table 1. Summary of Relevant Survey Characteristics

Relevant Variables	Results					
Sample Distribution by Location	Total samples of Hiroshima Prefecture: 16 Akitakata City: 5 Hatsukaichi City: 4 Sera City: 2 Kure City: 5					
	Total samples of Yamaguchi Prefecture: 19 Kudamatsu City : 3 Nagato City : 4 Hōfu City : 4 Shimonoseki City : 4 Iwakuni City : 4					
	Total samples of Shimane Prefecture: 17 Gōtsu City : 5 Unnan City : 5 Tsuwano City : 1 Okinoshima City : 6					
Length of Business Life	Sample mean (μ) life = 20.31 years Hiroshima average business life: 17.94 years of operation Yamaguchi average business life: 22.11 years of operation Shimane average business life: 20.53 years of operation					
Domestic Senior Care Employees	Total Sample Male (n = 435, 20.08%), Female (n=1,731, 79.92%) Hiroshima Male (n=159, 20.10%), Female (n=632, 79.90%) Yamaguchi Male (n=190, 20.11%), Female (n=755, 79.89%) Shimane Male (n=86, 20.00%), Female (n=344, 80.00%)					
Foreign Senior Care Employees						
Current number of Customers	Sample mean (μ) customers = 49.83 Hiroshima average customers: 76.18 Yamaguchi average customers: 42.41 Shimane average customers: 33.20					

The 52 facilities included in this survey sample has an average length of business life of 20.31 years, which indicates a sample including more junior businesses mixed with a few mature ones. Roughly fifteen businesses in the sample (29% of sample) have ≤10 years of business life. This is appropriately as it evidences the entrance of new businesses in the senior care market in coordination with the growth in demand for senior care services. The two municipalities with the newest businesses in operation are Kudamatsu and Sera, which are predominately high in concentration of senior citizens.

The sample produced a total employee labor force of 2,180 individuals within the three prefectures. A further breakdown shows that 2,166 employees (99.35% of sample) are domestic

Japanese employees and 14 are foreign employees (0.65% of sample). The senior care labor force is dominated by female employees who make up roughly 80% of the total. This matches national trends since caregivers are traditionally following the gender of female. Foreign employees represent a very small component of the total labor force. Only seven out of the 52 businesses (13.46%) have answered that they currently have foreign employees and reflects the low inflow of foreign employees from the EPA. The 52 facilities included in this survey reported that they have 2,392 total customers. A further breakdown shows the average number of customers is 49.83 per facility. Hiroshima prefecture has the most customers.

4.3.3 Results of Response to the Survey Questions

This section highlights the survey results to each question, including both the number of responses and the percentage concentration of responses.

Table 2. Results of Business Survey by Question

	N=	Response A	Response B	Response C	Resp	oonse D	Res	ponse E
Question #1	52	(a) We need more end (b) We are recruiting (c) We currently hav	mployees and are actively gand will need more empl e enough employees, but employees to meet curre	oyees long-term. would recruit more if highl		(6%)	0	(0%)
Question #2	52	(a) Demand for senion(b) Demand for senion(c) Demand for senion	or care is increasing very sl or care has stabilized; no g or care is decreasing in my	y in my community and my lightly. rowth at this time.		(0%)	0	(0%)
Question #3	52	(a) We have no more (b) We are running le		and/or product available. rently have some vacancy.	2	(4%)	1	(2%)

	52	1 (2%)	9 (17%)	17 (33%)	18	(35%)	7	(13%)
Question #4		4. Could your business gro (a) We could definite (b) We could grow w (c) We could grow, b	ow with access to greater ely grow with more labor; ith more labor, but need ut this would be challeng w our business with suffi		grow.			
Question #5	52	(b) Moderately expe(c) Less experienced	(hired or managed more rienced (hired or manage (hired or managed 1 fore or does not desire to hire	e than 5 foreign employees). ed 2-5 foreign employees). eign employee).	22	(42%)	12	(23%)
Question #6	52	(a) We could incur at(b) We could incur at(c) We desire to prov	dditional expense withou dditional expenses throug ride more support, but ne ord to hire additional em	eed more revenues/funding ployees right now	icials.			
Question #7	52	(b) Only a few reside (c) Some of our custo	esidents will not care abo nts may feel uncomforta omers/residents may feel omers/residents may fee	ut caregiver nationality. ble (less than 5%).	1 an 25%).	(2%)	8	(15%)
Question #8	52	(a) Our customers ca (b) Our customers m (c) Our customers m	n communicate and worl ay experience slight barri ay experience miscommu customers may feel unco	iers to communication unications.	2 comers?	(4%)	7	(13%)
Question #9	52	(a) Our corporate cu(b) We are actively c(c) We would like to	ture is inclusive and suppreating a more welcomin develop a more inclusive reasonable culture that	19 (37%) ers and supports foreign care portive of foreign employees g culture for foreign employ and supportive culture. fosters and supports foreign	ees.	(46%)	3	(6%)
Question #10	52	(a) There are no mat(b) Foreign labor has(c) Foreign labor nee	erial differences betweer slight training impairmen ds more training to grow edge, or the Japanese cus	17 (33%) to Japanese domestic quality in foreign and domestic labor int at first, but quickly improvito domestic employee level stomers prefer Japanese ove	y of servi ·. ve. l.		12	(23%)
Question #11	52	7 (13%) 11. Are you knowledgeab (a) I fully understand (b) I have heard wha	30 (58%) le with the current Econo what the Economic Part t the Economic Partnersh his international agreem	nip Agreement is.	5 (EPA)?	(10%)	0	(0%)
Question #12	52	(a) The community w(b) The community w(c) The community w	vill fully support foreign c vill likely support foreign vill have small challenges vill have significant challe	=	rs.	(12%) mily members) [*]	7 ?	(13%)

	52	0 (0%)	19	(37%)	18	(35%)	2	(4%)	13	(25%)
£13		13. Do you feel the local								
Question #13		(a) I think the gover		-	-		structure.			
sti		(b) Reasonable, but	_			-				
Š		(c) Not enough supp (d) There is no supp			-	iiileiit.				
		(e) I don't know or r		_						
	52	1 (2%)	20	(38%)	10	(19%)	5	(10%)	16	(31%)
Question #14		14. Do you feel the prefe								
o		(a) Prefectural gove	•	•			care givers e	enough resou	ırces.	
esti		(b) Reasonable, but(c) Not enough supp		-		-				
õ		(d) There is no supp		-		_				
		(e) I don't know or r	not applicabl	e.						
	52	0 (0%)	26	(50%)	14	(27%)	2	(4%)	10	(19%)
Question #15		15. Do you feel like the n	_	•	-	_		_	givers?	
ion		(a) National governr(b) Minor support is	•	-				resources.		
lest		(c) Not enough supp								
ð		(d) There is no supp								
		(e) I don't know or r								
	52	1 (2%)		(48%)	16	(31%)	6	(12%)	4	(8%)
Question #16		16. Is community infrastr shopping, internet, and b		ortive enough	for foreigi	n residents (sc	chools, medi	cal service, p	ublic transpoi	rtation,
‡ uo		(a) Community has	٠,	rastructure in	place for f	oreign residen	nts.			
stic		(b) Community has				_				
ğ		(c) Improvement is i				dical service, _ا	public transp	oortation, sh	opping, intern	et, banking)
		(d) We do not have(e) I don't know or r			in place.					
		(e) I doll t know of i	пот аррисарі	ᠸ.						
	52	20 (38%)	9 /		2	(4%)	7	(13%)	1/1	(27%)
17	52	20 (38%)	•	17%)	2 h the infus	(4%)	7	(13%) vers?	14	(27%)
n #17	52	20 (38%) 17. Do you feel the local (a) The economy wi	economy wi	17%) Il improve witl	h the infus	ion of more fo	reign caregi	vers?	14	(27%)
stion #17	52	17. Do you feel the local (a) The economy wi (b) The economy wi	economy wi ill increase fr ill increase, b	17%) Il improve with om job creation out there will b	h the infus on, spendir oe outflow	ion of more fo g, and resider of resources (oreign caregi	vers?	14	(27%)
Question #17	52	17. Do you feel the local (a) The economy wi (b) The economy wi (c) The economy wil	economy wi ill increase fr ill increase, b ll grow anyw	17%) Il improve with om job creation out there will brays, without f	h the infus on, spendir oe outflow	ion of more fo g, and resider of resources (oreign caregi	vers?	14	(27%)
Question #17	52	17. Do you feel the local (a) The economy wi (b) The economy wi (c) The economy wil (d) No material grow	economy wi ill increase fro ill increase, b Il grow anyw wth is expect	17%) Il improve witl om job creatic out there will b rays, without f ed.	h the infus on, spendir oe outflow	ion of more fo g, and resider of resources (oreign caregi	vers?	14	(27%)
	52 52	17. Do you feel the local (a) The economy wi (b) The economy wi (c) The economy wil	economy wi ill increase fr ill increase, b Il grow anyw wth is expect not applicabl	17%) Il improve witl om job creatic out there will b rays, without f ed.	h the infus on, spendir oe outflow	ion of more for g, and resider of resources (or.	oreign caregi	vers?	14	
		17. Do you feel the local (a) The economy wi (b) The economy wi (c) The economy wil (d) No material grov (e) I don't know or r 15 (29%) 18. Do you think foreign	economy wi ill increase fr ill increase, b Il grow anyw wth is expect not applicabl 27 residents wi	17%) Il improve withom job creatic out there will brays, without fred. e. (52%) Il have difficult	h the infus on, spendir oe outflow oreign labo 2 ties living i	ion of more for g, and resider of resources (or. (4%) n your commu	oreign caregint retention. remittances 3 unity?	vers?		(10%)
		17. Do you feel the local (a) The economy wi (b) The economy wi (c) The economy wil (d) No material grov (e) I don't know or r 15 (29%) 18. Do you think foreign (a) Foreign resident:	economy will increase frill increase, bill grow anywwith is expect not applicable 27 residents will experie	17%) Il improve withom job creatic but there will be rays, without freed. e. (52%) Il have difficult ence many diff	h the infus on, spendir oe outflow oreign labo 2 ties living i ficulties in	ion of more for g, and resider of resources (or. (4%) In your community our community our community is a second community our community our community is a second community our communi	oreign caregint retention. remittances 3 unity?	vers?		
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4.3.4 Summary of Survey Data to Research Questions

The following section examines the distribution of survey responses to each question, which can be grouped into four categories.

<u>Survey Finding #1 – Perception on senior care business pressures (Questions 1-4)</u>

The first category of questions seeks the survey participant's opinion on the level of demand experienced on their range of products and or services. These questions also seek the participant's opinion on the level of labor support available to assist them meet this growth of demand, if this is the situation. National industry trends have shown a growing amount of pressure on the senior care system. The domestic workforce is not keeping pace with senior care demand as highlighted by the various MHLW reports. These questions were influenced from the national government reports on nursing turnover (MHLW, 2008; 2017; 2020), as well as studies reporting the high burnout rate and low levels of job satisfaction among these care providers (Chamberlain et al. 2016; Kandelman, Mazars, & Levy, 2018; Saito et al. 2018). Additional research from Mitchell et al. (2008) and JOPUS (2019) was considered in question format. The first category of questions assumed the local businesses are feeling the same pressures of growing demand and a declining labor market. The findings from the survey reveal the businesses are feeling the pressures with increasing demand (not as significant as national trends) and are experiencing a declining labor market.

• Question #1. This question assesses if the senior care facility has enough employees to fulfill the current level of demand. The question assesses the labor needs and compares the responses to that of the national industry trends. The majority of survey respondents (31 participants, 60% of sample) have acknowledged that they have an immediate need for more employees or will need more employees within the long-term. Eighteen managers (35%) stated they have

enough employees at the current time, but would definitely hire more if available to continue expansion of services.

- Question #2. This question assesses if the business survey participants are seeing a general increase in demand for senior care services within the community. The question pairs with question 1 and further assesses the general sentiment on future demand. The results of the Lamb Business Survey concluded that 42 business survey participants have acknowledged that demand in increasing within their business (82% total of sample). The community survey participants were asked the same question in their respective survey and the majority of community survey participants at 313 responses (56% of sample) perceived senior care demands in the local community are greatly increasing.
- Question #3. This question assesses the level of demand in the local market area for senior care. The question asks the survey participants if they are at full capacity with their current services. The results of the survey concluded that the business stakeholders do not have any capacity for an increased level of demand if labor is taken out of the equation. Thirty-nine survey participants (75% of sample) have expressed the opinion that they are experiencing high demand and do not have any more products and/or services available, or are extremely low. Ten survey participants (19%) stated they are running low on occupancy.
- Ouestion #4. This question assesses if the survey participants believe they could grow their business with access to greater caregiver labor. The question assesses the ability of care facility management to leverage additional labor with business revenue growth. The results of the survey concluded that there is no major finding and labor is not a primary trigger for business growth. There could also be unknown variables to this analysis, such as a lack of working capital or an inability to provide better working conditions. Seventeen senior care businesses (33% of sample) stated they could grow with access to more labor, but this would be

challenging and indicates another variable to consider. Eighteen senior care businesses (35%) stated they would still not be able to grow with sufficient access to caregiver labor.

<u>Survey Finding #2 – Supporting foreign caregivers (Questions: 5- 10)</u>

There are several factors that attract foreign migration into a host country as described in Chapter 1. The most important variable is the positive economic situations of the receiving country that can be a lucrative pull factor to attract migration. However, retaining immigrants for the long-term will require a significant support structure provided by the local community. This category of question asked if businesses in rural areas are experiencing difficulties in supporting the needs of foreign caregivers. Additional research from Mitchell et al. (2008) and JOPUS (2019) was considered in question format. The survey has identified that businesses cannot support the needs of foreign care givers. They do not have an adequate corporate culture or support network conducive to retaining immigrants. However, the business survey participants believe foreign immigrants will be received positively by customers and employees of the senior care businesses.

• Question #5. This question assesses if the business survey participants had any relevant experience in managing foreign labor. The community member survey in Chapter 3 has already identified that individuals with foreigner experiences are much more likely to support immigration reform. Results of the Lamb Business Survey indicate that businesses are not very experienced at hiring foreign workers. Twenty-two senior care businesses (42% of sample) do not have any experience hiring foreign caregivers. It could also be assumed that a response of "I Don't Know or Not Applicable" is a negative response and, therefore, number of employers who do not have any experience would be 34 participants (65% of sample).

- Question #6. This question assesses if the survey participant has any financial constraints in supporting foreign caregivers. A positive support structure would involve additional expenses in the form of recruiting, relocation, translation services, quality of life care, or medical related co-pay expenses due to the lack of insurance coverage for foreign immigrants. The results of the Lamb Business Survey concluded that businesses do not have sufficient reserves available. Thirty-six business survey participants (60% of sample) do not have sufficient cash reserves available.
- Question #7. This question assesses the survey participant's opinion on how the customer will respond to receiving care from a foreign caregiver. The question assesses the ability for a business to maintain adequate services and potentially grow with foreign caregivers on staff. The results from the survey reveal an overall positive experience. The majority of 27 business survey participants (52% of sample) perceived a very positive outcome with \geq 95% satisfaction from the resident base. Sixteen businesses (31% of sample) stated that 5%-25% of the resident population may feel difficulty in communicating with foreign caregivers. Together, it can be stated that 83% of the business survey participants perceive a positive outcome in general from the current foreign workforce, or with introducing the foreign caregiver workforce. This question was compared to the community member survey responses to test the difference between business perception and the community perception. The majority of community member who responded (322 participants, 66% of sample) perceived either no difficulty or minor difficulty in communicating their needs to foreign workers. Furthermore, the majority of community member respondents (376 participants, 67% of sample) would be open to receiving care from a foreign caregiver without any major concerns. This would indicate a successful assessment of customer sentiment from the business survey participants.

- Question #8. This question assesses if the survey participants feel confident that foreign care givers could communicate well with the customers. This question assesses the participant's perception of how the foreign caregiver will be able to communicate with the resident and provide high quality of service similar to the domestic workforce. The results of the Lamb Business Survey concluded that 39 participants (48% of sample) stated that they will experience little to no miscommunications between resident and foreign caregiver and 20 participants (39% of sample) stated that there will be miscommunications and difficulties. There was no major finding with this question since the distribution of answers was not definite in a majority response.
- Question #9. This question assesses if the survey participant's opinion on if their business has an organizational culture that could foster and support foreign caregivers. The question assesses the ability of a business to promote and maintain a positive corporate culture that is conducive to job satisfaction and barrier minimization to foreign residents. The results of the Lamb Business Survey concluded that 43 participants (83% of sample) admitted they did not have a positive organizational culture that fosters and supports foreign immigrants. Only 6 participants (12% of sample) have stated that have a positive culture or are actively trying to create a multi-cultural environment. This is an important finding since it shows that the majority of business participants understand their weakness on immigrant retention.
- Question #10. This question assesses the survey participant's perception about the quality of care between a foreign worker and a domestic Japanese worker. The results of the survey concluded that 19 participants (37% of sample) perceive the foreign worker's quality as identical to the domestic labor, with time to complete training being the only difference between selection A and B. However, 21 participants (40% of sample) provided a negative response that foreign labor is inferior to Japanese domestic labor. The community survey

members were asked a similar survey question and they provided a different response and 222 participants (62%) have answered that quality between Japanese domestic workers and foreign workers is near equivalent, which is much higher than the business survey results.

Survey Finding #3 – Government Support (Questions: 5-10)

The third category of questions seeks the business survey participant's opinion on the level of support provided from the local and national governments. These questions were engineered from the World Values Survey Wave 7 (Haerpfer et al. 2020) which assesses the level of confident with the government. The results of the survey have identified that businesses desire the government to step in and assist more with the foreign labor force.

- Question #11. This question assesses if the business survey participant was aware of the Economic Partnership Agreement. The question assesses the business survey participant's knowledge on existing regional trade agreements in place known as the Economic Partnership Agreement (EPA). The majority of business participants (37 participants, 71% of sample) claimed to have an understanding of the EPA, or at least a minimal understanding of the EPA. This is understandable since the managers of the senior care facility should know this regulation as it pertains to the ability of hiring foreign nationals for their business. The community survey participants were asked the same question and they provided a similar response. Only 32% of them admitted they have some knowledge about the international agreement. This is understandable since the public generally more unaware of comprehensive governmental policies impacting regional trade.
- Question #12. This question assesses if the business survey participant if they perceive the local community can support the lives of foreign caregivers and family members. The majority of business (23 participants, 44% of sample) answered that the community can likely

support foreign caregivers. Twenty-one participants (40% of sample) acknowledged that the community would have mild-to-significant challenges supporting foreign caregivers. The community stakeholders had similar answers when they were asked the same question in their surveys. A significant amount of community survey responses (275 participants, 49%) did not want to answer this question or did not know. The reluctance to answer this question or the inability to express perspective is an interesting finding. The next significant concentration is 136 participants (25% of the sample) that believe the community will have general challenges to supporting foreign caregivers.

Question #13, Question #14, and Question #15. These questions assess if the business survey participants believe the level of support from the three structures of government is appropriate and supportive for foreign caregivers (i.e., local municipality, prefectural government; and national government). The results of the Lamb Business Survey revealed a low level of support from the three tiers of government and a desire that the governments do more for foreign residents. The general consensus with the business survey participants is that they believe the three sides of government provide a minimum level of support, but more support is needed. There also appears to be more animosity at the local government level than the national level. In regards to disapproval rates: The business survey participants revealed that 39% of the sample disapprove of the local governments support, 41% of the sample disapprove of the prefectural governments support, and 31% of the sample disapprove of the national government support. The community survey participant's results also paralleled the business survey participant's claims for the local government and the national government when the "Do Not Know" response was omitted.

<u>Survey Finding #4 – Community Infrastructure (Questions: 16-20)</u>

The last category of questions inquires if the community will have challenges supporting foreign caregivers. This is not surprising for Japan since the culture has remained insular and culturally homogenous throughout history. Furthermore, having infrastructure in place for immigrants will help retain them within Japanese communities for the long term. Proper infrastructure could be considered bike paths, schools, medical service, public transportation, shopping, internet, banking, interpretation services available, etc. These questions were engineered from the quality-of-life claims made in the Japanese Cabinet Office (2020) survey, the International Labour Organization Survey (2019) on public attitudes toward immigrant workers in Japan, and from the Ministry of Justice (2017) survey that found discrimination still prevalent in the Japanese communities. They ask if the rural business survey participants believe the foreign immigrants will experience challenges when living in their communities. The results of the survey have identified positive management opinion on immigrant workers despite concerns being shared with over discrimination, quality of life difficulties, and the lack of proper community infrastructure.

• Question #16. This question assesses if community infrastructure is supportive enough for foreign residents. Infrastructure examples include schools, medical service, public transportation, shopping, internet, and banking. Having sufficient and ample infrastructure in place will help retain them within Japan for the long-term. The results of the survey concluded that a significant concentration of participants (25 participants, 48% of sample) have stated that the community has basic infrastructure in place, but could improve in several categories. The next concentration of answers (22 participants, 43% of sample) state that community infrastructure is not sufficient. The Community Survey participants were asked the same question and 39% stating infrastructure is minimal and could improve and 53% stated there is not sufficient infrastructure in place once "I Don't Know" responses were omitted.

- Question #17. This question assesses if the business survey participants feel the local economy will improve with the continued infusion of more foreign caregivers. This question assesses the participant's knowledge of transmigration benefits and seeks their genuine opinion on the intrinsic value of immigrants within their local communities. The result of the Lamb Business Survey concluded that the majority of business participants (29 participants, 56% of sample) have answered that the economy will increase from job creation, spending, and resident retention. The majority of community survey participants show similar results with 69% of the sample stating the economy will increase and 31% against this claim.
- Question #18. This question assesses the survey participant's opinion on the level of difficulty the foreign caregivers will face while residing within their community. The result of the Lamb Business Survey concluded that the majority of business participants (42 participants, 62% of sample) acknowledge that foreign caregivers will experience difficulties.
- Question #19. This question assesses if the survey participant will believe the foreign worker will be discriminated against in their local community. The result of the Lamb Business Survey concluded that majority of participants (40 participants, 77% of sample) believed the immigrants would be discriminated against. This was the expected result as the discrimination is still prevalent in Japan. The community survey participants were asked the same question in their survey and the majority (429 participants, 76% of sample) also expressed the opinion that foreign caregivers will be discriminated against.
- Question #20. This question assesses if the survey participants consider foreign residents to contribute value to their community. The question tries to validate the intrinsic value gained by the community with the presence of the foreign caregiver. This question, similar to question #17; is structured to try to achieve a different result from the survey participant. The results of the Lamb Business Survey concluded the majority of responses (45 participants, 86% of

sample) have identified an inflow of immigrants provides a positive value in the community. The Community Survey participants were asked the same question in their survey and the majority of them (387 participants, 68% of sample) also perceive the foreign caregivers as value creation to the community.

4.4 The Model Used for Statistical Analysis in this Chapter

4.4.1 The Binary Logistic Regression Model

The primary research purpose within this section is to distinguish what factors affect the attitudes of rural senior care business leaders towards foreign care labor. A Binary Logistic Regression model will be used to analyze the survey data since this type of model is effective at analyzing the relationship between multiple independent variables and a categorical dependent variable expressed as a probability of occurrence of an event by fitting data to a logistic curve. Chapter 2 introduces the model and highlights its usage on participant responses. The formula is expressed again below:

$$P = \frac{\exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}{1 + \exp(\beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k)}$$

$$= \frac{\exp(\mathbf{X}\beta)}{1 + \exp(\mathbf{X}\beta)}$$

$$= \frac{1}{1 + \exp(-\mathbf{X}\beta)}$$
(1)

Where,

P (dependent variable): a probability of selecting an answer to a special question.

x_i: explanatory variable, selected from variables reflecting the characteristics of the participant's facility (see Table 3-b).

4.4.2 The Variables in the Model Used in This Chapter

Based on three hypotheses, which will be introduced in next section, seven independent variables are selected for analysis in **Table 3-a**. The summary statistics for these variables is shown in the following **Table 3-b**.

Table 3-a. Description of Independent Variables

Independent	Description
Variable	
Profit	- The mission of profit or non-profit
	- $Profit = 1$, $Non-profit = 0$
Customer Count	- The number of customers currently at facility
	- Displayed as actual number
Foreign Employee	- The number of foreign-born employees working at facility
Count	- Displayed as actual number
Business Length	- The length of the business life expressed in years
	- Displayed as actual number
Total Employee	- The total amount of employees currently working at facility
Count	- Displayed as actual number
Customer	- Ratio calculated as current customer number divided (/) current employee number
Employee Ratio	- Displayed as ratio figure
Gender Ratio	- Ratio calculated as female employee number divided (/) male employee number
	- Displayed as ratio figure

Table 3-b. The Summary Statistics for Independent Variables

Variable	Observations	Mean	Std. Dev.	Min	Max
Profit	48	0.354167	0.483321	0	1
Customer Count	48	49.83333	49.38228	8	274
Foreign Employee Count	48	0.354167	0.887012	0	4
Business Length	48	20.25	11.01739	7	48
Total Employee Count	48	35.02083	33.88497	2	164
Customer Employee Ratio	48	2.625396	4.124007	0.141	25
Gender Ratio	48	5.063042	4.184258	0.714	29

^{***} Note: The minimum range for **Customer Employee Ratio** is 0.141. There were a few facilities noted with a greater number of employees exceeding total customer counts. This is counter intuitive and several reasonable explanations have been made:

- The facility is below a desired occupancy level indicating a need for more customers;
- The facility is currently renovating and this has stopped services; or
- The facility is a parent company that has a greater administrative department.

4.4.3 The Three Hypotheses

The use of the independent variables in **Table 3-a** is based on three hypotheses. The purpose is to test which facility attributes affect the attitudes of rural senior care business leaders towards foreign care labor. The three hypotheses are as follows:

- 1. Hypothesis #1: A higher customer-to-employee ratio or a greater number of customers will evidence a level of desperation and acceptance for foreign labor, indicating a higher level of demand on both services and the labor structure in the workplace.
- 2. Hypothesis #2: The mission of a facility (for-profit or non-profit) will have no effect on the attitudes of business leaders towards foreigner care labor due to the high demand in the local markets for senior care services.
- **3.** Hypothesis #3: The business leader with greater number of foreign employees will be more likely to agree that there is not enough support for foreign employees within the local community.

Hypothesis #1

The first hypothesis tests if the customer-to-employee ratio or a greater number of customers will evidence a level of stress and, as a result, increase the acceptance of foreign labor. This would indicate a higher level of demand on both services and the labor structure in the workplace. Previous studies cited in chapter 1 show the pressures the senior care industry is experiencing and this hypothesis implies the same situation in the larger cities are realized within the rural areas. The results of the selected survey questions will be run through a logistic regression model by using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative.

Hypothesis #2

The second hypothesis tests if the mission of a facility (for-profit or non-profit) will have no effect on the attitudes of business leaders towards foreigner care labor due to the high demand in the local markets for senior care services. Given the pressures in the industry, as explained in chapter 1, there should be no significant effects to be observed. The results of the survey questions will be run through a logistic regression model by using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative.

Hypothesis #3

The third hypothesis tests if the business leader with greater number of foreign employees will be more likely to agree there is not enough support for foreign employees within the local community. It is expected that the business leader will understand the challenges that foreign employees have experienced and have communicated with their managers. The results of the survey questions will be run through a logistic regression model by using the dependent variable binary number of "1" for responses considered positive and the number of "0" for responses considered negative.

4.5 Result of Logistic Regression Analysis

4.5.1 Analysis Results for Hypotheses #1

The first hypothesis tests if a high customer-to-employee ratio, defined as customer divided by employee, or a high customer count positively impacts survey response rates. It is assumed that more customers will indicate a heightened level of demand, and a potentially more stressed management team who could be considered more lenient of foreign caregivers. All the survey

questions were run through the analysis and there was no concentration of results indicating a complete conformation of this hypotheses. However, the hypothesis was partially supported with both questions 7 and 9; the model output is as follows:

Table 4. Analysis Results of Question 7

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 7

Do you feel your customers will respond well to foreign caregivers?

- (a) Our customers/residents will not care about caregiver nationality.
- (b) Only a few residents may feel uncomfortable (less than 5%).
- (c) Some of our customers/residents may feel uncomfortable (5-25%).
- (d) Many of our customers/residents may feel uncomfortable (greater than 25%).
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)	
Profit	-	-	-	-	-	-	-	-	
CustomerCt	48	49.833	49.382	0.0543	1.0558	0.0241	2.3800	0.0170	
ForeignEmpCt	48	0.354	0.887	-0.8085	0.4455	0.2334	-1.5400	0.1230	
BusinessLength	48	20.250	11.017	-0.0573	0.9443	0.0355	-1.5300	0.1270	
TotalEmpCt	48	35.021	33.885	-0.0264	0.9740	0.0198	-1.3000	0.1950	
CustEmpRatio	48	2.625	4.124	-0.1433	0.8665	0.0892	-1.3900	0.1640	
GenderRatio	48	5.063	4.184	-0.1192	0.8876	0.0784	-1.3500	0.1770	
LR chi2(6) :	LR chi2(6) = 13.30		2 = 0.0386	Log li	kelihood = -26	5.6231	Pseudo R	$a^2 = 0.1998$	

^{***} Note: Profit variable has been removed to bring the overall model into significance with a Prob > Chi2 \geq 95% confidence.

Question 7 assesses the survey participant's opinion on how the customer will respond to receiving care from a foreign caregiver, thus assessing if the pressures of a high customer number have any relevance to the selection of a more positive response brought on from the pressures of high demand. Results from **Table 4** reveals the variable **CustomerCt** has a *positive* statistically significant effect on the probability of a survey participant selecting a response of (A) or (B), with a P-Value of 0.017. The Odds Ratio show that senior care facilities with high customer counts are 1.05 times more likely to make a more positive response on the survey than facilities with a low

customer count. It would be a reasonable assumption that facilities with a greater customers count would be larger or more complex and have the ability to support a significant labor structure, as well as have access to foreign caregivers through recruitment. Another logical conclusion could be a more lenient management team with perceptions of the customers in a level of desperation under business pressures. The negative Z scores indicates many negative effects (while not significant) in the other variables indicating that customer count is really the only positive variable.

Table 5. Analysis Results of Question 9

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 9

Do you have an organizational culture that fosters and supports foreign caregivers?

- (a) Our corporate culture is inclusive and supportive of foreign employees.
- (b) We are actively creating a more welcoming culture for foreign employees.
- (c) We would like to develop a more inclusive and supportive culture.
- (d) We do not have a reasonable culture that fosters and supports foreign labor.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)	
Profit	48	0.354	0.483	0.0105	1.0105	1.6844	0.0100	0.9950	
CustomerCt	48	49.833	49.382	0.0657	1.0679	0.0326	2.1500	0.0310	
ForeignEmpCt	48	0.354	0.887	2.8379	17.0802	29.0599	1.6700	0.0950	
BusinessLength	48	20.250	11.017	-0.0822	0.9211	0.0704	-1.0700	0.2830	
TotalEmpCt	48	35.021	33.885	-0.1520	0.8590	0.0681	-1.9200	0.0550	
CustEmpRatio	48	2.625	4.124	-0.1239	0.8834	0.1174	-0.9300	0.3510	
GenderRatio	48	5.063	4.184	-1.2336	0.2913	0.1993	-1.8000	0.0710	
LR chi2(7) = 21		Prob > chi2	= 0.0038	Log likelihood = -7.5872			Pseudo R ² = 0.5805		

Question 9 assesses the survey participant's opinion on the organizational culture present in the facility and if it is supportive of foreign caregivers. Results from **Table 5** reveals the variable **CustomerCt** has a *positive* statistically significant effect on the probability of a survey participant selecting a response of (A) or (B), with a P-Value of 0.031. The Odds Ratio show that senior care facilities with high customer counts are 1.06 times more likely to make a more positive response

on the survey than facilities with a low customer count. Furthermore, the variable of **ForeignEmpCT** is *positively* significant within the 90% confidence range with a P-Value of 0.095 and an odds ratio of 17.08 times more likely to select (A) or (B) as opposed to facilities without foreign employees. These are two interesting variables that indicate the facilities with foreign employees and a high level of customers have the appropriate level of support in place to meet the high-level of demand in the rural areas. This finding compliments the hypothesis since this allows the facilities to have the desired culture in place to grow.

However, both **TotalEmpCt** and **GenderRatio** variables are also significant with P-scores of 0.055 and 0.071, respectively. The z-score is negative and indicates a negative effect. One logical explanation for this can be that facilities with fewer employees can openly admit they do not have a well-defined culture in place due to their lower organizational complexity and lack of resources to achieve this cultural change. The gender ratio show that female-concentrated facilities follow the trends of the Lamb Community Survey and are more conservative on foreign employees and more honest on the ability to support them.

4.5.2 Analysis Results for Hypotheses #2

The second hypothesis tests if the mission of a facility (for-profit or non-profit) will affect the attitudes of business leaders towards foreigner care labor due to the high demand in the local markets for senior care services. The results from the analysis ultimately supported the hypotheses made. Question 1 was used to test the second hypothesis and the model output is below.

The purpose of question 1 is to assess if the senior care facility has enough employees to fulfill the current level of facility demand. The analysis results, as evidenced in Table 6, shows that the independent variable profit has a positive statistically significant effect on the probability of a facility selecting either response (A) or (B), with a P-Value of 0.026. This can be interpreted

as the for-profit facilities are the ones have higher probability of claiming to not have enough employees and are 6.41 times more likely to answer (A) or (B) from the Odds Ratio. This proves

Table 6. Analysis Results of Question 1

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 1

Do you have enough employees to fulfill your current senior care demands?

- (a) We need more employees and are actively looking for more.
- (b) We are recruiting and will need more employees long-term.
- (c) We currently have enough employees, but would recruit more if highly skilled.
- (d) We have enough employees to meet current demand.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	z	P>z (Wald)
Profit	48	0.354	0.483	1.8589	6.4169	5.3643	2.2200	0.0260
CustomerCt	48	49.833	49.382	0.0307	1.0312	0.0175	1.8100	0.0700
ForeignEmpCt	48	0.354	0.887	-0.7097	0.4918	0.2349	-1.4900	0.1370
BusinessLength	48	20.250	11.017	-0.0067	0.9933	0.0350	-0.1900	0.8490
TotalEmpCt	48	35.021	33.885	-0.0091	0.9910	0.0162	-0.5600	0.5780
CustEmpRatio	-	-	-	-	-	-	-	-
GenderRatio	48	5.063	4.184	-0.0363	0.9644	0.0729	-0.4800	0.6320
LR chi2(6) = 13.21		Prob > chi	2 = 0.0398	Log li	kelihood = -25	5.6165	Pseudo	$R^2 = 0.2050$

^{***} Note: CustomerEmpRatio variable has been removed to bring the overall model into significance with a Prob > Chi2 ≥ 95% confidence.

the hypothesis false since one type of organizational structure is answering differently from the others. One logistical conclusion is that there is more stress on, or more strong motivation of, the facilities in the private sector to hire more employees to support or expand their business. Another conclusion could be that private businesses have more resources available to actively recruit more senior care employees. However, **CustomerCt** has a *positive* significant effect within 90% confidence range with a P-Value of 0.070. This means that larger profit generating facilities are more likely to respond that they need more employees.

4.5.3 Analysis Results for Hypotheses #3

The third hypothesis tests the assumption that a business leader with a greater number of foreign employees will be more likely to agree there is not enough support for foreign employees within the local community. It is expected that the managers will understand the challenges that foreign employees have experienced since they have hired or support them. Question 14 and 16 was used to test hypothesis #3 and the model output is as follows:

Table 7. Analysis Results of Question 14

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 14

Do you feel the prefectural (Todofuken) government has provided enough support for foreign care givers?

- (a) Prefectural government provides local government and/or foreign care givers enough resources.
- (b) Reasonable, but prefectural government could do more to help.
- (c) Not enough support is provided from the prefectural government.
- (d) There is no support from the prefectural government.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	Z	P>z (Wald)
Profit	-	-	-	-	-	-	-	-
CustomerCt	48	49.833	49.382	0.0062	1.0062	0.0092	0.6700	0.5000
ForeignEmpCt	48	0.354	0.887	0.8848	2.4226	1.1088	1.9300	0.0530
BusinessLength	48	20.250	11.017	0.0703	1.0728	0.0361	2.0900	0.0370
TotalEmpCt	48	35.021	33.885	-0.0136	0.9865	0.0140	-0.9600	0.3360
CustEmpRatio	-	-	-	-	-	-	-	-
GenderRatio	-	-	-	-	-	-	-	-
LR chi2(4) =	= 9.63	Prob > chi	2 = 0.0472	Log li	kelihood = -27	'.7877	Pseudo I	$R^2 = 0.1477$

^{***} Note: CustomerEmpRatio, Profit, and GenderRatio variable has been removed to bring the overall model into significance with a Prob > Chi2 ≥ 95% confidence.

The purpose of question 14 is to ask the survey participant's opinion of the level of support provided from the prefectural government. From the analysis results in **Table 7**, we can find that independent variables **ForeignEmpCt** and **BusinessLength** both have a positive effect on survey response with P-Values of 0.053 and 0.037, respectively. This could be interpreted as facilities

with foreign employees and for longer operating periods have a higher approval rating of the prefectural government level of support. This proves the hypothesis false and is quite interesting. Business leaders with more foreign employees and who's business has a longer operating life are more likely to consider the level of support from the prefectural government as reasonable, or better. A reasonable explanation is that facilities with foreign employees and longer operating lives have a better relationship established with the tiers of government. This could be from incentives shared or the desire to maintain a positive stance with the government. Another explanation could simply be that facilities with more foreign employees could truly be more satisfied with the level of support.

Table 8. Analysis Results of Question 16

(Dependent Variable: the response of the question. A response of A or B is set as 1 and a response of C, D, or E is set as 0)

Question 16

<u>Is community infrastructure supportive enough for foreign residents (schools, medical service, public transportation, shopping, internet, and banking)?</u>

- (a) Community has sufficient infrastructure in place for foreign residents.
- (b) Community has basic infrastructure, but could improve in categories.
- (c) Improvement is needed in many sectors (schools, medical service, public trans., shopping, etc.)
- (d) We do not have appropriate infrastructure in place.
- (e) I don't know or not applicable.

	Obs	Mean	Std. Dev.	Coef.	Odds Ratio	Std. Err.	z	P>z (Wald)
Profit	48	0.354	0.483	0.5906	1.8051	1.3402	0.8000	0.4260
CustomerCt	48	49.833	49.382	0.0158	1.0159	0.0145	1.1000	0.2690
ForeignEmpCt	48	0.354	0.887	1.9691	7.1643	7.4996	1.8800	0.0600
BusinessLength	48	20.250	11.017	-0.0408	0.9601	0.0355	-1.1000	0.2710
TotalEmpCt	48	35.021	33.885	-0.0058	0.9942	0.0182	-0.3200	0.7510
CustEmpRatio	48	2.625	4.124	-0.1318	0.8766	0.1009	-1.1400	0.2520
GenderRatio	48	5.063	4.184	-0.1799	0.8354	0.1307	-1.1500	0.2500
LR chi2(7) = 14.55		Prob > chi	2 = 0.0422	422 Log likelihood = -25.9521 Pse		Pseudo R	² = 0.2190	

Question 16 asks a similar question with the difference being the focus on the local community instead of the government. Analysis results in **Table 8** show a *positive* effect on the

independent variable ForeignEmpCt with P-Value of 0.057. While not statistically significant, the results are within the 90% confidence range. Senior care facilities are 7.49 times more likely to select a response of (A) or (B). This is a reasonable assumption and could support two conclusions. The first is that the employer could have better understanding of the real needs of foreign employees in society as opposed to other survey participants. The second assumption is that facilities with foreign employees have answered this way because they want to keep good relation with the local community/government.

4.6 Chapter Summary

This chapter focused on the attitudes of rural senior care business leaders towards foreign care labor. Many interesting facts have been identified from the response to the questions of the Lamb Business Survey. Among them, the following four common findings are particularly impressive and suggest a more systemic concern.

- 1 Businesses are feeling the pressures with increasing demand and a declining labor market.
- ② Businesses cannot support the needs of foreign care givers.
- 3 Businesses desire the government to step in and assist more with the foreign labor force.
- ④ The results of the Lamb Survey has identified positive perspective on receiving immigrant workers despite concerns being shared with over discrimination, quality of life difficulties, and the lack of proper community infrastructure.

These findings provide interesting and detailed information on the business leader's attitude towards foreign senior care workers in the 12 cities/towns within the Western Chugoku region of Japan. The most important findings within these four facts are that rural senior care businesses lack reasonable cultures to support foreign caregivers and retain them. Furthermore,

the rural senior care businesses lack sufficient working capital, capital reserves, or do not have the opportunity to raise money through commercial lending. These are the greatest challenges that keep the rural senior care facilities within the national dilemma. However, it is still difficult to clearly identify which factors have statistically significant effect on the business leader's attitude. Therefore, a binary logistic regression model was used to analyze the effects of business leader's attitudes and facility attributes on their response to the questions of the survey. Three hypotheses were made to test relevance within the senior care industry.

The first hypothesis tests if the customer-to-employee ratio or a greater number of customers will evidence a level of stress and, as a result, more willing to accept foreign labor. This would indicate a higher level of demand on both services and the labor structure in the workplace. The results supported the hypothesis by demonstrating the survey participants are more positively influenced on the perceived customer satisfaction when more customers are present in the facility, with significance.

The second hypothesis tests if the business mission of a facility (for-profit or non-profit) will affect the attitudes of business leaders towards foreigner care labor due to the high demand in the local markets for senior care services. Given the labor shortage pressures in the industry, as explained in chapter 1, it seems that there should be no influences to the category of for-profit or non-profit on survey responses. However, this hypothesis was not supported since the analysis results show the business leaders employed at for-profit facilities have a higher probability of stating they do not have enough employees, with statistical significance.

The third hypothesis tests the business leader with greater number of foreign employees will be more likely to agree there is not enough support for foreign employees within the local community. The hypothesis was not supported and the analysis results showed that the business leaders of the facilities with more foreign employees and a longer business life have a higher

probability to consider the level of support from the prefectural government as reasonable, or better with statistical significance. Furthermore, the business leaders with more foreign employees also have higher probability to believe foreign senior care workers have a sufficient level of community infrastructure available (within the 90% confident range), reflecting that the facilities with foreign employees have built (or want to keep) good relation with the local community and government.

Chapter 5. What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?

5.1 Chapter Introduction

Chapter 5 focuses on the governmental stakeholders who regulate and influence the other members of the stakeholder model of society. The municipality is defined as a second level administrative (or geographic) area with autonomy, including city, town, and villages. It is important to introduce a background of the Japanese government since the Lamb Municipality Survey questionnaire is based off a basic understanding of this administrative system. The modern government of Japan dates back to the Meiji Restoration Period, which ranged between the years 1868 – 1889, and was restructured to parallel western government fundamentals after World War II during the time of the US occupation of Japan. The Japanese constitution was based off the western political system of sovereignty with the goal of remaining a peaceful and democratic country in perpetuity and developing a government structure consisting of a legislative branch (Diet in Japan), an executive branch (Cabinet in Japan), and a judicial branch, with appointments and powers shared between them. This structure of government is very similar to that of the United States government structure with a few differences. Firstly, the government of Japan is still highly centralized as compared to the United States. Clair (2005) states this is evident by both the absence of municipal courts and the adherence of the prefectures to the national constitution, rather than to their own individual constitutions, as is the case in the United States with each state having a constitution. Secondly, the local municipal governments have a higher degree of uniformity, with administration based exclusively on a strong mayor system. The Local Autonomy Law grants local authorities basically identical organizational forms and functions despite the differences which exist between the authorities in terms of area and population. Clair (2005) further argues

the emphasis on uniformity and central guidance is rooted in the belief that the quality and level of services should be standardized throughout the country.

The previous topic leads us into the Lamb Municipality Survey and the purpose of the chapter. While previous governmental and non-governmental surveys ask very generic and macrolevel questions on immigration, such as attitudes on immigration or opinions on assimilation, the Lamb Municipality Survey is a more specialized survey intended to better understand the local government stakeholder perceptions on foreign residents within the senior care industry in the small rural communities of Japan. The main audience for this chapter focuses on the local government sector. The role of a local government involves the protection of individual life, liberty, and property through effective administration and resource allocation. In Japan, the local governments provide the legal and social framework, provide public goods and services, and ensure social welfare of its residents. The same foundation view should also be afforded to non-Japanese residents living and working within the local municipalities since these individuals directly add value to the local economy and fill the appropriate labor resources to ensure the senior population can continue to receive quality senior care. The main research question for this chapter is as follows: What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents? To help assess and answer the primary research question, an independent survey was conducted for the local municipalities in the sampled geographical locations to collect their opinions on the effective level of support provided to businesses and communities. As introduced in chapter 2, the individuals asked to perform the survey were the senior public administrators who have direct oversight of senior care administration or the appropriate knowledge of senior care policies to answer questions competently on the behalf of the municipality.

A formal solicitation call was made by the third-party translator company of (Explore Translation) to the various municipalities requesting their participation in the academic survey. Twelve separate and distinct municipalities were selected out of sixty-four total municipalities within the three prefectures of Hiroshima, Yamaguchi, and Shimane. A significant effort was made to ensure a balanced sample representation between each local municipality. The government stakeholder survey period lasted approximately 90 days between June 15, 2020 and September 12, 2020. The responses for each question were plotted in a Microsoft Excel database for analysis and descriptive statistics were used to find common themes and trends with responses.

5.2 How Local Governments Support Commercial and Community Sector

Japan is divided into 47 prefectures with autonomous public entities. The local governments in Japan are comprised of the following two governmental tiers: prefectural and municipal (local) governments. The prefectural governments are regional authorities overseeing these 47 prefectural regions. Prefectural governments practice oversight over the municipal governments and are in charge of broader regional administration, to include common public services as the maintenance of highways, rivers, and coastlines management designated by the central government, public school education, police services and loans to the commercial sector Municipalities are considered the local public entities that have a strong and direct relationship with local residents and handle affairs directly related to the residents. As of 2021, there are 1,718 separate municipalities in Japan to include cities, designated cities, towns, and villages (Statistics Bureau, 2021). Local municipalities elected their own public figures by local and direct public votes. These public leaders represented the people through various matters of public administration through governmental labor, education, social welfare, and public health. Local

public officials also set regulations governing the use of land development, land preservation, disaster prevention, and pollution control.

Despite the governmental structure in Japan, the local municipal governments and the senior care businesses themselves are faced with tremendous pressure from the aging population and the growing senior care demand. Furthermore, many municipalities are experiencing financial difficulty and have ultimately realized a deficit. This would indicate a weaker level of funding available to support foreign residents. **Table 1** below shows the annual financial situation for each municipality that has been surveyed. The total deficit for all municipalities amounts to a 2.18 billion Yen burden on the prefecture and national government.

Table 1. Fiscal Year 2019 Surplus/ Deficit by Municipality (Thousands in Yen)

Municipality	2019 Annual Income	2019 Annual Expenditure	2019 Other Transactions	2019 Net Deficit / Surplus
Hiroshima Prefecture				
Akitakata City	22,761,199	-22,170,609	-1,043,994	-453,404
Hatsukaichi City	56,165,270	-55,522,084	-978,950	-335,764
Kure City	109,131,287	-107,329,280	-2,992,298	-1,190,291
Sera City	12,786,614	-12,331,078	-868,232	-412,696
Yamaguchi Prefecture				
Kudamatsu City	24,958,367	-24,075,856	-675,173	207,338
Nagato City	24,956,813	-23,913,719	-1,040,351	2,743
Shimonoseki City	122,097,715	-119,597,727	-3,417,946	-917,958
Iwakuni City	72,611,099	-69,674,884	-2,768,645	167,570
Shimane Prefecture				
Gōtsu City	17,632,777	-17,209,256	-328,273	751,794
Unnan City	31,309,686	-30,937,757	-326,149	45,780
Tsuwano City	8,651,028	-8,559,524	-63,743	27,761
Okinoshima City	17,826,101	-17,574,151	-327,966	-76,016

Source: Ministry of Internal Affairs and Communication (2021)

Previous research has paid considerable attention to the national challenges with health care and the social policy needs resulting from an aging population. Economists have provided detailed national analyses regarding the effects of the Japanese aged population on health care costs (Sato 2001; Tabata 2005), capital flows and mobility (Dekle 2004; Guest 2006), labor supply

(MHLW 2016), investment in human capital (Fougère et al. 2009), and fiscal sustainability (Faruque & Mühleisen 2003). The common theme with these researchers is an elevated risk posture on the national stage. The effects of population aging bring several unique challenges to health care management, social security expenditures, and the examination of aging-related public policies (Ihori et al. 2011; Schulz et al. 2004; Davis et al. 2010; Jimeno et al. 2008; Van Sonsbeek 2010). A high concentration of aged population within the local society brings unique challenges to municipalities urban planning strategy, to include impacts to the transportation system (Maoh et al. 2009), re-thinking mobility options in an aged society (Mercado et al. 2010), and considering preferences and frequencies of visits to public and medical facilities (Valdemarsson et al. 2005). Hirayama and Miyazaki (1996) have evinced that difficulty for frail, ill, and disabled elders to travel long distances as opposed to the younger population. All these considerations put more pressure on public planners and policy makers to identify ideal numbers and locations for the use of eldercare facilities.

Providing adequate and accessible senior care services in the rural areas, especially depopulated rural areas, has been a challenge to the public leaders, the senior care providers, and the individuals who require senior care. In addition, unlike in urban areas, providing public care services to elders who reside in their homes requires more time and effort on service providers. The role of taking care of senior citizens previously fell on the family members. As much state and public provision for care was inadequate to keep pace with a rapidly aging population, families continue to take great responsibility for eldercare. Initially, the Japanese government attempted to establish a westernized welfare state in the 1970s. However, in the 1980s, facing a steeply rising burden of taxes plus social security contributions, the government scaled back the scheme to build a Japanese welfare policy in which the government can seek to shift some of the burden of caring back to families and to elders themselves rather than institutionalized care (Boling 1998; Ogawa

& Retherford 1997). To address a rapidly aging population, the government announced its Gold Plan in 1990 to improve welfare services including long-term care facilities and home help services (day care, day health services, home nursing and rehabilitation, short stays in inpatient facilities), attempting to reduce the burden of family care. The plan was later revised to the long-term care insurance program to expand the services provided to the seniors, as discussed in chapter 4.

The long-term success of an enterprise depends on the support provided by its local and national government. The responsibilities of government are to ensure a supportive business environment by stimulating legislation, improving institutional capacities, rendering adequate measures of economic policy, and establishing the necessary infrastructure needed for these businesses to thrive. However, senior care facilities still remain highly regulated. The structure of Japanese laws and regulations on these senior care facilities is very complicated since there are two government agencies authorities involved and each having their own regulations as defined by Yuuri (2020). The first agency involved is the Ministry of Health, Labour and Welfare that regulates nursing homes based on the Social Welfare for the Elderly Act. The MHLW published guidelines for prefectural governors on the method of administrative guidance for Nursing Homes and the desirable conditions involved, such as with management, labor staffing, and with the services provided to the seniors. The act defines a nursing home structure as a fee-based home for the elderly and authorizes a facility to provide additional services for elderly persons during their normal nursing care services. The second agency involved is the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). The MLIT oversees nursing homes under the Act on the Securement of a Stable Supply of Elderly Persons' Housing and defines nursing home as a longterm residence with health and welfare services for the elderly. This is a rental housing service for the senior customers that provides safety-check services and life-advisory services. Yuuri (2020) states the MLIT requires senior care facilities to satisfy certain conditions that are generally less

strict than those of Nursing Homes. As the descriptions above show, most senior care facilities fall under the definition of a nursing home and, therefore, must adhere to both the MLIT requirements and the MHLW guidelines.

Despite the regulations and overseeing agency governing the type of facility, senior care facilities are still faced with business pressures that threaten their operation or hamper their expansion. This is more prevalent if the company is a small and medium-sized enterprises. Academic researchers have claimed that many smaller businesses fail because they cannot expand through the inability to raise capital (Masuda 2006; Blanchflower and Oswald 1998; Ngozi Oriaku 2012), they lack financial planning and the availability of resources (Dess, Lumpkin, and Eisner 2010), they lack market research and strategic planning ability (Levin 2006), and most important to this chapter, they lack proper government support with policies, regulations, and the controlling of interest rates to allow for cost sensitive borrowings. In the United States, each tier of government (local municipalities, state government, and federal government) each play a role in supporting the success of businesses through community sponsored training, regulatory easing, grant issuance, and the guarantee of commercial loan. These business loans by federal guarantee through banking channels have traditionally been a way to allow businesses access to funding sources to allow for expansion or to remain sustainable under times of economic hardship. Examples include a \$30 billion United States Small Business Lending Fund passed by US President Obama in 2010 in the aftermath of the 2007-2008 financial crisis aimed at purchasing the preferred stock of banks, which allows banks, through satisfying capital requirements, to extend up to \$300 billion in small-business lending. The same opportunities have been extended by the government during the COVID-19 global pandemic due to significant business impact. Prime Minister Abe Shinzo provided emergency COVID-19 zero interest small business loans to small and medium-sized enterprises in 2020.

The business challenges increase for small and medium-sized enterprises in the medical and senior care field where business-office operations can cause problems. A roundtable of senior hospital leaders in the US (HFM 2004) has identified challenges with revenue cycle management, reimbursement, and ongoing human resource shortages, growing labor costs due to specialized talent, and information technology requirements. These concerns are magnified on small and rural hospitals due to the limited resources and greater geographic and corporate isolation to resources. Therefore, there is a need for local governments to get involved to ensure the health of the small senior care businesses within the rural areas of Japan and offer some of the aforementioned services (i.e., training, access to funding, grants) to ensure the expansion of products and services. This action will also allow hospitals and senior care facilities the ability to begin investing in foreign caregivers, such as by recruitment and retention. Currently, the Japanese government has several Economic Partnership Agreements with surrounding Asian nations to allow trade opportunities and the movement of labor. Takahashi (2018) identifies a strong monetary burden on the hospital with costs exceeding 1 million yen per person to JICWELS as administrative fees, for travel/accommodation costs, for a trainer, and the lost business opportunity to allow the employee time to study for the national licensure. There have been other critics on the effectiveness of the EPAs. Yagi et al, (2013) cites the weakness of the nursing credentialing program and the Japanese language barriers and low passing rates. Furukawa et al. (2012) also concluded that the qualification examination for nurses and care workers to become certified in Japan is extremely difficult for people who do not have Japanese language skills. Hirano et al. (2010) mentions the gender dimension, noting the distinct difficulties that women face in working separately from their families.

5.3 <u>Data from Municipal Survey</u>

The following chapter section introduces the method for data collection and highlights the survey results. Once the surveys were received and sorted, the data was organized into response concentrations that would indicate what the majority consensus for each question.

5.3.1 Introduction to The Municipal Survey

The municipality participant survey was engineered to collect the perspectives of the municipal members and to understand which factors affect survey responses. There is a need for data and research within the rural areas of Japan and outside the major metropolitan statistical area since these stakeholders are incurring more negative externality brought about by national immigration strategy. The government has an important role since they must balance public programs to ensure support for all municipal residents, to include foreign caregivers themselves and the seniors who need the care. Twenty questions were asked of each public leader who was willing and able to complete the survey and the results will be introduced in the subsequent sections. The survey will help assess the chapter research question to see what the attitudes are from the local government leaders on supporting both the senior care businesses and the foreign residents. In order to answer the main research question of this chapter, What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?, the municipal participant survey was structured to ask four categories of questions, as follows.

- 1. Is there a lack of supportive public policy and outreach available for senior care foreign residents?
- 2. Does the municipality lack the relevant infrastructure to attract and retain foreign care givers?

- 3. Is the rural municipality effectively partnering with the local senior care business sector during a period of high demand, declining labor supply, and financial constraints?
- **4.** The municipality understands there will be challenges with foreign senior care workers in the local community, as demonstrated in the MOJ (2017) survey, the Worlds Value Survey Wave 7 (Haerpfer et al. 2020), the Pew Research Study (2017), and the Cabinet Office (2020) survey?

5.3.2 Sample Characteristics

The selected sample of 12 municipalities has provided some important characteristics to highlight. Each municipality was asked their current population breakdown by age categories and by foreign concentration. **Figure 2** highlights all survey city population responses from the government stakeholders listed vertically per municipality, as well as reports the data for each municipality. All of the sampled municipalities have reported both higher senior population concentrations and lower working age population concentrations in comparison to the 2019 national Japanese national trends by the World Bank (2019). This is important to note since the rural areas outside the major metropolitan areas are seeing elevated senior concentrations. Tsuwano City and Nagato City has the highest self-reported concentration of seniors within the sample at 48.4% and 42.1%, respectively.

The next demographic variable collected was the concentration of foreign residents living within the municipality as answered by the survey participant. **Figure 3** provides a graph with the national foreign residents in comparison to both the national figure and the reported foreign population reported per each municipality participant. The analysis also breaks out the gender per each foreign population and compares it to the Japanese. Eleven out of twelve municipalities have lower concentrations of foreign residents than the national average. The one municipal outlier is

the City of Akitakata City. Other notable trends are that Unnan City and Okinoshima City have the lowest percent concentrations of foreign residents at 0.61% and 0.66%, respectively.

Demographic Concentrations 70.0% 60.0% Concentration (%) 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% Akitakata Cit.4 HatakaidiiCity Kudamatsucity ShinonosakiCity TSUMANO CITY Okinoshima City Seracity MagatoCity Kine City kuni Cita GotsuCital ■ Local Population Ages 0-14 ■ Local Population Ages 15-64 ■ Local Population Ages +65 Location **Local Population Ages 0-14 Local Population Ages 15-64 Local Population Ages +65** National Average (2019) 12.6% 59.4% 28.0% Akitakata City 10.4% 50.6% 39.3% Hatsukaichi City 13.0% 56.9% 30.1% **Kure City** 10.8% 54.0% 35.1% 48.4% 41.1% Sera City 10.5%

Figure 2. Age Concentrations by Municipality

13.9% 57.0% 29.1% **Kudamatsu City** Nagato City 9.4% 48.5% 42.1% Shimonoseki City 11.1% 53.5% 35.4% Iwakuni City 11.4% 53.3% 35.3% Gōtsu City 10.5% 50.5% 39.0% 50.0% **Unnan City** 10.9% 39.1% 43.0% Tsuwano City 8.6% 48.4% 48.1% 40.6% Okinoshima City 11.3%

Source: World Bank (2019) and Lamb Municipality Survey (2020)

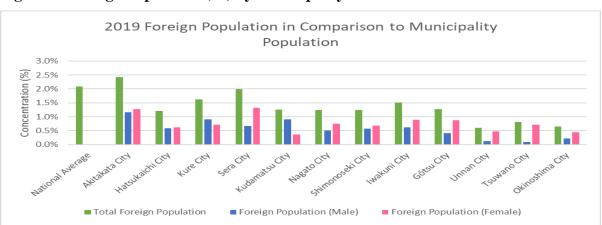


Figure 3. Foreign Population (%) by Municipality

Location	Total Foreign Population	Foreign Population (Male)	Foreign Population (Female)
Akitakata	2.43%	1.16%	1.27%
Hatsukaichi	1.21%	0.59%	0.62%
Kure	1.62%	0.90%	0.72%
Sera	1.99%	0.66%	1.32%
Kudamatsu	1.26%	0.91%	0.36%
Nagato	1.25%	0.50%	0.74%
Shimonoseki	1.25%	0.57%	0.68%
Iwakuni	1.51%	0.62%	0.89%
Gotsu	1.28%	0.40%	0.87%
Unnan	0.61%	0.13%	0.47%
Tsuwano	0.81%	0.10%	0.71%
Okinoshima	0.66%	0.22%	0.44%

Source: (OECD 2019 and Lamb Municipality Survey 2020)

5.3.3 Results of Response to Survey Questions

This section highlights the survey results, to include both the number of responses and the percentage concentration of responses for the 20 questions are presented in Table 4.

Table 4. Results of Community Survey by Question

	N=	Response A	Response B	Response C	Response D	Response E
Question #1	12	(a) We have 3+ gove (b) We have 1-2 gov (c) We are currently	2 (17%) es to support the quality of rnment programs and num ernment programs and sev reviewing and developing is any special programs or po ot applicable.	nerous policies to help for eral policies to help foreig government programs an	eign residents. gn residents. d/or policies	4 (33%)
Question #2	12	(a) We have significate (b) We have only a so (c) We do not have for	1 (8%) or public programs to suplent funding available for relemall level of funding availationing available this year, funding available for relevation of applicable.	evant immigrant program ble for relevant immigran but will start in next fisca	t programs.	6 (50%)
Question #3	12	0 (0%) 3. Have you partnered w (a) We have a coord (b) We have smaller (c) We wish to build	1 (8%) ith business sector to help inated govt/business support partnerships between gove future partnerships betwee or will not pursue partners	ort structure to recruit & rernment and businesses. en government and busin	retain immigrants.	4 (33%)

^{*} Note: Foreign population figures were self-disclosed by survey participants

	12	1 (8%)	2 (17%)	1	(8%)		(42%)	2	(25%)							
2	12	4. Do you feel the local comm							(23%)							
Question #4		(a) The community will fu			ivers (iiiiiiiBi	ant and ranni	y membersy.									
ţį		(b) The community will lik		_												
ř		(c) The community will ha	ave small challenges	supporting	foreign careg	ivers.										
ď		(d) The community will ha (e) I don't know or not ap	-	nges suppo	orting foreign	caregivers.										
	12	0 (0%)	4 (33%)	3	(25%)	2	(17%)	3	(25%)							
Question #5		5. Do you feel the prefectural				_	_									
ö		(a) Prefectural governme	-	-			_	_	resources.							
est		(b) Reasonable, but prefe(c) Not enough immigran	•		•	•	•	ou-son).								
ð		(d) There is no immigrant		-	•	government.										
		(e) I don't know or not ap		J												
	12	0 (0%)	4 (33%)	1	(8%)	0	(0%)	7	(58%)							
9#		6. Do you feel like the nationa	al government has pr	ovided eno	ugh support f	for foreign wo	orkers?									
Question #6		(a) National government						ary resource	S.							
sti		(b) Reasonable, but natio	-		•	_	ent.									
ž		(c) Not enough immigrant		-	_	vernment.										
•		(d) There is no immigrant(e) I don't know or not ap	* *	ational gove	enninent.											
	12	0 (0%)	2 (17%)	3	(25%)	4	(33%)	3	(25%)							
4		7. Can the local government (• •			•		-								
Question #7		(a) The local government	•	•		_										
stic		(b) The local government		-		_	ers.									
on,		(c) The local chou will have	•	_	•											
O		(d) The local government(e) I don't know or not ap		expenditure	es to directly a	iid foreign wo	rkers.									
	12	0 (0%)	1 (8%)	8	(67%)	3	(25%)	0	(0%)							
~		8. Is community infrastructure		_												
#		shopping, internet)?		Ü	•	•	•	•	,							
Question #8		(a) Community has suffici		-	_											
res		(b) Community has appro	•	-	•		,									
đ		(c) Improvement is needed(d) We do not have approx			as, snopping,	internet, etc.	.)									
		(e) I don't know or not ap		in place.												
	12	0 (0%)	1 (8%)	8	(67%)	3	(25%)	0	(0%)							
£		9 Could the addition immigra	ant labor increase the	e local tax b	ase sufficient	ly?										
		3. Could the addition infilling a														
o		(a) Tax bases will increase	-			(b) Tax bases will increase with immigrants, but support expenditures will also increase.										
estion		(a) Tax bases will increase (b) Tax bases will increase	e with immigrants, b		•	will also incre	ase.									
Question		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa	e with immigrants, b al out with taxpayer	expenditur	•	will also incre	case.									
Question		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ	e with immigrants, b al out with taxpayer ve effect on governn	expenditur	•	will also incre	case.									
	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap	e with immigrants, b al out with taxpayer ve effect on governn	expenditur	es			5	(42%)							
	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ	e with immigrants, bal out with taxpayer we effect on governn oplicable. 4 (33%)	expenditure nent 0	•		(0%)	5	(42%)							
	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%)	e with immigrants, bal out with taxpayer we effect on governo oplicable. 4 (33%) tion increase regional	expenditure nent 0	es			5	(42%)							
	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population inc	e with immigrants, bal out with taxpayer ve effect on governmonlicable. 4 (33%) tion increase regionarectly increases regionarectly increases regional directly directl	expenditurent O II GDP? In GDP. In GDP. In GDP. In GDP.	(0%)			5	(42%)							
	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population inc (c) Foreign population ha	e with immigrants, bal out with taxpayer ve effect on governmentable. 4 (33%) tion increase regionarectly increases regionarectly increases regions as no effect on region	expenditure nent 0 I GDP? onal GDP. gional GDP. al GDP.	(0%)			5	(42%)							
		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population inc (c) Foreign population ha (d) Foreign population ha	e with immigrants, bal out with taxpayer ve effect on governmentable. 4 (33%) tion increase regionarectly increases regionarectly increases regions in our effect on regions in effect on regions negative effect on	expenditure nent 0 II GDP? onal GDP. gional GDP. al GDP. regional GI	(0%)	0	(0%)									
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Question #10		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equal (d) There will be a negative (e) I don't know or not ap 3 (25%) 10. Could the foreign population directly (b) Foreign population incomplete (c) Foreign population had (d) Foreign population had (d) Foreign population had (d) Tax before the control of	e with immigrants, ball out with taxpayer ve effect on governments of the control	on the state of th	(0%) DP. (17%)	0	(0%)	6	(50%)							
Question #10		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equal (d) There will be a negative) I don't know or not ap 3 (25%) 10. Could the foreign population directly (a) Foreign population incomplete (c) Foreign population had (d) Foreign population had 2 (17%)	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases	on I GDP: on I GDP. gional GDP. regional GDP	(0%) DP. (17%) egivers (schoo	Q I, relocation,	(0%) (17%) public transp	6	(50%)							
Question #10		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population inc (c) Foreign population ha (d) Foreign population ha 2 (17%) 11. Can local government sup (a) We can fully support to	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases	on dispersion of the control of the	(0%) DP. (17%) egivers (schoo	Q I, relocation, ed by governi	(0%) (17%) public transp	6	(50%)							
Question #10		(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population inc (c) Foreign population ha (d) Foreign po	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases regionarectly increases regionarectly increases regionarectly increases regionarectly increases regionarectly increases regionare of the families of families of immigilable in native langurams available, but in tax in place and/or	on dispersion of the content of the	(0%) OP. (17%) egivers (schoo	Q I, relocation, ed by governing out.	(0%) (17%) public transpo	6	(50%)							
Question #10	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population ind (c) Foreign population ha (d) Foreign population ha (d) Foreign population ha 2 (17%) 11. Can local government sup (a) We can fully support t (b) Several programs avai (c) We have several programs (d) We do not have programs (e) I don't know or not ap	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases	expenditure oul GDP? onal GDP. gional GDP. regional GE coreign care grants. age of imm mmigrant m commercia	(0%) OP. (17%) egivers (schooligrant providenust seek therall sector is res	2 I, relocation, ed by governi n out. ponsible for t	(0%) (17%) public transpo	6 ortation, ban	(50%) king, etc.)?							
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Question #11 Question #10	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population ind (c) Foreign population ha (d) Foreign population ha (d) Foreign population ha 2 (17%) 11. Can local government sup (a) We can fully support t (b) Several programs avai (c) We have several programs (d) We do not have programs of the company of	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases	expenditure oul GDP? onal GDP. gional GDP. regional GE coreign care grants. age of imm mmigrant m commercia active place at and retail enges to re	(0%) OP. (17%) egivers (schoolar and provide nust seek ther all sector is res (25%) e to retain the an foreign population foreign population foreign population foreign p	2 I, relocation, ed by governi n out. ponsible for t foreign populations. copulations.	(17%) public transponent. chis.	6 ortation, ban	(50%) king, etc.)?							
Question #10	12	(a) Tax bases will increase (b) Tax bases will increase (c) Tax revenues will equa (d) There will be a negativ (e) I don't know or not ap 3 (25%) 10. Could the foreign population dir (b) Foreign population ind (c) Foreign population ha (d) Foreign population ha (d) Foreign population ha 2 (17%) 11. Can local government sup (a) We can fully support t (b) Several programs avai (c) We have several programs (d) We do not have programs of the country of	e with immigrants, be all out with taxpayer we effect on government oplicable. 4 (33%) tion increase regionarectly increases	expenditure oul GDP? onal GDP. gional GDP. regional GE coreign care grants. age of imm mmigrant m commercia active place at and retail enges to re	(0%) OP. (17%) egivers (schoolar and provide nust seek ther all sector is res (25%) e to retain the an foreign population foreign population foreign population foreign p	2 I, relocation, ed by governi n out. ponsible for t foreign populations. copulations.	(17%) public transponent. chis.	6 ortation, ban	(50%) king, etc.)?							

m	12	0 (0%) 9 (7	5%) 1	(8%) 2	(17%)	0 (0%)	
Question #13		13. Are you knowledgeable with the cu (a) I fully understand what the Ecc (b) I have heard what the Econom (c) I am unaware of this internatio (d) I don't know or not applicable.	nomic Partnership Agr ic Partnership Agreeme nal trade agreement.	eement is. ent is.			
Question #14	12	9 (75%) 2 (1: 14. Are you seeing community senior community senior care is incressible Demand for senior care is incressible Demand for senior care has stated (d) Demand for senior care is decressible I don't know or not applicable.	are demands increase? easing greatly in my cor easing very slightly. bilized; no growth at th	nis time.	(8%)	0 (0%)	
Question #15	12	15. Does the business sector have enough employees on hand to fulfill the current level of senior care demand? (a) We need more employees and are actively looking for more. (b) We are recruiting and will need more employees long-term. (c) We currently have enough employees, but would recruit more if available. (d) We have enough employees to meet current demand. (e) I don't know or not applicable.					
Question #16	12	12 2 (17%) 0 (0%) 5 (42%) 1 (8%) 4 (33%) 16. Do you believe the commercial sector could afford greater expenses to support foreign labor (i.e. salary, recruiting, transporting, housing, and quality of life care)? (a) Businesses could incur additional expense without drastic change to financials. (b) Businesses could incur additional expenses through commercial lending. (c) Businesses desire to provide more support, but need more revenues/funding first. (d) Businesses cannot afford to hire additional employees right now (e) I don't know or not applicable.					
Question #17	12	9 (75%) 0 (0 17. Do you feel the local economy will i (a) The economy will grow from jo (b) The economy will grow, but th (c) The economy will grow anyway (d) No material growth is expected (e) I don't know or not applicable.	prove with the infusi b creation, spending, a ere will be outflow of rows, without foreign labo	nd resident retention. esources (remittances).	\ /	3 (25%)	
Question #18	12	6 (50%) 0 (0 18. Do you think foreign residents will I (a) Foreign residents will experien (b) Foreign residents should not es (c) Foreign residents will not experiment of the company of the compan	nave difficulties living ir ce many difficulties in c cperience too many dif rience difficulties great ence.	n your community? our community. ficulties. er than what a an	(8%)	4 (33%)	
Question #19	12						
Question #20	12	6 (50%) 5 (47) 20. Do you consider foreign residents to (a) Foreign residents bring value to (b) Diversity is good. However, th (c) Foreign residents are good. Howish they would be more respond. Foreign residents could weake (e) I don't know or not applicable.	o contribute value to you the community (busine ere have been challeng wever, they tend to take ectful.	ness, government, society es to the idea. se advantage of many opp	').	1 (8%)	

5.3.4 Summary of Survey Data to Research Questions

The following section examines the distribution of survey responses to each question, which can be grouped into four finding categories.

Survey Finding #1 – Lack of public policy for foreign residents. (Questions: 1, 2, 5-7, 11)

The first category of questions in the survey try to assess perception from the government stakeholder on the availability and quality of public programs and outreach for foreign immigrant workers. Public programs and incentives for foreigner senior care workers is important to not only attract foreign residents, but to retain them for the long term as they continue their personal and professional lives in Japan. These questions were influenced from the quality-of-life claims made in the Japanese Cabinet Office (2020), the Akitakata City Multicultural Promotion Plan (Akitakata City, 2018), and the World Values Survey Wave 7 (Inglehart et al. 2020) which asked individuals how confident they are in the government. The questions ask if there is a lack of supportive public policy and outreach available for senior care foreign residents. **Results of the survey confirm the research question and evidence a general lack of support admitted by the local public leaders**.

- Question #1. This question assesses the ability of the local government to set framework policies and procedures around supporting foreign residents in the community with specific focus on the senior care sector. 4 participants (33% of sample) admitted they had no programs in place to support foreign residents and another 4 participants (33%) claimed to not know if policies are in place. This would count as a negative response because the telephone solicitation to participate in the survey was aimed at the senior public officials who are best suited to answer these questions, and the lack of an answer could be intended.
- Question #2. This question assesses the availability of public funds or active programs to support residents. An effective program may need a sufficient level of public funds to achieve the intended purpose. 10 participants (83% of sample) have acknowledged that they do not

have an appropriate level of public funding available to support foreign immigrants. Six of these 10 municipalities answered "Do not know or not applicable." If the survey participant selected an "I do not know or not applicable" response, then this could also count as a negative response since the respective government administrators should know as they serve as the subject matter experts for public policy in the respective field.

Question #5 and Question #6. These two questions assess the local government survey participant's opinion if they believe the level of support from the higher tier structure of government (prefecture and national government) is appropriate for supporting foreign caregivers. 5 participants (42% of sample) have admitted that they do not receive enough support from the prefectural government to support foreign workers and 4 (33%) stated the amount of support is reasonable, but there could be more support given to help the local government. With regards to the national government, 4 (33%) of sample stated the amount of support is reasonable, but there could be more support given to help the local government and 7 (58%) of sample stated they did not know or not applicable. The consensus with the business survey participants is that they believe the three sides of government provide a minimum level of support, but more support is needed. In regards to disapproval rates: The senior care business survey participants revealed that 39% of the sample disapprove of the local governments support, 41% of the sample disapprove of the prefectural governments support, and 31% of the sample disapprove of the national government support. The community survey participant's results paralleled the business participant's claims for the local government and the national government when the "Do Not Know" response was omitted. In conclusion, all three stakeholders, including the government representatives, believe the government should do more to help support foreign caregivers.

- Question #7. This question asks the survey participant if their municipality can support more expenditures to aid and support foreign care workers. This question assesses the financial impact on the local municipalities to fund programs that are supportive to foreign residents. The majority of the sample, 7 participants (58% of sample), acknowledged they would have significant challenges or will not be able to incur more expenditures to support foreign workers.
- Question #11. This question assesses the survey participant's opinion on if the local government provides enough support for the families of the foreign caregiver (i.e., school, relocation, public transportation, banking, etc.). 8 participants (67%) do not have programs or rely on the commercial sector to provide enough support for the foreign resident. Two municipalities (17%) claimed that they have programs available, but foreign resident have to seek them out. Two municipalities (17%) answered that they could fully support a family of foreign resident.

<u>Survey Finding #2 – Community Infrastructure (Question 8-10)</u>

The second category of questions in the survey try to answer the basic question to the survey participants: Does the municipality have relevant infrastructure to attract and retain foreign caregivers in the local area? Foreign residents have many different social reasons to immigrate to Japan and work in the senior care industry. However, having a broad and encompassing infrastructure in place to support foreign resident is important to ensure they remain in Japan for the long-term. Infrastructure ensured the foreign resident can have a reasonable quality of life depending on their own financial situation. Foreign residents who experience societal hardships are more likely to return to their country of origin to seek a better quality of life. This question was engineered off a Gallop's Pole that used a Potential Net Migration Index (PNMI) to suggest Japan has a long way to go to make the country an attractive destination to foreign resident due to

a low score (Ray 2018). Results from the survey confirm the category question; survey participants believe there is a general lack of infrastructure in place to attract and retain foreign caregivers.

- Question #8. This question assesses the participant's opinion if the community infrastructure is supportive enough for foreign residents to have an ideal quality of life and the ability to reside in the municipality for the long-term. The focus of the question was on the frequently utilized attributes, such as with public schools, medical services, public transportation, shopping, internet. 11 participants (92% of sample) have acknowledged that they do not have sufficient community infrastructure in place to support foreign residents. Only one survey participant, Iwakuni City, has answered that the community has appropriate infrastructure in place, but could improve in a few areas. A significant concentration of the population residing in Iwakuni consists of US military personnel, government civilians, and the families of these individuals residing in Japan under the Status of Forces Agreement (SOFA) classification. These SOFA members contribute significantly to the local economy and the municipal government has allocate public resources accordingly to their population.
- Question #9. This question assesses the survey participant's opinion on the additional immigrant inflow and if it would increase the local tax base sufficiently. This question assesses the municipality's understanding of the long-term intrinsic benefits that foreign resident provide to the community. The results of the survey reveal the majority of responses are "I don't know" at 7 participants (58% of the sample). This may highlight an unsophisticated analysis, or lack of an analysis, being performed in the local government to understand long-term social value that foreign residents have in the skilled nurse-aid field. The next concentration of responses there will either be a trade-off of tax benefit/expenses (4 participants, 33% of sample).

• Question #10. This question assesses if the survey participant believes a foreign population could increase regional GDP, thus evidencing the survey participant's understanding of the long-term intrinsic benefits that foreign residents provide to the local economy, as well as clarifies any underlying bias the survey respondent may have towards immigrant. 7 participants (58% of sample) have claimed that regional GDP will generally increase with the inflow of more foreign workers. However, five out of 12 municipalities (42%) claimed that they didn't know if foreign population increase regional GDP. This highlights a lack of understanding in economics and/or the lack of a sophisticated modeling analysis to assess long-term benefits of migration within their local municipality.

Survey Finding #3 – Partnership with Business Sector (Question 3, 13, 14, 15, and 16)

The third category of questions focuses on the basic question to the municipal stakeholders: Is the rural municipality effectively partnering with the local senior care business sector during a period of high demand, declining labor supply, and financial constraints? Government and business are very interdependent on each other to meet the full demands of the society. Businesses are regulated and incentivized by the government sector. On the other hands, governments seek out the business sector to solve problems and meet demands. Both of the stakeholders seek the improvement of society. Governments count on a health business sector and a healthy community to receive tax payments. A disconnect in information between the two stakeholders could result in missed partnership opportunities and/or funding opportunities. These questions were influenced from the research of Mitchell et al. (2008) where entitlements and utilization rates in Japan have grown tremendously in the first few years the LTCI program has been implemented. This question was also influenced from the national government reports on nursing turnover (MHLW 2017), as well as the high burnout rate and low levels of job satisfaction among these care providers

(Chamberlain, Hoben, Squires, & Estabrooks 2016; Saito et al. 2018). Results of the survey confirm the category question and reveal a lack of partnership or understanding of the business sector during a period of high demand and a declining labor supply.

- Question #3. This question assesses the survey participant's opinion if they have partnered with the commercial sector to help foreign residents in the senior services sector. 7 participants (58%) acknowledged that they do not have partnerships established with the local business sector. Four survey participants (33% of sample) stated that they did not know or not applicable. It could be possible that the survey participant did not have the relevant experience or position to identify these programs.
- Question #13. This question assesses if the government survey participant is knowledgeable with the current Economic Partnership Agreement (EPA). 9 participants (75% of sample) claimed to have a minimal understanding of the EPA and the remaining three municipalities have not heard of the EPA. The business participants were asked the same question and they provided a similar response. The majority of business survey participants (71% of sample) are aware of the international agreement. However, the opposite is true for the community stakeholders as only 32% of the sample admit they have some knowledge about the international agreement.
- Question #14. This question assesses the survey participant's awareness of the local demands on the senior care industry. 9 participants (75%) have seen significant growth and two (17%) have seen general growth. This can be restated as 11 out of 12 municipalities are seeing growth in this sector. The business survey participants and the community survey participants responded to the same question. The results of the business survey revealed 42 business survey participants have acknowledged that demand in increasing within their business (82% total of sample). A further breakdown shows that 13 senior care businesses (25% of sample) have seen

demand increase greatly and 29 senior care businesses (56% of sample) have seen demand increased only slightly. The community survey participants also expressed this concern with 313 participants (56% of sample) stating they are seeing a great increase in senior care demands.

- Question #15. This question assesses the survey participant's opinion if the senior care facilities have enough employees to fulfill the current level of demand. This question was meant to gauge the understanding of the business sector's labor supply pressures. 11 municipalities (92%) have admitted that businesses need more employees; 6 of these eleven admitted they greatly need more employees through a response of A. The majority of businesses survey respondents (31 participants, 60% of sample) have acknowledged that they have an immediate need for more employees or will need more employees within the long-term. Eighteen businesses (35%) stated they have enough employees at the current time, but would definitely hire more if available to continue expansion of services.
- Question #16. This question assesses if the senior care facilities have any financial constraints with supporting foreign caregivers. A positive support structure would involve additional expenses in the form of recruiting, relocation, translation services, quality of life care, or medical related co-pay expenses due to the lack of insurance coverage for foreign residents. The results of the survey concluded that the municipal survey participants believe businesses have sufficient reserves available. Two survey participants (17% of sample) thought businesses had ample revenues to support foreign caregivers, five (42% of sample) stated that the businesses probably would need more revenues/funding first. The business stakeholders were asked this same question and thirty-six survey participants (60% of sample) responded that they do not have sufficient cash reserves available and thirteen (25% of sample) responded that they did not know or not applicable. The difference between the business participants and the government participants reveals a difference in perspective from both stakeholders. These

results could indicate a need for the government to provide more access to cash for the local senior care business sector at subsidized lending rates upon successfully hiring foreign caregivers.

Survey Finding #4 – General perception on migration benefits (Question 4, 12, 17, 18, 19, 20)

The last category of questions asks the opinions of the municipal stakeholders with long-term considerations of value on behalf of the survey participant. A greater source of foreign labor inflow has been beneficial for the local economy as gross regional domestic product (GRDP) will increase, as well as the inflow of foreign residents will deter negative population growth. These series of questions were meant to measure the understanding of immigration theory within the local municipalities. The questions were influenced by the MOJ (2017) survey, the Worlds Value Survey Wave 7 (Haerpfer et al. 2020), the Pew Research Study (2017), the Akitakata City Government Public Survey conducted in both 2010 and 2017 (Akitakata City, 2018), the International Labour Organization Survey (2019), and the Cabinet Office (2020) survey. Results of the survey confirm the category question. The municipalities understand there will be challenges with foreign senior care workers in the local community and has failed to see the long-term benefits of foreign residents

• Question #4. This question assesses the survey participant's opinion if they perceive the local community can support the lives of foreign caregivers and family members. Results of the survey reveal 6 out of 12 municipalities (50%) identified that there will be challenges with the community supporting foreign care givers. Only three municipalities (25%) claimed the community will support foreign residents. The business sector and the community stakeholders were a little more optimistic when they were asked the same question in their respective surveys. The majority of business (23 participants, 44% of sample) have answered that the community can likely support foreign caregivers. Twenty-one participants (40% of

sample) acknowledged that the community would have mild-to-significant challenges supporting foreign caregivers. A significant amount of community survey responses (275 participants, 49%) did not want to answer this question or did not know. The reluctance to answer this question or the inability to express perspective is an interesting finding. The next significant concentration is 136 participants (25% of the sample) that believe the community will have general challenges to supporting foreign caregivers.

- Question #12. This question asks the survey participant's opinion if they consider their community as an attractive place for foreign residents. The ideology behind this question is to assess the participant's opinion on their community attributes and desirability for foreign workers. Results from the Lamb Municipality Survey indicates three municipalities (25%) have admitted that they will have concerns attracting and retaining foreign populations. Four (34%) have admitted that they can attract foreign residents, but will not be able to keep them long-term due to a lack of community desirability. The remaining five municipalities did not provide an answer or did not know. Retaining foreign residents is an important concern that many municipalities face since keeping foreign residents will increase GDP and reduce population decline.
- Question #17. This question assesses the survey participant's opinion if they feel the local economy will improve with the continued infusion of more foreign caregivers. This question tests the participant's knowledge of transmigration benefits and seeks their genuine opinion on the intrinsic value of foreign residents within their local communities. The result of the Lamb Municipality Survey concluded that the majority of municipality stakeholders have claimed that there is a positive effect in the community (9 participants, 75% of sample). The business participants and community participants were asked the same question. The majority of the business participants (29 participants, 56% of sample) have answered that the economy will increase from job creation, spending, and resident retention. The majority of the community

participants shows the same trends with 69% of the sample stating the economy will increase and 31% stating the economy will not improve with more foreign residents.

- Question #18. This question asks the survey participant if they believe foreign residents will experiencing difficulties living in the community. The Lamb Municipality Survey concluded that a significant concentration of responses (6 participants, 50%) indicate that foreign residents will experience many difficulties in the community. This is very similar to the business stakeholder survey results. Roughly 42 participants (62% of sample) acknowledge that foreign caregivers will experience difficulties.
- Question #19. This question asks the survey participant if the foreign caregivers would be discriminated against in their communities. This question assesses the municipalities understanding and tolerance of discrimination against foreign residents. The result of the Lamb Municipality Survey concluded that four out of 12 municipalities (34%) responded that slight discrimination is an unfortunate part of migration, which supports a tolerance in the government for discrimination. Two municipalities (17%) do not see any discrimination and five (42%) have selected not to answer. The same question was asked of the business and community stakeholders where the majority of business survey participants (40 participants, 77% of sample) believed the foreign residents would be discriminated against and the majority of community stakeholders (185 participants, 78%) acknowledged direct discrimination or a tolerance for discrimination.
- Question #20. This question asks the survey participant's opinion if foreign residents contribute value to their community. The question assesses the intrinsic value gained by the community with the presence of the foreign caregiver. The response A and B indicate a generally positive view on foreign caregiver community value and the response of C and D indicate a negative view. This question is similar to the municipal survey question #17; however, structured to try to achieve a different result from the survey participant. The results

of the Lamb Municipality Survey concluded the six out of 12 municipalities (50%) answered that foreign residents bring value to the community and to all stakeholders and five out of 12 municipalities (42%) stated that diversity is good; however, there have been challenges. The business stakeholders and community stakeholders were asked the same question in their survey with the majority of the business participants (45 participants, 86% of sample) considered foreign caregivers as value-creation to the community and the majority of community survey participants (387 participants, 68% of sample) also perceive the foreign caregivers as value creation to the community.

5.4 Chapter Summary

As previously mentioned, senior care demands are growing in the community and the impacts are affecting the three major stakeholders of society in very unique ways. This chapter focused on the impacts to the local municipality. The main research question for the chapter sought to examine the attitudes from local government leaders on supporting both the senior care business sector and the foreign senior care workers. Based on the Lamb Municipality Survey, the local government is not supporting the senior care business sector and the foreign residents effectively per survey participant perception. Five negative findings were noted in the survey and suggest a more systemic concern.

Lack of Public Funding Available to Support Foreign Residents

The first survey finding is the lack of funding and/or resource allocation for foreign residents living within the municipality. Many rural municipalities are experiencing budget constraints and do not have the ability to fund or support special immigrant programs. As noted in chapter 4, the majority of senior care business survey participants confirmed that they are

experiencing a combination of growing demand for their services and the lack of labor resources to accommodate this demand. The lack of government support is concerning since this indicates both a lack of partnership and a strategy of funding other public priorities. When asked if public funding is available for foreign residents, 33% of the sample provided a negative response and 50% of the sample stated "I Don't Know," which would lead to a total 83% number of negative responses. When asked if the municipality can support more expenditures to aid foreign care workers, the majority of municipalities (7 participants, 58% of sample) acknowledged that they would have significant challenges or will not be able to incur more expenditures to support foreign workers. Three respondents (25% of sample) did not know as they may not be involved in the funding side of the government. However, if the municipal survey participant selected an "I do not know or not applicable" response, then this could count as a negative response because the telephone solicitation to participate in the survey was aimed at senior public officials who are best suited to answer these questions and are the subject matter experts for public policy in senior care.

Lack of Supportive Policies or Programs for Foreign Residents

The second survey finding is the lack of focus, or awareness, on an appropriate public policy framework to protect or support foreign residents living within the municipality. When asked if the municipality has appropriate public policies in place to support the quality of life of a foreign population, 4 participants (33% of sample) admitted they had no programs in place to support foreign residents and 4 participants (33% of sample) claimed to not know if policies are in place. When asked of the municipality provides enough support for the families of the foreign caregivers, 2 survey participants (17% of sample) have no programs or rely on the commercial sector to provide enough support for the foreign residents, 2 survey participants (17%) claimed that they have programs available that foreign residents will have to seek out independently, and

six participants (50% of sample) were unaware. If the municipal survey participant selected an "I do not know or not applicable" response, then this could count as a negative response because the telephone solicitation to participate in the survey was aimed at the senior public officials who are best suited to answer these questions and are the subject matter experts for public policy in the senior care field. Declining to answer could be a safer response instead of a negative response.

Community Infrastructure is substandard or unappealing to attract or retain foreign residents

The third survey finding is the lack of community infrastructure in place or the lack of a positive appearance for the municipality. Retaining foreign residents is an important concern that many municipalities face since keeping foreign residents will increase GDP and reduce population decline. The results of the Lamb Municipality Survey concluded that the overwhelming majority of the municipality stakeholders (11 participants, 92% of sample) have acknowledged that they do not have sufficient community infrastructure in place to support foreign residents. When asked if the community is an attractive place to retain the foreign population, three municipality survey participants (25% of sample) have admitted that they will have concerns attracting and retaining foreign populations and four (34% of sample) have admitted that they will not be able to retain foreign residents long-term due to a lack of community desirability. The remaining five municipalities did not provide an answer or did not know. When asked if the municipal survey participant believes the local community can support the lives of foreign caregivers and family members, the majority of responses reveal six out of 12 municipalities (50% of sample) identified that there will be challenges with the community supporting foreign care givers, three municipalities (25%) claimed the community will support foreign residents, and three municipalities (25%) did not know or did not want to comment. Again, if the municipal survey

participant selected an "I do not know or not applicable" response, then this could be considered a negative response.

Lack of Partnerships with Local Businesses

The fourth survey finding identifies a lack of partnership between the local municipality and the local senior care business. The majority of municipalities (7 participants, 58% of sample) acknowledged that they do not have partnerships established with the local business sector. Four survey participants (33% of sample) stated that they did not know. When asked if the senior care facilities have any financial constraints in supporting foreign caregivers, the results of the Lamb Municipality Survey concluded that 17% of sample thought businesses had ample revenues to support foreign caregivers and 50% of sample stated that the businesses probably would need more revenues/funding first or could not afford additional expenses. The business stakeholders were asked this same question and thirty-six survey participants (60% of sample) responded that they do not have sufficient cash reserves available and thirteen (25% of sample) responded that they did not know or not applicable. The difference between the business participants and the government participants reveals a difference in perspective from both stakeholders. These results could indicate a need for the government to provide more access to cash for the local senior care business sector at subsidized lending rates upon successfully hiring foreign caregivers.

Municipalities Agree with National Trends: Greater Demand with Decreasing Labor Pool

The fifth survey finding identifies the municipalities are aware of the local demands on the senior care industry. The results of the Lamb Municipality Survey concluded the surveyed municipalities are perceiving an increase in demand for senior care services with the majority of municipalities (9 participants, 75% of sample) observing significant growth and two (17%) have seen general growth. This claim was affirmed by the business survey participants and the

community survey participants who responded similarly with 42 business survey participants (82% of sample) and 313 participants (56% of sample) having acknowledged that demand in increasing within their business or communities. When asked if the senior care facilities have enough employees to fulfill the current level of demand, the majority of responses (92% of sample) confirmed the business sector needs more employees and the majority of businesses survey respondents (31 participants, 60% of sample) have acknowledged that they have an immediate need for more employees or will need more employees within the long-term.

Chapter 6. Summary and Policy Recommendations

6.1 Research Purpose and Research Questions of this paper

As discussed heavily in Chapter 1, Japan is a nation faced with several unique social and economic challenges. The shifting age demographics, increased longevity of life, decreasing population growth rate, and the lack of a supplemental foreign population are combined factors that are impacting the long-term sustainability of the nation. This paper focused on the senior care sector since this industry has been impacted significantly from the effects of an aging population. The longevity of life for seniors has been more dramatic than in any other developed country and the high demands for quality senior care services has grown beyond what the domestic labor pool can provide. The revision of the Gold Plan to the Long-term Care Insurance (LTCI) program at the turn of the 21st century has improved the standard of care and provided greater accessibility for the senior population. However, the labor supply to support this expansion is under pressure from both a decreasing population growth of youth category (14 and younger), the reliance on an aging labor structure, and the static graduation rates of new nurses not growing commensurate with the demand. The Japanese government has been paying high attention to the severe problem of care worker shortage and has begun to revise national immigration policy for efficiently receiving larger amount of skilled senior care labor from foreign countries. Japan's previous approach of internal domestic migration with a back-door immigration policy to fill critical positions is not sufficient as in the past and external workers are needed to fill many roles. However, the situation is changing and a greater level of research needs to be undertaken to better understand the Japanese attitudes of the societal members towards receiving foreign workers. Particularly, there is an urgent need for research focusing on the rural areas of Japan and outside the major metropolitan areas since these areas are facing greater effects of an aging society and a

low concentration of foreign caregivers. The following three questions were asked at the start of the research paper:

- 1) Which factors affect community member attitudes towards foreign workers in the senior care industry?
- 2) What are the attitudes of rural senior care business leaders towards foreign care labor?
- 3) What are the attitudes from local government leaders on supporting both the senior care business sector and the foreign residents?

6.2 Approaches and Data Used in this Paper

This research paper was an empirical study that used a survey method to collect and analyze data to better understand the three primary research questions. The purpose was to both build off prior academic research on Japan's conservative immigration policy system and to conduct an original empirical study focusing on examining and comparing the attitudes of three stakeholders within rural Japanese societies towards foreign senior caregivers. The research approach to collecting and analyzing data could be summarized into two major phases.

The first phase was with the development and deployment of a survey. Societies are divided into three categories of stakeholder: government, community, and business. Therefore, three different surveys were created to seek the perspectives of each stakeholder within Hiroshima, Yamaguchi, and Shimane prefectures, referenced in this research paper as the Western Chugoku Region. The survey questions were carefully selected based off previous studies and were deployed with the help of a professional third-party translation company in order to achieve a more personalized solicitation with the attempt to gain acceptance of the survey participant. The return rate for the survey was successful and the municipal stakeholder had a 92% return rate, the business stakeholders had a 62% return rate, and the community stakeholders had a 67% return rate. In

addition, the third party of NTT Research was utilized to help generate a larger sample of an additional 317 surveys, which provided a greater representation of general community members outside of the senior care field. A reasonable level of data was collected enough for the next phase of data analysis.

Phase two involved applying the data through both a descriptive statistical analysis and binary logistic regression analysis. The descriptive analysis involved the use of a concentration analysis of the survey results from each stakeholder to understand the general consensus of the participants through the majority of responses, expressed through a percent concentration. Several important themes emerged with this analysis. Although the results provide interesting and detailed information on the stakeholder's attitudes toward foreign senior care workers, it was still difficult to clearly judge or identify which factors have a statistically significant effect on attitude. Therefore, the binary logistic regression model was used to understand what variables impact selection of response with statistical significance, or within 90% confidence. Only the senior care business stakeholder and community stakeholder survey data were run through the binary logistic model due to the quantity and robustness of the data collected. Several hypotheses were made prior to the use of the statistical model.

6.3 Main Findings and Academic Contributions

This research paper was to both build off prior academic research on Japan's restrictive immigration policy system and to conduct an original empirical study focusing on examining and comparing the attitudes of three stakeholders within rural Japanese societies towards foreign senior caregivers. The Lamb Survey presents several interesting conclusions that will be explained in this section. These are important findings that will contribute to the existing literature since there is a significant lack of quality research within the rural senior care business sector. Compared to

the limited previous studies on rural Japan, which are usually examined from only one of these stakeholder viewpoints, this study provides a more robust analysis understanding the various attitudes of different stakeholders towards foreign workers in rural society. There is an urgent need for research within the rural areas of Japan and outside the major metropolitan statistical areas since these stakeholders are facing greater effects of an aging society and a low concentration of foreign caregivers.

6.3.1 Community Survey Conclusions

The first major finding is noted with the **community survey participants**. The Lamb survey has identified that the community survey participants do in fact support immigration by positively answering many questions pertaining to both their tolerance of foreign caregivers and their understanding of the various challenges and barriers that foreign caregivers face.

The community survey participants agree that senior caregivers will face challenges with satisfactory receiving medical care, educational opportunities, financial services, and legal services/representation, which is comparable to findings on national surveys. The community survey participants understand that discrimination is still prevalent in the local societies and presents challenges for the long-term retention of foreign caregivers even though a majority of community participants do not perceive a difference on the quality of foreign caregivers in comparison to domestic Japanese caregivers, indicating improved sentiment. The community would like better support from the government to provide more assistance to foreign workers. Finally, the community perceives continued growth in the senior care industry and understands the labor shortage pressures currently being experienced by the domestic caregivers.

The dataset was run through the binary logistic regression model to identify which factors have a statistically significant effect on stakeholder attitude. Four hypotheses were created based

on previous studies and assumptions of the relevance to the senior care sector. The output of the empirical analysis was quite interesting.

The first hypothesis made was to test if individuals employed within the senior care industry, individuals who have had a previous foreign association, and individuals hold a manager-level position will express a more positive perception of foreign senior care givers. The model output revealed this hypothesis was partially true with statistical significance. Participants employed within the healthcare sector and have a foreign acquaintance or relationship are statistically to believe the local economy will improve overall from an increase in immigration or perceive relative ease when gauging the level of quality between domestic Japanese and foreign caregivers. Foreigner interaction is an important factor and the magnitude of this effect is sizable and suggests the important role of personal attachment or human network in the formation of policy preferences. In regards to the management-level independent variable, there were no statistically significant findings to fully evidence that management roles correlate to a more lenient immigrant perspective, which slightly goes against previous studies.

The second hypothesis made was if gender influences the behaviors of survey participants on the Lamb Survey questions. Results from the survey questions have shown statistical significance on several questions with regards to the male gender answering more positively. The Lamb Survey supports previous studies where males are more liberal on immigration policy as opposed to females who appear to be more traditional or conservative.

The third hypothesis made was if individuals who received higher education will have more positive perspective on the acceptance of foreign senior care workers. Results from the statistical modeling reveal statistical significance when the survey participant was asked to gauge their own tolerance on foreign residents within their community and the direction that these foreign residents should take on managing their own cultural identity within the community. These finding parallels

previous studies that correlate education with immigration theory, with the only difference being they are less relative in the senior care industry.

The fourth hypothesis made was if older individuals will be less inclined to receiving care from a foreign senior care worker, thus evidencing a negative perspective on the acceptance of foreign senior care workers. This hypothesis was not supported with the Lamb Survey and no statistically significant findings were noted with age. This could possibly be explained by a difference in family support structure between urban and rural societies. In the urban areas, parents are usually living separately from their children or relatives as opposed to families in the rural areas who often live together or close by. Therefore, age may not be statistically significant because there is no pressure on the family to accept foreign caregivers to meet their future senior care needs since the family will provide this quality-of-life care.

6.3.2 Senior Care Business Survey Conclusions

The Lamb survey has identified that the <u>business survey participants</u> are feeling the pressures of growing demand and a declining labor market as claimed in the previous studies. The majority of survey participants agree that the level of senior care demand is growing within the communities and the local senior care business occupancy rate is very high or maxed out to prevent further service offerings to future customers. Secondly, businesses participants in rural areas admit that they are unable to support the needs of foreign caregivers due to financial constraints, a lack of experience with managing foreign care givers, and a culture not conducive to satisfying or retaining foreign caregivers. The lack of an acceptable culture appears to be caused from the management level since 40% of the sample believed that foreign labor is inferior to Japanese domestic labor despite the high number of survey participants who admitted they never had any foreign employees – indicating a possible bias in the organization. Thirdly, the rural business

community is unsatisfied with the governmental efforts to support foreign immigrants sufficiently and believe all three tiers of the government could do more to help. A significant concentration of the sample had lower approval rates for the local municipality (37% approval rate), the prefecture (40% approval rate), and higher levels for the national government (50% approval rate). Finally, the local senior care businesses believe the foreign immigrants will experience challenges when living in their communities in similarity with academic and governmental survey results. The two biggest concerns made by the business survey participants was the quality of local city infrastructure and the level of discrimination against foreign workers that seems prevalent within the community.

The dataset was run through the binary logistic regression model to identify which factors have a statistically significant effect on stakeholder attitude. Three hypotheses were created based on previous studies and assumptions of the relevance to the senior care sector. The output of the empirical analysis was also quite interesting.

The first hypothesis tests if the customer-to-employee ratio or a greater number of customers will evidence a level of stress and, as a result, more willing to accept foreign labor. This would indicate a higher level of demand on both services and the labor structure in the workplace. The results supported the hypothesis by demonstrating the survey participants are more positively influenced on the perceived customer satisfaction of foreign caregivers when more customers are present in the facility, with significance.

The second hypothesis tests if the business mission of a facility (for-profit or non-profit) will affect the attitudes of business leaders towards foreigner care labor due to the high demand in the local markets for senior care services. Given the labor shortage pressures in the industry, as explained in chapter 1, it seems that there should be no influences to the category of for-profit or non-profit on survey responses. However, this hypothesis was not supported since the analysis

results show the business leaders employed at for-profit facilities have a higher probability of stating they do not have enough employees, with statistical significance.

The third hypothesis tests the business leader with greater number of foreign employees will be more likely to agree there is not enough support for foreign employees within the local community. The hypothesis was not supported and the analysis results showed that the business leaders of the facilities with more foreign employees and a longer business life have a higher probability to consider the level of support from the prefectural government as reasonable, or better with statistical significance. Furthermore, the business leaders with more foreign employees also have higher probability to believe foreign senior care workers have a sufficient level of community infrastructure available (within the 90% confident range), reflecting that the facilities with foreign employees have built (or want to keep) good relation with the local community and government.

6.3.3 Municipal Survey Conclusions

The third major finding is with the <u>municipal survey participants</u>. The Lamb survey has identified that there is a lack of supportive public policy and outreach available for senior care foreign immigrants. The primary concern with these series of questions was the lack of financial support or resource allocation for foreign immigrants residing within the rural communities. Many rural municipalities are experiencing budget constraints and do not have the ability to fund or support special immigrant programs. The majority of municipalities stated either there were no additional public support programs available or they were not aware and a majority of survey participants answered that they would experience significant challenges trying to incur more expenditures to support foreign workers. The majority of survey participants agreed that there was a lack of appropriate public policies in place to support the quality of life of a foreign population. Secondly, a significant amount of municipal survey participants admit that they lack the relevant

infrastructure to attract and retain foreign care givers. Three municipality survey participants (25%) of sample) have admitted that they will have concerns attracting and retaining foreign populations and four (34% of sample) have admitted that they will not be able to retain immigrants long-term due to a lack of community desirability. Thirdly, the local municipalities are not effectively partnering with the local senior care business sector during a period of high demand, declining labor supply, and financial constraints. The majority of government participants agree that they do not have partnerships established with the commercial sector. The majority of government survey participants also agreed that businesses do not have ample working capital on hand or financial reserves available for future growth. Furthermore, the increasing level of demand for senior care without the commensurate numbers of employees to fill those needs is hindering business opportunity and resident quality of life. These results could indicate a need for the government to provide more access to cash for the local senior care business sector at subsidized lending rates upon successfully hiring and retaining of foreign caregivers. Finally, the municipality participants understand there will be challenges with foreign senior care workers in the local community.

6.4 Policy Recommendations at Local and National Levels

The results of all three surveys revealed general areas that can be improved from each stakeholder in society. In order to promote receiving foreign caregiver more efficiently, the following policy response are necessary and encouraged. This section has been categorized into two categories. The first section provides three recommendations that are based off the direct empirical results of the Lamb Survey <u>or</u> strong support from all three stakeholders through the concentration analysis. The second section provides four minor recommendations that were based off general areas of concern raised by the survey participants. These recommendations have been

provided without empirical support or group consensus; however, can be considered valid and relevant since they are based off individual stakeholder perception. More time would be needed to research the true impact and apply economic variables. However, these recommendations are still valid and would be reasonable for both future research efforts.

6.4.1 Policy Recommendations Based Off Statistical Results or Strong Consensus

The first policy recommendation is to focus on greater information campaigns specifically targeted to domestic female voters since this group is more likely to impede further immigration reform. Findings in the Lamb Survey logistic regression model (Pages 75 - 78, tables 9 and 10) demonstrate that female members are more likely to answer the survey somewhat negatively as opposed to the male gender. Nakata (2017) suggest that information campaigns are needed to alter the attitudes towards immigration for female voters. A further recommendation with this information campaign could be to portrait only the female immigrant as the major population coming into the host country and highlighting. The Eurostat database (2020) has noted that young men make up the largest share of newly arrived immigrant to Europe. This group has the potential to make a substantial economic contribution to the receiving country and attitudes should be more favorable to them. However, this group is also perceived to be the most threatening to the domestic population due to outgroup threats in intergroup conflict from evolutionary theory (Navarrete et al. 2010), realistic and symbolic threat (Stephan & Stephan 2017) and male dominated violent crimes (Gambetta and Hertog 2017). Ward (2019) identified that clusters of immigrants with a large share of young men receive substantially less support from the domestic population after conducted a survey of 2,100 individuals. Gereke, Schaub & Baldassarri (2020) also conducted survey research in Germany and identified that Germans are similarly pro-social toward immigrant men and women in non-strategic situations, but are significantly less likely to trust immigrant men (but not women) in strategic encounters. All of the aforementioned findings provide evidence that the gender of the immigrant can be an important factor conditioning the behavior (attitude) of the majority population.

The second policy recommendation is to focus on building the foreign acquaintance or relationship factor in order to establish more exchanges between Japanese citizen and foreign individuals. The analysis results in chapter 3 (pages 172 - 175, tables 7 and 8) demonstrated that individuals who have a foreign acquaintance, friendship, or relationship are statistically more likely to accept foreign migration. Therefore, a greater pursuit of this attribute should be incentivized. The most desired individual for this strategy would be the professional employees or students. In regards to the professional employees, the government could consider tax incentives to companies that expatriate employees abroad to encourage professional exchanges and international cooperation. In regard to the student population, a greater focus on the subsidizing of more academic exchange programs abroad for Japanese high school students or university exchange programs would be valuable. These types of foreign exchange programs or stay-abroad programs are expensive and only families with adequate financial resources can provide this opportunity to the student. Therefore, the national government should consider ways of subsidizing this by grant, tax refund, or direct loans with zero interest. Local municipalities could also explore ways of filling this deficit under the same premise.

The third policy recommendation is to engage in minor, less resource intensive, quality-of-life improvements within the local municipalities. All stakeholders in the survey have admitted deficits in community support services for foreign workers and the national government surveys also supported this weakness (community: question #16, page 65; business: question #16, page 105; municipality: question #8 page 137). The government has a responsibility to ensure adequate

representation and support of the resident base. Life support and communication challenges for foreign workers could be solved with simple efforts from the government. An example could be to offer more translation services for immigrants within the government office or via telephone for immigrants who have this access. There are many businesses within Japan and abroad who offer these translation services in person or on the phone. This could be done on an "as needed" basis when a foreign worker needs assistance. This could also be used by the local municipality to check-up on the immigrant once a quarter to see if they have any concerns. The human element is an important factor for retaining immigrants since it creates a relationship and brings a sense of caring belonging for the immigrant in the community.

6.4.2 Minor Policy Recommendations Based Off Survey Perception

The first minor policy recommendation is for the local municipality to partner more effectively with the business sector to subsidize various foreign worker and dependents quality-of-life requirements, as evident in (community: question #1, page 58; municipality: question #3 page 139). Immigrants in a new host country will require basics needs, such as transportation needs, legal needs, language needs, or medical needs. Results from the survey show that both businesses and government understand immigrants will experience challenges with this and the majority of municipality participants openly admitted they don't partner or communicate with the business sector. Each stakeholder appears to operate in a fenced mentality and not communicate their needs with each other. Offering these resources and services to foreign workers will require either municipal or business financial resources. The municipality could offer interest free funds for businesses to utilize to achieve these initiatives or, if resources are not adequate to achieve this, the municipality could waive certain transportation registration fees or taxes (登録費用,自動車稅) for immigrants. Another consideration is providing transportation assets, such as bicycles,

mopeds, or vehicles to foreign workers coming into the country. The business sector could acquire new, used or donated assets to provide to their foreign workers and dependents. The municipality could do the same or provide refurbished assets that have been abandoned, discarded, donated, or surrendered. Furthermore, all ancillary transportation expenses could also be subsidized for the immigrant (i.e., bike or moped insurance, safety gear, theft insurance, etc.). Communication and partnership could help define requirements for both stakeholders and ensure immigrants receive needed support.

The second minor policy recommendation is to continue to create public policies or an analysis framework to support foreign immigrants or appeal for greater appropriation disbursements from the national government. Many surveyed municipalities in the Lamb Survey study could not accurately answer how many immigrants were residing within the municipality. Having a better analysis framework in place to capture migration inflow or outflow, as well as the demands needed within the senior care system would provide ideal information for local governments to push to higher governmental tiers in the hopes of greater resource opportunities. Local public policies are also needed to outline municipal strategy to appeal to immigrants or reverse the trend of demographic decay. An example is the Akitakata City Multicultural Promotion Plan (Akitakata City, 2018). This plan highlighted several key goals to assist foreign workers and their families and outlines a reasonable policy framework on how to achieve this initiative safety and in the interests of long-term community value.

The third minor policy recommendation involves both the municipality and the senior care business to enforce legal protections for foreign workers and to create a better corporate culture that fostering diversity for employers. Survey results with the business stakeholders reveal the majority of participants admit they do not have an appropriate culture in place for foreign workers, as well as discrimination is still prevalent in the communities (*Questions #9 and #19, pages 102*)

and 106). Discrimination can wear on foreign residents over the long-term and make them more likely to return to their source country, resulting in increased employee turnover costs, sunk costs, and lost opportunity for the business managers to extend needed services. Municipality responsibilities should include providing a conduit to receive and investigate complaints with anonymity and with the proper translation support. Municipalities should also provide resources for senior care businesses to develop their corporate culture in conformance with industry best business practices. Foreign workers are more at risk than domestic employees since they cannot simply resign or seek other employment if the corporate culture doesn't appeal to their own ethics and values. The business responsibilities would be to continue to foster a corporate culture that in inclusive and supportive of employees.

The fourth minor policy recommendation involves the municipality stakeholders by focusing on the controversial topic of community blight. Community blight is considered the abandoning, neglect, or disarray of building within the community. The transition from home to senior care facility for continued aging support has created a situation where a number of homes are left vacant or abandoned. The concept of blight has created several community nuisances and public image concerns for public leaders when seniors leave their homes in a state of degradation, to include overgrown lawns, inadequate lighting, or the disrepair of the home. This is magnified in the rural areas where the economy is depressed or there is not a sufficient pull factor for inflow of migrants. These abandoned homes, or homes in a derelict situation without proper extended family support, could easily be rented out to immigrants. The immigrant would agree to maintain the property to a minimum living standard and, in return for this, the municipality could offer this home rent free. This agreement could also be offered to vacant homes still owned by extended family. The local municipality could incentivize either the senior citizen, or the extended family, by waiving or reducing property tax costs. This solution would curve community blight, alleviate

the burdens of home ownership for the senior or extended family, improve the recruitment ability for businesses, and provide a suitable home to allow the immigrants to reside long-term in the community. Some additional challenges would need to be discussed more between the municipality and business, such as liability and property insurance.

6.5 Shortcomings of The Paper and Issues Needed to Be Studied in the Future

This research paper provides practical evidence and sound recommendations on the foreign worker component within the rural societies of Japan by collecting unique perspectives of the three major stakeholders. There is value in collecting data directly with the end-users who are the more impacted by the research questions. Surveys are a reasonable method to collect this data in a cost effective and expeditions way. However, there were a few deficits in this paper that should be mentioned in this section to help determine where future academic efforts should be directed.

The first deficit in this research paper involves the qualitative survey method. Some scholars may not feel highly confident with the survey results since the underlying data is based on stakeholder perception and not necessarily economic driven factors. Survey accuracy is dependent on sample distribution and survey participant honesty. Surveys are susceptible to underlying bias and inaccuracy. Future efforts would be to achieve a larger sample size with higher employment diversity, ask more follow-up question after a certain response, and to engage in more underlying statistical testing in relation to other local or national economic indicators.

The second deficit is the size of the sample. The sample size was originally planned to be much larger. The COVID-19 global pandemic severely impacted the survey deployment phase and caused a disruption to the on-site component of the survey. The original survey deployment approach was to personally visit the municipality, as well as visit areas of high citizen traffic (i.e., grocery store, mall, etc.) to administer the community stakeholder survey. The original target was

to achieve a minimum number of 1,000 surveys from a much wider age demographic. However, the pandemic prevented both traveling to and visiting these high interaction environments to mitigate exposure for my own safety and the safety of others. An alternative step taken was to rely on the business (care service facilities) for survey disbursement and engage a third-party research company to connect my survey with an online supplemental survey.

All research can be improved, and these areas will be reconsidered in subsequent years once more resources are attained.

Dissertation References

- Adair, T. Kippen R, Naghavi M, Lopez AD (2019). The setting of the rising sun? A recent comparative history of life expectancy trends in Japan and Australia. PLoS ONE 14(3): e0214578. Retrieved from https://doi.org/10.1371/journal.pone.0214578.
- Akitakata City Second Multicultural Promotion Plan (2018). Sustainable town development by various municipalities. City of Akitakata. Retrieved from: https://www.akitakata.jp/akitakata-media/filer_public/6d/d3/6dd364f5-19c6-4a31-8470-bbe4d20b9a82/dai-2tsugi-aki-takadashi-ta-bunka-kyousei-suishin-puran.pdf.
- Analytical Report of the Foreign Residents Survey (2017). Center for Human Rights Education and Training. Ministry of Justice. Retrieved from: http://www.moj.go.jp/content/001249011.pdf.
- Arora, H. (2014). International Migration: Trends and Economic Benefits. International Journal of Business & Economics Perspectives. Fall 2014, Vol. 9 Issue 1, P 25-35.
- Aspinall, R. W. (2017). Embedded Racism: Japan's Visible Minorities and Racial Discrimination. Social Science Japan Journal, 20(2), 328–331. Retrieved from: https://doi.org/10.1093/ssjj/jyx012.
- Australian Institute of Health and Welfare. (2016). Australia's health 2016. Canberra: Author.
- Bell, Brian; Oxford, University of; UK (2014). Crime and immigration. IZA World of Labor. doi:10.15185/izawol.33.
- Beltram, D. (2005). International Labor Migration: Foreign Workers and Public Policies. Palgrave Macmillan.5th Avenue, NY.
- Binci, M. (2012). The Benefits of Migration. Institute of Economic Affairs. Feb 2012, Vol. 32 Issue 1, p 4-9.
- Bjerke, L., & Mellander, C. (2017). Moving home again? Never! The locational choices of graduates in Sweden. Annals of Regional Science, 59(3), 707–729. https://doi.org/10.1007/s00168-016-0777-2.
- Blanchflower, D. G. and A. J. Oswald (1998). What Makes an Entrepreneur? Journal of Labor Economics 16 (1), 26-60.
- Borjas, G. (2003). The labor demand curve is downward sloping: Re-examining the impact of immigration on the labor market. Ouarterly Journal of Economics 118(4), 1335-1374.
- Brettell, C. B. and Hollifield, J. F. (2015). Migration Theory: Taking Across Disciplines, 3rd Edition. New York, NY: Routledge.
- Cabinet Office (2020). Public Opinion Survey on Environmental Improvement for Accepting Foreigners. Government Of Japan Cabinet Office. Retrieved from: https://survey.gov-online.go.jp/tokubetu/tindex-all.html.
- Cabinet Office (2010). Public Opinion Survey on Workers' International Mobility. Government of Japan Cabinet Office. Retrieved from http://survey.gov-online.go.jp/h22/h22-roudousya/index.html.
- $Cabinet\ Office\ (2004).\ Public\ Opinion\ Poll\ on\ Foreign\ Workers-2004.\ Government\ of\ Japan\ Cabinet\ Office.\ http://survey.gov-online.go.jp/h16/h16-foreignerworker/index.html.$
- Cabinet Office (2003). Public Opinion Poll on Elder Care. Government of Japan Cabinet Office. Retrieved from: htttp://survey.gov-online.go.jp/h15/h15-kourei/index.html.
- Cabinet Office (2000). Public Opinion Poll on Foreign Workers 2000. Government of Japan Cabinet Office. Retrieved from: http://survey.gov-online.go.jp/h12/gaikoku/index.html.
- Cabinet Office (1990). Public Opinion Poll on Foreign Worker Problem. Government of Japan Cabinet Office. Retrieved from: http://survey.gov-online.go.jp/h02/H02-11-02-21.html.
- Calahorrano, L. (2013). Population aging and individual attitudes toward immigration: Disentangling age, cohort and time effects. Review of International Economics 21(2), 342-353.
- Campbell, J. C. (1992). How Policies Change: The Japanese Government and the Aging Society, Princeton, NJ: Princeton University Press. Retrieved from https://quod.lib.umich.edu/cgi/p/pod/dod-idx/how-policies-change-the-Japanese -government-and-the-aging.pdf?c=cjs;idno=2546709.0001.001;format=pdf.

- Cascio, W. F. (2006). The Economic Impact of Employee Behaviors on Organizational Performance. California Management Review, 48(4), 41–59. https://doi.org/10.2307/41166360
- Chamberlain S. A., Gruneir A., Hoben M., Squires J. E., Cummings G. G., Estabrooks C. A. (2017). Influence of organizational context on nursing home staff burnout: A cross-sectional survey of care aides in Western Canada. International Journal of Nursing Studies, 71, 60–69. doi: 10.1016/j.ijnurstu.2017.02.024.
- Connell, J. (1993). Kitanai, Kitsui and Kiken: The Rise of Labour Migration to Japan. Economic & Regional Restructuring Research Unit, University of Sydney.
- Council of Local Authorities for International Relations. (2005). An Outline of Local Government in Japan. Retrieved from: https://www.gdrc.org/uem/observatory/logov-japan.pdf.
- Dai, E. (2022). Factors affecting Japanese attitudes towards foreign workers in the senior care industry: Evidence from a survey targeting four metropolitan areas. Asian Growth Research Institute. Currently unpublished.
- Dai, E., Hatta T. (2019). The Effects of Demographic Changes on Regional Economic Growth: Evidence from Japan. The Singapore Economic Review. DOI: 10.1142/S0217590818420109.
- Dancygier, R. Donnelly, M. (2013). Sectoral economies, economic contexts, and attitudes toward immigration. Journal of Politics, 75, 17-35.
- Davis, P., Lay-Yee, R. & Pearson, J. (2010). Using micro-simulation to create a synthesized data set and test policy options: The case of health service effects under demographic ageing. Health policy, 97(2), 267-274.
- Dekle, R. (2004). Financing consumption in an aging Japan: The role of foreign capital inflows and immigration. Journal of the Japanese and International Economies, 75(4), 5 0 6-527.
- Dess, G.G., Lumpkin, G. T., and Eisner, A. B. (2010). Strategic Management. 5th edition New York, McGraw-Hill Irwin.
- Dillman D. A., Smyth J. D., Christian L. M. (2014) Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method. John Wiley & Sons. Hoboken, NJ: Retrieved from: https://books.google.co.jp/books?hl=en&lr=&id=fhQNBA AAQBAJ&oi=fnd&pg=PR11&ots=JvSUwgXDHJ&sig=2j84paSXks1BrYWhhzYK3xZW1dQ&redir_esc=y#v=onepa ge&q&f=false.
- Dustmann, C., Preston, I. (2006). Is immigration good or bad for the economy? Analysis of attitudes toward immigration. Research in Labor Economics, 24, 3-34.
- The Economist (2019). Brides for Bumpkins; Depopulation in Japan. The Economist. 433 (9163), 33(US). https://link.gale.com/apps/doc/A601585104/GPS?u=usmciwm&sid=GPS&xid=64691f04.
- Elena-Alexandra, S (2019). The Nexus Between Migration, Innovation and Economic Development in Eu-28. Annals of the University of Oradea, Economic Science Series. Dec2019, Vol. 28 Issue 2, p423-433. 11p.
- Employment Security Bureau (2018). Environment and Issues Surrounding Employment. Document 6. Ministry of Health, Labor and Welfare. Retrieved from: https://www.mhlw.go.jp/file/05-Shingikai-11601000-Shokugyouanteikyoku-Soumuka/0000062121_1.pdf.
- Eurostat database (2020). Asylum applicants by type of applicant, citizenship, age and sex monthly data (rounded). European Commission. Retrieved from: https://ec.europa.eu/eurostat/web/products-datasets/-/migr_asyappctzm.
- Faruque, H. & Mühleisen, M. (2003). Population aging in Japan: demographic shock and fiscal sustainability. Japan and the world economy, 75(2), 185-210.
- Felbermayr, G., Geis, W., and Kohler, W. (2010). Restrictive immigration policy in Germany: Pains and gains foregone? Review of World Economics 146, 1–21.
- Florida, R. (2002). The rise of the creative class and how it's transforming work, leisure, and everyday life. Basic Books, New York, NY.
- Fougère, M., Harvey, S., Mercenier, J. & Mérette, M. (2009). Population ageing, time allocation and human capital: A general equilibrium analysis for Canada. Economic Modelling, 26(1), 30-39.

- Freiburg, R. and Hunt, J. (1995). The Impact of Immigrant on Host Country Wages, Employment and Growth. Journal of Economic Perspectives. Volume 9, Number 2. Pages 23–44.
- Furukawa, E., Seto, K., Matsumoto, K., Hasegawa, T. (2012). A Questionnaire Survey of Economic Partnership Agreement (EPA) Host Facilities for Foreign Nurses. Journal of Japan Society for Health Care Management, Vol.12 No.4, pg255.
- Gambetta, D., & Hertog, S. (2016). Engineers of Jihad: The Curious Connection between Violent Extremism and Education (Revised). Princeton University Press. https://doi.org/10.2307/j.ctvc779ns.
- Gauld, R., Goldfinch, S., & Horsburgh, S. (2010). Do they want it? Do they use it? The demand side of eGovernment in Australia and New Zealand. Government Information Quarterly, 27 (2), 177 186.
- Gereke J, Schaub, M. & Baldassarri, D. (2020). Gendered Discrimination Against Immigrant: Experimental Evidence. Frontiers in Sociology Migration and Society. Retrieved from: https://www.frontiersin.org/articles/10.3389/fsoc.2020.00059/full#B43
- Goldschmidt, B. (2019). The Way to Work: Experts Discuss How to Overcome the Challenges Associated With Recruitment, Retention, Training and Diversity. Progressive Grocer, 98(1), 42–46.
- Gong (2015). Occupational Status, Perceived discrimination and Immigrants' Life Satisfaction: The case of Japan. Conference Papers American Sociological Association, 1–28.
- Graeme Hugo, G., Morén-Alegret, R. (2008). International Migration to Non-metropolitan Areas of High-Income Countries. Population, Space, and Place. John Wiley & Sons, Ltd. Volume 14, Issue 6. https://doi.org/10.1002/psp.515
- Green, D. (2017). As its Population Ages, Japan Quietly Turns to Immigration. Migration Policy Institute. Retrieved from: https://www.migrationpolicy.org/article/its-population-ages-japan-quietly-turns-immigration.
- Guest, R. S. (2006). Population ageing, capital mobility and optimal saving. Journal of Policy Modeling, 28(1), 89-102.
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al.(2020). World Values Survey: Round Seven Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. Retrieved from: doi.org/10.14281/18241.1.
- Hainmueller, J., Hiscox, M., and Margalit, Y. (2015). Do concerns about labor market competition shape attitudes toward immigration? New evidence. Journal of 24 International Economics. 97, 193-207.
- Hamada, K. and Bhagwati, J. (1987). Domestic Distortions, Imperfect Information and the Brain Drain, Pages 127-141 in Robert C. Feenstra (ed.) Essays in International Economic Theory: International Factor Mobility, Cambridge: The MIT Press.
- Hashimoto, K. (2006). Class Society: An Inquiry into Disparities in Contemporary Japan. Tokyo: Kodansha.
- Healthcare Financial Management (2004). Business-Office Challenges of Small and Rural Hospitals. Healthcare Financial Management. 58(4), 87–92.
- Higuchi, Y., (1991). Japanese Economy and Job Search Behavior. Toyokeizai-Shinbousya.
- Hirano, Y., Ogawa, R., Ohno, S. (2010). A Comparative Survey on Indonesian and Filipino Nurse Candidates Coming to Japan Under the Economic Partnership Agreements: An Analysis of the Results of Questionnaire Survey of Socio-economic Attribution of the Respondents and Their Motivation to Go to Japan. Bulletin of Kyushu University Asia Center, Vol.5, pp.153-162.
- Hirayama, H., & Miyazaki, A. (1996). Implementing public policies and services in rural Japan: Issues and problems. Journal of Aging and Social Policy, 8(2), 133–146.
- Howell, D. L. (1996). Ethnicity and Culture in Contemporary Japan. Journal of Contemporary History. 31, 1: 171–90. Retrieved from: https://journals.sagepub.com/doi/abs/10.1177/002200949603100107.
- Hurd, M., Rohwedder, S. (2016). Living Longer, Working Longer. Study of Aging Department. RAND Corporation. Retrieved from: https://www.rand.org/blog/2016/08/living-longer-working-longer.html.
- Ihori, T., Kato, R. R., Kawade, M. & Bessho, S. (2011). Health insurance reform and economic growth: Simulation analysis in japan. Japan and the World Economy, 23(4), 227-239.

- Immigration Services Agency of Japan (2016). 平成 2 8 年入管法改正について. Available at: http://www.immi-moj.go.jp/hourei/h28_kaisei.html.
- Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2014. World Values Survey: Round Six Country-Pooled Datafile Versions. Retrieved from https://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp. Madrid: JD Systems Institute.
- International Labour Organization (2019). Public attitudes towards immigrant workers in Japan, Malaysia, Singapore, and Thailand. International Labour Office. Retr from: https://www.ilo.org/wcmsp5/groups/public/---asia/---robangkok/documents/publication/wcms_732443.pdf.
- Ishiguro, I., Y. Lee, H. Sugiura and K. Yamaguchi (2012) The Brain Drain: Why Japanese Youth Move to Tokyo. Minerva Shobo.
- Isoda, N. (2009). Higher Education and Population Concentration into Tokyo Metropolitan Area in Japan. Fukuoka University Review of Literature & Humanities, Vol.41 No.3, pp. 1029 1052.
- Israel, G (1992). Sampling the Evidence Of Extension Program Impact. Program Evaluation and Organizational Development. IFAS. University of Florida. PEOD-5.
- Japan Health Policy Now (2021). Health and Global Policy Institute. Retrieved from https://japanhpn.org/en/longtermcare/.
- Japan International Corporation of Welfare Service (2016). EPA Database. Available at: https://jicwels.or.jp/?page_id=30 and at https://jicwels.or.jp/files/EPAE58F97E585A5E68EA8E7A7BB2020142062027E38080E69C.pdf.
- Jimeno, J. F., Rojas, J. A. & Puente, S. (2008). Modelling the impact of aging on social security expenditures. Economic Modelling, 25(2), 201-224.
- JOPUS (2019). 70% of foreigners residing in Japan face language barrier. A survey on awareness about the Japanese work environment. Goalist Co. Ltd. Retrieved from https://jopus.net/en/news/yolo-japan-report-201812.html.
- Kachan D, Fleming LE, Christ S, Muennig P, Prado G, Tannenbaum SL, et al. (2012). Health Status of Older US Workers and Nonworkers, National Health Interview Survey, 1997–2011. Preventing Chronic Diseases 2015;12:150040. DOI: http://dx.doi.org/10.5888/pcd12.150040.
- Kaigo Center Long-term care labor stability center (2018). The current situation of long-term care work. 2017 nursing care labor situation. Retrieve from http://www.kaigo-center.or.jp/report/pdf/h29_roudou_genjyou.pdf.
- Kashiwazaki, C. and Akaha, T. (2006). Japanese Immigration Policy: Responding to Conflicting Pressures. Migration Policy Institute. Retrieved from https://www.migrationpolicy.org/article/japanese-immigration-policy-responding-conflicting-pressures.
- Kish, L. (1965). Survey Sampling. New York: John Wiley and Sons, Inc.
- Kleinbaum, D. G., & Klein, M. (2010). Logistic regression (statistics for biology and health). 3rd edition. New York, NY: Springer-Verlag New York Inc.
- Koga M, Toyomaki A, Miyazaki A, Nakai Y, Yamaguchi A, Kubo C, et al. (2017). Mediators of the effects of rice intake on health in individuals consuming a traditional Japanese diet centered on rice. PLoS ONE 12(10):e0185816. https://doi.org/10.1371/journal.pone.0185816.
- Kumagai, M. (2018). Japan's Economic Outlook No. 199. Daiwa Institute of Research. Retrieved from: https://www.dir.co.jp/english/research/report/jquarterly/20181128_020478.pdf.
- Lee, T.; Martinez Jr., Ramiro (2009). Immigration reduces crime: an emerging scholarly consensus. Immigration, Crime and Justice. Emerald Group Publishing. pp. 3–16. ISBN 9781848554382.
- Lee, Y. (2012). Economic Gains Youth Receive from Inter- Regional Migration. Ishiguro, I. et al., The Brain Drain: Why Japanese Youth Move to Tokyo. Minerva Shobo, pp.47- 90.
- Lee, Y. and Sugiura, H. (2018). Key Factors in Determining Internal Migration to Rural Areas and Its Promoting Measures A Case Study of Hirosaki City, Aomori Prefecture. Policy Research Institute, Ministry of Finance, Japan, Public Policy

- Review, Vol.14, No.1, Feb. 2018. Retrieved from: https://www.mof.go.jp/english/pri/publication/ppreview/fy2017/ppr14_0106.pdf.
- Levin, J., (2006). How Marketing Research Can Benefit A Small Business. Retrieved from: SmallBusinessTrends.Com. Levy, P. S., Lemeshow, S. (1999). Sampling of populations: Methods and applications. (3rd ed.). New York: John Wiley and Sons.
- Lichtenberg, F. (2017). The Impact of Biomedical Innovation on longevity and Health. Nordic Journal of Health Economics, Vol. 5 (2017), No. 1, pp. 45-57 45.
- LIFULL senior Co (2020). Homepage: Searching Nursing Homes from Area; Hiroshima, Shimane, Yamaguchi. Retrieved from: https://kaigo.homes.co.jp/.
- Lowell, L. (2001). Some Developmental Effects of The International Migration of Highly Skilled Persons. International Migration Papers no. 46. International Migration Branch; International Labour Office. Geneva.
- Macunovich, Diane J. (1996). Social Security and Retirees- an economist's perspective. National Academy of Social Insurance. Washington, D.C.
- Maoh, H., Kanaroglou, P., Scott, D., Paez, A. & Newbold, B. (2009). Impact: An integrated GIS-based model for simulating the consequences of demographic changes and population ageing on transportation. Computers, Environment and Urban Systems, 33(3), 200-210.
- Martin, P. (2008). United Nations Expert Group Meeting On International Migration And Development In Asia And The Pacific. Retrieved From:https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/unpd_egm_200 809_paper_martin_managing_labour_migration_in_asia.pdf.
- Masuda, H. (2014). The Disappearance of the Region: The Rapid Population Decline brought on by Mono -Polar Concentration in Tokyo. Chuokoron shinsha.
- Masuda, T. (2006). The Determinants of Latent Entrepreneurship in Japan. Small Business Economics, 26(3), 227–240. https://doi.org/10.1007/s11187-005-0206-x.
- Matsumoto, M., Kimura, K., Inoue, K., Kashima, S., Koike, S., & Tazuma, S. (2018). Aging of hospital physicians in rural Japan: A longitudinal study based on national census data. PLoS ONE, 13(5), 1–16. Retrieved from https://doi.org/10.1371/journal.pone.0198317.
- Matsuura, N. (1980). Wage determination and sex discrimination in Japan. Industrial Relations Journal, 11(3), 60–69. Retrieved from: https://doi.org/10.1111/j.1468-2338.1980.tb00322.x.
- Mayda, A. M. (2008) Why are people more pro-trade than pro-migration? Economics Letters 101, 160-163.
- Mayda, A. M. (2006). Who is against immigration? A cross-country investigation of individual attitudes toward immigrant. Review of Economics and Statistics 88(3), 510-530.
- McIntyre, L. J. (1999). The practical skeptic: Core concepts in sociology. Mountain View, CA: Mayfield Publishing.
- McQillian, K. (2004). When Does Religion Influence Fertility? Population and Development Review. Vol. 30, No. 1. Population Council. Retrieved from www.jstor.org/stable/3401497.
- Mercado, R., Paez, A. & Newbold, K. B. (2010). Transport policy and the provision of mobility options in an aging society: a case study of Ontario, Canada. Journal of Transport Geography, 78(5), 649661.
- Milly D. (2020). Japan's Labor Migration Reforms: Breaking with the Past? Migration Policy Institute. Retrieved from: https://www.migrationpolicy.org/article/japan-labor-migration-reforms-breaking-past.
- Minami, R. (2008). Income Distribution of Japan: Historical Perspective and Its Implications. Japan Labor Review. Volume 5, No. 4. Autumn 2008. Retrieved from: https://www.jil.go.jp/english/JLR/documents/2008/JLR20_minami.pdf.
- Ministry of Finance (2019). About social security. Retrieved at: https://www.mof.go.jp/about_mof/councils/fiscal_system_council/sub-of_fiscal_system/proceedings/material/zaiseia300411/01.pdf.
- Ministry of Foreign Affairs of Japan (2020). Economic Diplomacy: Free Trade Agreement (FTA) and Economic

- Partnership Agreement (EPA). Retrieved from: https://www.mofa.go.jp/policy/economy/fta/index.html.
- Ministry of Health, Labour and Welfare (2020). Annual Health, Labour and Welfare Report The social security system and people's work styles in the Reiwa Era. Retrieved from: https://www.mhlw.go.jp/english/wp/wp-hw13/dl/summary.pdf.
- Ministry of Health, Labor, and Welfare (2020). 2020 Vital statistics monthly report. Table 2 Annual Trends in Vital Statistics (2-1). Retrieved at: https://www.mhlw.go.jp/toukei/saikin/hw/jinkou/geppo/nengai20/dl/h2.pdf.
- Ministry of Health, Labor, and Welfare (2019) Guidebook for Care Service Providers on Employment of Foreign Care Workers. Published by Mitsubishi UFJ Research and Consulting Co., Ltd. Retrieved from: https://www.mhlw.go.jp/content/12000000/000526602.pdf.
- Ministry of Health, Labor, and Welfare (2017). Current State of Care Workers. Available at: https://www.mhlw.go.jp/content/12602000/000482541.pdf.
- Ministry of Internal Affairs and Communication (2021). Collection of financial status materials for the first year of Reiwa-2019. Information and Communications Policy Site. Retrieved from: https://www.soumu.go.jp/iken/zaisei/jyoukyou_shiryou/r01/index.html.
- Ministry of Justice (2017). Analytical Report of the Foreign Residents Survey, Revised Edition. Center for Human Rights Education and Training. Retrieved from: http://www.moj.go.jp/content/001249011.pdf.
- Ministry of Justice (2015). Basic Plan for Immigration Control (5th Edition). Retrieved from http://www.immimoj.go.jp/seisaku/2015_kihonkeikaku_honbun_pamphlet_english.pdf.
- Ministry of Justice (2010). Basic Plan for Immigration Control (4th Edition). Retrieved from: http://www.moj.go.jp/ENGLISH/english00003.html.
- Ministry of Justice (2005). Basic Plan for Immigration Control (3rd Edition). Retrieved from: http://www.moj.go.jp/ENGLISH/information/bpic3rd-01.html.
- Ministry of Justice (2000). Basic Plan for Immigration Control (2nd Edition). Retrieved from: http://www.moj.go.jp/ENGLISH/information/bpic2nd-03.html.
- Mitchell, O. S., Piggott, J., & Shimizutani, S. (2008). An Empirical Analysis of Patterns in the Japanese Long-Term Care Insurance System. Geneva Papers on Risk & Insurance Issues & Practice, 33(4), 694–709. https://doi.org/10.1057/gpp.2008.25.
- Mora, M. (2016). 10 Key Things to Consider When Designing Surveys. SurveyGizmo. Retrieved from: https://www.surveygizmo.com/resources/blog/designing-surveys/.
- Mukherjee, S. Adams, G. Molina, L. (2018). Support for Tough Immigration Policy: Identity Defense or Concern for Law and Order? Journal of Social Issues, Vol. 74, No. 4, 2018, pp. 700—715 doi: 10.1111/josi.12294.
- Nakata, H. (2017). Attitudes towards Immigration in an Ageing Society: Evidence from Japan. The Research Institute of Economy, Trade and Industry. RIETI Discussion Paper Series 17-E-095.
- Nargund G. (2009). Declining birth rate in Developed Countries: A radical policy re-think is required. Facts, views & vision in ObGyn, 1(3), 191–193.
- National Institute of Population and Social Security Research (2015). Data of Population Pyramid: 1965~2065. Available at: http://www.ipss.go.jp/index-e.asp.
- Navarrete, C. D., McDonald, M. M., Molina, L. E., & Sidanius, J. (2010). Prejudice at the nexus of race and gender: An outgroup male target hypothesis. Journal of Personality and Social Psychology, 98(6), 933–945. https://doi.org/10.1037/a0017931.
- Newman, L., Javanparast, S., Baum, F., & Hutchinson, C. (2015). Evidence reviews: Settings for addressing the social determinants of health inequities. Melbourne: VicHealth.
- Ngozi Oriaku. (2012). Current Challenges Facing Small Businesses: Case of Brazil and United States. International Journal of Finance & Policy Analysis, 4(2), 16–25.
- NML Labs (2020). Research Topics. Mitsuishi Harada Laboratory. Department of Mechanical Engineering, the University of Tokyo. Retrieved from http://www.nml.t.u-tokyo.ac.jp/en/research-e.html.
- Nojima, M. (1994). Japan's approach to continuing education for senior citizens. Educational Gerontology. Jul/Aug

- 94, Vol. 20 Issue 5, p463. 9p. 1.
- Ogawa, N. (2004). Urban-rural differentials in health conditions and labor force participation among the Japanese elderly. Geriatrics and Gerontology International, 4, S60–S62.
- Ohata, M. (2015). Economic Report Summary. 2015 No.3. Mitsubishi UFJ Research and Consulting. Retrieved from: https://www.murc.jp/wp-content/uploads/2015/06/es1503.pdf.
- Ohta, S. (2005). Regional Characteristics of the Japanese Youth Labour Market. The Japanese Journal of Labour Studies. No. 539. pp. 17 33.
- Organization for Economic Cooperation and Development (2019). OECD Statistics. Age Demographics. Available at: https://data.oecd.org.
- Organization for Economic Co-operation and Development (2018). OECD Health Statistics: Health Care Resources. Nurses data; Nursing Graduates data. Available at: https://data.oecd.org/healthres/nurses.htm#indicator-chart.
- O'Rourke, K., and Sinnott, R. (2006). The determinants of individual attitudes toward immigration," European Journal of Political Economy 22, 838-861.
- Park, H. (2013). An Introduction to Logistic Regression: From Basic Concepts to Interpretation with Particular Attention to Nursing Domain. The Journal of Korean Academy of Nursing. Retrieved from: https://jkan.or.kr/DOIx.php?id=10.4040/jkan.2013.43.2.154
- Peng, I. (2016). Testing the Limits of Welfare State Changes: The Slow-moving Immigration Policy Reform in Japan. Social Policy & Administration. ISSN 0144-5596. DOI: 10.1111/spol.12215. VOL. 50, NO. 2, March 2016, PP. 278–295.
- Pennsylvannia State University (2018). Applied Regression Analysis. 12.1 Logistic Regression. Retrieved from:https://online.stat.psu.edu/stat462/node/207/#:~:text=The%20multiple%20binary%20logistic%20regression%20model%20i
- Pew Research Center (2017). The Partisan Divide on Political Values Grows Even Wider. 4. Race, immigration and discrimination. Pew Research Center. 1615 L St. NW, Suite 800, Washington, DC 20036.
- Plenda, M. (2018). Professional Development: Critical to Employee Retention. Business NH Magazine, 35(11), 26–29.
- Pîrvu, R. and Axinte, G. (2012). Return Migration Reasons, Consequences and Benefits. Annals of the University Of Petroşani, Economics, 12(4), 2012, 193-202 193.
- Ponto, J. (2015). Understanding and Evaluating Survey Research. Journal of the Advanced Practitioner in Oncology; 6(2): 168–171. US National Library of Medicine; National Institutes of Health. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/.
- Pradham, El & Canning, D. (2015). The Effect of Schooling on Teenage Fertility: Evidence from the 1994 Education Reform in Ethiopia. Program on The Global Demography of Aging at Harvard University. PGDA Working Paper No. 128. Retrieved from: https://www.hsph.harvard.edu/pgda/working/.
- Ray, J. (2018). Japan May Want Immigrants More Than They Want Japan. Gallup News Service, 1.
- Retherford, R.D., Ogawa, N & Matsukura, R. (2001). Late Marriage and Less Marriage in Japan. Population and Development Review, 27(1), 65. Retrieved from: https://link.gale.com/apps/doc/A73463704/GPS?u=usmciwm&sid=GPS&xid=839bb105.
- Reubens, E. (1981). Low-Level Work in Japan Without Foreign Labor. International Migration Review 15. No. 4: 749-57.
- Roser, M. (2017). Fertility Rate. OurWorldInData.org. University of Oxford & Global Change Data Lab, Retrieved from: https://ourworldindata.org/fertility-rate.
- Saito, S., Kato, S., and Takeda, S. (2017). Effects of Immigration in Japan: A Computable General Equilibrium Assessment. Social Science Research Network. Retrieved from: http://dx.doi.org/10.2139/ssrn.2782708.
- Saito Y., Igarashi A., Noguchi-Watanabe M., Takai Y., Yamamoto-Mitani N. (2018). Work values and their association with burnout/work engagement among nurses in long-term care hospitals. Journal of Nursing Management, 26, 393–402. doi:10.1111/jonm.12550.

- Sakashita, R. (2018). Features of Women's Leadership and Nursing in Japanese Culture. Asian Pacific Island Nursing Association. 2018; 3(2): 50–55. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6467435/.
- Sato, Y. (2001). Comparative analysis of health care costs in Japan and the United States: a simulation of productivity and savings behavior. Japan and the World Economy, 73(4), 429-454.
- Schulz, E., Leidl, R. & König, H.-H. (2004). The impact of ageing on hospital care and long-term care--the example of Germany. Health Policy, 67(1), 57-74.
- Schunck, R., Reiss, K., & Razum, O. (2015). Pathways between perceived discrimination and health among immigrant: evidence from a large national panel survey in Germany. Ethnicity & Health. 20(5), 493–510. Retrieved from: https://doi.org/10.1080/13557858.2014.932756.
- Sekikawa A, Miyamoto Y, Miura K, Nishimura K, Willcox BJ, Masaki KH, Rodriguez B, Tracy RP, Okamura T, Kuller L,H. (2016). Continuous Decline in Mortality from Coronary Heart Disease In Japan Despite A Continuous And Marked Rise in Total Cholesterol: Japanese Experience After the Seven Countries Study. Int J Epidemiol. 2015; 44:1614–24.
- Sepahvand, R., & Khodashahri, R. B. (2021). Strategic Human Resource Management Practices and Employee Retention: A Study of the Moderating Role of Job Engagement. Iranian Journal of Management Studies, 14(2), 437–468.
- Sheridan, J. E. (1992). Organizational Culture and Employee Retention. Academy of Management Journal, 35(5), 1036–1056. https://doi.org/10.2307/256539.
- Sides, J. and J. Citrin, J. (2007). European opinion about immigration: The role of identities, interests and information. British Journal of Political Science. 37, 477-504.
- Squires J. E., Hoben M., Linklater S., Carleton H. L., Graham N., Estabrooks C. A. (2015). Job satisfaction among care aides in residential long-term care: A systematic review of contributing factors, both individual and organizational. Nursing Research and Practice, 2015, Article 157924. doi:10.1155/2015/157924.
- Statistics Bureau of Japan. (2021). Municipal Data. E-Stat Portal. Ministry of Internal Affairs and Communications. Retrieved from https://www.e-stat.go.jp/en/regional-statistics/ssdsview/municipality.
- Statistics Bureau of Japan (2019). Various databases. Available at: https://www.stat.go.jp/english/index.html.
- Statistical Handbook of Japan (2018). Population, Surface Area, and Population Density by Prefecture. Statistics Bureau. Ministry of Internal Affairs and Communication. Retrieved from: https://www.stat.go.jp/english/data/handbook/pdf/2018all.pdf.
- Stephan, W., Stephan, C (2017). Intergroup Threat Theory. Intergroup Communication Theories, Issues, and Concepts. Retrieved from https://doi.org/10.1002/9781118783665.ieicc0162.
- Stokes,B., Devlin, K. (2018). Despite Rising Economic Confidence, Japanese See Best Days Behind Them and Say Children Face a Bleak Future. Section 3. Perceptions of immigrant, immigration and emigration. PEW Research Center. Retrieved from: https://www.pewresearch.org/global/2018/11/12/perceptions-of-immigrant-immigration-and-emigration/.
- Straubhaar, T., Martin, W. (1998). Brain Drain and Brain Gain in Europe: An Evaluation of East-European Migration to Germany, CIIP and Institute for Global Conflict and Cooperation.
- Tabata, K. (2005). Population aging, the costs of health care for the elderly and growth. Journal of Macroeconomics, 27(3), 472-493.
- Takahashi, K. (2018). Japan's Immigration Policy and the EPA between the Philippines and Japan. Retrieved from: https://www-hs.yamagata-u.ac.jp/wp-content/uploads/2018/03/10TAKAHASHI.pdf.
- Tanaka, K., & Iwasawa, M. (2010). Aging in Rural Japan-Limitations in the Current Social Care Policy. Journal of Aging & Social Policy, 22(4), 394–406. https://doi.org/10.1080/08959420.2010.507651.
- Tokoro, M. (2009). Ageing in Japan: Family changes and policy developments. In T. Fu and R. Hughes (Eds.), Ageing in East Asia: Challenges and policies for the twenty-first century (pp. 54–71). New York: Routledge.

- Tomiura, E., Ito, B., Mukunoki, H., & Wakasugi, R. (2016). Individual Characteristics, Behavioral Biases, and Trade Policy Preferences: Evidence from a Survey in Japan. Review of International Economics, 24(5), 1081–1095. https://doi.org/10.1111/roie.12248.
- Urbaniak, G. C., & Plous, S. (2013). Research Randomizer (Version 4.0). Computer software. Retrieved from http://www.randomizer.org/.
- Ushiro, R., Nakayama, K. (2010). Gender role attitudes of hospital nurses in Japan: Their relation to burnout, perceptions of physician–nurse collaboration, evaluation of care, and intent to continue working. Japan Journal of Nursing Science. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/j.1742-7924.2010.00138.x#b41.
- Valdemarsson, M., Jernryd, E. & Iwarsson, S. (2005). Preferences and frequencies of visits to public facilities in old age--a pilot study in a Swedish town center. Archives of gerontology and geriatrics, 40(1), 15-28.
- Van Sonsbeek, J.-M. (2010). Micro simulations on the effects of ageing-related policy measures. Economic Modelling, 27(5), 968-979.
- Ward, D. (2019). Public Attitudes toward Young Immigrant Men. American Political Science Review, Volume 113, Issue 1, February 2019, pp. 264 269. Retrieved from: https://www.cambridge.org/core/journals/american-political-science-review/article/abs/public-attitudes-toward-young-imimmigrant-men/9422A0C5998C5196444582553E4A41E8.
- Williams, L. (2020). Introduction to Business and Management. Lumen Learning. Provided on behalf of the University of Maryland Global Campus textbook database.
- Williams, M. D., Asiedu, G. B., Finnie, D., Neely, C., Egginton, J., Finney Rutten, L. J., & Jacobson, R. M. (2019). Sustainable care coordination: a qualitative study of primary care provider, administrator, and insurer perspectives. BMC Health Services Research, 19(1), 1–10. https://doi.org/10.1186/s12913-019-3916-5.
- Winkler, H. (2015). Why do elderly people oppose immigration when they're most likely to benefit? The Brookings Institution. Retrieved from: https://www.brookings.edu/blog/future-development/2015/07/22/why-do-e lderly-people-oppose-immigration-when-theyre-most-likely-to-benefit/.
- World Bank (2019). Open Databases. Various databases used. Available at: https://data.worldbank.org/indicator/. World Factbook (2020). East Asia/Southeast Asia: Japan. Central Intelligence Agency. Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html.
- Wu, C., Odden, M. C., Fisher, G. G., & Stawski, R. S. (2016). Association of retirement age with mortality: a population-based longitudinal study among older adults in the USA. Journal of epidemiology and community health, 70(9), 917–923. https://doi.org/10.1136/jech-2015-207097.
- Xiang, B. (2012). Labor Transplant: "Point-to-Point" Transnational Labor Migration in East Asia. South Atlantic Quarterly. 111. 721-739. 10.1215/00382876-1724156.
- Xulu, Z., Cheng, J., & Lili, L. (2017). A Study of Urban–Rural Differences in College Student Employment—Based on National College Sample Survey Data. Chinese Education & Society, 50(2), 119–131. https://doi.org/10.1080/10611932.2017.1326778.
- Yagi, N., Mackey, T., Liang, B., Gerlt, L (2014). Policy Review: Japan–Philippines Economic Partnership Agreement Analysis of a failed nurse migration policy. International Journal of Nursing Studies. 51 (2014) 243-250.
- Yuuri A. (2020). Japan: Investment in nursing homes. International Financial Law Review, N.PAG.

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Appendix 1

Austin R. Lamb

PSC 561 Box 8146, FPO AP 96310 | a9d10001@doc.kitakyu-u.ac.jp |

Recipient Name
Owner, President, or Chief Executive Officer (CEO)
Company
Address
City, ST ZIP Code

Greetings:

My name is Austin Lamb and I am doctoral student at the University of Kitakyushu. I am requesting your cooperation in completing a very important academic survey. The purpose of the survey is to collect data to assess the various social-economic impacts of foreign senior care labor in Western Chugoku Region of Japan.

Eldercare demands have seen significant growth over recent decades in Japan as the average Japanese citizen is living longer. In fact, this greater level of life expectancy for seniors (65 years and older) has been more dramatic than in any other developed country. The demand for nursing aid care has grown beyond what the domestic labor pool can provide. This has created various opportunities and challenges for foreign workers who are considering Japan as their new country to work and reside.

A sample of 12 municipalities were chosen in the prefectures of Hiroshima, Shimane, and Yamaguchi. A further sample of 48 senior care businesses were selected within those municipalities. Your institution was chosen to participate with your permission and generous input! Ten additional surveys have been provided to you to distribute to your employees and residents.

For each question, please circle the answer which is most applicable to you. There are also a few questions that ask for a few more details. Please write the details in the given blank space or anywhere on the survey you feel is relevant. I will be reviewing each survey response personally and will keep all responses anonymous in my project, including all papers or books.

Please place the completed questionnaire into the enclosed return envelope and place it into the post at your earliest convenience. You will have a prepaid envelope in your initial survey packet. Thank you so much for your input and your contribution!

Sincerely,

Austin R. Lamb



Austin R. Lamb

Doctoral Student at the University of Kitakyushu

Program for International Development Policy in Collaboration with Asian Growth Research Institute

Bachelors in Business Administration (BBA) from Eastern Michigan University

Masters of Business Administration (MBA) from Walsh College 2015

Masters of Science in Finance (MSF) from Walsh College 2017



Appendix 2

Senior Care Facility Script Greetings sir/ma'am, and I am a translator calling on behalf of Mr. Austin Lamb. Mr. My name is Lamb is a doctoral student at the University of Kitakyushu and he is conducting a very important academic research project in the senior-care industry. May I speak to the CEO, President, office manager, or other decision maker in the organization for a few minutes? I truly appreciate your time. Good morning/afternoon to you. and I am a translator calling on behalf of Mr. Austin Lamb. Thank you for taking my call today. Mr. Lamb is a doctoral student at the University of Kitakyushu and he is conducting a very important academic research project into both the senior-care industry. He is kindly requesting your help to complete a survey, which will be sent to you through the Japanese Post Office or through fax. He wanted to visit your institution and personally hand you the survey; however, mailing will be used to protect the senior population and minimize possible transfer of COVID-19.

The purpose of the survey is to collect data to assess the various social-economic impacts of foreign senior care labor in Western Chugoku Region of Japan. Mr. Lamb is sampling 12 municipalities and 48 senior care businesses in the prefectures of Hiroshima, Shimane, and Yamaguchi. Your institution was included in the sample and you are invited to participate with your permission and generous input! If you complete the survey, you will be greatly contributing to academic research within the senior care industry and Japan's immigration policy.

If you accept, Mr. Lamb will either mail the survey in the next few days or you will be faxed the survey. Which do you prefer? He will include the survey of 20 questions and his University of Kitakyushu credentials. The survey is expected to take 10 minutes to complete. If mailing is selected, there will be a prepaid envelope provided to help the return process. Please be assured that both your comments and your institution name will not be disclosed in the final research project. Your opinion will be anonymous.

Can we count on you to provide us your support for research? Who would be the one to complete this survey? Name of individual? Title of individual?

Mr. Lamb also has a resident/customer survey that is unique from yours. Would you be interested in providing this out to a few residents to complete? He can provide 10 of these surveys. If you need more, he would be very happy to provide more.

Thank you very much!

Local Government Script Greetings sir/ma'am, My name is and I am a translator calling on behalf of Mr. Austin Lamb. Mr. Austin Lamb is a doctoral student at the University of Kitakyushu and he is conducting a very important academic research project into both the senior-care industry and current Japanese immigration field. May I speak to a government representative or public relations specialist for a few minutes? I truly appreciate your time. Good morning/afternoon to you. and I am a translator calling on behalf of Mr. Austin Lamb. Thank My name is you for taking my call today. Mr. Lamb is a doctoral student at the University of Kitakyushu and he is conducting a very important academic research project into both the senior-care industry and current Japanese immigration field. He is kindly requesting your help to complete a survey, which will be sent to you through the Japanese Post Office or through fax. He wanted to visit your municipality and personally hand you the survey; however, travel should not be performed to minimize possible transfer of COVID-19. The purpose of the survey is to collect data to assess the various social-economic impacts of foreign senior care labor in Western Chugoku Region of Japan. Mr. Lamb is sampling 12 municipalities and 48 senior care businesses in the prefectures of Hiroshima, Shimane, and Yamaguchi. Your municipality was included in the sample and we are requesting your participation and generous input! If you complete the survey, you will be greatly contributing to academic research within the senior care industry and Japan's immigration policy. If you accept, Mr. Lamb will either mail the survey in the next few days or you will be faxed the survey. Which do you prefer? He will include the government survey and his University of Kitakyushu credentials. There will be a prepaid envelope provided to help the return process. Can we count on you to provide us your support for research? Who would be the one to complete this survey? Name of individual? Title of individual? Thank you very much!

Business Stakeholder Survey

20 Questions

Characteristics of respondent			
0 0	What is your role in the organization? How many years has business/institute been in operation?		
0	How many senior care employees do you currently employ?	Male	Female
0	How many foreign senior care employees do you currently have?	Male	Female

Part 1 – Current Business Sector Situational Awareness

1. Do you have enough employees to fulfill your current senior care demands? (Please Circle Best Response)		
(a) We need more employees and are actively looking for more.		
(b) We are recruiting and will need more employees long-term.		
(c) We currently have enough employees, but would recruit more if highly skilled.		
(d) We have enough employees to meet current demand.		
(e) I don't know or not applicable.		
2. Are you seeing community senior care demands increase? (Please Circle Best Response)		
(a) Demand for senior care is increasing quickly in my community and my business.		
(b) Demand for senior care is increasing very slightly.		
(c) Demand for senior care has stabilized; no growth at this time.		
(d) Demand for senior care is decreasing in my community.		
(e) I don't know or not applicable.		
3. Are you at full capacity with your current products and services?		

(Please Circle Best Response)

- (a) We have no more occupancy in our facility and/or product available.
- **(b)** We are running low on occupancy, but currently have some vacancy.
- **(c)** We have sufficient occupancy available to absorb moderate growth.
- (d) We have low occupancy rates.
- (e) I don't know or not applicable.

4. Could your business grow with access to greater caregiver labor? (Please Circle Best Response)

- (a) We could definitely grow with more labor; we currently have plans to grow.
- **(b)** We could grow with more labor, but need to create plans for growth.
- (c) We could grow, but this would be challenging for us in the short-term.
- (d) We could not grow our business with sufficient access to caregiver labor
- (e) I don't know or not applicable.

5. How experienced are you at hiring or managing foreign labor? (Please Circle Best Response)

- (a) Very experienced (hired or managed more than 5 foreign employees).
- **(b)** Moderately experienced (hired or managed 2-5 foreign employees).
- (c) Less experienced (hired or managed 1 foreign employee).
- (d) Not experienced or does not desire to hire/manage foreign labor
- (e) I don't know or not applicable.

6. Could you afford greater expenses to support foreign labor (i.e. salary, recruiting, transporting, housing, and quality of life care)? (Please Circle Best Response)

- (a) We could incur additional expense without drastic change to our financials.
- (b) We could incur additional expenses through commercial lending.
- (c) We desire to provide more support, but need more revenues/funding first.
- (d) We could not afford to hire additional employees right now
- (e) I don't know or not applicable.

7. Do you feel your customers will respond well to foreign caregivers?

(Please Circle Best Response)

- (a) Our customers/residents will not care about caregiver nationality.
- **(b)** Only a few residents may feel uncomfortable (less than 5%).
- (c) Some of our customers/residents may feel uncomfortable (5-25%).
- (d) Many of our customers/residents may feel uncomfortable (greater than 25%).
- (e) I don't know or not applicable.

8. Are you confident that foreign care givers could communicate well with customers? (Please Circle Best Response)

- (a) Our customers can communicate and work well with foreign labor.
- **(b)** Our customers may experience slight barriers to communication
- (c) Our customers may experience miscommunications.
- (d) A majority of our customers may feel uncomfortable.
- (e) I don't know or not applicable.

9. Do you have an organizational culture that fosters and supports foreign caregivers? (Please Circle Best Response)

- (a) Our corporate culture is inclusive and supportive of foreign employees.
- **(b)** We are actively creating a more welcoming culture for foreign employees.
- (c) We would like to develop a more inclusive and supportive culture.
- (d) We do not have a reasonable culture that fosters and supports foreign labor.
- (e) I don't know or not applicable.

10. Do you feel quality of foreign service is similar to Japanese domestic quality of service? (Please Circle Best Response)

- (a) There are no material differences between foreign and domestic labor.
- (b) Foreign labor has slight training impairment at first, but quickly improve
- (c) Foreign labor needs more training to grow to domestic employee level.
- (d) Deficits of knowledge, or the Japanese customers prefer Japanese over foreign.
- (e) I don't know or not applicable.

Part 2 – Business Stakeholders Perception

11. Are you knowledgeable with the current Economic Partnership Agreement (EPA)? (Please Circle Best Response)

- (a) I fully understand what the Economic Partnership Agreement is.
- **(b)** I have heard what the Economic Partnership Agreement is.
- **(c)** I am unaware of this international agreement.
- (d) I don't know or not applicable.

12. Do you feel the local community (shi-chou-son) can support foreign caregivers (immigrant and family members? (Please Circle Best Response)

- (a) The community will fully support foreign caregivers.
- **(b)** The community will likely support foreign caregivers.
- (c) The community will have small challenges supporting foreign caregivers.
- (d) The community will have significant challenges supporting foreign caregivers
- **(e)** I don't know or not applicable.

13. Do you feel the local government (shi-chou-son) has provided enough support for foreign care givers? (Please Circle Best Response)

- (a) I think the government has ample resources and a positive support structure.
- **(b)** Reasonable, but local government could do more to help.
- (c) Not enough support is provided from the local government.
- (d) There is no support from the local government.
- (e) I don't know or not applicable.

14. Do you feel the prefectural (Todofuken) government has provided enough support for foreign care givers? (Please Circle Best Response)

- (a) Prefectural government provides local government and/or foreign care givers enough resources.
- (b) Reasonable, but prefectural government could do more to help.
- (c) Not enough support is provided from the prefectural government.
- (d) There is no support from the prefectural government.
- (e) I don't know or not applicable.

15. Do you feel like the national government of Japan has provided enough support for foreign caregivers? (Please Circle Best Response)

- (a) National government provides prefectures enough program support and/or Tax resources.
- **(b)** Minor support is given, but government of Japan could do more to help.
- (c) Not enough support is provided from the national government of Japan.
- (d) There is no support from the national government of Japan.
- (e) I don't know or not applicable.

16. Is community infrastructure supportive enough for foreign residents (schools, medical service, public transportation, shopping, internet, banking)? (Please Circle Best Response)

- (a) Community has sufficient infrastructure in place for foreign residents.
- **(b)** Community has basic infrastructure, but could improve in categories.
- (c) Improvement is needed in many sectors (schools, medical service, public transportation, shopping, internet, banking)
- (d) We do not have appropriate infrastructure in place.
- (e) I don't know or not applicable.

17. Do you feel the local economy will improve with the infusion of more foreign caregivers? (Please Circle Best Response)

- (a) The economy will increase from job creation, spending, and resident retention.
- **(b)** The economy will increase, but there will be outflows of resources (remittances).
- (c) The economy will grow anyways, without foreign labor.
- **(d)** No material growth is expected.
- (e) I don't know or not applicable.

18. Do you think foreign residents will have difficulties living in your community? (Please Circle Best Response)

- (a) Foreign residents will experience many difficulties in our community.
- (b) Foreign residents should not experience too many difficulties.
- (c) Foreign residents will not experience difficulties greater than what a an average resident would experience.

(d) No difficulties are expected because quality of life is better in Japan. (e) I don't know or not applicable. 19. Do you think the foreign care givers will be discriminated against? (Please Circle Best Response) (a) I think the foreign immigrants could be discriminated against (directly and indirectly). **(b)** I think the foreign immigrants to be discriminated against (indirectly only). (c) Slight discrimination is an unfortunate part of migration. (d) I do not expect any cases of discrimination. **(e)** I don't know or not applicable. 20. Do you consider foreign residents to contribute value to your community? (Please Circle Best Response) (a) Foreign residents bring value to the community (business, government, society). **(b)** Diversity is good. However, there have been challenges to the idea. (c) Foreign residents are good. However, they tend to take advantage of many opportunities in the local community. I wish they would be more respectful. (d) Foreign residents could weaken the local community. (e) I don't know or not applicable. Part 3 – Please provide additional comments you feel are relevant

Government Stakeholder Survey

20 Questions

Characteristics of respondent		
0	What is your position in the municipality (shi chou son)?	
0	What is the size of local population and age demographics?	Population:
0	Ages 0-14	Ages 0-14:
0	Ages 15-64	Ages 15-64
0	Ages +65	Ages +65
0	What is the size of the foreign population in 2019?	Male Female
0	What is the size of foreign working population in 2019?	Male Female

Part 1 – Current Government Situational Awareness

1. A	there public policies to support the quality of life needs of a foreign population	1?
(1	ease Circle Best Response)	

- (a) We have 3+ government programs and numerous policies to help foreign residents.
- **(b)** We have 1-2 government programs and several policies to help foreign residents.
- (c) We are currently reviewing and developing government programs and/or policies
- (d) We do not have any special programs or policies governing immigrant residents
 - (e) I don't know or not applicable.
- 2. Is there public funding or public programs to support foreign immigrants? (Please Circle Best Response)
 - (a) We have significant funding available for relevant immigrant programs.

- **(b)** We have only a small level of funding available for relevant immigrant programs.
- (c) We do not have funding available this year, but will start in next fiscal year.
- **(d)** We do not have funding available for relevant immigrant programs.
- (e) I don't know or not applicable.

3. Have you partnered with business sector to help immigrants in the senior services Sector? (Please Circle Best Response)

- (a) We have a coordinated govt/business support structure to recruit & retain immigrants.
- **(b)** We have smaller partnerships between government and businesses.
- (c) We wish to build future partnerships between government and business.
- (d) We do not have, or will not pursue partnerships at this time.
- (e) I don't know or not applicable.

4. Do you feel the local community can support foreign caregivers (immigrant and family

members)? (Please Circle Best Response)

- (a) The community will fully support foreign caregivers.
- **(b)** The community will likely support foreign caregivers.
- (c) The community will have small challenges supporting foreign caregivers.
- (d) The community will have significant challenges supporting foreign caregivers.
- **(e)** I don't know or not applicable.

5. Do you feel the prefectural (Todofuken) government has provided enough support for foreign care givers? (Please Circle Best Response)

- (a) Prefectural government provides our local government (shi-chou-son) ample program or financial funding resources.
- **(b)** Reasonable, but prefectural government could do more to help our local government (shi-chou-son).
- **(c)** Not enough immigrant support programming from the prefectural government.
 - (d) There is no immigrant support from the prefectural government.
 - **(e)** I don't know or not applicable.

6. Do you feel like the national government has provided enough support for foreign workers? (Please Circle Best Response)

- (a) National government provides our local government (shi-chou-son) ample program or monetary resources.
- **(b)** Reasonable, but national government could do more to help our local government.
- (c) Not enough immigrant support programming from the national government.
- (d) There is no immigrant support from the national government.
- (e) I don't know or not applicable.

7. Can the local government (shi-chou-son) incur more expenditures to aid foreign care workers? (Please Circle Best Response)

- (a) The local government can incur much more expenditures to aid foreign Care workers.
- **(b)** The local government can incur few more expenditures to aid foreign care workers.
- (c) The local chou will have challenges when incurring more expenditures.
- (d) he local government cannot incur more expenditures to directly aid foreign workers.
- **(e)** I don't know or not applicable.

8. Is community infrastructure supportive enough for foreign residents (i.e. schools, medical services, public transportation, shopping, internet)?

- (a) Community has sufficient infrastructure in place for foreign residents.
- (b) Community has appropriate infrastructure in place, but could improve in areas.
- (c) Improvement is needed in many sectors (schools, roads, shopping, internet)
- (d) We do not have appropriate infrastructure in place.
- (e) I don't know or not applicable.

9. Could the addition labor increase the local tax base sufficiently? (Please Circle Best Response)

- (a) Tax bases will increase with immigrants.
- **(b)** Tax bases will increase with immigrants, but support expenditures will also increase.

- (c) Tax revenues will equal out with taxpayer expenditures
- (d) There will be a negative effect on government
- (e) I don't know or not applicable.

10. Could the foreign population increase regional GDP? (Please Circle Best Response)

- (a) Foreign population *directly* increases regional GDP.
- **(b)** Foreign population *indirectly* increases regional GDP.
- (c) Foreign population has no effect on regional GDP.
- (d) Foreign population has negative effect on regional GDP.
- (e) I don't know or not applicable.

11. Can local government (shi-chou-son) support the families of the foreign care giver (i.e. school, relocation, public transportation, banking, etc.)?

- (a) We can fully support the families of immigrants.
- **(b)** Several programs available in native language of immigrant provided by government.
- (c) We have several programs available, but immigrant must seek them out.
- **(d)** We do not have programs in place and/or commercial sector is responsible for this.
- (e) I don't know or not applicable.

12. Do you consider your community to be an attractive place to retain the foreign population? (Please Circle Best Response)

- (a) We have a wonderful community to attract and retain foreign populations.
- **(b)** We have a community to attract, but challenges to retain foreign populations.
- (c) We have concerns with attracting and retaining foreign populations.
- (d) We do not have any foreign populations.
- (e) I don't know or not applicable.

Part 2 – Governmental Stakeholder Perception

13. Are you knowledgeable with the current Economic Partnership Agreement (EPA)? (Please Circle Best Response)

- (a) I fully understand what the Economic Partnership Agreement is.
- **(b)** I have heard what the Economic Partnership Agreement is.
- **(c)** I am unaware of this international trade agreement.
- **(d)** I don't know or not applicable.

14. Are you seeing community senior care demands increase? (Please Circle Best Response)

- (a) Demand for senior care is increasing greatly in my community.
- **(b)** Demand for senior care is increasing very slightly.
- (c) Demand for senior care has stabilized; no growth at this time.
- (d) Demand for senior care is decreasing in my community.
- (e) I don't know or not applicable.

15. Does the business sector have enough employees on hand to fulfill the current level of senior care demand? (Please Circle Best Response)

- (a) We need more employees and are actively looking for more.
- **(b)** We are recruiting and will need more employees long-term.
- (c) We currently have enough employees, but would recruit more if available.
- (d) We have enough employees to meet current demand.
- (e) I don't know or not applicable.

16. Do you believe the commercial sector could afford greater expenses to support foreign labor (i.e. salary, recruiting, transporting, housing, and quality of life care)?

- (a) Businesses could incur additional expense without drastic change to financials.
- **(b)** Businesses could incur additional expenses through commercial lending.
- **(c)** Businesses desire to provide more support, but need more revenues/funding first.
- (d) Businesses cannot afford to hire additional employees right now
- (e) I don't know or not applicable.

17. Do you feel the local economy will improve with the infusion of more foreign

caregivers? (Please Circle Best Response)

- (a) The economy will grow from job creation, spending, and resident retention.
- **(b)** The economy will grow, but there will be outflow of resources (remittances).
- **(c)** The economy will grow anyways, without foreign labor.
- (d) No material growth is expected.
- (e) I don't know or not applicable.

18. Do you think foreign residents will have difficulties living in your community? (Please Circle Best Response)

- (a) Foreign residents will experience many difficulties in our community.
- **(b)** Foreign residents should not experience too many difficulties.
- (c) Foreign residents will not experience difficulties greater than what a an average resident would experience.
- (d) No difficulties are expected because quality of life is better in Japan.
- (e) I don't know or not applicable.

19. Do you think the foreign care givers will be discriminated against? (Please Circle Best Response)

- (a) I think the foreign immigrants could be discriminated against (directly and indirectly).
- **(b)** I think the foreign immigrants to be discriminated against (indirectly only).
- (c) Slight discrimination is an unfortunate part of migration.
- (d) I do not expect any cases of discrimination.
- (e) I don't know or not applicable.

20. Do you consider foreign residents to contribute value to your community? (Please Circle Best Response)

- (a) Foreign residents bring value to the community (business, government, society).
- **(b)** Diversity is good. However, there have been challenges to the idea.
- (c) Foreign residents are good. However, they tend to take advantage of many opportunities in the local community. I wish they would be more respectful.
- (d) Foreign residents could weaken the local community.

(e) I don't know or not applicable.	
Part 3 – Please provide additional comments you feel are relevant	

Community & Resident Stakeholder Survey

20 Questions

Thank you so much for your input and your contribution!

My name is Austin Lamb and I am a doctoral student at the University of Kita-Kyushu. I am requesting your cooperation in completing a very important academic survey. The purpose of the survey is to collect data to assess the various social-economic impacts of foreign senior care labor in Western Chugoku Region of Japan. The expected time to complete is 10 minutes.

Instructions:

- For each question, please circle the answer which is most applicable to you.
- There are also a few questions that ask for a few more details. Please write the details in the given blank space or anywhere on the survey you feel is relevant.
- I will be reviewing each survey response personally and will keep all responses anonymous in my project.
- Please hand in your survey to the administrator and receive your reward.

D	Demographics of respondent	
0	What is your age?	
0	What is your gender?	
0	What is your highest achievement in education?	
0	What business sector are you employed from?	
0	What is your role in that organization/institute?	
0	Do you interact, or have you interacted, with foreigners in your daily life?	

Part 1 – Current Society Situational Awareness

1. Do you think foreign care givers will experience difficulties in the following sectors? (You can choose one or more responses)

- **(Yes) (No)** With medical care?
- **(Yes) (No)** With education for themselves or family?
- **(Yes) (No)** Shopping & quality of life services?
- **(Yes) (No)** Financial sector (banking)?
- **(Yes) (No)** Their rights or legal matters?

2. Do you feel the local economy will improve with the infusion of more foreign caregivers? (Please Circle Best Response)

- (a) The economy will grow from job creation, spending, and resident retention.
- **(b)** The economy will increase, but there will be outflow of resources (remittances).
 - (c) The economy will grow anyways, without foreign labor.
 - (d) No material growth is expected.
 - (e) I don't know or not applicable.

3. Will you have difficulty communicating your senior needs to a foreign individual? (Please Circle Best Response)

- (a) I do not believe I will have difficulty in communicating my needs.
- **(b)** I may have a little difficulty, but believe I can still communicate my needs.
- (c) I will have great difficulty in communicating my needs to immigrants.
- (d) I will not communicate my needs.
- (e) I don't know or not applicable.

4. Do you expect foreigners to assimilate to your local society? (Please Circle Best Response)

- (a) Foreigners should not assimilate and/or express their cultural differences.
- (b) Immigrants must assimilate basic Japanese cultural needs, but remain unique.
- (c) Immigrants must assimilate, and share their cultural differences.
- **(d)** Immigrants must assimilate because they reside in Japan and interact with Japanese.

- **(e)** I don't know or not applicable.
- 5. Could a foreign population change your culture and local way-of-life? (Please Circle Best Response)
 - (a) Foreign residents will not change my culture; they will only enrich it.
 - **(b)** Foreign residents will not entirely disrupt my culture.
 - (c) Foreign residents will disrupt my culture.
 - (d) Foreign residents will disrupt my culture significantly.
 - **(e)** I don't know or not applicable.
- 6. Have you seen or heard about discriminatory demonstrations or street propaganda activities against foreigners living in Japan? (Please Circle Best Response)
 - (a) I have never heard of any.
 - **(b)** I have heard on national or local news.
 - (c) I have personally witnessed these demonstrations or street propaganda.
 - (d) I have participated in, or have a strong following with them.
 - **(e)** I don't know or not applicable.
- 7. How did it make you feel when you saw or heard about the propaganda? (Please Circle Best Response)
 - (a) Uncomfortable.
 - **(b)** Negative.
 - (c) Negative, but curious.
 - (d) Positive.
 - (e) I don't know or not applicable.
- 8. Do you think the foreign care givers will be discriminated against? (Please Circle Best Response)
 - (a) I think the foreign immigrants could be discriminated against (directly and indirectly).
 - (b) I think the foreign immigrants to be discriminated against (indirectly only).
 - (c) Slight discrimination is an unfortunate part of migration.
 - (d) I do not expect any cases of discrimination.

(e) I don't know or not applicable.

9. Do you consider foreign residents to contribute value to your community? (Please Circle Best Response)

- (a) Foreign residents bring value to the community (business, government, society).
 - **(b)** Diversity is good. However, there have been challenges to the idea.
 - (c) Foreign residents are good. However, they tend to take advantage of many opportunities in the local community. I wish they would be more respectful.
 - (d) Foreign residents could weaken the local community.
 - (e) I don't know or not applicable.

10. Would you be open to receiving care from a foreign caregiver? (Please Circle Best Response)

- (a) I am open to receiving care from a foreign caregiver.
- **(b)** I have a few reservations, but am open to receiving care.
- (c) I would be respectful, but would have bias or uncomfortableness.
- (d) I would not be open to receiving care from a foreign caregiver.
- (e) I don't know or not applicable.

11. Do you consider foreign care quality the same as from a domestic Japanese worker? (Please Circle Best Response)

- (a) It is my opinion that foreign care quality is better than domestic care.
- **(b)** I believe domestic and foreign care are both identical.
- (c) I believe foreign car is slightly behind domestic care.
- (d) I believe foreign car is inferior to domestic care.
- (e) I don't know or not applicable.

12. Does your primary caregiver appear stressed, or have you heard or seen anything negative about your primary caregiver workload? (Please Circle Best Response)

- (a) I have heard my caregiver express concerns about the lack of support.
- **(b)** I have seen a certain level of stress from my caregiver.
- (c) I have not witnessed any issues with my caregiver's workload.

- **(d)** My caregiver appears relaxed with minimal stress.
- (e) I don't know or not applicable.

Part 2 – Societal Stakeholder Perception

13. Are you knowledgeable with the current Economic Partnership Agreement (EPA)? (Please Circle Best Response)

- (a) I fully understand what the Economic Partnership Agreement is.
- **(b)** I have heard what the Economic Partnership Agreement is.
- **(c)** I am unaware of this international agreement.
- **(d)** I don't know or not applicable.

14. Do you feel the local government (Shi-Chou-Son) has provided enough support for foreign care givers? (Please Circle Best Response)

- (a) Foreign residents have ample resources and a positive support structure.
- **(b)** Reasonable, but government could do more to help.
- (c) Not enough support is provided from the local chou government.
- (d) There is no support from the local chou government.
- (e) I don't know or not applicable.

15. Do you feel like the national government has provided enough support for foreign workers? (Please Circle Best Response)

- (a) National government provides citizens ample programs.
- (b) Reasonable, but national government could do more to help.
- (c) Not enough support is provided from the national government.
- (d) There is no support from the national government.
- (e) I don't know or not applicable.

16. Is community infrastructure supportive enough for foreign residents (schools, public transportation, medical, shopping, internet, banking, etc.)?

- (a) Community has sufficient infrastructure in place for foreign residents.
- (b) Community has appropriate infrastructure in place, but could improve in areas.

- (c) Improvement is needed in many sectors (schools, public transport, shopping, internet)
- (d) We do not have appropriate infrastructure in place.
- (e) I don't know or not applicable.

17. Are you seeing community senior care demands increase in your community? (Please Circle Best Response)

- (a) In my opinion, demand for senior care is increasing greatly.
- **(b)** In my opinion, demand for senior care is increasing very slightly.
- (c) In my opinion, demand for senior care has stabilized; no growth at this time.
- (d) In my opinion, demand for senior care is decreasing in my community.
- **(e)** I don't know or not applicable.

18. Do you feel you have enough money for your care now, or in the future? (Please Circle Best Response)

- (a) I am prepared for all senior care expenses that I may pay.
- **(b)** I am prepared for minor senior care deductibles, or minor expenses.
- (c) I am saving right now, or I have a small amount saved.
- (d) I don't have enough, or I am planning to start saving.
- (e) I don't know or not applicable.

19. Do you see any advantages to receiving care from foreign caregivers? (Please Circle Best Response)

- (a) I believe there are many advantages.
- **(b)** I believe there are several advantages.
- (c) I see care from foreigners similar to Japanese.
- (d) I do not see any advantages, or see a few disadvantages.
- (e) I don't know or not applicable.

20. How do you feel about your family members receiving care from foreigner caregivers, or how do think your family members will feel about you receiving care from foreign caregivers? (Please Circle Best Response)

(a) I think it is positive, or believe the family will think of it positively

- **(b)** I would be okay with it, or believe my family would be okay with it.
- **(c)** I do not have an opinion on it, or do not believe my family would have opinion.
- (d) I would look negatively on it, or believe my family will look negatively on it.
- (e) I don't know or not applicable.

Part 3 – Please provide any additional comments you may have that you feel is relevant to an academic survey.