Towards Sustainable Rural Japan: a Case Study on Urban-Rural Migration Motives

Lisa Kanai
DePauw University

Follow this and additional works at: http://scholarship.depauw.edu/studentresearch
Part of the Asian Studies Commons, Demography, Population, and Ecology Commons, and the Rural Sociology Commons

Recommended Citation

This Thesis is brought to you for free and open access by the Student Work at Scholarly and Creative Work from DePauw University. It has been accepted for inclusion in Student research by an authorized administrator of Scholarly and Creative Work from DePauw University. For more information, please contact bcox@depauw.edu.
Towards Sustainable Rural Japan:
A Case Study on Urban-Rural Migration Motives

Lisa Kanai
Professor Ophelia Goma, Supervisor
Professor Larry Stimpert, First Reader
Professor Hiroko Chiba, Second Reader

DePauw University
2016
Abstract

With Japan losing its overall population due to low fertility rate, rural depopulation has become a prevalent issue across the country. This thesis examines Oonan Town in Shimane Prefecture as a case study, as it is a rural town that has been successful in getting in-migrants back into the community. Through oral, biographical interviews, participants reported factors that played a significant role in the migration decision-making process. Data show that in-migrants in Oonan Town were largely affected by four factors, which are 1) family ties, 2) life course events, 3) lifestyle preferences, and 4) financial factors. The current study also presents two theoretical frameworks, economic approach and behavioral approach, to understand migratory decision-making process. Data largely support the behavioral approach, which asserts that the dissatisfaction about the current place of living combined with knowledge about an alternative place he/she could migrate to leads to stress, which in turn leads to the decision to migrate. Furthermore, the success of Oonan Town in recruiting in-migrants can be largely attributed to two factors, which are the town policy and slogan that targets very specific in-migrants (i.e., families with young children) and the great care the government takes in making sure that the in-migrants demand fits with what the town is like in actuality. The current study sheds light on how rural, disappearing communities can revitalize their towns by attracting in-migrants back into their community.

Key words: urban-rural migration, rural revitalization, behavioral approach
Acknowledgments

I would first like to thank my advisor, Professor Ophelia Goma of Economics Department at DePauw University, for guiding through my year-long project from brainstorming with me on my scatter-brained ideas in the fall to providing insightful feedback and editing my writing in the spring. She consistently provided me with the support and encouragement I needed, and steered me in the right direction with the project.

I would also like to thank my first reader, Professor Larry Stimpert of Economics Department at DePauw University and my second reader, Professor Hiroko Chiba of the Japanese Department at DePauw University for the support and for providing insightful feedback on the writing. I would also like to acknowledge Professor Bondy of the Sociology Department at International Christian University for advising me on my interviews.

I would also like to give my thanks to the Honor Scholar Department Chair, Professor Kevin Moore, as well as Ms. Amy Welch and Ms. Peg Lemley of Honor Scholar Department for the opportunity and structure they have provided to write a thesis with three professors on the committee as an undergraduate student.

I would also like to acknowledge Mr. Yokosu and the six participants in Oonan Town for their consent and kind cooperation in collecting my data.

Finally, I am thankful for my parents and friends who have given me their continuous support in completing the thesis. Without their support, I would not have been able to complete my thesis.
Table of Contents

Chapter I: Introduction ........................................................................................................... 5
  Patterns of Migration ........................................................................................................... 7

Chapter II: Theoretical Frameworks .................................................................................. 11
  Economic Framework ......................................................................................................... 12
  Behavioral Framework ....................................................................................................... 13
  Urban-Rural Migration: Case Studies .............................................................................. 16

Chapter III: Current Research ............................................................................................ 29
  Oonan Town ....................................................................................................................... 30
    Demographic Profile ........................................................................................................ 31
    Population Plan .............................................................................................................. 32
  Methods .............................................................................................................................. 33
    Participants ..................................................................................................................... 33
    Interview Procedure ....................................................................................................... 34
    Measures ......................................................................................................................... 34

Chapter IV: Results and Discussions .................................................................................. 37
  Results ............................................................................................................................... 38
    Demographics ................................................................................................................ 38
    Migratory Motivations ................................................................................................. 38
  Discussions ....................................................................................................................... 46
    Evaluation of Behavioral Framework ........................................................................... 48
    Evaluation of Economic Framework ............................................................................ 49
    Analysis of the Success of Oonan Town ........................................................................ 50

Chapter V: Conclusion ......................................................................................................... 55

Appendix ............................................................................................................................... 60

References ............................................................................................................................ 65
Chapter I: Introduction
In 1991, a Japanese sociologist Akira Oono coined a term that has become a symbol of a horrifying phenomenon in Japan. The term is “genkai shuraku,” directly translated as “marginal village,” and is defined as villages in which over half of its population is age 65 or older (Oono, 2008). Villages whose population fit this definition are identified as genkai shuraku because, as the name precisely suggests, they are on a verge of inexistence. Soon, residents 65 or older will cease to exist, and the rest will out-migrate—leaving the village for the wild nature to slowly eat over until the human marks are no longer present. As of 2007, there were over 8,000 genkai shuraku in Japan, and the residents are often times well aware of the fact that they live in a village that probably will not exist 30 years from now (Ministry of Land, Infrastructure, Transportation, and Tourism, 2007).

Shimane Prefecture is the second least populated prefecture out of 47 prefectures in Japan. Many of the villages are agriculture-based, and suffer from severe out-migration of younger generations. Oonan Town in Shimane Prefecture has become famous in the last few years, not because of its disappearing community, but because of its miraculous turnaround in the net migration; despite being a rural town in the second most depopulated prefecture, it has had more in-migrants than out-migrants since 2012. This thesis aims to examine migratory decision-making process that these recent in-migrants have gone through, and explore questions such as: why has Oonan Town in particular been successful? What was the strongest pull towards this town? Are these migrants happy where they are—are they here to stay and support the sustainability of the town? In fact, data show that in-migrants in Oonan Town were largely affected by four factors, which are 1) family ties, 2) life course events, 3) lifestyle preferences, and 4) financial factors. Furthermore, data suggest that Oonan Town has been successful in recruiting in-migrants for two reasons: first, the town government strategically targets families
with young children as potential in-migrants, and second, they take great care in making sure that the in-migrants demand fits with what the town is like in actuality.

Thus, the current study explores the migratory motivations exhibited by in-migrants who have moved from an urban city to rural Oonan Town in Shimane Prefecture, Japan. The thesis is constructed in five chapters: in Chapter One, I will discuss the general definition and types of domestic migration. In Chapter Two, I will examine two theoretical frameworks, based on economics and sociology, that explain the migration decision process and observe case studies—in and outside of Japan—that have applied these theoretical frameworks to study the migration process. In Chapter Three, I will present the details of the current study, including information about Oonan Town and methods of the study. In Chapter Four, I will present results and discussion about the current data. Finally in Chapter Five, I will close off the thesis by reflecting on the past literature and the current study results.

**Migration**

With globalization and technological advancement increasing people’s mobility to an unprecedented level, understanding migration—the mobility and flow of people—is ever more important today. Migration impacts states and regions, as well as societies’ economies and policies. As such, much attention has been given to international migration in the research literature (Castles, Miller, & Ammendola, 2005). While international migration is a study of high interest, it is important to note that domestic migration within a country exceeds international migration in the number of people involved (Deshingkar & Grimm, 2005). According to the U.S. Census Bureau, in 2014 in the U.S. alone, there were 34 million people who migrated within the country, in contrast to 1.6 million people who internationally migrated (United Census Bureau, 2015). In addition, economic contributions from internal labor migration and remittances from
The migrators have been vital for economic development around the world. Ping and Pieke (2003) concluded that without internal migration there “would be no Beijing, Shanghai, Guangzhou or Shenzhen.” Dieleman, Cuong, Anh, and Martineau (2003) similarly noted that in Bangladesh, China, Vietnam and the Philippines, internal migration has been an important driver of economic growth, poverty reduction, and improved well-being.

The remittances that the internal migrants send to their families and relatives back home can reduce poverty and improve well-being by increasing access to food, education, medical care, housing, and land. The remittances can also have multiplier effects, in which they are spent on consumer durables (e.g., bicycles, motorbikes, or televisions) that then generate increased income, or are spent on cash inputs to agriculture (e.g., hired labor or better disease control) that then result in better cultivation practice and higher yields. Hence, internal migration, while often overshadowed by international migration, is a field of study that merits a closer observation.

**Spatial Patterns of Internal Migration**

Internal migration can be categorized by spatial patterns. Specifically, research has classified regions within a country as rural areas and urban areas, and identified four types of spatial patterns: rural-rural (i.e., from a rural area to another rural area), rural-urban (i.e., from a rural area to an urban city), urban-rural (i.e., from an urban city to a rural area), and urban-urban (i.e., from an urban city to another urban city). While disputes have risen in the literature regarding the definition of “rural” and “urban”, the categorization has allowed drawing general conclusions regarding spatial patterns of migration.

**Rural-rural migration.** Deshingkar and Grimm (2005) report that in developing countries, rural-rural migration is the dominant type of migration. The leading cause behind this phenomenon is labor migration, in which workers from poorer regions travel to an agriculturally
more prosperous (i.e., irrigated and needs more human workers in the field) areas. In 1999 in developing countries such as India and Nepal, rural-rural migration was the dominant type of internal migration with 62% of Indian and 68% of Nepalese total population movement categorized as rural-rural migration (KC, 2003; Srivastava & Bhattacharyya, 2003). This type of migration typically involves poorer groups of people with little education and other limited resources.

**Rural-urban migration.** Labor migration from a rural area to an urban city is rapidly gaining attention, especially in the urbanizing economies of Asia where rural-urban wage differences are growing. In countries such as China and Bangladesh, rural-urban migration has overtaken other kinds of movements. Typically, rural-urban migration is undertaken by workers who leave agricultural life behind to work in a larger city, or the hub of manufacturing factories.

**Urban-rural migration.** Urban-rural migrants are typically returnees, although the reason for coming back ranges widely. In South-East Asia, the effects from the financial crisis created return migration flows from urban cities back to rural homes, whereas in Bangladesh, migrants return home from the city once they decided remittance was no longer necessary, or in order to take care of their elderly parents (Deshingkar & Grimm, 2005). Researchers have pointed out potential benefits from these return migrants, as they may bring back a range of skills to their home community.

**Urban-urban migration.** Migration from an urban area to another urban area or intra-metropolitan migration is predominant in some countries in Latin America, such as Mexico and Brazil. For example, in Mexico between 1995 and 2000, 70% of migration took place in urban areas (Deshingkar & Grimm, 2005). Because Latin American cities exist between large clusters,
a large amount of domestic migration occurs between small administrative divisions within the same metropolises such as Mexico City, Santiago, and Lima.
Chapter II: Theoretical Frameworks of Migratory Motivations
In understanding migration flows and patterns, an essential question arises: why are people deciding to move from one area to another? One approach to understanding the reasons behind the migration phenomena is to examine the individual decision-making process. This section presents two theoretical frameworks, economics and behavioral approach, on how individuals make those migratory decisions.

**Economics Framework**

Todaro (1969) presented a migration decision process model based on economic motivations. Specifically, he asserted that two principle factors are at play when people decide to migrate from rural to urban areas. The first factor is the urban-rural real income difference, and the second is the probability of obtaining an urban job. Previous literature has shown that there has been gradual but continuous transfer of economic agents from rural based traditional agriculture to urban oriented modern industry; migrants transfer from lower-paying agriculture work in rural areas to higher-paying urban employment.

In addition to the income difference, Todaro (1969) asserted that the probability of obtaining an urban job is crucial in the migration decision process. The question of how long it will take for the migrant to actually find and obtain a job in the urban area will influence whether he or she leaves the farm and moves to a city. He raised the case of 1930’s United States as an example of why job opportunity is important for migration decisions. During the depression in the United States in the 1930’s, urban wages were considerably higher and falling less rapidly than rural wages. Nonetheless, the migration flow flipped, with more urban to rural migration in 1932. This puzzling phenomenon can be explained by the fact that job opportunities were severely low in the depressed urban factories, to the point where prospects of obtaining low-paying agricultural employment became a more attractive option to the migrants. Hence, Todaro
concluded that two factors are vital in the migration decision process: 1) urban-rural wage difference and 2) the probability of obtaining a job in the migration destination.

Since the publication of the Todaro Model, a large volume of literature has examined its validity, but most studies that validate the Todaro Model focus on developing countries. Suits (1985), noting the trend in the literature, claimed that the Todaro Model can also be applied to explain internal migration in developed countries, and examined the United States between 1900-1976 as a case study to apply the Todaro Model. In the study, he presented his modified model in which the unemployment rate is taken as an exogenous variable, and the equilibrium ratio of farm to non-farm labor force is determined by the productivity of labor employment. He also concluded that as countries develop, the influence of the non-farm unemployment declines. In other words, in developed countries, the creation of non-farm jobs does not influence the number of people leaving the farms as much as it would in developing nations; the availability of non-farm job openings would influence the farmer migration more substantially in developing nations.

**Behavioral Framework**

While many studies have supported the Todaro Model, researchers have also criticized this approach to understanding migration (Brown & Moore, 1970). The Todaro Model offers a “macro” approach, claiming that on the aggregate level, internal migration is determined by the society’s wages and employment opportunities. Consequently, the model offers little insight into the behavior of individual migrants, and how individual tastes and characteristics may influence the migration. Indeed, in the Todaro Model, migration is viewed as a simple, uniform response to the structural changes (i.e., employment and wage rate).
In response to the criticism to the economics “macro” approach, a “micro” approach to understand migration progress was developed in the 1970’s, called the behavioral approach. Developed from the psychology and sociology field, the behavioral approach treats migration as a choice made by an active decision-maker, and the Brown-Moore Model is the most widely accepted (Brown & Moore, 1970). Essentially, the model explains that migratory decision-making is driven by stress. The stress is created when an individual compares the place utility of their current dwelling to the place utility of a potential dwelling and realizes that the current place utility is lower than potential place utility. The concept of place utility was developed earlier by Woplert (1965), who asserted that people assign certain utility to a place through their subjective values and a finite ability to perceive the reality. Hence, the behavioral approach explains that stress is created when individuals perceive their alternative place utility to be higher than the current place utility, leading to the decision to migrate.

Two important distinctions should be noted in comparing the behavioral approach to the economics approach. The first distinction is that the evaluation of the places is based on place utility, which depends on the subjective perception of the place rather than objective facts about the place such as employment and wage rate differences. Wolpert (1965) explains that people have finite ability to perceive, calculate, predict, and differentiate between alternative courses of action. He emphasizes that only a limited portion of the environment is relevant and applicable to the decision making process. He asserts that people get their relevant information from their “action space,” or space in which people physically move about, which is influenced by the person’s needs, drives, and goals. It is important to note that this action space—where most vital information about the place is collected—is not an accurate representation of the physical, objective world. For example, a small college town may possess a variety of facilities, such as a
university gym, a town library, dining places, and a movie theater. However, each of the town residents would put a different value on the facilities—and consequently the town as a whole—depending on the individual action spaces. Those who are fitness-focused would appreciate the gym facilities more than people who never visit the gym, and those who are not interested in reading or researching may put less value on the library than a regular library-goer would. In this case, the town is offering the same public facilities to all residence in an objective sense, but the place utility is different from one individual to another due to their subjective evaluations. In behavioral approach, it is the latter—the subjective evaluation of the place—that is essential in migratory decision-making process.

The second distinction is that the evaluation of the place is not solely dependent on economic factors, but is open to a wide variety of factors. Several studies have employed the behavioral approach, and the scope of factors varies across literature. Deane (1990) applied the behavioral approach to analyze the residential mobility in the United States. In the study, the researcher used data from the Annual Housing Survey: National Core and Supplement File for the years 1978-1981. He identifies six categorical factors as behavioral precursors for residential mobility: 1) family cycle, 2) family background, 3) housing location within the U.S., 4) duration of dwelling, 5) residential satisfaction, and 6) neighborhood satisfaction. The study confirmed that all of the factors had a significant influence on residential stress and mobility. Specifically, regarding family cycle, families with children under 18 years old were more prone to move when they felt locational stress. Regarding family background whites were more likely to move. Regarding housing location within the U.S., residents of the Northeast, North Central, or South are very much more likely to move than Western residents. Regarding duration of dwelling, families with longer residential duration in their current locations were less likely to move.
Finally, regarding residential and neighborhood satisfaction, both had significant influence on location stress, but neighborhood satisfaction had about twice as large influence than residential satisfaction.

Clark and Cadwallader (1973) also employed the behavioral approach to examine intra-city migration within Los Angeles, and identified four categorical factors to influence migratory decision-making process, which are 1) the size and facilities of the dwelling unit, 2) the kind of people living in the neighborhood, 3) proximity of friends and relatives, and 4) proximity to work. The survey data from 169 households in the Los Angeles area indicated that the four factors had a significant correlation with the amount of location stress that these households reported, as well as their desire to leave the area.

In all, it should be noted that the behavioral approach is different from the economics approach in that 1) the factors involved in migratory motivation are not restricted to economic factors and 2) the factors are also not restricted to objective factors.

**Case Studies of Urban-Rural Migration**

While the free flow of people can help distribute labor in rural and urban regions to equalize the wage differences as well as to contribute to other economic advances, it can also bring about detrimental influences to the origins and destinations of migration. Urban concentration and severe rural depopulation are common phenomena that result from excessive rural-urban migration, as experienced by many developing and developed countries; the severity of the situation has stimulated policy debate about sustainability of the population in rural areas (Walmsley, Epps, & Duncan, 1998).

Curiously, since the 1970’s, some developed countries have experienced a large migration trend from urban areas to rural areas, which is a phenomenon referred to as
“counterurbanization.” The urban-rural migration, or counterurbanization, is a potential solution to rural depopulation and urban concentration. Hence, this subsequent section will examine the issue, or rural depopulation in developed countries, and its potential solution, or urban-rural migration.

**Rural Depopulation in Developed Countries**

Throughout the 19th and 20th century, many developed countries experienced urbanization, industrialization, and rural depopulation. In the United States between 1940 and 1944, five million people of labor force age left the rural, agricultural life for urban, civilian work. The migration population later grew to 15 million in 1963; in fact, the farm population halved from 30 million in 1940 to 14 million in 1963 (Beale, 1964). In Ireland between 1845 and 1876, agricultural employment fell by 45% (O’Rourke, 1991). New Zealand saw its rural county, Eketahuna County, lose 27% of its population and much of its public service between 1956 and 1976 (Joseph & Chalmers, 1999).

Rural depopulation in developed countries can be viewed as a general phenomenon caused by modern economic growth. Industrialization causes economic growth, in which cities expand rapidly and industry and service concentrate to urban areas. The urban expansion creates a demand for a large labor force, which acts as a pull-factor that attracts rural migrants. In the agricultural rural areas, improved productivity reduces the need for manpower. Factors such as substitution of farm machinery for manual labor, improved seeds, better breeds and animal nutrition, and advances in fertilizer and pest control all contribute to higher productivity and less demand for labor, consequently acting as a push-factor to encourage rural farmers to migrate to urban areas.
Stockdale (2002) examined the contemporary out-migration from rural areas in rural Scotland, and employed both quantitative and qualitative research methods. In the quantitative part of her research, Stockdale (2002) administered a survey to 212 former residents of two rural towns, Western Isles and Roxburgh. Western Isles is a very remote rural area in Northern Scotland, and Roxburgh district is a less remote rural area in the Scotland-England border. The questionnaire asked for the migrators’ gender, age of migration, the primary reason for migration, and destination of the first move. The survey revealed that out-migration from peripheral Scotland was dominated by education-related school leavers; 43% of former Roxburgh residents and 79% of former Western Isles residents left their hometown looking for better education in urban cities. A majority of them were between the age 16-18 at the time of out-migration, which is the age at which students finish secondary school and can choose to go on to higher education. The research also showed a gender difference; the female migration was overwhelmingly caused by education and happened in their late teenage years, whereas 35% of male migration was caused by employment and happened after the age of 30.

In the second part of her research, Stockdale (2002) conducted a qualitative study by conducting follow-up interviews with 25 participants. She employed a biographical approach to gain an in-depth understanding of the migration decision process. The interviews revealed that the education-motivated migrants faced certain expectations from school and family to pursue studies in a larger city. The migrants accepted this societal expectation as the norm, and few questioned it. Others reported more personal factors, such as the desire to experience something new and different by pursuing higher education and escaping to urban cities.

Counterurbanization in Developed Countries
One of the countries that has experienced counterurbanization is Australia. Its largest city, Sidney, is a net-loser of population in terms of internal migration; the net growth of the city is derived from immigrants from overseas. Contrarily, some of the nation’s most rapid population growth has been observed in the North Coast of New South Wales. Walmsley et al. (1998) observed this counterurbanization migration flow and the decision-making process behind the migration. Specifically the researchers conducted a survey on 150 households who moved to the North Coast between 1896-1991, and collected migrant data regarding migrant profile as well as “push” and “pull” factors in the decision process.

The results of the study showed a number of interesting findings. The age of the migrants were shown in bimodal distribution, with both households with children (age 30-40s) and aged households (age 60+) prominent. Sixty three percent reported that their migration was the result of intra-organizational moves, such as promotions or transfers. This suggests that many migrants were able to control corporate staff employment in their favor, rather than quitting their current job and finding a new job in the North Coast. Furthermore, the migrants over-represented managerial and professional occupations and under-represented blue-collar occupations.

Regarding push and pull factors, research by Walmsley et al. (1998), in line with past research, supported that pull factors are more important for migrants’ decision-making process than are push factors. Specifically, pleasant climate, relaxed lifestyle, and attractive physical environment of the coastal city were rated as some of the strongest pull factors. Hence, the study showed that the behavioral pull factors were more important than economic factors. Furthermore, research revealed that as many as 37% of the migrants did not actually visit their future place of residence prior to migration. This suggests that migrants were acting on their overarching desire to live in the coastal towns rather than an emotional reaction to a pleasant visit to the area. They
then rationally evaluated the advantages and disadvantages of several coastal cities, as well as employment opportunities, to make a final decision regarding the place to live.

Another country that has experienced counterurbanization is the United States, studied by Williams and Jobes (1990). The researchers examined both economic and quality-of-life considerations in urban-rural migration. They administered a survey regarding migratory deciding factors to 299 recent in-migrants to the Gallatin Valley, Montana. Gallatin Valley is a rural but cosmopolitan area; while it is surrounded by mountains, trout streams, and ski areas, the dominant city of Bozeman has a state university and the population is highly educated. The survey asked for the participants’ socioeconomic status and whether their reason for moving was related to economic factors such as employment and income, or related to quality-of-life factors. The researchers define quality-of-life factors as anything unrelated to economic factors, including recreation, family and friends, natural environment, or safety.

The results showed an association between socioeconomic status and reasons for moving. Specifically, in-migrants of higher socioeconomic status reported both economic and quality-of-life reasons as their main reason for moving, while in-migrants of lower socioeconomic status reported quality-of-life reason as their main reason for moving. Williams and Jobes (1990) reasoned that families of lower socioeconomic status have less to lose economically, and hence may not have to consider economic factors as much as do high socioeconomic families. Families of higher socioeconomic status, on the other hand, have much to lose economically; rural jobs generally pay less, and hence their income can drop significantly if they do not consider economic factors in moving. Thus, higher socioeconomic status families defer moving until the economic factors are satisfied in their desired destination. Consequently, families of higher socioeconomic status reported both economic and quality-of-life factors as reasons for moving.
Taking these results into account, Williams and Jobes (1990) concluded that while economic factors are vital in migration decision process, they may only be facilitating factors rather than causing factors. In other words, families of both high and low socioeconomic status were initially motivated by quality-of-life reasons. For families of high socioeconomic status, the availability of well-paying jobs was also necessary in addition to the quality-of-life factors. In this sense, economic factors were secondary, incidental consideration for families of higher socioeconomic status, and less important for families of lower socioeconomic status.

**Rural Depopulation in Japan**

In countries such as Japan where rural out-migration is combined with serious aging and declining population on a national level, the outlook for the rural communities is grim. With other developed countries following the declining trend for population and fertility rate, the rural depopulation is an issue that needs a closer inspection (Gould, 2015).

While the studies on urban-rural migratory motivations in countries that have exhibited counterurbanization are extremely resourceful in understanding the case of Japan, there is an important distinction between Japan and other countries that experienced counterurbanization, such as Australia, the United Kingdom, and the United States. Ishikawa (1992) points out that migration in Japan in the 1970’s was characterized by a drop to zero or small positive net immigration to the urban areas, largely caused by the decrease in the number of young out-migrants from the rural areas. On the other hand, the U.S. in the 1970’s experienced a strong net out-migration from urban areas. This was largely caused by the influx of labor force into urban areas, fueled by the prolonged baby boomer era in the U.S. Hence, it is important to examine the migratory trends that Japan exhibited in the 1970’s on. Rural depopulation in Japan has been a severe problem in contemporary Japan for largely two reasons: the national depopulation caused...
by a lower fertility rate and the large-scale out-migration from the rural communities to urban cities.

**National decline in the fertility rate.** Fertility rate decline is a global trend, but the trend is especially prominent in Japan. Since 1947, Japan’s total fertility rate (TFR) has dropped from 4.54 to 1.41 children born by a woman in her lifetime in 2012 as shown in Figure 1.1 (World Bank). Although replacement rate is as low as 2.08 children per woman in Japan thanks to its extremely low infant mortality rate, TFR has been below replacement rate ever since 1974. The fertility decline is also reflected in the total population; in 2008, the nation saw the first decline in the total population from 127.8 million in 2007 to 127.7 million in 2008, and the decline has been steady since. Hence, in terms of demographics, Japan can be considered as the “leading goose” in the flock of nations bearing fewer babies ever year.

Japan’s characteristic as a demographic trend forerunner is also prevalent from the shift in working-age population. Working-age population, or residents who are between 15 and 64 years old, are important contributors to the national and global economy, and are essential for supporting the children and elderly in the society. According to Magnus (2009), in the U.S., this population is growing, but is projected to grow at a slower rate in the next few decades (Figure 1.2). For Western Europe, the working-age population growth has been declining, until it crossed over in the past decade; the population is now shrinking, and is expected to continue to shrink in the future (Figure 1.3). Similarly, China’s working-age population is expected to start shrinking in about 5 years (Figure 1.4). Turning to Japan, it is clear that the shrinking trend is not new to the country; Japan’s working-age population has been shrinking since the mid-1990s, and the shrink is predicted to become even more rapid in the future (Figure 1.5). As seen through fertility rate data and working-age population decline, Japan has been on the lead for the decline in
URBAN-RURAL MIGRATION MOTIVES

population. Hence, this essay will take Japan as a case study for examining the consequences of depopulation, in hopes to not only understand the current issues in Japan but also shed light on possible consequences other countries may face in the future.

Regarding the factors at play behind the decline in fertility, Becker (1960) has presented his theory, the New Household Economics, to explain the relationship between fertility rate and income. In his theory, Becker explains that children can be considered a durable good that yields psychic benefits to parents as well as economic benefits such as labor and social security for the future. Children also have both explicit and implicit costs. Explicit cost is the money a family has to spend on the child’s food, clothing, shelter, and perhaps education as well. Implicit cost, or opportunity cost, is the time and energy that the parents—and often more so the mother—spends on their child that could have been spent on other activities had they not had that child. Given these costs and benefit, couples can maximize their utility on children by manipulating the quantity and quality of their children.

While it would seem economically intuitive for families with higher income to have more children because they can afford explicit costs (i.e., food, shelter, and other items provided for children) better than families with low income can, it is essential to note that as family income rises, the opportunity cost of the parents’ time, especially mother’s time, also rises. When the mother’s income rises, it means that she is earning more money per hour, and every hour spent from her taking care of the child is a more expensive loss. This rise in the implicit cost of children deters families from having more children. In fact, if the amount of rise in the implicit cost is more than the rise in the income, couples may decide to have fewer children—which is the phenomenon we see in developed countries. Instead of investing on more quantities of children, parents may decide to invest on better quality of their children, which is also the trend
we see in developed countries. Hence, Becker’s model demonstrates how Japan and other
developed countries are experiencing lower fertility rate as a cost-benefit analysis result.

Atoh (2001) also explores the social value changes in the last few decades to account of
the decline in fertility rate. A longitudinal study of Japanese residents from 1970s to 1990s
examined various social and cultural values, such as views on stay-at-home moms, marriage, and
divorce. The results showed that more than 80% of both male and female respondents gave an
affirmative reply to the statement, “Men work outside, women keep home,” whereas the figure
fell to 66% among men and to 56% among women in 1992. In terms of views on marriage, the
perceived importance of marriage (i.e., agreeing to statements such as “Women’s happiness lies
in marriage” and “Women become mentally and economically stable by marriage”) dropped both
in men and women from 80% in 1972 to 40% in 1990. Contrarily, divorce was perceived to be
more acceptable; the percentage of people who gave an affirmative answer to the question “Do
you think it is allowable to get divorced if you are not satisfied with your spouse?” increased
from around 20% in 1972 to 40% in 1992. In short, the study showed that in the 1970s, many of
the responses were in line with the traditional views that it is a woman’s duty to get married at an
appropriate age, bear and raise the children as a stay-at-home mother, and stay in the relationship.
The responses showed, however, that many had abandoned this view in the 1980s, and even
more so in 1990s.

The value changes mirror the actual marriage behavior. Retherford, Ogawa, and
Matsukura, (2001) examined the marriage age and rate change in Japan between 1975 and 1995.
They found that mean age of marriage in Japan increased from 24.5 to 27.7 years for women and
from 27.6 to 30.7 years for men, making Japan one of the latest-marrying populations in the
world. Over the same period, the proportion of women who will never marry, calculated from
age-specific first-marriage probabilities pertaining to a particular calendar year, increased from 5 to 15 percent for women and from 6 to 22 percent for men. Hence, post World War II Japan experienced a delayed and decreased marriage, as well as value changes, and these changes correspond with the national decrease in fertility rate. While a causational relationship is difficult to claim, these researches shows a correlational relationship between lower fertility and factors such as marriage rate, marriage age, and cultural values and views towards marriage, divorce, and gender roles.

Hence, due to various reasons including higher implicit cost of children, a shift in social norm, and late marriage trend, fertility rate in Japan has been steadily declining, and the drop is more prevalent than almost anywhere else in the world today. This national phenomenon is one of the two factors that are contributing to the severe rural depopulation in Japan, especially in the post World War II period.

Large-scale out-migration. The large-scale out-migration from rural areas into large cities also became prominent in the post World War II period, around the latter half of the 1950’s. During this time, Japan’s manufacturing industry was quickly growing, giving a rise to a 10% increase per year in the gross national product. This growth in the manufacturing industry was supported by the Pacific Coast Manufacturing Belt, a 600-mile long belt of cities along the coast of Pacific Ocean that included the two largest metropolitan areas in the country, Tokyo and Osaka.

The out-migration from late 1950’s to 1970’s was largely characterized by migration of labor from rural villages into the Pacific Coast Manufacturing Belt. In 1975, the Belt, which accounted for 22% of the total land area of Japan, contained over half of the population. During this period, migration was influenced by large differences in income levels between the rural
prefectures and prefectures in the Belt. The differences in the income were very significant; in 1964, the per capita income level in rural prefectures such as Saga, Iwate, and Shimane, was less than 40% of the income level in Tokyo. Hence, economic factors and employment seemed to be the main migration factor for the out-migration in 50’s-60’s.

As a consequence of population concentration in the Pacific Belt, the standard of living in the rural communities was jeopardized. According to Kakiuchi and Hasegawa (1979), people in these communities became worried about the lack of public services and facilities such as schools and hospitals. They report that in Ehime Prefecture in the 1970s, some isolated communities had to contact doctors from Taiwan, because Japanese doctors were neither available nor willing to relocate to a rural village in Ehime. In another case in the same period, Toka-machi, another rural community in Niigata Prefecture, the nearest clinic was 30 minutes away by car in the good weather, or 2 hour on snow days. Hence, the researchers conclude that the lowered living standard during the 60’s and 70’s also contributed to the out-migration.

**Migration Turnaround: Urban-rural Migration**

As many other developed countries, Japan experienced a strong net inflow of migrants in the urban areas during the 1960s, a period in which the post-World War II baby boomers moved from rural areas to urban cities. However, in the 1970s, Japan saw a drastic reduction in the level of net inflow into cities. Ishiwaka (1992) examined the relationship between the rural-urban migration, demographics and economic growth in search for the explanation for the 1970’s migration turnaround. He concluded that the phenomenon was caused by two factors: the reduction in the rural-urban migration and the increase in the urban-rural migration. He emphasizes the former factor as the main contributor to the semi-counterurbanization in Japan in the 1970’s.
According to Ishikawa (1992), the decrease in the rural-urban migration can further be broken down into two causes: the reduced cohort size and reduced out-migration rate for young adults in their 20’s. In other words, the rural areas had less young people in general in 1970’s compared to 1960’s, because fertility rate dropped after baby-boomer generation. Furthermore, the younger people were more likely to stay in the rural areas, because more jobs became available in the rural areas in the 1970’s. Ishikawa points out that in the 1970’s, Japan’s manufacturing industry dispersed into rural areas. Hence, manufacturing jobs that were confined to urban areas in the 1970’s became available in rural areas in the 1970’s, further decreasing the level of rural-urban migration. In addition, the level of urban-rural migration increased slightly in the 1970’s, contributing to the reduction in the net inflow into the cities. Ishikawa (1992) concludes that manufacturing deconcentration—and hence the increased availability of manufacturing jobs in the rural areas—contributed to this urban-rural migration.

Despite the slight turnaround in migratory trend in the 1970’s, it was not long-lived. During late 1980’s and early 1990’s, as Japan experienced a “bubble economy,” the income gap between the wealthy, urban dwellers and poor, rural residents deepened further. Feldoff (2013) asserts that, with population aging and shrinking on a national level, the disparity between the urban and rural areas will only grow.

Hence, there is little literature that reveal urban-rural migration in contemporary Japan. However, these few studies show that the migratory reasons seem to include non-economic factors, such as better environment, marriage with local people, position changes in the workplace, and better residential circumstances (Working Group on Over Depopulation, 2010). Taking this situation into consideration, Hayashi (2015) attempted to measure welfare using an alternative indicator to GDP, or the Genuine Progress Indicator (GPI). The traditional GDP
measures welfare only in economic terms, whereas GPI into account non-economic factors such as cost of commuting, pollution, car accidents, overtime work, and climate change. Using GPI, Hayashi compared urban and rural prefectural GPI during the 1980’s to 1990’s “bubble economy” era as well as during the post-bubble economy era.

The results showed that under the bubble economy, GDP grew rapidly in the urban areas and slowly in the rural areas, creating a large rural-urban GDP disparity. Contrarily, GPI growth was slow for both rural and urban areas under the bubble economy, and the rural-urban disparity is small in terms of GPI. Both economic factors (i.e., low cost of living and relatively equal income distribution) and non-economic advantages (i.e., good environmental conditions) in the rural areas raise its GPI. According to Hayashi (2015), these noneconomic factors are vital in measuring rural-urban disparity.

Hence, while urban-rural migratory motivation in Japan is largely unexplored, it is an area that merits a study. From past studies in Japan and other countries, both economic and non-economic factors appear worth examining.
Chapter III: Current Study
Thus far, this thesis has observed the importance of internal migration, specifically urban-rural migration. Japan, with its declining population spearheading other developed nations’ demographic trends, has a uniquely severe situation with rural depopulation. This makes Japan a valuable case study to evaluate rural sustainability, but few studies have conducted in-depth research on migratory motivations for urban-rural migrants in Japan. To add to this shortcoming in the literature, I have conducted a biographical narrative interview on the in-migrants of Oonan Town, Shimane Prefecture.

**Oonan Town**

Oonan Town is located in Shimane Prefecture, which is a mountainous prefecture in the western part of Japan. Oonan Town currently has a population of about 12,000, and roughly 80% of the land is covered in woods. It rains frequently in the summer, has a large day-night temperature discrepancy, and has heavy snow in the winter. The major industry in the town is agriculture, with 45% of the families (2,042 out of 4,510 families) in the town officially registered as farmers. Many families that are not officially registered as farmers also farm in their back yard or in the community farm to grow enough crops to feed at least their family.

Within the town, there are also hot springs, a ski resort, camping facilities, and a country golf club for residents and visitors of Oonan Town. There is one hospital and eleven clinics in town. There are 8 elementary schools, 3 middle schools, and 1 high school, most of which run school buses, and no universities or other higher education facilities. Internet service and TV connections are generally available. The town has supermarkets, and fresh groceries, cooking and office supplies, and other daily necessity items readily accessible.

Public transportation is poor in the town. Buses run sparsely throughout the day and bus routes do not cover the whole town. In fact, private car and the ability to drive is one of the
minimum requirements to have a decent standard of living. The town is also about an hour and fifteen minutes away from Hiroshima City, which is the tenth largest city in Japan with a population of 1,174,000. In order to access shopping, entertainment, and other facilities in Hiroshima City, a car is a necessary resource.

**Demographic Profile**

The population in Oonan Town was 11,595 as of 2010, and has been on a decline since the 1980’s (Figure 2.1). In addition to the decline, aging has been a prominent trend in the demographics. Figure 2.2 shows that the 0-14 year old age group and 15-64 year old group have been shrinking severely, while 65 years or older age group’s shrinkage has been mild or even reversed in throughout the years. As of 2010, 40% of the population is age 65 or older; this is an extremely high percentage, in relation to the national and even Shimane Prefectural average.

The cause of population shrink is twofold, as is it in Japan as a nation: natural decline (i.e., number of deaths trumping the number of births) and out-migration. According to a survey by Basic Resident Register, the number of deaths has stayed well above the number of births since 2007; in fact Oonan Town had an average net loss of 166 people per year between 2007 and 2014 due to natural deaths and births (Figure 2.3). However, the fertility rate in Oonan Town has been relatively high (Figure 2.4), the rate exceeding national and Shimane prefectural average rate. In the past in 2007, 2008, 2010, and 2012, it has met and exceeded the replacement rate of 2.07. Hence, the reason behind natural loss in the number of people in town can be attributed to an extremely high number of deaths from aging rather than a low number of births.

Regarding the second reason for population decline—migration and mobility of the people—Oonan Town has seen a turnaround in the past few years (Figure 2.5). Until 2011, the town had more out-migrants—or “leavers” who migrated out of Oonan—than in-migrants who
came to the town from elsewhere. In 2012, however, the number of in-migrants exceeded the number of out-migrants, and this trend has been continuing since. The Oonan town government attributes this reversal to the public policy that was implemented in 2011. In 2011, Oonan Town started campaigns that targeted younger generations “U-turn” and “I-turn” in-migrants. U-turners are in-migrants who have previously lived in Oonan, moved out to a larger city, and then made a U-turn back to Oonan. I-turners are in-migrants who were born and raised outside of Oonan, then moved into Oonan. The government attempted to make Oonan more attractive to U- and I-turners with a campaign and a slogan of “The Best Village in Japan to Raise Kids.” According to National Census Survey, most of the U- and I-turners that came back to Oonan town were in their late 20s or early 30’s (the generation young couples) or early 60’s (the generation of retired migrants). In terms of out-migration, the largest generation of leavers is late teens and early 20’s, which is the transitioning age from high school to college and college to post-graduation positions.

**Population Plan**

While Japan as a nation faces a declining fertility rate, rural communities are especially vulnerable to the loss. Oonan Town is no exception; the town has been facing population decline since 1985. With overall population decline and severe aging of the population—more old generations and less children—the sustainability of the community has been jeopardized.

**National plan.** In response to the national depopulation, the Japanese government has set a basic policy for “Town, People, and Employment Revitalization Long-Term Plan” in September 2014. This national plan entails three main objectives with five subset objectives. The three main objectives are 1) enabling younger generations to achieve employment, marriage and child-raising, 2) halting Tokyo metropolitan concentration, and 3) resolving regional issues by
utilizing regional strengths. The five sub-objectives are a) creating a new flow to rural areas, b) establishing new jobs in rural areas, c) enabling younger generations to get married, have children and raise children, d) creating rural areas that are in accordance with the contemporary society, and e) strengthening the connections and relationships among the rural regions.

Oonan Town population plan. In line with the national population plan, Oonan Town has also set up three strategic visions for future Oonan Town (Oonan Town Government, 2015). Their first goal is to promote “furusato,” or hometown, for the residents. Specifically, the town aim to revitalize their industry and create employment and improve public transportation system in order to halt the out-migration of younger generations. Their second goal is to set up a community that is attractive for raising kids. Specifically, they aim to offer continuous support throughout the process of marriage, pregnancy, childbearing and rearing as a community. Finally, their third goal is to facilitate connections within residents as well as with outside the town. Specifically, they aim to promote community events for residents and endorse their unique products for tourists. Through these visions, they aim to retain their residents to the town, attract child-raising families, and attract possible tourists. Furthermore, they have set up their official town slogan as “The Best Village in Japan to Raise Kids” in order to create the foremost town image as an attractive town for raising children. By 2060, they hope to retain the population of 10,000 as well as change the demographic profile and enlarge the percentage of young generation in the population.

Methods

Participants

Six families in Oonan Town were interviewed for the current study; four of them were I-turn families, and two of them were U-turn families. The participants were selected by the In-
migration Support Center at Oonan Town Government. The support center reached out to 10 recent in-migrant families that moved to Oonan Town from a bigger city within the last five years to request a participation in a study of migratory motivation in rural Japan. Of the 10, six families responded and confirmed to participate in the interview. All but one family had either the husband or the wife participate in the interview; one family had both the wife and the husband present at the interview.

**Interview procedure**

Interviews took place either in the Oonan Town Government building or in the participants’ home, depending on their preference. The interviews were one hour for each participant, and were conducted in Japanese. Participants first filled out a written questionnaire that asked for basic demographic information, then were asked to engage in an oral interview. At the beginning of the oral interview, the researcher explained the research procedure, the need to record the interview, and protection of individual information and confidentiality. Upon agreement, the interviewer activated a voice recorder on a laptop to record the conversation. The questions were asked in a natural, conversational style, but they were developed and written down prior to the interview so that the interview questions were consistent. Due to the exploratory nature of this research, follow-up questions were asked in addition to the prepared questions to acquire additional, in-depth information regarding the migratory motivations.

Upon completion of the interview, the interviewees were thanked for their time and received a small gift (i.e., a university pen) as a thank-you gift for participation. They also received contact information in case they were interested in the results of the research.

**Measures**
As noted earlier, the interview involved written and oral component. Measures were developed prior to the interview according to the two migratory frameworks, economics and behavioral.

**Demographics.** The written questionnaire asked for basic demographic information, including gender, age, current occupation, income, and level of education.

**General Migration Motivation.** At the beginning of the oral interview, questions were asked regarding general migratory motivation. The questions included “At what age did you leave Oonan Town?” and “How did you decide to leave Oonan Town? Please tell me about your process of decision.”

**Economics Framework Questionnaire.** Half of the interview questions were related to economic incentives, developed from the Todaro Model. Sample questions included “When you came back to Oonan Town, were you expecting your income to change? If so, how?,” “Did you know that you would have good job opportunities in Oonan Town, or did you think it would be hard to find a job here? Why did you think so?,” “Were you expecting the cost of living (e.g. rent, transportation) to change when you moved to Oonan Town? Did it actually change?,” and “Were there other financial benefits that Oonan Town offered to you that made you want to come back and live in Oonan Town?”.

**Behavioral Framework Questionnaire.** The other half of the questions asked during the interview were related to behavioral framework. Specifically, the questions asked about participants’ identification “of” Oonan Town and identification “with” Oonan Town. For example, questions that examined identification “of” ideas included: “How would you describe a typical person in Oonan Town?,” “How would you describe a typical lifestyle in Oonan Town?,” and “How would you describe your image of Oonan Town as a place?”.
identification “with” Oonan Town included “Did you feel emotional attachment to the city you lived in before you left for Oonan Town? Was it hard to leave there?” and “Do you feel like Oonan Town is your home territory? Why or why not? Do you have family relatives here?” Do you feel like the city was your home territory? Why or why not? Do you have family relatives there?
Chapter IV: Results and Discussion
Results

Demographics

Of the six participants in the study, three were in their thirties, two was in her forties, and one was in his sixties. Five of the participants were employed and one was unemployed at the time of the interview; three participants worked for the town government office, one worked for water facilities, and one was a self-employed cafe owner. Their personal income varied between $10,000 per year to $40,000 per year. All of the participants lived in the Hiroshima City prior to their move to Oonan Town.

Migration Motivations

While individual interviews each had its own story and a myriad of personal preferences, common themes arose regarding reasons for migration. The categorical themes presented were 1) family ties, 2) life course events, 3) lifestyle preference, and 4) financial factors. The following section will examine the four categories with interview excerpts.

Family ties. Family ties to Oonan Town were a common, strong pull factor among all six participants. U-turners, who were born and raised in Oonan Town, still had their parents living in the town, which acted as one of the main factors pulling them back. However, family ties seem to provide an incentive to come back for different reasons. For Mrs. K, a 36 year-old U-turner who lived in Oonan Town until high school and is now a mother of two children, spoke that presence of her parents in Oonan Town provided convenience and support for her and her husband:

Before [when I lived in Hiroshima], my parents’ home was far and if my kids got sick, me or my husband had to take a day off from work to look after them. Now I can depend
on my parents to take care when my kids are sick and I don’t have to worry about taking off from work.

For other participants including Mrs. I, Mrs. M, and Mrs. T, the migration was rather a forced situation caused by family ties. Mrs. I, a 42 year-old wife of a U-turner husband and a mother of two children, emphasized her husband’s parent’s needs as a reason for migration:

The biggest reason why we came to Oonan Town was because my husband’s mother got into an accident and became in need of a caretaker. My husband’s siblings had also moved out of the town, so we had to come back and take care of her.

Similarly, Mrs. M, a 44 year old I-turner with two children, referred to her husband’s grandparent as a reason for the move:

My husband’s grandfather is in his 90’s and he lives by himself in Oonan Town, and we decided to come back and take care of him.

In other cases, family ties played a role because the children acme back to depend on the parents, rather than parents looking for caretakers. Mrs. T, a 37 year-old single mother U-turner, explained that she was forced to depend on her parents after her husband’s death:

My husband passed away two years ago. His parents lived in the same city we lived, but I felt like I had lost all family ties in the city. With my husband gone, I had to depend on my parents, and I decided to come back to Oonan Town.

Yet for others, family ties provided an opportunity to visit and know about Oonan Town as their potential migration destination. Mr. Y, a 31 year-old I-turner who opened a private-owned cafe a few years ago, spoke about his grandparents and childhood memories as the reason why he considered moving into Oonan Town in the first place:
I was born and raised in Hiroshima, but as a child I spent every summer in Oonan Town because my grandparents lived here. I knew this place, I knew this town, and I knew I wanted to move here.

Mr. D, 62 years old and now retired, recalled that he and his wife were looking for a place to spend his post-retirement life when he visited his niece in Oonan Town:

After I retired, I spent a few years looking for potential areas to move to. We traveled through Kyoto, Kyushu and Shikoku, but we weren’t able to find suitable houses. We came to Oonan Town a couple of times too because my niece had moved here and she had recommended this place to us.

Hence, for Mr. Y and Mr. D, family ties were not the final deciding factor, but rather a starting point that gave them a change to see and learn about what the town had to offer. In all, family ties played different but significant role in the migration decision-process for all participants in the study.

**Life course events.** Past studies have observed that life course events such as having a new child or losing a job can have a significant influence on residential mobility (Rabe & Taylor, 2009). In the current study, similar patterns were observed. Four out of six participants of the study had young children, and three referred to their children as a contributing factor to migration. Mrs. K mentions that the birth of the second child to explain the timing of her family’s migration:

We had our second child, and I thought back to my own childhood. I myself grew up in Oonan Town with my grandparents, and I wanted to give that experience to my kids too. For Mrs. K’s family, the birth of the second child especially pulled them to Oonan Town, where daycare for all children is free. Similarly, Mrs. M mentions having a second child was a pushing
factor to consider migrating out of Hiroshima. For Mrs. I and her family, their children were not a deciding factor for migration itself, but considerably affected the timing of the move. Mrs. I noted,

My husband moved here two years before my children and I did. We stayed behind because I was still working in Hiroshima and couldn’t transition yet, and because my older child was in middle of his kindergarten. We waited for two years, when my older child was transitioning into elementary school and my younger kid was transitioning into elementary school, and I myself was done with my work.

Hence, the life stages such as having a child or their child getting into school was an influencer in the migratory decision process for the above three participants. There were other life course events and life stages that motivated people to move to Oonan Town. When asked to identify one deciding factor for migration, Mr. Y referred to their age and life stage as his motivation to get out of Hiroshima:

The timing was important. I was 28 then, and I felt like it was a time to decide between staying in Hiroshima and building on the career path with the job I had back then, or move to another place and start a brand new life while we still don't have kids and have more freedom in terms of time and money.

For Mrs. K, the significant life course event was the loss of her husband, which then forced her to rely on her parents’ as mentioned earlier. For Mr. D, retirement was the event that prompted him to consider moving to another area for retirement life. For Mrs. I, the children affected the timing of migration, and for Mr. Y, their age and the fact they did not have children were push factors for moving into Oonan Town.
Lifestyle preferences. Another common theme that arose in the interview was the lifestyle in rural areas. The participants compared rural living to urban living in their subjective evaluation, and stated that they preferred rural lifestyle to urban lifestyle. In this category, little to no remark was made regarding the distinctive characteristics of Oonan Town; rather, participants reported their general attraction to rural way of living. Mrs. T, a widowed U-turner, highlights the fact that there are too many options and choices to be made in urban living, and stated that the simple way of rural living is more suited for her:

I think the lifestyle in Oonan Town fits me way better than that in Hiroshima City.

Maybe the way I live isn’t that different, but I feel mentally at peace here in Oonan Town. In Hiroshima City, everything cost money and energy, and there were too many options for anything and I felt like I was constantly cramming in activities. When I had to decide which kindergarten to put my kid into, I visited multiple kindergartens to collect information about each one, and I was so overwhelmed by the choice I had. Oonan Town doesn’t really have a lot of options, and puts my mind at peace. I don’t feel like I have to be a certain way or I have to make my kids to be a certain way here. In Hiroshima, I felt like there was a lot of social pressure from the people around me. I found myself comparing my kids and family to the people around me. Here, I don’t really compare myself with the family of my age and everyone seems comfortable the way they are. On the weekends, I’ve been going out with other moms and kids, and that never happened in Hiroshima. I didn’t really have a deep relationship with other families in Hiroshima, and a lot of families moved in and out of the city anyways. Here, I feel like we have a community because families intend to in this town long-term.
Mr. Y, an I-turner cafe owner, was also seeking for a rural lifestyle with his wife. For them, stress from the work culture in Hiroshima City was what had made them turn to an alternative lifestyle. Mr. Y recalls:

> When my wife and I were working Hiroshima City, our work was so demanding, and we often spent the weekends working too, and we were just so exhausted. I was a graphic designer and my wife a freelance writer back then, but we wanted to quit our job and get out of the stressful life in Hiroshima City. I had a dream of opening my own shop someday, and we decided to move to make that dream come true.

Hence, for Mr. Y and his wife, the lifestyle in Hiroshima was a push factor that made them want to leave the town. For Mrs. K and her family, lifestyle was both a push and pull factor; they were pushed out of Hiroshima and pulled into the rural life in Oonan Town. Mrs. K recalls:

> The air wasn’t very clean in Hiroshima, and both my husband and I were struggling from asthma, and we wanted to move somewhere with more nature around us. Since we moved to Oonan Town, work is still busy, but I feel like our life is calmer and slower. There’s less traffic, it’s dark and quiet at night and we like that. I feel more at peace mentally.

For others, it was the past experience of living in a rural setting that attracted them back into the rural setting. Mrs. M and her family lived in rural New York before moving to Hiroshima, and she refers to that experience to explain her motivation for moving to Oonan Town:

> I love the ocean and at first I was a little opposed to the idea of moving into the mountains, but rural New York turned out to be not bad. It was quite fun actually, taking a walk in the deep mountains with my young child in my arms. I enjoyed the life in the mountains more than I thought that would, and it was my first experience living in a
place like that. I think that because I had that experience, I wasn’t really opposed to the idea of moving to Oonan Town.

Here, Mrs. M’s assumption is that life in the rural areas—although in different countries—is comparable enough to give her an idea of what the general lifestyle would be like. Similarly, Mr. D, a retired I-turner, refers to his experience of living in another rural area in Japan:

My last three years of work was in rural area in Yamaguchi Prefecture. My wife and I really liked living there. Everything felt freer, and we realized how much we liked rural lifestyle. I’ve actually also worked in Tokyo when I was younger, but living in Tokyo was too busy and exhausting for me.

**Financial factors.** The final common theme that was mentioned in the current interview was financial factors, such as lower cost of living in Oonan Town and financial support from the town government (e.g., free children’s daycare and financial aid for I- and U-turner housing renovation). Majority of the participants mentioned that lower cost of living in rural area was attractive because it enables them to pursue better quality of life, such as obtaining better housing or having more children. Mr. Y, the cafe owner I-turner, explains that the decreased cost of living positively impacted his housing quality:

I wasn’t really concerned about the wage decrease when moving to Oonan Town, because rent and cost of living is so much cheaper here compared to Hiroshima. I used to live in a two-room apartment back in Hiroshima, but now we live in a newly built house with a backyard. And since my grandparents farm, we never have to worry about buying vegetables. In that sense, I don’t feel like we’re more financially challenged than we were in Hiroshima, even though our income has come down.
Similarly, Mrs. K, an U-turner, also recalls that she and her family were not concerned with the decrease in income for very similar reasons:

We knew what our job and our pay was going to be before coming to Oonan Town, and we knew that it was going to be lower than it was in Hiroshima. But we also knew that the cost of raising children would be significantly lower here because of the town’s free child daycare policy. Our rent was cheaper because we live in a town-owned housing now, and we can get vegetables from my parents and neighbors so that’s also a lot cheaper. Also, Hiroshima’s traffic was pretty bad and we spent a lot on gas, but Oonan Town has none of that. I think we’re saving a lot on the cost of living here.

For Mrs. K, the lower cost of living was especially attractive because it would financially enable them to have another child. She says:

One of the biggest reasons why we came back was because we wanted a third child. In Hiroshima, living is expensive and it was financially impossible to have another child. Here, daycare for all kids is free, and my parents can help me look after them, and I think that we can have another child.

Mrs. I, the wife of a U-turner husband, also talks about the decrease in income, and explains that her concerns were alleviated by the financial support by the town government:

My husband’s income decreased when we moved to Oonan Town, by about 10% or so, but we live in his parents’ house now and don’t have to pay rent. Also, we’ve really appreciated the fact that Oonan Town offers free daycare for all children, because that takes a lot of financial burden off of us. We also renovated our house when we moved into my husband’s parents’ house, and the town offers an aid for the renovation and that was very helpful too.
Mrs. T, the widowed U-turner, mentions that financial worry was a big push factor out of Oonan Town. She explains:

I’m definitely less concerned about finances here in Oonan Town. In Hiroshima, if I don’t have money, I just can’t make a living. Here, a small income is enough to get me through. I live in my parents’ house and we have a little farm, and my children’s daycare is now free, so I barely have to spend anything. So I have a lot less to worry about financially.

In fact, the financial difference has impacted her well-being as well, Mrs. T says:

I was always concerned about money in Hiroshima. Now that I’m in Oonan Town, I don’t have that worry occupying me, and I have time and energy to think about what kind of life I want for myself and my kids in the future.

Hence, it seems that financial factors such as lower cost of living and town government’s free daycare policy were an important pull factor to Oonan for people such as Mr. Y, Mrs. K, and Mrs. I. For Mrs. T, it was rather a push factor out of urban area.

The analysis shows four major factors that contributed to motivate the current participants to move into Oonan Town. Table 1 shows a summary of economic factors (i.e., financial factors) and behavioral factors (i.e., family ties, life course events, and lifestyle preferences) that each participant remarked.

**Discussion**

With Japan losing its overall population due to low fertility rate, rural depopulation has become a prevalent issue across the country. In this thesis, I examined Oonan Town in Shimane Prefecture as a case study, which has been relatively successful in getting in-migrants back into
Table 1

Economic and Behavioral Factors for Each Participant

<table>
<thead>
<tr>
<th>Participant Profile</th>
<th>Economic Factors</th>
<th>Behavioral Factors</th>
</tr>
</thead>
</table>
| **Mr. Y (I-turner)** | • Lower cost of living  
• Free daycare for children | • Visited his grandparents as a child  
(family ties)  
• Wanted to move before having children (life course event)  
• Stress from Hiroshima’s work culture (lifestyle preference) |
| A 31-year old cafe owner who has recently had a child in Oonan Town. Born and raised in Hiroshima City, and moved to 3 years ago. | | |
| **Mrs. M (I-turner)** | • Lower cost of living | • Husband’s father is 90 years old by himself in Oonan (family ties)  
• Liked the rural setting in New York State (lifestyle preference) |
| A 44-year old mother to two children. Lived in Hiroshima City, Osaka, and New York State in the past, moved to Oonan Town 2 years ago. | | |
| **Mr. D (I-turner)** | | • Was introduced to the town through his niece (family ties)  
• Liked living in Yamaguchi Prefecture, another rural region of Japan (lifestyle preference) |
| A 62-year old retired man. Spent all of his life in Hiroshima City, but wanted to move to a rural setting with his wife upon retirement. Has been in Oonan Town for 9 months. | | |
| **Mrs. K (U-turner)** | • Lower cost of living  
• Free daycare for children  
• Wanted a third child | • Parents live in Oonan Town, wanted to rely on them for raising children (family ties)  
• Had a second child (life course event)  
• Air pollution in Hiroshima, wanted slower living (lifestyle preference) |
| A 36-year old mother to two children. Born and raised in Oonan Town, and worked and married in Hiroshima City. Came back to Oonan Town one year ago. | | |
| **Mrs. T (U-turner)** | • Financial difficulty in supporting herself as a single mother in Hiroshima  
• Lower cost of living  
• Free daycare for children | • Husband’s death (life course event)  
• Parents live in Oonan Town, housing available for free (family ties)  
• Stress as a single mother and too many options in Hiroshima (lifestyle preference) |
| A 37-year old widowed mother to two children, born and raised in Oonan Town herself. Came back to Oonan Town 2 years ago. | | |
| **Mrs. I (I-turner)** | • Lower cost of living  
• Free daycare for children  
• Financial support for housing renovation | • Husband’s mother got into an accident and cannot live alone (family ties)  
• Children getting into school (life course event) |
| A 42-year old mother to two children, whose husband was born and raised in Oonan Town. Has been in Oonan Town for one year. | | |
the community. I conducted an oral interview to in-migrants of Oonan Town to determine what kind of factors played a significant role in the migration decision-making process. The data have been presented above, and in the subsequent section I evaluate the collected data in relation to the two theoretical frameworks, the economics approach and the behavioral approach.

**Evaluation for Behavioral Framework**

The current data largely supported the behavioral approach proposes that in a migratory decision-making process, low place utility (i.e. a dissatisfaction about an individual’s economics approach focuses on urban-rural wage and job opportunity disparity as leading factors for migratory decision, the behavioralists advocate that 1) the stressors are not restricted to economic factors and 2) they are not restricted to objective factors, but rather the subjective perception of their current situation substantially influences the decision making process.

In support of this approach, all six participants in the current study described their decision to migrate as a personal story, in which various subjective judgments and personal preferences played a large role. For example, for some who prefer the busy city life, Hiroshima City would have a high place utility. However, because of the individual preferences, Mr. Y describes it as “exhausting” and “stressful.” Similarly, Mrs. T was “overwhelmed by the choice” she had in Hiroshima, and felt that there were “social pressure” that made her constantly compare herself and her family with others. These are subjective judgments of the place that consequently led to stress for the place they lived.

In addition, there were factors outside of economic sphere that considerably influenced their decision-making process. As noted above, the interview data were identified into four categorical factors: 1) family ties, 2) life course events, 3) lifestyle preference, and 4) financial factors, and first three are non-economic. Granted, these factors were not mentioned clear-cut
from each other; rather, one overlapped with another. For example, in Mrs. T’s case, she lost her husband (life course event), and decided to turn to her parents back in Oonan Town (family ties) because she was challenged to support her family financially (financial factor), and because she was exhausting herself trying to live a city life as a single mother (lifestyle preference). Here, all four factors overlap with one another—had her husband not deceased, they may not have considered moving at all. Had she not had her parents and her childhood memory in Oonan Town, she probably would not have thought of Oonan Town as her potential option, at least not immediately. However, the data speak that factors outside of financial issues can be very relevant to migratory decision process.

Thus, the current data suggest the two characteristics of the behavioral approach, which are that 1) the stressors are not restricted to economic factors and 2) the subjective perception and judgments of their current living substantially influences the migratory-decision making process.

**Evaluation for Economics Framework**

Although financial factors were relevant to the migratory decision-making process, the economics approach was not as applicable to the current study as the behavioral approach. The economics approach focuses on the urban-rural wage differences as well as job attainment possibility as factors that lead to migratory decision. For Oonan Town in-migrants, employment was hardly a pull factor into the town. All participants reported that their income fell when they moved to Oonan Town. Some had employment in Hiroshima City that they were satisfied with, but decided to move because of other factors at play. Mr. Y was unsatisfied with work, but reports that he disliked the lifestyle associated with work rather than the financial aspect of his work. In fact, the cafe he now owns in Oonan Town is not only considerably lower in income
compared to the graphic designer job he used to have in Hiroshima, but is also a less stable source of income. Thus, the economics approach did not apply to the participants in the current study in Oonan Town.

One reason behind this may be that Oonan Town, as are many in-land rural regions in Japan, is overwhelmingly agricultural. As noted earlier, the major industry in the town is agriculture, with 45% of the families in the town officially registered as farmers. In addition, many run farming as a side business or as their source of groceries. There are few employment options available in Oonan Town for non-farmers. There are no factories or manufacturing units to provide a large employment outlet to blue-collar workers. Most white-collar jobs available in town are those associated with the town government. Because of this characteristic of Oonan Town, the employment options are not attractive. In cases where a larger employment outlet is available, the economics approach may be more applicable.

Another point to note about the economics approach is that it is a “macro” approach. It acknowledges that not everyone functions in the same manner, but asserts that when observed on an aggregate level, the general migratory trend will be determined by the employment wage and availability. The nature of the current study observes the individual process rather than an aggregate trend, which may be another reason why the economics approach is less applicable to this case.

**Analyzing the Success of Oonan Town**

Oonan Town has been successful in the recent recruitment of in-migrants. The success is prevalent in the demographic profile; 2012 saw a turnaround, where in-migrants exceeded the number of out-migrants. It was also clear in the interviews; all participants indicated their intention to stay in the town to see their retirement age in the town. From the four migratory
factors observed in this study, the success of the Oonan Town seems to be twofold. The first reason behind is involves life course event and financial factors, and the second reason involves family ties and lifestyle preferences.

The first reason behind the success is the effective targeting of the young couple generation. In 2011, prior to the demographic turnaround, Oonan town government strategized their public policy to target families with young children as in-migrants. The government campaigned the town as “The Best Village in Japan to Raise Kids” to make Oonan more attractive to U- and I-turners, especially the family with young children. Specifically, they made daycare service free to all children, and put forth “The Best Village in Japan to Raise Kids” as their foremost vision of the town. In fact, in a survey administered to 2,000 Oonan residents in 2015, 89.4% of the participants reported that they knew their town slogan “The Best Village in Japan to Raise Kids.” This helped them target the younger couples, who are going through a life course event (i.e., marriage and having children), and consequently are more mobile and prone to consider moving. The town naturally has a lower cost of living than urban cities do, and in addition, they have set up other financial support that specifically targets U- and I-turners with young kids, which are free daycare and house remodeling support. As the current data show, migratory decision is made on an individual level, and a town cannot effectively strategize to recruit anyone and everyone; it must target a specific type of family with specific preferences. Oonan Town was successful in targeting a family whose children are younger than elementary school age, and offering the kind of financial support that those families would need as an incentive to move in. Hence, the Oonan government policy contributed to the two factors for migratory motivation—life course event and financial support.
The second reason for their success is the care that the Oonan government takes prior to the move in making sure that the in-migrants receive an accurate image of what their life in the town would look like. After all, Oonan Town is a small rural village—it has its beauties and virtues, but there are no large shopping malls, diverse choice for dining, or nightlife options that urban dwellers enjoy. Mr. Yokosu, an In-migrant Coordinator working for the Oonan Town government, reports that there were unfortunate cases in the past in which the in-migrants were not receiving accurate information regarding what their life would be like in Oonan Town. The town government and employer were presenting a misleading image of Oonan Town, making it seem more convenient and urban-like than it actually is. This attracted U- and I-turners who were not fit for the rural living style. Consequently, those in-migrants could not stand living in Oonan after a few years of living there. Henceforward, the town has been careful about how they project the town’s “image” to the potential in-migrants. The government created a specific position called In-migrant Coordinator, for which Mr. Yokosu works now. In an interview, he emphasized the importance of passing on an accurate representation of the town to potential in-migrants. He remarked:

My job is a mix of town guide and a real estate. Oonan Town has been getting a lot of media attention recently due to the success in attractive families with younger families, but media doesn’t always portray all the pros and cons about the town. The town government is getting more and more contacts from families interested in moving in, and my job is to set up a tour for them where I show the town around and also show them available housing in town. I’m careful not to project everything in a better light than it actually is—we don’t want any bad surprises once they’ve moved in. For example, I
always tell them that public transportation is not thorough here and that they really need a driver’s license and a car to live here.

For potential in-migrants, Mr. Yokosu is often the first contact with a person of Oonan Town. Hence, Mr. Yokosu recognizes the importance and responsibility he has in representing the townspeople and projecting an image of what it’s like to live in Oonan Town. In addition, Mr. Yokosu stressed the importance of after-care for in-migrants:

I visit all in-migrants at least once a month, just to check up on them. Most of the time they adjust to the community pretty smoothly, but sometimes I find that they have trouble and don’t know who to talk to. I’m an in-migrant myself and I understand the struggles of moving into a new town, and it’s my job to make sure that people have the right kind of support.

The care that Mr. Yokosu takes seemed to have a great influence on the in-migrants in the current study. When asked if they were worried about moving into a town where they did not know anyone, the participants often mentioned Mr. Yokosu as being very caring and reliable in the migration process.

In the current data, two of the four factors were innate, personal factors. Family ties and lifestyle preferences are internal factors that are generated by individuals rather than imposed by the town. In other words, the participants already had family members living in Oonan Town, which naturally led them to consider the town as a migration destination option; the town did not artificially create that. Similarly, the participants naturally had a preference for rural style of living. This can be contributed to the fact that Oonan Town government takes a great care in making sure that what the in-migrants are looking for and what the town has to offer is a good match. As Mr. Yokosu mentioned, his responsibility is not to paint the town in the best light...
possible but rather to present it in a fair, accurate way. By doing so, they filter out the potential in-migrants who would not be happy living in Oonan Town. The remaining are those who truly do desire the rural living style that is available in Oonan Town. Hence, the town caution in presenting the accurate image of Oonan Town resulted in a good match between the in-migrants’ natural preference and Oonan Town’s characteristic; consequently, in the current study, personal, innate factors—family ties and lifestyle preference—were also important factors in making the migratory decision.

Thus, from the current data and the four factors that contributed the most to the decision to move into Oonan Town, it seems that the town has been successful for two reasons: for its policy that targeted specifically families with younger children, and for the great care they take when introducing the town to potential in-migrants.
Chapter V: Conclusion
While rural depopulation in Japan and the sustainability of rural communities are of high interest to the national government and residents in Japan, there is little literature on I- and U-turners in rural Japan. The current literature fills in a gap by bringing together international studies on urban-rural migration and original data collected from an exceptional case study of Oonan Town in Shimane Prefecture. Furthermore, the current study employs a biographical interview approach to gain a comprehensive view of urban-rural migration process. By asking the participants to explain their decision-making process as a personal story, I was able to collect rich data that include their past experiences, conflicting influences, and future plans. Past studies have also highlighted the benefits of qualitative research in migratory decision-making process, because “the biographical narratives of migrants themselves permit a fuller understanding of the complex decision-making associated with… migration flows (Stockdale, 2002, p.355).”

In addition, the current study is also valuable because it includes data from both the residents’ perspective as well as from the town government’s perspective. Mr. Yokosu, the immigrant coordinator, offered an insightful perspective on the challenges of recruiting and sustaining I- and U-turners into the town.

While the current study offers insightful data regarding the migratory motivation factors, the small participant pool creates a limitation. Six families participated in the study, all of whom were recruited by the town government. The small participant pool places a limit on the power of the study data. In addition to the quantity of the participant, the quality of the participants places two limitations on the current study. First, all participants lived in Hiroshima City before they moved to Oonan Town, which may have limited the scope of the factors involved in the decision-making process. Hiroshima is an hour ride away from Oonan Town, and many
participants in fact said that they often make weekend trips to Hiroshima. Had there been participants who previously lived in Tokyo, a megacity that is half-day trip away from Oonan Town, the incentives to come to Oonan Town would probably have to be stronger, and may include different factors. Hence, interviewing in-migrants from other cities would have expanded the scope of the study, enabling us to explore what kind of factors would be powerful enough to attract residents from further places.

Another limiting character about our participant pool is that five of the six migrant families were in their late 30’s to early 40’s, with younger children. While this is the dominant migratory group in Oonan Town, a conversation with other age groups such as midlife generation (i.e., in their late 40’s to 50’s) or younger, single residents (i.e., 20’s) would have provided an insight on how different generations may have very different values on some factors. For example, the social aspect may be more important to the unmarried generation who are moving in without family. Employment and financial factors may be of utmost importance to the midlife generation whose children are going through college, or the most expensive phase of education. As this current study shows, life course events are an important factor of migratory decision-making process, and generation differences in migratory motivation also merits a study in the future. While Oonan Town is a small town and the number of I- and U-turners are small and recruiting a large number of participants for the current study was not feasible, if Oonan Town continues to be successful in recruiting in-migrants, it would be intriguing to see whether the four factors observed in the current study is something that is applicable to a larger group of migrants as a general trend.

Furthermore, the current data suggest that the four migratory factors are influential in facilitating a success in-migration to a rural area. However, it does not quantify to what extent
each factors impact individuals—is one more influential than another, or are they equally influential? This is a question to be explored in a further study. However, the challenge is that the participants themselves often do not know the exact influence of each factor, and the influence is most likely not clear-cut or quantifiable.

In the light of this issue, the Ministry of Economic, Trade and Industry in Japan has been pursuing a project in order to quantify different factors that are involved when comparing the rural living to urban living. The project is called “Visible-lizing the Cost of Living,” and it aims to put a monetary value on non-economic factors such as proximity to shopping malls and climate by administering a survey to over 10,000 Japanese residents over the age 20. The survey questions are multiple choices, in which each option has a combination of different factors. For instance, one question might have four choice, where choice A is 30km away from a shopping mall, 3km away from school, children’s daycare is readily available, water is clean, and the weather is mild. Choice B, C and D would vary from each other, and the participants would be asked to choose the best option for themselves. The survey would aggregate the results and run an algorithm according to 10,000 people’s preferences to put a monetary value on each factors. Combining data from this project with migratory motivation study, future studies could assess whether, when non-economic factors are monetized, people show a behavioral pattern that follows a cost-benefit analysis.

As fertility rate continues to drop in developed countries around the world, rural aging and depopulation is becoming a large issue. Japan is a country in which the fertility rate is exceptionally low, at 1.41 in 2012. In rural regions, out-migration of younger generations is also a prevalent pattern, leaving the future outlook grim for those rural regions. While migration into
rural areas in Japan is a field of study that merits closer inspection, few studies have conducted in-depth, qualitative research on migratory motivations for urban-rural migrants in Japan.

In this thesis, I examined Oonan Town in Shimane Prefecture as a case study, as it has relatively successful in getting in-migrants back into the community. Through an oral, biographical interview, participants reported the complex mix of factors that played a significant role in the migration decision-making process. Data show that in-migrants in Oonan Town were largely affected by four factors, which are 1) family ties, 2) life course events, 3) lifestyle preferences, and 4) financial factors. The current study supported the behavioral approach to understanding migration, which asserts that the dissatisfaction about the current place of living combined with knowledge about an alternative place he/she could migrate to leads to stress, which in turn leads to the decision to migrate. In contrast to the Economic Approach, this approach is a micro-approach that asserts that migration is an action initiated by active decision makers rather than an automatic reaction to a certain condition. Furthermore, I discussed that the success of Oonan Town in recruiting in-migrants can be largely attributed to two factors, which are the town policy and slogan that targets very specific in-migrants (i.e., families with young children) and the great care the government takes in making sure that the in-migrants demand fits with what the town is like in actuality.

The current study draws attention to the rural depopulation issue in Japan, which has been overlooked in literature. With population decline and aging proceeding in developed countries around the world, the concern should not be confined to Japan; rather, it is already relevant to many developed countries, and will likely be a growing matter in the near future. In the light of this issue, this thesis sheds light on how rural communities in Japan—the “genkai shuraku (marginal villages)” —can revitalize their town by facilitating in-migrants.
Appendix

Figure 1.1

*Japan Fertility Rate, 1950-2004 (Coulmas, 2007)*

![Japan Fertility Rate Graph](image)

Figure 1.2

*U.S. Working-age Population Growth Rate Projection, 1951-2047 (Magnus, 2009)*

![U.S. Working-age Population Graph](image)

*Figure 3.9  America’s working-age population will grow slowly
Source: United Nations/Haver Analytics.*
Figure 1.3

*Europe’s Working-age Population Growth Rate Projection, 1951-2047 (Magnus, 2009)*

Figure 1.4

*China’s Working-age Population Growth Rate Projection, 1951-2047 (Magnus, 2009)*

Figure 1.5

*Japan’s Working-age Population Growth Rate Projection, 1951-2047 (Magnus, 2009)*

![Graph showing Japan's working-age population growth rate from 1951 to 2047.](image1.png)

**Figure 3.10** *Japan’s working-age population is falling*


Figure 2.1

*Oonan Town Population, 1980-2010 (National Census Survey)*

Number of people

![Bar chart showing Oonan Town population from 1980 to 2010.](image2.png)
Figure 2.2

*Oonan Town Population by Age Groups, 1980-2010 (National Census Survey)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 65 and over</th>
<th>Age 15-64</th>
<th>Age 14 and under</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>3,305</td>
<td>9,641</td>
<td>2,788</td>
</tr>
<tr>
<td>1985</td>
<td>3,741</td>
<td>9,402</td>
<td>2,652</td>
</tr>
<tr>
<td>1990</td>
<td>4,290</td>
<td>8,462</td>
<td>2,361</td>
</tr>
<tr>
<td>1995</td>
<td>4,915</td>
<td>7,511</td>
<td>2,030</td>
</tr>
<tr>
<td>2000</td>
<td>5,180</td>
<td>6,920</td>
<td>1,669</td>
</tr>
<tr>
<td>2005</td>
<td>5,117</td>
<td>6,402</td>
<td>1,425</td>
</tr>
<tr>
<td>2010</td>
<td>4,850</td>
<td>5,835</td>
<td>1,273</td>
</tr>
</tbody>
</table>

Figure 2.3

*Oonan Town Natural Birth and Deaths, 2007-2014 (Basic Resident Register)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Births</th>
<th>Deaths</th>
<th>Net change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>204</td>
<td>-189</td>
<td>-85</td>
</tr>
<tr>
<td>2008</td>
<td>239</td>
<td>-150</td>
<td>-89</td>
</tr>
<tr>
<td>2009</td>
<td>211</td>
<td>-152</td>
<td>-59</td>
</tr>
<tr>
<td>2010</td>
<td>256</td>
<td>-178</td>
<td>-78</td>
</tr>
<tr>
<td>2011</td>
<td>229</td>
<td>-164</td>
<td>-65</td>
</tr>
<tr>
<td>2012</td>
<td>222</td>
<td>-158</td>
<td>-64</td>
</tr>
<tr>
<td>2013</td>
<td>223</td>
<td>-159</td>
<td>-64</td>
</tr>
<tr>
<td>2014</td>
<td>250</td>
<td>-181</td>
<td>-69</td>
</tr>
</tbody>
</table>
Figure 2.4

*Oonan Town Fertility Rate, 2006-2014 (Basic Resident Register)*

[Graph showing fertility rate over the years]

Figure 2.5

*Oonan Town Migration Rate, 2007-2014 (Basic Resident Register)*

[Graph showing migration rates over the years]
References


