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Economics Series

No. 73, October 2004

Impact of Population Aging on Japanese International Travel to 2025

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This paper was prepared as part of the East-West Center's research project on [The Future of Tourism in Asia](#) coordinated by Christopher Edmonds and Sumner LaCroix. The authors are indebted to Sumner LaCroix, Christopher Edmonds, Sang Hyop Lee, Andrew Mason, Ilan Noy, Seiji Naya, Marcia Sakai, and James Moncur for helpful comments. James Mak's participation in this project was funded by the East-West Center (Honolulu).

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Impact of Population Aging on Japanese International Travel to 2025

Abstract

In this paper we forecast Japanese international travel to 2025. In addition to the usual economic variables, our model also captures both population aging and cohort effects on Japanese travel abroad. We predict the number of future Japanese overseas trips for males and females separately by five-year age groups and in five-year increments. We conclude that the Japanese will continue to travel abroad in increasing numbers but population aging will dramatically slow overall future Japanese overseas travel. While the number of “senior” travelers is predicted to increase sharply, we foresee fewer overseas trips taken by Japanese, especially among women, in the 20s and early 30s age groups. Finally, we examine the responses of the industry and the public sector in Japan to implications of a rapidly aging population on future international travel.

Impact of Population Aging on Japanese International Travel to 2025

In 2002, 714 million tourists left their own countries to visit other countries compared to only 25 million in 1950. Since the 1970s, the number of international tourist arrivals grew 1.4 times as fast as the world's economy. Despite the tragedies of September 11, 2001 and the ensuing war on terrorism, the World Tourism Organization (WTO) in its *Tourism 2020 Vision* held to its prior prediction that international tourist arrivals will reach 1 billion by 2010 and over 1.56 billion by 2020. In Asia and the Pacific, international tourist arrivals increased 5-fold between 1970 and 1998 and the WTO predicts another 5-fold increase between 1995 and 2020. Japan has been a major contributor to the impressive growth of international tourism during this period. Indeed, the highlight story of world tourism since the 1970s has been the emergence of Japan as a leading tourist-generating country.

Until 1964, the Japanese were not even allowed by their government to travel abroad for pleasure. The pattern of early post-WWII tourism development in Japan was not atypical of a developing country. Inbound tourists exceeded outbound tourists and the nation's travel account in the balance-of-payments maintained a consistent surplus. Government policies were aimed at sustaining this positive balance by encouraging inbound tourism and limiting foreign exchange consuming outbound tourism. The Japanese government created various disincentives to overseas travel by its nationals. For example, most passports issued were valid for one trip only, and any international travel had to be approved by a Ministry of Finance committee. There was a \$500 limit on

the amount of foreign exchange that could be taken out of Japan, and travel for pleasure was not considered a valid reason for approval.¹

That all changed in 1964, following the Tokyo Olympics, when the ban on overseas pleasure travel was finally lifted. However, monetary restrictions were left in place. Between 1964 and 1968, the Japanese government allowed each overseas traveler to take out \$500 in foreign exchange. The limit was raised to \$700 in 1969, \$1,000 in 1970, \$1,500 (plus 30,000 yen) in 1975, and \$3,000 (and 100,000 yen) in 1976. In 1978, all currency limits were abolished. Until then, the Japanese could vacation abroad but foreign exchange control meant that they could not always go where they wanted to or spend as much money as they wanted to. James Mak and Kenneth White found that, in the Asia-Pacific region, foreign exchange controls have a negative impact on travel spending but not on the propensity to travel abroad.² In 1964 the Japanese took nearly 128,000 trips abroad; among them 15 percent were pleasure trips. Within a decade, the number of overseas trips had increased to 2.335 million, and over 80 percent of them were pleasure trips. Japan had become the number one tourist generating country in East Asia and the Pacific. By 1989, Japan also became the world's leader in spending on international tourism. In 2000, and following nearly a decade of economic malaise, the more spending conscious Japanese overseas travelers were still the fourth largest spenders on international travel in the world, after the Americans, the Germans, and the British.³

¹ Mak and White (1992), and Carlile (1996).

² Mak and White (1992).

³ A survey by the Japan Association of Travel Agents revealed that the average amount of money spent by Japanese overseas travelers declined continuously from 361,000 yen

Japanese government policy toward outbound tourism also took a 180-degree turn from discouraging to actively encouraging its nationals to travel abroad. The easing of monetary restrictions on overseas travel in the early 1970s was clearly in response to the growing international pressure on the nation to stem the widening trade surplus between Japan and some of its major trading partners, especially the U.S. Encouraging Japanese to travel abroad was seen as a preferable policy change to opening Japan's widely perceived closed domestic markets to foreign competition. Moreover, as a new member of "the club of advanced industrialized countries" in the OECD, Japan was obliged to loosen its official grip on currency exchange and foreign travel. Encouraging foreign travel was also seen as a way for Japan to contribute to the global economy, promote internationalization at home, and to announce to the rest of the world that Japan has joined other advanced industrialized countries as a "normal" country.⁴

In 1987, the Japanese government announced the Ten Million Program which called for the doubling of Japanese overseas travel to 10 million trips in five years. The goal was actually achieved a year ahead of schedule. The government did not actually employ any coercion or incentives to promote outbound tourism; instead Leheny explained that "it used its position of moral authority to encourage outbound tourism. It ostensibly created an environment in which people felt better about taking overseas trips, that doing so was not a sign of slothful indulgence, as it had been in the workaholic 1960s and 1970s, but rather the just dessert for a job well done."⁵

(US\$ 3,406) per trip in 1996 to 309,000 yen (US\$ 2,915) per trip in 2000. See [www.jata-net-or.jp/english/materials/2002/materials0208.htm](http://www.jata-net.or.jp/english/materials/2002/materials0208.htm)

⁴ Leheny (2003), Chapter 6.

⁵ Ibid, p. 152.

Of course, the growth of Japanese overseas travel cannot be attributed to the liberalization of travel alone. The introduction of the Boeing 747 jumbo jet in 1970 made it possible for large groups of people to travel together on popular package tours. Most Japanese overseas vacationers travel on prepaid package tours. By the early 1970s, tour costs to most destinations had fallen to about half of what they were in 1965. The appreciation of the yen relative to the U.S. dollar and other currencies beginning in 1971 following the (global) abandonment of the fixed exchange rate system also added to the attraction of foreign travel relative to domestic travel. And once the ban on overseas travel was lifted, the “miraculous” growth of the post-war Japanese economy fueled the surge in Japanese travel abroad. These factors are not likely to be as important in spurring Japanese travel abroad in the 21st century.

While tourist destinations around the world compete for high spending Japanese tourists, Japan’s changing demographics now raises concern that outbound travel from Japan may slow dramatically in the future. Japan is an aging nation as a result of its shift from high to low birth and death rates. Its population age structure is growing older at a faster rate than all other industrialized nations in the world. Indeed, in 2006 Japan’s population is expected to reach its peak and begin a slow decline.⁶

The rapid aging of its population has three potential consequences on future Japanese travel abroad. First, fewer people in the future will mean a smaller population pool from which to draw overseas travelers. The United Nations Population Division estimates that Japan, which recorded 127 million people in 2000, will have 3.6 million fewer people in 2025, while the Japanese government predicts an even larger decline of

⁶ The Japan Institute for Labour Policy and Training (2004), p. 10.

5.8 million.⁷ This means that, other things being equal, there should be a proportionate decrease in overseas travel demand. Second, since the number of young people of working age is expected to decline and the number of seniors is expected to increase sharply, the result will be a shrinking work force and slower economic growth.⁸ Indeed, the nation's work force peaked in 1998 and has been declining slowly since then.⁹ The resulting slower economic growth will likely have an added dampening effect on the growth of overseas travel demand. Finally, the propensity to travel (TP)—defined as the number of overseas trips divided by the population—tends to decline with age. In Japan's case, the highest travel propensity is seen among the population in the 25-29 age group and thereafter the propensity to travel declines with age. Among adults, those in the 65 and over age group have the lowest propensity to travel abroad. It is a point of fact that Japan's overall travel propensity abroad reached a historical peak in 2000 at 14.04 percent compared to .64 percent in 1970, 3.34 percent in 1980 and 8.90 percent in 1990.¹⁰ An aging population could temper the rise in the travel propensity in the future.

⁷ The United Nations (2002 revision), the Japan Statistics Bureau (projections as of January, 2002), and the Nihon University Population Research Institute issued different estimates of future population for Japan:

Year	UN	Japan Statistics Bureau	Nihon University
2000	127,034,000	126,926,000	126,930,000
2010	127,998,000	127,473,000	126,610,000
2020	125,617,000	124,107,000	123,210,000
2025	123,444,000	121,136,000	120,410,000

The UN estimates are higher and show a smaller numerical decline in the Japanese population between 2000 and 2025 than the official Japanese government (social security system) estimates. Nihon University's Population Research Institute issued the lowest future population forecasts.

⁸ Mason and Ogawa (2001), and Moffett (2003).

⁹ *Japan Statistical Yearbook, 2004*, Table 16-1.

¹⁰ Mak (2004), pp. 198-199.

Age is not the only demographic variable that affects the Japanese propensity to travel abroad. Sakai, Brown, and Mak¹¹ have shown that the Japanese population from different birth cohorts have different propensities to travel abroad after accounting for other (i.e. economic and age) factors. Japanese in their twenties today are likely to travel more than both their parents and grandparents at the same age because they are more experienced travelers and may want to continue traveling when they grow old. Thus, the effect of demographic change on future Japanese international travel must consider both the age and cohort effects.

This article has two objectives. First, we forecast the number of Japanese overseas trips for males and females (separately), by five-year age groups, and by five-year intervals between 2000 and 2025 using a model that takes into account the effects of both age and birth cohort. We generate separate forecasts for men and women because they exhibit very different patterns of travel behavior over their lifecycle, and then aggregate the forecasts to obtain total outbound travel. The article refines and extends an earlier study by Sakai, Brown, and Mak.¹² Moreover, unlike their paper, we provide numerical estimates of future Japanese overseas travel. And unlike most existing industry forecasts which focus on the near term,¹³ we provide long-term forecasts. By providing actual numbers of future trips abroad, our article should be of great use to travel industry planners and policymakers. Second, we examine a number of recent policy developments in the travel industry that could marginally alter Japanese travel propensities in the future and cause the actual number of overseas travelers to deviate

¹¹ Sakai, Brown, and Mak (2000).

¹² Ibid.

¹³ See, for example, Kobayashi (2003) and Sakakibara (2003)

from the benchmark forecasts. Policy initiatives examined include efforts by Japanese travel agencies to modify their products to better suit the travel habits and preferences of the emerging cohort of senior travelers, joint public-private initiatives to alter holiday and vacation patterns, and a new central government initiative to dramatically increase the number of inbound tourists to Japan.

Japan's Aging Population

Table 1a displays the UN forecasts of Japanese population by 10-year age groups between 2000 and 2025 in five-year increments, and Table 1b shows the numerical changes from 2000. Between 2000 and 2025, Japan's population is expected to decline by 3.6 million. The population between 0 and 59 is expected to decline by 17.8 million while those in the 60 and over (i.e. the seniors) are expected to increase by 14.21 million; indeed, the increase in the number of seniors is almost entirely attributable to the 65 and over age group (not shown) which is expected to increase by 14.208 million. The largest numerical decline is predicted for those between the ages of 0-19 (5.835 million) and 20-29 (6.441 million). For both groups, the decline is continuous. For the other age groups with expected declining populations, each will have spurts of population growth, but at different times.

Prognoses of future Japanese outbound travel are often based on the analyses of the country's changing population age distribution.¹⁴ By this method, the 20's age group should see a continuous decline in outbound travel, the 30's age group could see a burst of outbound travel between 2000 and 2010, followed by the 40's age group between 2010 and 2020, and finally the 50's age group between 2020 and 2025. The largest (and

¹⁴ Ibid.

continuous) gain in overseas travel should come from the seniors, and especially from the 65 and over age group. However, the actual number of overseas travelers from any age group j , *in any given year*, is the product of the number of people in age group j and their propensity to travel: $\text{Number of Travelers}_j = \text{Population}_j \times \text{Travel Propensity}_j$. Hence, to forecast future Japanese outbound travel, it is necessary to ascertain future Japanese propensity to travel abroad.

Modeling Japanese Propensity to Travel Abroad

Figures 1a and 1b display the outbound travel propensities for males and females (separately) by five-year age groups for selected years between 1970 and 2000. The general shapes of the travel propensity curves have remained similar from year to year, especially for the women, although shifts (up or down) of the curves are also noticeable due to such factors as the state of the Japanese economy, changes in currency exchange rates, and other external shocks. What is most striking about these curves is that Japanese men and women exhibit very different patterns of travel behavior over their lifecycle. The travel propensities for women peak in their late '20s; after the age of 30, travel propensities fall sharply and do not rise again until they reach the age of (around) 50. For men travel propensities used to peak in the late '20s but since the 1990s the peaks are not attained until they reach their late '30s or '40s; thereafter their propensity to travel declines.

Key to understanding the differential travel behavior of men and women are the characteristics of Japan's family and employment system. Specifically, the Japanese family system remains one in which a fairly strict gender-based division of labor is maintained in which the wife is responsible for childrearing and household management

and the husband serves as the quintessential breadwinner.¹⁵ Japanese single, working women—often referred to as “office ladies”, or OLs--tend to travel frequently and spend money freely knowing that once they marry the opportunity to continue to travel may become severely limited. It is a fact that about half of the Japanese women retire from the labor force at the time of marriage and a high percentage of them begin childbearing soon after.¹⁶ For the new housewife and mother, this means that during the roughly two decades between the birth of her first child (usually in her late twenties or early thirties) and the point at which the youngest child reaches college age (typically in her late forties or early fifties in a two child household) her time will be taken up almost entirely by the tasks associated with maintaining a household and raising and educating her children. She will not easily find the time to work and travel abroad again until she reaches the age of around 50.

The husband, in the meantime, tends to be wedded to his work and career from his mid-twenties until retirement, and contributes little to housework or childrearing. Despite recent changes, Japanese employment norms remain rigid and demanding, and it is quite common for male (white collar) employees to forego the vacation days that they are given. One consequence of these family and work arrangements is that the opportunities for leisure travel on the part of married couples under the age of 50 are highly circumscribed. Family leisure travel is usually limited to holiday periods when school is out and the male head-of-household can take time off. These, however, coincide with peak travel periods when demand and prices are high. Limited time and high prices tend to suppress overall consumption of travel products and combined create a demand

¹⁵ Mason and Ogawa (1997).

¹⁶ Ibid.

for travel packages of limited duration; it also means that Japanese are more likely to take vacations at home rather than abroad.¹⁷ Aside for taking overseas trips for wedding and honeymoon (usually at the age of late '20s and early '30s), husbands are often presented with job-related overseas travel opportunities especially after they attain managerial status in their '40s, but these too tend to be of limited duration and strongly affected by economic conditions. It is hardly surprising that given the different demands of family and work life, Japanese men and women are often seen traveling separately. Hence, their travel propensities should be modeled and estimated separately.

Following Sakai, Brown, and Mak¹⁸ and Rentz and Reynolds¹⁹, for each gender, our estimation model regresses travel propensity for age group j against the average monthly real wage rate (Wage) for travelers from age group j , the labor force participation rate (LFPR) for age group j , the nominal yen-dollar exchange rate (Xchange), the age group of the travelers (AGE), and the birth cohort (i.e. Year of Birth) of the travelers from age group j :

$$TP_j = a + bWage_j + cLFPR_j + dXchange + eAge_j + fYear\ of\ Birth_j + e_j \quad (1)$$

It is posited that the population groups earning higher wage rates are likely to have higher propensity to travel abroad. A priori, the effect of labor force participation rate on travel propensity is unclear and may well be different for men and women. While male groups with higher labor force participation are likely to have more money to travel more frequently, they may also have less time to travel. Among Japanese women, higher

¹⁷ In 2000 Japanese took 325.44 million domestic trips versus 17.82 million foreign trips. Accessed at www.jtb.co.jp/soumu/english/press/jtb_news/jtbnews_2003_01/ on March 24, 2003.

¹⁸ Sakai, Brown, and Mak (2000).

¹⁹ Rentz and Reynolds (1991).

labor force participation could be associated with both greater freedom (i.e. from household responsibilities) and financial ability to travel. The currency exchange rate affects all Japanese in a given year regardless of their age or year of birth. Changes in the currency exchange rate alter the relative costs of foreign travel versus domestic travel.

The travel propensity (TP) for age group j is defined as the ratio of number of overseas departures for age group j to the total population in age group j . Note that travel propensity is not a measure of probability since TP can exceed 1.²⁰ Travel propensities were calculated for male and female travelers by 5-year age groups, beginning with the 15-19 age group; the highest age group is the 65 & above age group. Hence, we have 11 age groups. Travelers younger than 15 were excluded from the estimation equation because we assumed their travel decisions were made by someone else, e.g. parents. In recent years, the number of travelers in the under-15 age group comprised roughly 5 percent of the total number of Japanese overseas travelers.²¹ In our estimation model, the 20-24 age group was designated the reference age group.

Data

The data for the number of overseas Japanese travelers by gender and by age group were obtained from the annual issues of the *Japan Travel Blue Book* published by Travel Journal, Inc. (Tokyo, Japan) and Japan Travel Bureau's annual *JTB Report*. The original source of the data is the Japanese Ministry of Justice which compiled the data from immigration and emigration records; hence the quality of the travel data is very high. Travel data by age groups were available at the time of this study for each year between

²⁰ Indeed, a few European countries have travel propensities abroad that exceed 1. See Mak (2004), p. 198.

²¹ It was 4.36 percent in 1995 and 5.14 percent in 2000.

1968 and 2001. To allow time for the Japanese to adjust to the recently (1964) liberalized travel environment, we began our analysis in 1970. As well, because overseas travel in 2001 was drastically curtailed by the terrorist attacks of September 11th, we decided not to include 2001 in our estimation. In 2000, the number of Japanese overseas travelers reached an all-time high of 17,819,000 but by 2003 had plummeted to 13,296,000 due to the Iraq War, SARS, and related events. Hence, 2000 is a good base year from which to make long-term forecasts.

Data on the labor force participation rates by 5-year age group for males and females were obtained from the *Annual Report on the Labor Force Survey*, Statistical Survey Department, Ministry of Public Management, Home Affairs, Posts and Telecommunications. Average nominal monthly wage rates by 5-year age groups were published for males and females separately and were converted to real wage rates using the Japanese consumer price index. Wage rate data were obtained from the Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare.

The nominal yen-U.S. dollar exchange rate published by the Bank of Japan was used (instead of a real exchange rate) as a proxy for the relative costs of overseas versus domestic travel. The nominal exchange rate is more readily observed by potential travelers than the real exchange rate, and, for practical purposes, may have a greater influence on the decision to travel abroad. Moreover, real exchange rates computed by using each country's consumer price index (since country-by-country domestic travel

price indices are not available) may not accurately reflect changes in the relative prices of international travel.²²

We created 10-year birth cohorts. The most recent cohort comprised of travelers born between 1975 and 1984. The earliest cohort comprised of travelers who were born before 1935 (the reference cohort). Thus, our travel data gave us 6 birth cohorts. Because the data on overseas travelers advanced in five-year instead of annual age increments, for estimation we were able to use only the travel data for the 7 years--1970, 1975, 1980, 1985, 1990, 1995, and 2000, and none of these years witnessed unusual events that might have influenced Japanese decisions to travel abroad. Not being able to use the entire (annual) travel data set was a big loss, because a wealth of information was simply discarded. However, it was unavoidable because we could not construct a cohort variable without more specific information on the age distribution of the travelers within each 5-year age group. With 11 age groups for each year and 7 years of data, we had 77 observations for each gender.

Equation (1) was estimated for males and females as a system using the method of seemingly unrelated regressions (SUR) and yielded good fit (Table 2).²³ An interesting finding from these regression results is that while higher wages lead to higher propensity to travel abroad for men, that is not true of women, suggesting perhaps that Japanese women depend more on family resources and personal savings and not necessarily

²² In a separate run, we also used a *real* yen- U.S. dollar exchange rate (i.e. ratio of nominal exchange rates adjusted for consumer prices in both countries), and the results were very similar.

²³ See Greene (1993), Chapter 17.

current personal earnings to travel.²⁴ The historical (1970-2000) and predicted travel propensities (2005-2025) for men and women are presented in Appendix Table A1a and Table A1b.

Forecasting Future Travel: Assumptions

We used coefficient estimates from Table 2 to first forecast travel propensities for males and females (separately) by five-year age group for the years 2005, 2010, 2015, 2020, and 2025 and then calculated the number of overseas trips by multiplying the predicted travel propensities by the UN estimates of future Japanese populations in each age group.

We used 110 yen per dollar as our future yen-dollar exchange rate; this was roughly the prevailing yen-dollar exchange rate when this paper was prepared. Movements of exchange rates can be characterized as a random walk; thus, the current exchange rate is as good a predictor of future exchange rates as any other exchange rate.

For future Japanese real wage gains we considered the assumptions—1% and .5% per year increase-- employed by the Japanese government's Ministry of Health, Labor and Welfare in preparing forecasts of future social security fiscal requirements.²⁵ By comparison, Nihon University's Population Research Institute (NUPRI) anticipates higher real wage gains of nearly 1.5 percent per year between 2000 and 2025.²⁶ The

²⁴ In Table 2, the coefficient of the real wage rate variable for women is negative but not significantly different from zero at conventional levels of acceptance. When the two equations are estimated separately using ordinary least squares, the coefficient of the real wage rate variable for women becomes positive (0.425) but remains statistically insignificant ($t=.19$).

²⁵ Syakaihoshou Shingikai Nenkin Bukai (2003).

²⁶ Kindly provided by Mr. Rikiya Matsukura. NUPRI forecasts declining real wages over time. The average annual growth rates remain pretty stable between 1.8 to 1.9 percent

actual rate of real wage growth between 1980 and 2000 in Japan was approximately 1 percent per year. We assumed 1 percent annual growth in our forecast.

We also used the Ministry of Labor Employment Security Bureau's forecasts of future labor force participate rates.²⁷ These forecasts anticipate participation rates to rise among males in the 60+ age groups while remaining quite stable for other male age groups. Labor force participation rates are expected to rise for all female age groups, except for those under the age of 20. The forecasts reflect observed changes in labor force participation rates since the 1970s.²⁸

To estimate the future cohort effects, we projected the coefficients of the cohort variables from our estimated equations (Table 2) forward using the method of ordinary least squares. Using linear extrapolation probably over-estimates future travel propensities for the younger age groups but not for the "seniors."

Results

Tables 3a, 4a, and 5a present the number of overseas trips by five-year age groups for males, females, and total (i.e. males and females combined) respectively between 2000 and 2025, and Tables 3b, 4b, and 5b present their respective (percentage) shares. Figure 2 indicates that the future growth of total outbound travel from Japan will likely fall below the historical trend, but there is *no* long-term decrease in the number of Japanese overseas trips despite population aging and decline. Between 2000 and 2025, the number of overseas trips taken by those age 15 and above is expected to increase from nearly 17 million to 22.5 million (Table 5a). In 2025, the seniors (age 60 and

per year between 2000 and 2015, and then declines to 1.14 percent, .75 percent, and .7 percent per year for each of the next 3 five-year periods.

²⁷ Syakaihoshou Shingikai Nenkin Bukai (2003).

²⁸ The Japan Institute for Labour Policy and Training (2004), p. 14.

above) will likely account for 26 percent of all Japanese overseas travel (compared to barely less than 15 percent in 2000), but they will account for 60 percent of the nearly 5.6 million *increase* in outbound trips. Historically, Japanese in their 20's comprised the largest group of overseas travelers. Our forecasts indicate that they (along with those in the 30-34 age group) will take fewer trips in 2025 than in 2000. By 2025, the seniors will have displaced them as the largest group of overseas travelers. Demand for overseas travel should increase for all other age groups.

While senior travel has become the focus of Japan's travel industry, the future of Japanese overseas travel is not about "seniors" only. Tables 5a shows that different age groups will experience bursts of outbound travel, albeit at different times, in the next two+ decades. For example, the 35-39 age group should see a burst of outbound travel between 2000 and 2010, the 40-49 age groups between 2000 and 2020, and the 50-64 age groups between 2015-2025.

Briefly looking at the gender results, the decline of overseas travel among women in their mid- and late-20s is particularly noticeable (Table 4a). No similarly striking decline is visible for men (Table 3a). One Japanese travel executive recently observed that "young office ladies, who until quite recently were the dominant players in the Japanese overseas travel market are conspicuously disappearing out of the mainstream of travel, except on their honeymoons."²⁹ While this is somewhat of an exaggeration, it is clear that in the future "young office ladies" will no longer be "the dominant players" in

²⁹ Matsushashi (2003), p. 2. Matsushashi surmises that one of the recent contributors to the decline in overseas travel among the office ladies is their obsession with cell phones. Money previously spent on overseas travel is being spent on costly cell phone fees "making it difficult for impressionable young ladies to go overseas as frequently as before."

international travel as they used to be. By 2025, women in their late '20s are expected to account for only 5 percent of total Japanese outbound travel, compared to 9 percent in 2000.

Historically, Japanese men outnumbered women in overseas travel. In 1970, men accounted for nearly 80 percent of total Japanese overseas travel, but by 2000, men's share had declined to 54 percent of total outbound travel. That decline appears to have stabilized so that by 2025 we expect the men's share of total outbound travel to fall marginally to 53 percent.

In sum, this article finds that the historical post-1970s growth in Japanese outbound travel is unsustainable in the face of population aging and decline. Based on the current pattern of demand for travel destinations by age groups, beach resort destinations that rely heavily on younger Japanese travelers—such as Australia, Indonesia, Guam, Saipan and Hawaii—can expect to see their current markets shrink. Those destinations have to develop new products to attract an older group of travelers. By contrast, destinations in Europe and China are likely to gain popularity.³⁰ Thus, the changing pattern of Japanese outbound travel presents both challenges and opportunities for travel businesses and destinations.

Tourism Strategies in Response to an Aging Population

The graying of Japanese society has received widespread media coverage and has been the subject of frequent public discussion over the past decade. Under these circumstances, it is not surprising to find that both private firms and public sector entities in the travel and tourism field have made concerted attempts to comprehend the scale and

³⁰ <http://www.jata-net.on.jp/english/materials/2002/materials0204.htm> (accessed March 14, 2003)

quality of the impact of this demographic shift and have tried to develop and implement responses. As an extension of the preceding exercise in forecasting, in the following section of this article we will review the ways in which the “problem” of Japan’s changing demographic structure has been apprehended by the travel industry and associated governmental organs and will discuss some of the major policy initiatives that have been put forward and, in some cases, implemented, as solutions. Although unlikely to invalidate the forecasts made in the preceding sections, to the extent that these policies are successfully implemented they could have a significant marginal impact on future flows of outbound Japanese travelers. While no effort will be made to forecast their impact statistically, the potential direction of their impact on overseas travel will be discussed.

From the standpoint of the Japanese travel industry—and in particular for the travel agencies that are the linchpin of the industry—the arrival of Japan’s aging society represents a transformation of the demographic composition of its customer base, and industry attention has focused above all on the implications of this demographic event on the mature segment of the travel market. This is based on the understanding that in the future the relative size of the 50-plus segment of the Japanese population will grow dramatically as other age categories decline in size.³¹ There appears to be an industry-wide consensus that this demographic transition will be accompanied by important changes in travel patterns and preferences due to factors associated with what we have characterized as age and cohort effects.

³¹ This assumption is not entirely correct as the population between 50 and 59 is expected to decline at least until 2015 (see Table 1a).

One basis for this view is the anticipation that the increase in the number of Japanese over age 50 will result in a steady and substantial increase over the next decade and beyond in the number of Japanese—namely, women over 50 and male retirees—who are unconstrained by the demands of career and household obligations and who for that reason will have the free time to spend on leisure travel and the flexibility in their schedules to choose when they will travel. In addition, high levels of savings and the practice of lump-sum retirement payouts means Japan’s seniors also tend to have access to income that can be directed into travel consumption.³² Indeed a 1999 survey of current seniors age 60 and above indicated that approximately 70 percent of Japanese seniors had already experienced overseas travel and that roughly the same proportion desired to travel abroad in the future.³³

What this portends in the view of industry analysts is that there will be an increase in the overall demand for tour packages and travel services as a result of the increase in the number of elderly Japanese. It is anticipated, as well, that there will be an increase in off-peak travel. In the words of the director of marketing of Japan’s leading private-sector

³² When a group of seniors, who had just received their retirement allowances, were asked how they planned to spend their allowances, the most frequently cited use (58 percent) was travel. Indeed, increasingly popular among the Japanese is multi-generation travel where grandparents travel with their children and grandchildren; in nearly 60 percent of the cases, it is the grandparents who pay for travel. <http://www.jat-net.or.jp/English/reports/2001/senior-travel.htm> (accessed on March 27, 2003).

³³ JATA (1999). They also preferred well established “Western” travel destinations. The countries that they were most interested in traveling to were Western Europe (Switzerland, France, Italy, Germany, UK), Canada, Hawaii, and Australia. The survey also found that seniors value quality over quantity—an overwhelming majority indicated that they would prefer fewer but more luxurious trips over more frequent budget travel. They were more interested in more “passive” tours that emphasized scenic and historical sites along with museums than in “participatory” tours (e.g., food, foreign cultural experiences, rest and relaxation, shopping). See also the featured articles in *Weekly Travel Journal* (August 12, 2002): 8-13.

travel research organization, the structure of Japan's outbound travel will increasingly shift toward "stock consumers" dominated by the 50-plus segment (and in particular women in this category) whose purchases of travel products will not be affected by economic conditions, and relatively fewer "flow consumers" consisting of individuals in other age groups whose travel consumption will be highly sensitive to fluctuations in economic circumstances.³⁴

At the same time, however, it is also noteworthy that seniors who constitute the bulk of the stock consumer segment also represent a segment of the market that is particularly sensitive about safety concerns abroad. The 1999 survey cited above indicated that, along with an inability to communicate in a foreign language, personal security was a top worry among seniors.³⁵ When the SARS epidemic and the Second Iraq War occurred in 2003, it was precisely this segment that saw the sharpest drop in overseas travel among the various age groups. The outbound Japanese travel market has shown itself to be highly sensitive to outbreaks of war, terrorism and disease in the past and with the expansion of the aging population this sensitivity will only increase. Thus, while the increase in the number of senior travelers will serve as factor that, other things being equal, presses the Japanese outbound market toward expansion, heightened concerns about the safety of overseas travel as a consequence of international events could easily prevent actual outbound figures from attaining the latent levels outlined in our benchmark forecasts.

³⁴ Kobayashi (2003).

³⁵ JATA (1999). See also the featured articles in *Weekly Travel Journal* (August 12, 2002): 8-13.

As for the cohort effect, certain qualitative changes in travel preferences and behavior are anticipated as an outgrowth of the retirement of a cohort of aging baby boomers who, unlike the current generation of seniors who experienced the deprivations of World War II, have known only the prosperity of Japan's post-World War II economic success and who have been at the forefront of the rapid expansion of Japanese overseas travel since the 1970s. A recent survey conducted by the premier industry trade association, the Japan Association of Travel Agents (JATA), of planning and marketing staff at member travel agencies elicited the following conclusions about what travel agencies should be kept in mind with regard to these "new seniors":

[Having already had the experience of traveling abroad,] they will become even more active travelers and constitute a promising new category of clients for travel agencies.

There will be considerable *diversity* in their style of travel as spending patterns and travel product type will depend on what their travel goals are.

Being experienced travelers, they will be *selective* in choosing travel companions, means, and products.

Although they are willing to spend money in order to get exactly what they want, for basic travel they will be *value conscious* when choosing tours.

[In sum, this new generation of aging baby-boomers] will be different in assorted ways from earlier seniors and it will be necessary to change the content of tours accordingly. At the same time, one should avoid labeling these tours as being "geared toward seniors." [emphasis added]³⁶

In line with this understanding, Japanese travel agencies have pursued a variety of initiatives geared toward capturing this diverse, selective and value conscious "new senior" market. In particular, Japanese travel agencies have recently expended considerable effort in developing upscale, longer term, special interest tours that are aimed at the 50-plus segment, although it is noteworthy that great care has been taken to label these tours as being something other than tours geared toward "seniors" or the

³⁶ JATA (2002).

“elderly.” There have also been initiatives on the part of several overseas destinations to develop programs and destinations attuned to the interests and needs of Japan’s senior travelers.³⁷ An example of a proactive effort to systematically cultivate what is perceived to be the latent demand for special interest tours characteristic of new seniors is the recent emergence of travel agency-mediated “travel clubs.” Such “clubs” consist of would be travelers who are interested in a common topic that has the potential to generate a matching tour. The sponsoring corporation facilitates the activities of these clubs by publishing and distributing newsletters and then sponsoring specialized tours for club members that address topics and interests relating to the club’s theme. One of the pioneers in this area has been Kinki Nihon Travel, which recently spun off its club travel division as a new corporation devoted exclusively to that area known as Club Travel International.³⁸ As for the impact of such efforts to match travel products to the preferences of the expanding population of senior travelers, to the extent that travel product producers can in fact attain such a match the effect will be to increase the number of Japanese overseas travelers.

Whereas the preceding discussion describes responses directed toward the impact of the age and cohort effects of Japan’s aging society, there have been a number of other initiatives in recent years that seek to more fundamentally alter the institutional and economic environment within which Japanese overseas travel unfolds. The modern Japanese state has a long history of policy initiatives designed to shape the lifestyles of its

³⁷ Examples include South Australia and Hawaii. See Seeliger (2003).

³⁸ Kômoto (2004).

citizens.³⁹ Such policies include interventions in the area of leisure and, more specifically, travel and tourism. Despite Japan's status as a high income country, Japanese propensity to travel abroad is not particularly high by international standards. As Leheny details, the general thrust of the Japanese state's leisure policy has been to raise the "backward" leisure habits and patterns of the Japanese up to what is perceived to be the norm of advanced industrialized countries—i.e., Western Europe and the US.⁴⁰ Recent initiatives on the part of the Japanese government have continued along this track and have done so in a way that has brought tourism to the fore. A vivid illustration of this can be found in the text of a 1995 report of the Tourism Advisory Council that presents tourism as a component of a culturally sophisticated society under the heading, "Everyone has a Right to Travel."⁴¹ The fact that Japanese on average tend to take much shorter vacations than Western Europeans in particular—the Japanese average is 3.5 days per annum while the counterpart figures for Britain, Germany, and France are 20.2, 20.1, and 15.8 days, respectively—is regularly touted as an indicator of Japan's "backwardness" in this area.⁴² In response to this, the Japanese government has in cooperation with the travel industry, promoted the idea that Japanese workers should take

³⁹ For a general historical survey of state interventions in lifestyle matters see Garon (1997).

⁴⁰ Leheny (2003).

⁴¹ Kanko Seisaku Shingikai (1995). The report states:

Travel is a fundamental urge of everyone. Through travel people exit their daily existence and encounter as yet unknown nature, people, cultures and environments and through this discover a new self. Through travel, people maintain and restore their health and creativity ... Travel-based tourism activity is now absolutely essential if social progress in such areas as raising national health levels and strengthening family bonds is to be sustained.

⁴² Nihon Tsûrizumu Sangyô Dantai Rengôkai (2003), p. 4.

more time off and use that time off for family travel. In line with this, initiatives have been pursued that are intended to create an institutional environment that is more facilitative of such travel. A semi-governmental organ, the Long Stay Foundation (*Rongusutei Zaidan*) has been established through which government and industry have attempted to promote longer term family travel built on Western European models. One recent success in this area was the passage of a national law that made Ocean Day—itsself a relatively recent addition to the Japanese holiday calendar—a national holiday that falls on the third Monday of July rather than on a specific calendar date, thereby creating a three-day weekend that is more conducive to travel than a holiday in the middle of the week.⁴³ In a similar vein, the Japanese travel and tourism industry is working with the Ministry of Land, Infrastructure and Transport (MLIT) to encourage the establishment of a fall break in the Japanese school calendar in order to create an additional extended school holiday period on top of the current winter and summer breaks in order to open up an extended period conducive to family travel.⁴⁴ While the progress in this area has left a lot to be desired, it is true that Japanese work hours have been steadily reduced over the years and major work and school schedule alterations—notably the spread of the two-day weekend—have been successfully implemented. To the extent that such efforts bear fruit in the future, they will alter the dynamics of age effects in the behavior of Japanese overseas travelers and serve to increase the Japanese propensity to travel across the board by expanding the leisure time available for travel purposes.

Perhaps the most interesting development in the tourism policy arena in recent years has been the emergence of a “tourism nation building” program complete with a

⁴³ *TIJ nyûsu* (May 15, 2003), p. 1. [<http://www.tij.or.jp/tijnews15-1.htm>]

⁴⁴ See *TIJ nyûsu* (August 7, 2003).

matching study commission, cabinet task force, and action plan.⁴⁵ The central pillar of this drive to implement tourism nation building is the goal of doubling the number of inbound travelers to Japan, which stood at roughly 5 million in 2002, by 2010, but it is noteworthy that the Japanese government has invested the concept with a range of other objectives. One is the obvious significance of inbound tourism development for economic development. Under conditions where Japanese manufacturing enterprises are increasingly moving overseas to take advantage of lower labor costs in neighboring Asian countries, the development of inbound tourism provides an alternative avenue for expanding employment. A second objective relates to the geographic distribution of tourism resources in the context of an aging society. That is, one of the most visible and geographically widespread aspects of Japan's aging population has been the depopulation of the Japanese countryside. With rural industries on the decline and economic opportunities concentrated in the cities, over the past forty years Japan has experienced a steady movement of population away from the countryside. With young people moving out, the proportion of aged within the declining populations of Japan's rural towns and villages increasing dramatically, the Japanese countryside has been turned into an expanse of predominantly elderly residents. Social service needs and costs have skyrocketed even as the tax base and working population required to cover these has shrunk. As a result, more and more of Japan's rural areas are facing circumstances where their communities are no longer socio-economically sustainable. At the same time, more individualized lifestyle patterns and the sheer physical distance between the aging parents

⁴⁵ Various documents relating to government efforts in these area were accessed through the portals <http://www.mlit.go.jp/sogoseisaku/kanko/top.htm> and <http://www.mlit.go.jp/sogoseisaku/kanko/top.htm> (August 16, 2004).

and working age children are leading to a decline of the traditional family support systems that had earlier shouldered the burden of elder care, and this just at a point in time when the government is cutting back on its share of health and pension care payments.

The argument is being put forward in conjunction with the tourism nation building program that the promotion of domestic and inbound tourism represents an effective tool for rejuvenating Japan's withering community life. It is noted that some of the best resources for tourism development are found in areas where there are few alternative economic opportunities. The expansion of tourism provides a means by which to keep younger generations in the countryside. It is posited that interaction with tourists from outside the community that is made possible by tourism plays a role in adding interest and zest and stimulation to local life.⁴⁶ Beyond this there is a great push to utilize tourism development to encourage national identity and international recognition. In the words of the Outline of the Report (main text) by the Japan Tourism Advisory Council:

In the 21st century, Japan must exercise its soft power, based on its cultural charm, knowledge, intelligence and information gathering and transmitting abilities, to gain greater trust of foreign countries, by promoting as a challenge to the nation the enhancement of the magnetism of Japan that attracts people and companies both at home and abroad.⁴⁷

As for the question of how this will be achieved, the strategy outlined by the government consists of increasing the international competitiveness of Japan's inbound tourism industry by promoting Japan as a tourism destination overseas, through tourism development projects that highlight Japan's "charm points" and which make Japanese

⁴⁶ Kankô Seisaku Shingikai (2000).

⁴⁷ Prime Minister's Office (2003).

tourism attractions more easily accessible to overseas tourists who do not speak or read Japanese, as well as industry efforts to develop tourism products that can compete with foreign travel destinations in price and attractiveness.⁴⁸

The multifaceted nature of the tourism nation building program makes it difficult to predict precisely what the consequences of its successful implementation might be. Certainly, an increase in the number of inbound foreign tourists does not in and of itself affect outbound tourism flows and could conceivably work to stimulate overseas travel through an increase in social interaction between Japanese and travelers from abroad. On the other hand, the large gap between the number of inbound and outbound tourists in Japan (5.2 million inbound versus 16.5 million outbound in 2002) can be read as an indicator of a lack of relative international competitiveness on the part of Japan as a tourist destination. This can be concretely substantiated by looking at the internationally high costs of such tourism basics as Japanese domestic transportation and lodging. Under these circumstances, should Japan succeed in reducing the costs of domestic travel and tourism and increasing the attractiveness of Japan as a tourist destination as envisioned in the tourism nation building program, it could reduce the relative attractiveness of overseas tourism relative to domestic tourism on the part of Japanese travelers. This would be particularly so under conditions where terrorism, disease and other developments heighten the safety concerns of Japanese overseas travelers.

Conclusion

Japan is a rapidly aging country. This article examined the likely effects of demographic change on the future of Japanese travel abroad. Prognoses of future

⁴⁸ For a detailed listing of proposed projects see Kankô Rikkoku Kankei Kakuryô Kaigi (2003).

Japanese overseas travel are often based on the analyses of the country's changing population age distribution. This paper also takes into consideration the cohort effect and economic change on Japanese travel propensity abroad. While our forecasts are not etched in stone, as they could be adjusted by unforeseen international events and Japanese government policy, some of which were discussed in the last section of the article, nonetheless we suggest that they provide useful benchmarks to guide tourism marketers, planners, and policymakers in formulating their own future plans. In sum, we find that the pace of post-1970s boom in Japanese outbound travel is not sustainable as Japan's population ages in the next quarter century. Yet, contrary to the consensus held within the Japanese travel industry that "seniors" will be the only segment of the travel market that will witness positive growth, our estimates indicate that the number of overseas travelers will increase in all age groups, except among the 20s and early 30s age groups. We also show that different age groups will account for the lion's share of the increase at different times in the next 3 decades. Thus the changing demographic profile of Japanese overseas travelers will create both challenges and opportunities for tourism suppliers and destinations.

This article barely scratches the surface of the potential implications of population aging on Japanese travel abroad. Our analysis focuses only on overseas trips by age groups. Population aging will no doubt also influence where Japanese will likely travel, for how long, and with whom, how much money they will spend on travel, what goods and services they will demand and so on. A large research agenda remains to be undertaken. Even more importantly, the aging of Japan's population has led the nation to scrutinize more intensely the role of travel and tourism in Japan's national life.

References

- Carlile, Lonny E. "Economic Development and the Evolution of Japanese Overseas Tourism, 1964-1994," *Tourism Recreation Research*, Vol. 21 (1), 1996.
- Garon, Sheldon. *Molding Japanese Mind: The State in Everyday Life* (Princeton: Princeton University Press, 1997).
- Greene, William H. *Econometric Analysis*, second edition (Englewood Cliffs, N.J.: Prentice Hall, 1993).
- Japan Association of Travel Agents. JATA, "Yaku 7 wari ga kaigai ryokô keiken ari: Shirubâ sedai to kaigai ryokô" (September 9, 1999) (<http://www.jata-net.or.jp>). (Accessed August 26, 2004).
- _____. "Danki sedai ga shinia ni nattara, donna tabi o suru? Ryokô gaisha shôhin kikaku tantôsha ga yosoku suru ko'korekarano shinia' no ryokôjjjô" (September 17, 2002) <http://www.jata-net.or.jp/index.htm> (Accessed August 26, 2004).
- Japan Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications. "Population Census," Japan. Accessed at www.stat.go.jp/english/data/jinsui/wageakuni/index.htm
- Japan Statistical Yearbook 2004 at www.stat.go.jp/english/data/nenkan/index.htm
- _____. *Annual Report on the Labor Force Survey*, Statistical Survey Department.
- Japan Travel Bureau (JTB). *JTB Report: All About Japanese Overseas Travelers*, (Tokyo: JTB), annual.
- Kanko Rikkoku Kankei Kakuryo Kaigi. *Kankô rikkoku kôdô keikaku*. <http://www.mlit.go.jp/sogoseisaku/kanko/top.htm> 2003. (Accessed August 16, 2004).

Kanko Seisaku Shingikai, “Kongo no kankô seisaku no kihontekina hôkô ni tsuite (Tôshin dai 39 gô)” (June 2, 1995).

<http://www.mlit.go.jp/singikai/unyusingikai/kankosin/kankosin39.html>. Accessed June 30, 2004.

Kanko Seisaku Shingikai. “21 seiki shotô ni okeru kankô shinkô hōsaku: Kankô shinkô o kunizukuri no hashira ni (tôshin dai 45 gô)” (December 1, 2000)

[http://www.mlit.go.jp/kisha/oldmot/kisha00/koho00/tosin/kansin/kansin0_.html]

(Accessed September 13, 2004).

Kobayashi, Hidetoshi. *Trends and Potential of the Japanese Outbound Travel Market*, Presented at the JATA World Tourism Congress 2003, October 2, 2003, Yokohama, Japan.

Kômoto Kôji. “Kintsû no shōsan: Kurabu tsûrizumu baikyaku toiu kake ni deta nambâtsû kigyô no korekara..” *Travel Journal* (April 26, 2004): 10-14.

Leheny, David. *The Rules of Play, National Identity and the Shaping of Japanese Leisure* (Ithaca: Cornell University Press, 2003).

Mak, James. *Tourism and the Economy, Understanding the Economics of Tourism* (Honolulu: University of Hawaii Press, 2004).

Mak, James, and Kenneth White. “Comparative Tourism Development in Asia and the Pacific,” *Journal of Travel Research*, Summer, 1992.

March, Roger. “The Japanese Travel Life Cycle” in K. S. Chon, Tsutomu Inagaki and Taiji Ohashi, eds., *Japanese Tourists: Socio-Economic, Marketing and Psychological Analysis* (Binghamton: Haworth Hospitality Press, 2000), pp. 185-200.

Mason, Andrew, and Naohiro Ogawa. "Why Avoid the Altar," in James Mak, Shyam Sunder, Shigeyuki Abe, and Kazuhiro Igawa, eds., *Japan: Why It Works, Why It Doesn't. Economics in Everyday Life* (Honolulu: University of Hawaii Press, 1997), pp.11-19.

Mason, Andrew, and Naohiro Ogawa. "Population, Labor Force, Saving, and Japan's Future," in Magnus Blomstrom, Byron Gangnes, and Sumner LaCroix, eds., *Japan's New Economy, Continuity and Change in the Twenty-First Century*, (New York: Oxford University Press, 2001), pp. 48-74.

Matsubishi, Isao. *Fit and Survive*, Presented at the JATA World Tourism Congress 2003, October 2, 2003, Yokohama, Japan.

Moffett, Sebastian. "Aging Society in Japan Stifles Nation's Growth Amid Economic Crisis," *Asian Wall Street Journal*, February 11, 2003.

Nihon Tsûrizumu Sangyô Dantai Rengôkai. *21 seiki no rîdingu sangyô e: Waga kuni ni okeur tsûrizumu sangyô no hakyû kôka*. 2003.

<http://www.tij.or.jp/report/21pamphlet2003.pdf> (Accessed September 13, 2004).

Prime Minister's Office. "Outline of the Report (main text) by the Japan Tourism Advisory Council." 2003.

http://www.kantei.go.jp/foreign/policy/kankou/houkoku_s_e.html {Accessed August 27, 2004.}

Rentz, Joseph O. and Fred D. Reynolds. "Forecasting the Effects of an Aging Population on Product Consumption: An Age-Period Cohort Framework," *Journal of Marketing Research*, 29 (August, 1991).

Sakai, Marcia, Jeffrey Brown, and James Mak. "Population Aging and Japanese International Travel in the 21st Century," *Journal of Travel Research*, February, 2000.

Sakakibara, Fumihiko. *The Trend of Middle and Elderly Market in Japan*, Presented at the JATA World Tourism Congress 2003, October 2, 2003, Yokohama, Japan.

Seeliger, Michael. "'Town Living' Tour Based on 'Slow Life' Concept" Presented at the JATA World Tourism Congress 2003. October 23, 2003, Yokohama, Japan.

Syakaihoshou Shingikai Nenkin Bukai, "Zaisei saikeisan ni okeru keizai zenteitou ni tsuite," Tokyo: 2003.

TIJ nyûsu.

Travel Journal International (TJI). *Japan Travel Blue Book*, (Tokyo: TJI), annual.

United Nations. *World Population Prospects: The 2002 Revision*. Population Division, Department of Economic and Social Affairs, United Nations, 2003.

U.S. Bureau of Labor Statistics, at data.bls.gov/servlet/SurveyOutputServlet
Weekly Travel Journal. Weekly.

World Tourism Organization (WTO). *Tourism Highlights, 2003* (Madrid: WTO) at www.worldtourism.org

You, Xinran and Joseph T. O'Leary. "Age and Cohort Effects: An Examination of Older Japanese Travelers," in K.S. (Kaye) Chon, Tsutomu Inagaki, and Taiji Ohashi (eds.), *Japanese Tourists: Socio-Marketing and Psychological Analysis*, (New York: Haworth Press, Inc., 2000), pp. 21-42.

Table 1a. Forecasts of Japanese population

Unit: 1,000

Year	0-19	20-29	30-39	40-49	50-59	60+	Total
2000*	26,101	18,521	16,926	16,736	19,199	29,552	127,034
2005	24,453	16,168	18,731	15,841	19,086	33,636	127,914
2010	23,433	14,186	18,571	16,822	16,328	38,658	127,998
2015	22,616	12,719	16,241	18,632	15,510	41,506	127,224
2020	21,396	12,242	14,276	18,489	16,512	42,702	125,617
2025	20,266	12,080	12,821	16,191	18,325	43,762	123,444

*Actual

Source: World Population Prospects: The 2002 Revision, United Nations

Table 1b. Changes in Japanese population from 2000

Unit: 1,000

Year	0-19	20-29	30-39	40-49	50-59	60+	Total
2005	-1,648	-2,353	1,805	-895	-112	4,084	880
2010	-2,668	-4,335	1,645	86	-2,871	9,106	964
2015	-3,485	-5,802	-685	1,896	-3,689	11,954	190
2020	-4,705	-6,279	-2,650	1,753	-2,687	13,150	-1,417
2025	-5,835	-6,441	-4,105	-545	-874	14,210	-3,590
							-17,800

Figure 1a. Outbound Travel Propensity by Age and Year, Japanese Males

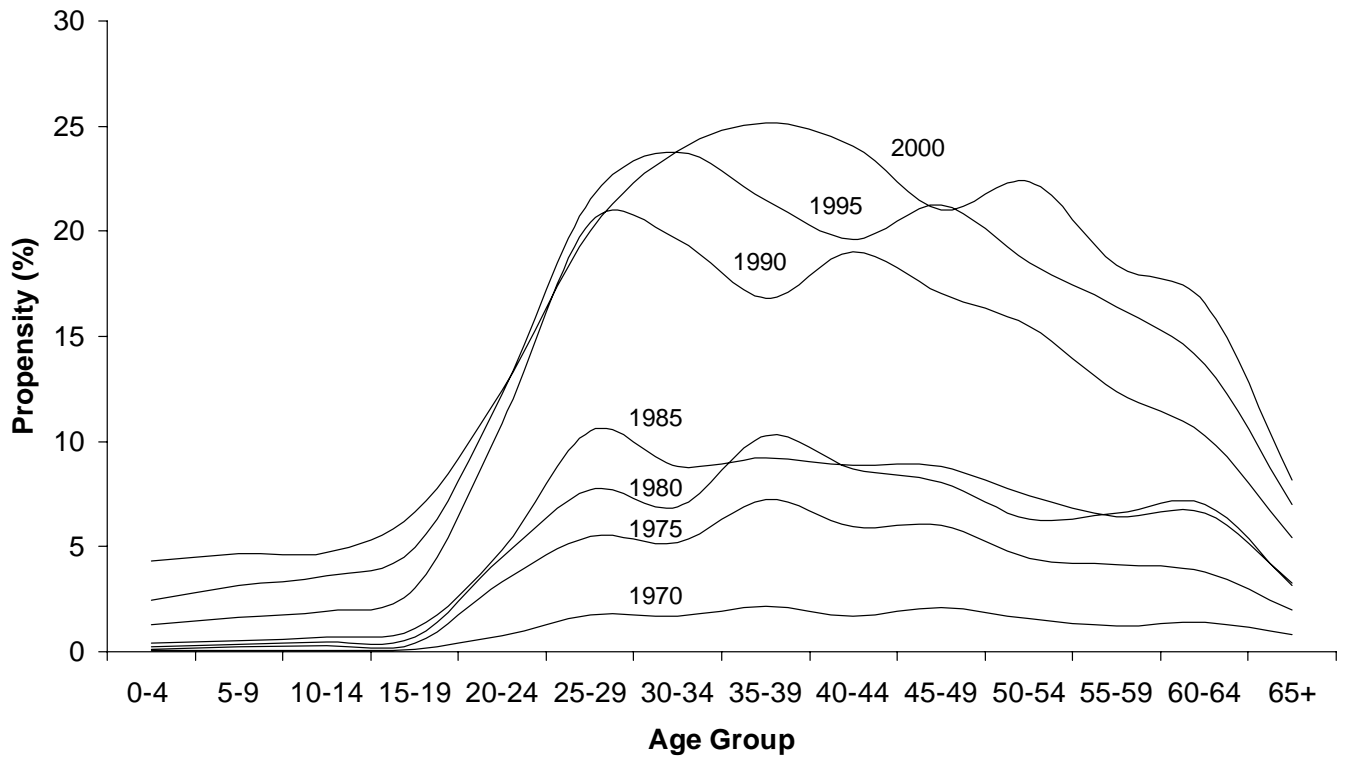


Figure 1b. Outbound Travel Propensity by Age and Year, Japanese Females

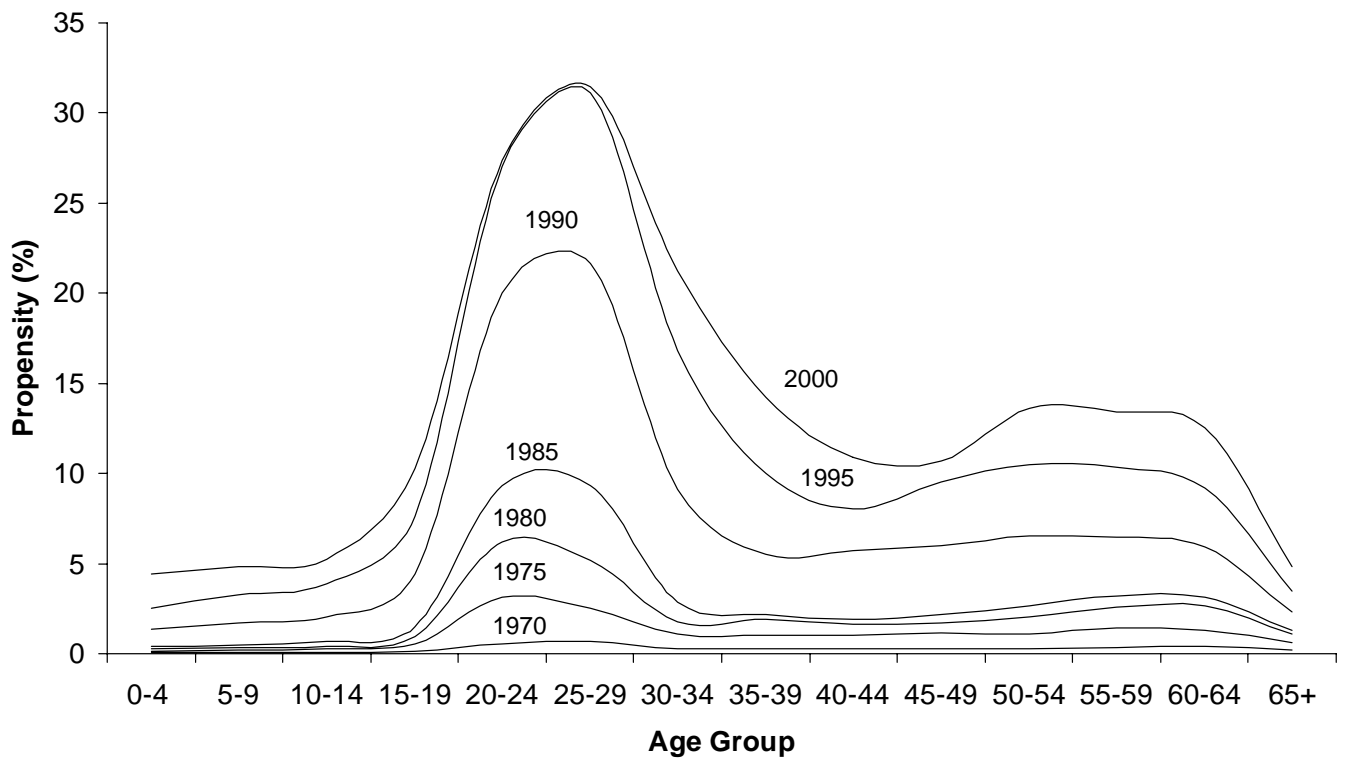


Table 2. Seemingly unrelated regression estimations for outbound travel propensity by gender

Parameter	Male (N =77)			Female (N =77)		
	Estimate	t Value	P value	Estimate	t Value	P value
Intercept	-30.3278	-5.18	<0.0001	-19.2424	-2.99	0.0041
Exchange rate	-0.0383	-6.26	<0.0001	-0.0305	-3.71	0.0005
Wage	2.9922	2.53	0.0142	-1.1917	-0.57	0.5694
Labor force participation rate	0.4429	6.14	<.0001	0.4920	7.73	<.0001
Age group (dummy)						
15-19	20.3291	5.14	<.0001	13.1740	3.79	0.0004
25-29	-5.2998	-2.78	0.0073	11.2101	7.02	<.0001
30-34	-6.0723	-2.74	0.0080	8.3972	4.43	<.0001
35-39	-5.7596	-2.26	0.0274	3.0575	1.83	0.0726
40-44	-5.8965	-2.09	0.0407	-0.6311	-0.37	0.7110
45-49	-5.4105	-1.80	0.0774	-0.3685	-0.20	0.8445
50-54	-5.7758	-1.86	0.0681	2.7232	1.35	0.1828
55-59	-3.6041	-1.33	0.1891	7.6192	3.37	0.0013
60-64	5.4456	3.21	0.0022	13.7526	5.25	<.0001
65 +	18.0453	6.79	<.0001	22.0684	5.93	<.0001
Cohort (dummy)						
Born 1975-84	6.8179	3.53	0.0008	13.3838	5.12	<.0001
Born 1965-74	8.3818	5.32	<.0001	10.5602	4.66	<.0001
Born 1955-64	8.5352	6.68	<.0001	4.0314	2.17	0.0338
Born 1945-54	3.9707	3.69	0.0005	-0.3310	-0.23	0.8171
Born 1935-44	1.5235	1.85	0.0690	-0.1467	-0.15	0.8817

Notes: The left side variable is the travel propensity for age group j.

System Weighted MSE = 0.9799 with 116 DF, System Weighted R-Square = 0.9546

The reference age group is the 20-24; the reference cohort group comprises of travelers born before 19:

Table 3a. Observed and forecasted Japanese overseas trips, males

Unit: 1,000

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed ¹												
1970	5	40	78	71	89	62	56	34	25	25	26	510
1975	18	152	299	242	305	245	220	115	86	73	76	1,830
1980	31	178	351	375	473	362	324	223	166	136	141	2,760
1985	50	203	416	403	499	405	360	291	218	157	168	3,170
1990	157	488	837	772	763	1021	767	620	469	333	325	6,552
1995	218	619	961	979	848	888	1,134	819	642	493	528	8,129
2000	256	536	996	1,058	1,034	945	940	1,167	792	624	756	9,104
Forecasted ²												
2005	360	485	810	1097	1052	1006	998	921	1053	654	930	9,366
2010	353	598	732	913	1226	1114	1071	1005	910	1006	1125	10,052
2015	417	560	794	823	1032	1299	1187	1079	991	885	1643	10,709
2020	409	631	745	879	933	1101	1386	1200	1065	968	1743	11,060
2025	444	619	824	828	980	997	1182	1405	1185	1047	2450	11,961

¹ Japan Travel Blue Book (annual)² Based on forecasting exchange rate=110 yen; 1% real wage increases each year; and Japanese government forecasts of future labor force participation rates.

Table 3b. Distribution of Japanese trips (%), males

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed												
1970	0.97	7.78	15.32	13.85	17.49	12.15	10.89	6.72	4.99	4.84	5.02	100.00
1975	0.96	8.29	16.33	13.21	16.68	13.40	12.01	6.31	4.68	3.99	4.14	100.00
1980	1.12	6.46	12.72	13.58	17.15	13.10	11.74	8.09	6.00	4.93	5.11	100.00
1985	1.58	6.40	13.12	12.71	15.74	12.78	11.36	9.18	6.88	4.95	5.30	100.00
1990	2.40	7.45	12.77	11.78	11.65	15.58	11.71	9.46	7.16	5.08	4.96	100.00
1995	2.68	7.61	11.82	12.04	10.43	10.92	13.95	10.08	7.90	6.06	6.50	100.00
2000	2.81	5.89	10.94	11.62	11.36	10.38	10.33	12.82	8.70	6.85	8.30	100.00
Forecasted												
2005	3.85	5.18	8.65	11.71	11.24	10.74	10.66	9.84	11.24	6.98	9.93	100.00
2010	3.51	5.95	7.28	9.08	12.19	11.08	10.66	10.00	9.05	10.01	11.19	100.00
2015	3.90	5.23	7.41	7.69	9.64	12.13	11.08	10.08	9.25	8.26	15.34	100.00
2020	3.70	5.71	6.73	7.95	8.43	9.95	12.53	10.85	9.63	8.76	15.76	100.00
2025	3.71	5.18	6.89	6.93	8.20	8.34	9.88	11.74	9.91	8.75	20.48	100.00

Table 4a. Observed and forecasted Japanese overseas trips, females

Unit: 1,000

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed ¹												
1970	5	31	30	13	11	9	10	8	8	8	7	139
1975	21	141	137	49	44	43	44	36	37	31	30	614
1980	40	240	233	96	87	68	70	76	80	67	66	1,123
1985	65	377	362	130	117	88	90	107	114	94	94	1,638
1990	217	870	867	353	246	304	271	267	256	208	206	4,065
1995	317	1,313	1,349	676	387	359	505	473	419	355	377	6,530
2000	376	1,127	1,520	924	573	424	476	713	596	500	617	7,846
Forecasted ²												
2005	370	889	1432	1086	819	505	536	483	603	440	623	7,785
2010	333	826	1271	1094	957	865	577	605	549	611	755	8,444
2015	417	751	1169	981	956	979	915	638	658	598	752	8,813
2020	395	837	1078	927	850	973	1035	984	700	753	721	9,252
2025	447	799	1179	866	802	862	1023	1117	1058	856	1567	10,576

¹ Japan Travel Blue Book (annual)² Based on forecasting exchange rate=110 yen; 1% real wage increases each year; and Japanese government forecasts of future labor force participation rates.

Table 4b. Distribution of Japanese trips (%), females

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed												
1970	3.30	22.12	21.45	8.98	8.11	6.73	6.93	5.65	5.94	5.44	5.35	100.00
1975	3.44	23.03	22.33	7.99	7.22	6.98	7.19	5.79	6.09	5.01	4.93	100.00
1980	3.55	21.39	20.74	8.57	7.74	6.07	6.25	6.75	7.09	5.98	5.89	100.00
1985	3.97	23.02	22.10	7.94	7.14	5.37	5.49	6.53	6.96	5.74	5.74	100.00
1990	5.34	21.40	21.33	8.68	6.05	7.48	6.67	6.57	6.30	5.12	5.07	100.00
1995	4.85	20.11	20.66	10.35	5.93	5.50	7.73	7.24	6.42	5.44	5.77	100.00
2000	4.79	14.36	19.37	11.78	7.30	5.40	6.07	9.09	7.60	6.37	7.86	100.00
Forecasted												
2005	4.75	11.42	18.39	13.95	10.53	6.49	6.88	6.20	7.75	5.65	8.00	100.00
2010	3.94	9.78	15.05	12.96	11.33	10.25	6.83	7.17	6.51	7.23	8.94	100.00
2015	4.73	8.52	13.26	11.13	10.85	11.10	10.38	7.24	7.47	6.78	8.54	100.00
2020	4.26	9.05	11.65	10.02	9.18	10.51	11.19	10.63	7.57	8.13	7.80	100.00
2025	4.23	7.56	11.15	8.19	7.58	8.15	9.67	10.56	10.00	8.09	14.82	100.00

Table 5a. Observed and forecasted Japanese overseas trips, total (both sexes)

Unit: 1,000

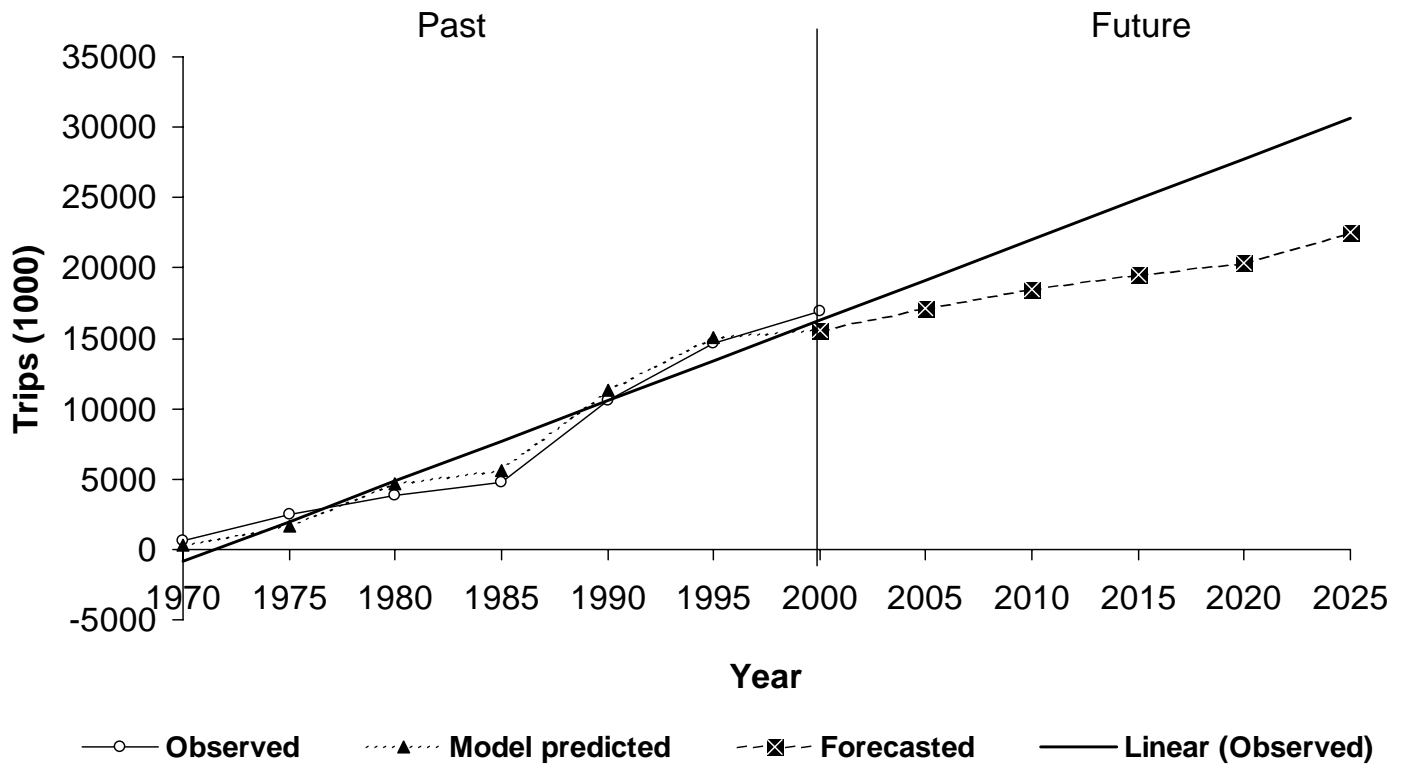
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed ¹												
1970	10	70	108	83	100	71	65	42	34	32	33	649
1975	39	293	436	291	349	288	264	151	123	104	106	2,443
1980	71	418	584	471	560	430	394	299	245	203	207	3,883
1985	115	580	778	533	616	493	450	398	332	251	262	4,808
1990	374	1358	1704	1125	1009	1325	1038	887	725	541	531	10,617
1995	535	1932	2310	1655	1235	1247	1639	1292	1061	848	905	14,659
2000	632	1663	2516	1982	1607	1369	1416	1880	1388	1124	1373	16,950
Forecasted ²												
2005	730	1374	2242	2183	1872	1511	1534	1404	1656	1093	1553	17,151
2010	686	1424	2003	2007	2182	1980	1648	1610	1459	1617	1880	18,496
2015	834	1311	1963	1804	1988	2278	2102	1717	1649	1483	2395	19,522
2020	804	1468	1823	1806	1782	2074	2421	2183	1765	1721	2465	20,312
2025	891	1418	2003	1694	1782	1859	2205	2522	2243	1903	4017	22,537

¹ Japan Travel Blue Book (annual)² Based on forecasting exchange rate=110 yen; 1% real wage increases each year; and Japanese government forecasts of future labor force participation rates.

Table 5b. Distribution of Japanese trips (%), total (both sexes)

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Observed												
1970	1.47	10.86	16.63	12.80	15.47	10.98	10.04	6.49	5.19	4.97	5.09	100.00
1975	1.58	11.99	17.83	11.90	14.30	11.79	10.80	6.18	5.03	4.25	4.34	100.00
1980	1.82	10.78	15.04	12.13	14.43	11.07	10.16	7.70	6.32	5.23	5.34	100.00
1985	2.39	12.06	16.18	11.09	12.81	10.25	9.36	8.28	6.91	5.22	5.45	100.00
1990	3.52	12.79	16.05	10.60	9.50	12.48	9.78	8.35	6.83	5.10	5.00	100.00
1995	3.65	13.18	15.76	11.29	8.42	8.51	11.18	8.81	7.24	5.78	6.17	100.00
2000	3.73	9.81	14.84	11.69	9.48	8.08	8.35	11.09	8.19	6.63	8.10	100.00
Forecasted												
2005	4.26	8.01	13.07	12.73	10.91	8.81	8.94	8.19	9.66	6.37	9.05	100.00
2010	3.71	7.70	10.83	10.85	11.80	10.70	8.91	8.71	7.89	8.74	10.17	100.00
2015	4.27	6.71	10.05	9.24	10.19	11.67	10.77	8.79	8.44	7.59	12.27	100.00
2020	3.96	7.23	8.97	8.89	8.77	10.21	11.92	10.75	8.69	8.47	12.13	100.00
2025	3.95	6.29	8.89	7.52	7.91	8.25	9.78	11.19	9.95	8.44	17.82	100.00

Figure 2. Japanese Outbound Travel: Past and Future
(Age 15 and over)



Appendix

Table A1a. Japanese male travel propensity (%)*

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
Observed											
1970	0.108	0.746	1.729	1.688	2.163	1.689	2.072	1.589	1.245	1.405	0.794
1975	0.434	3.322	5.502	5.223	7.240	5.941	6.008	4.409	4.129	3.770	1.972
1980	0.728	4.497	7.714	6.907	10.290	8.684	8.028	6.291	6.593	6.985	3.134
1985	1.086	4.870	10.532	8.838	9.239	8.893	8.793	7.408	6.391	6.594	3.293
1990	3.053	10.873	20.440	19.594	16.802	19.013	17.048	15.454	12.352	10.252	5.409
1995	4.964	12.257	21.552	23.762	21.463	19.585	21.252	18.496	16.411	13.630	7.027
2000	6.661	12.413	20.008	23.786	25.183	24.027	20.992	22.348	18.414	16.605	8.180
Forecasted											
2005	10.711	12.581	18.358	21.713	23.655	24.593	25.648	20.911	20.716	15.927	8.784
2010	11.437	17.706	18.919	20.673	24.302	25.156	26.423	26.232	21.198	20.612	9.289
2015	13.366	18.040	23.369	21.246	23.394	25.863	27.015	27.004	26.480	21.407	11.694
2020	13.619	20.086	23.867	25.825	24.083	25.041	27.798	27.663	27.233	26.793	11.676
2025	15.580	20.461	26.083	26.458	28.784	25.822	27.057	28.516	27.871	27.641	16.247

Table A1b. Japanese female travel propensity (%)*

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
Observed											
1970	0.102	0.576	0.653	0.298	0.276	0.255	0.302	0.297	0.347	0.385	0.182
1975	0.539	3.135	2.552	1.061	1.052	1.044	1.190	1.123	1.435	1.309	0.602
1980	0.984	6.186	5.177	1.798	1.886	1.630	1.729	2.074	2.565	2.664	1.075
1985	1.484	9.341	9.340	2.891	2.191	1.920	2.171	2.670	3.175	3.106	1.276
1990	4.435	20.046	21.680	9.124	5.484	5.718	5.965	6.515	6.484	5.919	2.309
1995	7.593	27.033	31.090	16.837	9.977	8.010	9.539	10.504	10.346	9.183	3.503
2000	10.276	27.354	31.463	21.261	14.240	10.925	10.687	13.612	13.396	12.528	4.821
Forecasted											
2005	11.544	24.099	33.974	22.243	18.845	12.602	13.911	10.919	11.648	10.088	4.270
2010	11.319	25.560	34.272	25.888	19.587	19.924	14.439	15.812	12.554	11.987	4.557
2015	14.051	25.311	35.937	26.356	22.595	20.044	21.109	16.038	17.330	13.850	3.957
2020	13.824	28.009	36.055	28.355	22.770	22.980	21.242	22.785	17.736	20.069	3.535
2025	16.545	27.746	39.119	28.806	24.475	23.082	24.190	22.994	24.663	21.918	7.467

* Ratio of overseas trips to population