

Visitor Groups to Hawaii and How Residents Perceive Them

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Abstract

Over the years Hawaii has seen changes in the market composition of its visitors with slower growth rates for mainland U.S.A. and Canadian markets and increasing growth rates from visitors from the East, particularly the Japanese market. With over 5.6 million annual visitors, visitors outnumber residents by almost six times and Hawaii is considered to be at a "mature" stage. At a recent Governor's Congress on Tourism, a resolution was passed stating that Hawaii should no longer be concerned solely with increasing the number of visitors, but that efforts should be focused on attracting a "quality visitor," defined as one who spends a lot and stays a long time. However, the data indicate that those who stay the longest also spend the least on a per-day basis. This paper compares the mainland U.S.A., Canadian and Japanese visitor contributions to the economy in terms of their spending patterns and multiplier effects. Although domestic visitors are the largest market segment, the results show that Japanese and Canadian visitors contribute proportionately more to the Hawaii economy owing to their spending patterns or length of stay. Finally, how residents perceive these various groups adds another dimension to what types of visitors might be targeted as "desirable."

Over the years Hawaii has seen changes in the market composition of its visitors with slower growth rates for mainland U.S.A. and Canadian markets and increasing growth rates from visitors from the East, particularly the Japanese market. With over 5.6 million annual visitors, visitors outnumber residents by almost six

times and Hawaii is considered to be at a "mature" stage. At a recent Governor's Congress on Tourism, a resolution was passed stating that Hawaii should no longer be concerned solely with increasing the number of visitors, but that efforts should be focused on attracting a "quality visitor," defined as one who spends a lot and stays a long time. However, the data indicate that those who stay the longest also spend the least on a per-day basis. Clearly, the concept of quality visitor is one that requires thought, since different types of visitors will benefit different types of establishments.

One way of assessing that elusive aspect of quality might be to examine the economic impact of various types of tourists. The purpose of this paper is to compare the spending patterns and the propensities of major tourist groups to generate income and employment. Using Hawaii Visitors Bureau data on visitor expenditures obtained by diary questionnaires and the 63 × 63 input-output matrix of the Hawaii economy developed by the Department of Planning and Economic Development, multipliers are calculated for domestic, Japanese, Canadian, and other foreign visitors. By applying the multipliers to visitor spending, the relative contributions by the various groups to local income and employment can be determined.

The Study Area

In 1986 Hawaii received more than 5.6 million visitors, who spent about \$ 5.6 billion (Hawaii Visitors Bureau 1986). It is estimated that tourism provides about 40% of Hawaii's gross domestic product and one-third of the jobs and government revenues. The visitor industry has been the principle source of economic growth in Hawaii over the past two decades.

The main source of visitors to Hawaii is the mainland U.S.A., followed by Japan and Canada (see Table 1). Sixty-seven percent of all visitors are domestic

Table 1. Origin of Visitors to Hawaii, 1986

Origin	Percent
Mainland U.S.A.	66.7%
Japan	16.8
Canada	5.0
Australia	3.9
Europe	1.8
Other	5.8
	100.0%

Source: Hawaii Visitors Bureau, Market Research Department.

visitors; however, the goal of the Hawaii Visitors Bureau is to increase the percentage of foreign visitors to 50% to decrease reliance on a single market.

Relative Contributions of Visitors by Origin

Vast differences exist in the consumption and spending patterns among different types of visitors. Table 2 shows the distribution of visitor spending in 1980. For example, Japanese tourists spend about three times the dollar amount per day of the average visitor and about a third of that amount on gifts and souvenirs. In addition, the average length of stay for all visitors is 10 days, compared to 5 days for the Japanese visitor (Hawaii Visitors Bureau). Differences in expenditure patterns are expected to be reflected in the multiplier values. It might be posited, for example, that although Japanese tourists spend the most on a daily basis, they generate the least household income per dollar of expenditure because of leakages due to greater purchases of imported luxury goods from duty-free shops and Japanese-owned enterprises through prepaid group tour arrangements.

Table 2. Tourist Expenditure Pattern for Hawaii, 1980

	Mainland U.S.A.	Canadian	Japanese	Other Foreign
Daily expenditure per person	\$ 71.24	\$ 65.30	\$ 185.00	\$ 74.92
Distribution				
Lodging	35%	35 %	13 %	33 %
Food and beverages	23	26	18	23
Local transportation	11	9	13	8
Gifts and Souvenirs	9	6	36	9
Clothing	7	8	6	11
Groceries	3	5	2	3
Entertainment	5	5	4	4
Other	7	6	8	9
	100 %	100 %	100 %	100 %

Source: 1980 Visitor Expenditure Survey, Hawaii Visitors Bureau.

Table 3 shows that in 1986 the per-person dollars spent by the various groups vary widely. Japanese visitors spend the most with \$ 257.40 per day, or about three times as much as do other visitors and \$ 1287 per trip. Canadians spend the least on a per-day basis at \$ 80.14, but they are the second highest spenders per trip at \$ 1202, because of their long length of stay. Visitors from the mainland U.S.A. spend \$ 95.40 per day, or \$ 964 per visit. Other foreigners have higher than average spending at \$ 117.76, but shorter lengths of stay, resulting in the lowest average expenditures per visit of about \$ 706. These comparisons show that the Japanese spend the most on both per day and per trip bases.

Table 3. Hawaii Visitor Expenditures, 1986

	Dollars per Person per Day	Length of Stay in Days	Dollars per Person per Visit
Mainland U.S.A.	\$ 95.40	10.1	\$ 964
Japan	257.40	5.0	1287
Canada	80.14	15.0	1202
Other foreign	117.76	6.0	706

Source : Hawaii Visitors Bureau Market Research Department.

The Multiplier Method

The multiplier measures the impact of exogenous spending in the economy by adding up all the successive rounds of respending. Direct effects account for income generated as tourists make purchases from the tourist-related businesses, while indirect effects occur as these businesses make local purchases from all other enterprises in the region. Furthermore, the household income and spending generated through the additional earnings are called induced effects.

The impact of tourist spending measured at these three stages can be used to determine either ratio or normal multipliers. Ratio multipliers provide a useful picture of the degree of interdependence in the economy and the relative importance of the secondary (indirect and induced) effects, while normal multipliers indicate the amount of income that is generated per dollar of tourist expenditure.

Two types of ratio multipliers are calculated in this study. The Type I multiplier

is the ratio of the direct and indirect income to the direct income, while the Type II multiplier is the ratio of the direct and secondary income to the direct income. Explanation of the model can be seen in previous articles by this author. (Liu 1986, Liu et al 1984, 1983, 1982)

Tourist Income Multipliers

The total normal multiplier for all visitors to Hawaii was .80 in 1980, indicating that each visitor dollar results in \$.80 of local income. Contrary to common belief, the Japanese visitor had the highest propensity to generate total household income, i.e., \$.84 compared to an average of \$.80, which is about 5% higher. Visitors from Japan had the highest direct and induced normal coefficients, as well as the lowest indirect and ratio multipliers. These differences can be explained by the variations in spending patterns that showed that they spend proportionately more on retail goods and less on hotels and restaurants.

Note that contrary results are obtained when using the normal versus ratio techniques. When the merits of the two different approaches to calculate the income multiplier are compared, normal multipliers are a better measure of overall benefit, since they provide a direct account of income generated per tourist dollar spent, while the conventional approach of using ratio multipliers gives only the extent of secondary income generated to the direct income received.

Tourist Employment Multipliers

The results indicate that in 1980, 80 jobs were created per \$1 million of tourist spending (see Tables 5 and 6). As was the case for income multipliers, the same patterns for income multipliers by origin were found for the employment multipliers. In particular, the total income multiplier (normal) for visitors from Japan exceeded the average.

This means that Japanese visitors had greater than average propensities to generate both income and employment.

Differences in the distributions of visitors can be compared to their contributions to annual receipts, local household income and employment. Expenditure data for 1980 were used in order to be consistent with the multiplier values. In Table 6 the results show that although Japanese visitors represent about 17% of the market, they contribute 20% of annual receipts, 22% of household income, and 21%

of employment. Canadians also contribute a larger proportion to the economy than would be expected from their percentage of visitor volume. They constitute 8% of all visitors, yet contribute 11% of annual receipts, income, and employment.

Table 4. Hawaii Tourist Income Multipliers by Origin, 1980

	Normal			Ratio		
	Direct	Indirect	Induced	Total	Type I	Type II
Mainland U.S.	.3691	.1347	.2946	.7984	1.3648	2.1631
Japan	.4131	.1158	.3093	.8382	1.2803	2.0290
Canada	.3660	.1352	.2932	.7944	1.3693	2.1702
Other Foreign	.3426	.1504	.2899	.7992	1.4244	2.2577
All visitors	.3695	.1346	.2948	.7989	1.3643	2.1623

Table 5. Hawaii Tourist Employment Multipliers by Origin, 1980

	Normal			Ratio		
	Direct	Indirect	Induced	Total	Type I	Type II
Mainland U.S.	.0462	.0101	.0234	.0797	1.2183	1.7244
Japan	.0523	.0087	.0246	.0855	1.1663	1.6348
Canada	.0461	.0101	.0233	.0795	1.2084	1.7000
Other Foreign	.0406	.0114	.0221	.0741	1.2660	1.7992
All visitors	.0464	.0101	.0234	.0798	1.2173	1.7218

Table 6. Relative Contribution of Visitor Markets to Hawaii's Economy, 1980

	Volume of Visitors (000)	Distribution of Visitors	Distribution of Annual Receipts	Distribution of Local Household Income	Distribution of Employment
Totals ^a	3,934.5		\$2.9 billion	\$2.1 billion	148,700
Mainland U.S.A.	2,456.0	62.4 %	59.5 %	58.8 %	59.1 %
Japan	658.1	16.7	19.7	21.6	21.0
Canadian	331.8	8.4	10.7	10.6	10.6
Other Foreign	488.6	12.5	10.1	10.0	9.3

^aSource: Hawaii Visitors Bureau Annual Research Report 1981 and Hawaii State Department of Economic Development, The Economic Impact of Tourism in Hawaii: 1970 to 1980, 1983.

By contrast, foreign visitors from other countries and those from the mainland U.S.A. contribute a slightly smaller proportion to the economy than is indicated by their relative shares of visitors. Other foreign visitors represent 13% of visitors, yet contribute only 10% of receipts and income and 9% of employment. Mainland U.S.A. visitors are 62% of visitors, but contribute 60% of annual receipts and 59% of income and employment. These results show that: (1) the multipliers do not alter the ratios significantly, and (2) length of stay compensates so that variations in per visit spending is not as great as expected. Hence, the impact of the spending on income and employment among the various groups is not as large as one would initially expect by comparing per-day expenditures.

Conclusion and Policy Implications

Analyses of spending patterns and differential income and employment multipliers for tourist groups in a small regional economy were performed. The results are subject to the usual limitations of a static input-output model, data deficiencies, and assumptions such as the existence of infinite resources. Despite these limitations, some positive benefits can be gained from this study.

First, as can be expected the value of the income multiplier for Hawaii tourism is low. It is only .80 for this small island economy with high leakages. The importance of secondary impact is evident as indirect and induced effects comprise about half the total impact. These results are consistent with previous studies. Further, the choice of multiplier is important since opposite patterns and trends were found for normal versus ratio ones.

Second, comparison of the disaggregated multipliers showed that those tourists with high direct and induced effects also had correspondingly low indirect and ratio coefficients. These differences reflect variations in spending patterns which indicate that those who spend more on retail purchases and less on hotel and restaurants had a greater propensity to generate more total household income. These findings are consistent with those from larger, more self-sufficient regions (Liu and Var 1984).

Third, only slight variations were found among various tourist types in their propensities to generate income and employment. However, the highest multipliers were found for visitors from Japan.

The result on Japanese visitors is counter to common belief since one might expect greater consumption leakages on several counts: (1) more purchases of luxury items which are imported, (2) more purchases from duty-free shops, and (3) more prearranged group tours with expenditures in a circuit of Japanese-owned firms. Regarding product mix, the import content is not expected to vary significantly except for a few local items, since almost everything is shipped in anyway. It is estimated that as much as 80% of products originate outside the islands.

In addition, for the purposes of calculating the multiplier, purchases from duty-free shops may not differ significantly from other retail outlets, since nonlocal taxes and duties are considered to be leakages in both cases. Taking the most extreme case that Japanese visitors buy all gifts and souvenirs there, and assuming further that duty-free shops function as wholesale outlets with the loss of all local taxes, the total income multiplier was recalculated to be .7897, rather than .8382. The new estimate is 6% lower, which is not considered to be a substantial difference.

The prearranged tour syndrome with a captive consumer in a closed circuit suggests greater leakages. However, purchases from exclusively Japanese-owned enterprises in tour packages is not substantiated by data (Hawaii State DPED 1979). Further, the model treats the retail and wholesale sectors as margin industries and includes as transactions only those operating expenses or gross margins associated with distribution of goods. Without specific data it is not evident that purchases by visitors from Japan have lower local margins compared to visitors from other places.

Of course, profits and margins are remitted directly to any travel agent or supplier based outside Hawaii through prepaid purchases, but these amounts are not included in the expenditure data used in this study. From a methodological standpoint, these amounts are leakages from the first round of spending and hence are subtracted from the multiplicand, not the multiplier. Finally, it is not clear that Japanese-owned firms are structurally or operationally different from any other externally owned, or even locally owned, enterprises. A report on foreign investment in Hawaii suggests that Japanese-owned, hotels do not operate substantially differently from other hotels in terms of hiring practices or reinvestment (Hawaii State DPED 1979).

However, recent data indicate that the distribution of the Japanese tourist dollar is moving toward that of the other visitors, i.e., more FITS and smaller percentages of retail purchases. This would tend to diminish the difference in the

multiplier coefficients. The newly established practice of purchasing Hawaii souvenirs in Japan, indeed, without having to leave Hawaii with it, reduces the high percentage of money spent on gifts by shifting the tourist purchase into an export item.

Again, the variations are not expected to be substantial in terms of percentages. However, differences in actual dollar amounts would be more significant. The surprising finding is that even with downward adjustment, the multiplying effect of the Japanese dollar is not significantly lower than that of other tourists.

Fourth, this study has examined the relative contributions of various tourist groups in terms of receipts, income and employment. Of course, domestic visitors, representing 62% of total visitors, have the highest overall contribution to the economy, i.e., 60% of receipts and 59% of income and employment. By comparison, compared to their market mix, Japanese and Canadian visitors have higher relative contributions to the economy on a percentage basis. The impact of the high daily spending by Japanese visitors is mitigated somewhat by their short length of stay. By contrast, Canadians, who spend the least on a daily basis, have greater than proportional relative impacts because they stay the longest.

Fifth, the results suggest that regional policy goals should include information on relative impacts and contributions, as well as the usual total or average tourist expenditures. Moreover, multipliers provide only a partial picture for policy formulation; demand patterns and supply constraints must also be considered.

Finally, economic impact is only one measure of quality. A recent survey conducted by this author of over 600 Hawaii residents measured the perception of tourists that bring in the most dollars. The ranking is as follows: Japanese, Canadians, Asian(non-Japanese), West Coast Mainland, Europeans, East Coast Mainland, Australian, and Hispanics. However, when respondents were asked which tourist is most preferred, a different ranking resulted: West Coast Mainland, Canadian, Japanese, East Coast Mainland, Australian, European, Asian, and Hispanic. These perceptual gaps reflect resident stereotyping of tourists. Ultimately, the concept of quality includes social aspects and the "quality visitor" might be one that is "created" rather than attracted.

In conclusion, this study has demonstrated the importance of having specific information for tourism planning at the regional level. In the case of Hawaii, mainland visitors will continue to be the backbone of the tourism market. However, in terms of visitor expenditures the value of the Japanese and Canadian markets can

be seen. The results of this study show that contrary to popular belief, the impact of the Japanese dollar is not substantially lower than that of other visitor spending. They also spend the most on both per day and per trip bases. Finally, there is a need for further research on this important industry. Some fruitful directions would be to study the impact of convention visitors and other foreign markets.

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