ANALYSIS ON TRAVEL EXPENDITURE BY OCCUPATION FOR JAPAN DOMESTIC TRAVEL

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Abstract

There is growing interest in the travel market with its significant impact on the economy and society. This paper attempts to provide some insight to the Japan domestic travel market by analysing the travel related purchasing behaviour by occupation. It examines travel related expenditure covering five consumption items for domestic travel with and without overnight stays by Japan residents. The occupations examined are management; professionals and engineers; administration; retail, service and security; agriculture, lumbering, fishing; manufacturing, transport, construction, field work; housewives; students; retired and unemployed. The results find that the greatest difference by occupation is the partiality agriculture, lumbering and fishing and housewives have towards package tours, holidays and vacation for travel with and without overnight stays. Concerning travel with overnight stays, management, professionals and engineers exhibited similar purchasing behaviours and for travel without overnight stays, professionals, engineers, administration retail, service and security displayed similar preferences. Students showed an exceptionally strong partiality towards entrance and attraction expenditure when travelling without overnight stays. Another significant result is the weak preference by management for travel gifts and shopping. The purchasing behaviour of manufacturing, transport, construction and field work were the closest to the average traveller.

Keywords: occupation, travel expenditure, consumption item, Japan domestic overnight travel

JEL classification: J10, Z30, Z33

1. Introduction

There is growing interest in the travel market with its significant impact on the economy and society. In Japan, with travel listed as a focus market for development according to the Tourism-based Country Promotion Basic Act (Japan Tourism Agency, 2017), there is growing need to understand the trend of the travel industry.

In order to understand the market of an industry, demographic variables are often applied in the analysis since it is straightforward to measure the variables and they reflect the preference and behaviours of the consumers (Kotler and Keller, 2006). There are numerous past studies using demographic variables (e.g. Rendon, 2003; Kuris and Bortoleto, 2011). They have also been examined in past studies on travel and tourism to understand motivation, preference and behaviour patterns (e.g. Crask, 1981; Merci and Hunt, 1998; Heung et al., 2001; Johns and Gyimóthy, 2002; Tsiotsou and Vasioti, 2006; Jönsson and Devonish, 2008; Katsoni et al., 2011; Hasanagas et al., 2018)

This paper examines occupation as the demographic variable considering the impact it may have on leisure time, income and social status which may affect travel. Occupation is often included as a demographic variable to study travel. Woodside and Pitts (1976) include occupation in their study on predicting travel behaviour. Occupation is often seen in studies that focus on specific type of travel such as sport tourism and mountain tourism (Daniels, 2004; Daniels et al., 2004; Fredman, 2008). Jang et al. (2004) examine socio-demographic and trip-related variables which find occupations as having a significant effect on travel expenditures by Japanese travellers to the United States. However, research on Japan domestic tourism which examines occupation is limited. There is the study by Furuya et al. (2008) which focuses on Chinese, Korean and Japanese businessmen and public servants and examines the media that the tourist information was obtained, the frequency of domestic travel and overseas travel based on type of travel. Study by JTB (2015) examines occupation to analyse the motivation of domestic and international travel, which find businessmen the

most eager and housewives the least motivated towards domestic travel in Japan. Development Bank of Japan and Japan Economic Research Institute (2017) study by occupation, the length of stay for domestic business travel; the size of share of business travel within all domestic travel; and the business travel expenditure per night of travel. They find that managerial positions and manufacturing have the longest stay as well as the largest share of business travel and agriculture and management were found to have the highest expenditure per night of travel. However, past studies have not comprehensively covered the preference for type of travel expenditure by occupation. This paper will cover the total number of purchases per consumption item by occupation for domestic travel with and without overnight stays. The paper aims to supplement past research by focusing on the following areas. First, it will study each consumption item to examine the occupations that have a partiality towards the consumption item and compare the differences. It will then focus on each occupation to compare the strength of the partiality towards each consumption item. This will be conducted for both travel with and without overnight stays. Secondly, it will examine partialities towards each consumption item for travel with and without overnight stays to identify occupations with similar results. It will then categorize each occupation depending on the difference in partiality compared to the average of all travellers. Next, each occupation will be studied to understand which consumption items have similar results for both travel with and without overnight stays. The consumption items will be categorized based on the strength of the preference compared to the overall average. Finally, for each occupation, it will examine whether the partiality towards each consumption item is stronger for travel with or without overnight travel.

The next section will cover the methodology and data and the third section will provide the results. The fourth section will discuss the main findings from the results, followed by the conclusion which will provide some policy implications and future research questions.

2. Methodology and Data

This paper studies the Japan domestic travel market by looking at the share of all travellers' purchases of each consumption item to identify any differences by occupation of the traveller. This paper applies the data from the Tourist Consumption Trend Report from 2012 to 2017 made available from the Japan Tourism Agency (2018) concerning the total number of purchases during travel per consumption item and by occupation. The data is used to examine the cases of travel with and without overnight stays for the domestic travel market by Japan residents. There are nine occupations covered by the data, which are *management*; professionals and engineers (*professionals*); *administration*; retail, service and security (*retail*); agriculture, lumbering, fishing (*agriculture*); manufacturing, transport, construction, field work (*manufacturing*); *housewives*; *students;* retired and unemployed (*retirees*). Concerning the travel related consumption items, they are categorized into the following six. Consumption items for travel with overnight stays are, package tours, holidays and vacation expense (*package*); transportation (*transportation*); *accommodation*; food and drink (*food&drink*); 'omiyage - travel gifts' and shopping expense (*souvenir*); and entrance and attraction expense (*attraction*). The consumption items for the case without overnight stays will be the same five items excluding the *accommodation*.

The analysis is conducted as follows. First, we will calculate the share of the number of total purchases for each consumption item for all travellers.

$$D_{Ji}^{c} = \frac{X_{Ji}^{c}}{X_{JI}^{c}} \quad (1)$$

Here, X represents the total number of purchases of the consumption item during domestic travel. i represents the consumption item, I refers to the total consumption items and J is total occupations. c represents the cases (o) with overnight stays or (d) without.

Next, the share of consumption item by occupation will be determined.

$$D_{ji}^{c} = \frac{X_{ji}^{c}}{X_{jI}^{c}} \quad (2)$$

Here, occupation is depicted by *j*. By dividing (2) by (1), the size of the share of consumption item by occupation relative to the total travellers' share by (relative share of consumption item by occupation) can be compared. Hence, in (3) below, the relative share of consumption item by occupation is represented.

$$P_{ji}^{c} = \frac{D_{ji}^{c}}{D_{ji}^{c}} \quad (3)$$

If the partiality is calculated based on only one fiscal year, there is the risk of an impact specific to that fiscal year and the value becomes unreliable. In order to address this possibility, this study adopts the mean for 2012 to 2017. When P_{ji}^{c} is larger than 1, then the share for that consumption item by the occupation is greater than the average share; when it is less than 1, then the share by the occupation is less than the average; and when it is 1, then the share by the occupation is equivalent to the average. Here, we will define $P_{ji}^{c} < 0.667$ as 'very weak', $0.667 \leqq P_{ji}^{c} \leqq 0.909$ as 'weak', $0.909 < P_{ji}^{c} < 1$ as 'slightly weak', $1 < P_{ji}^{c} < 1.1$ as 'slightly strong', $1.1 \leqq P_{ji}^{c} < 1.5$ as 'strong' and $1.5 \leqq P_{ji}^{c}$ as 'very strong'. Since $P_{ji}^{c} = 1$ is not found in any of the results, it will be omitted. In the annotations of Table 3, and 4, the P_{ji}^{c} is represented as *PF*.

The partiality value provided above will first be compared amongst the occupations for each consumption item. In order to analyse the dispersity of the partiality for each consumption item amongst the occupations, we will measure the standard deviation of the partiality amongst the occupations. Such comparison would help marketers with their strategy when considering their target audience. In order to understand the largest difference in preference amongst occupations, a comparison was made between the occupation that shows the greatest preference with the one that shows the least. Since the results were consistent with the standard deviation analysis, taking into consideration of space, they have been omitted from this paper. Next, for each occupation, the partiality value will be compared amongst the consumption items. The dispersity concerning partiality amongst consumption items by an occupation will be analysed by measuring the standard deviation of the partiality between consumption items. The aim of the analysis is to provide opportunities for the various travel related providers to cooperate and gain synergy. The analysis is applied to cases with and without overnight stays, which will enable the examination of any differences or similarities between occupations concerning the partiality of each consumption item for travel with and without overnight stays. As well as study any differences and similarities between the consumption items for each occupation for travel with and without overnight stays, it will further focus on each consumption item to identify occupations where the strength of the partiality changes depending on whether the travel includes overnight stays or not. This is depicted in the following equation.

$$R^{c} = \frac{P_{ji}^{o}}{P_{ji}^{a}} \quad (4)$$

If the value is greater than 1, then partiality is stronger for travel with overnight stays and if it is less than 1, it is stronger for travel without overnight stays. From equation (4) which depicts the partiality value for travel with and without overnight stays, if $R^{c} < 0.667$ is defined as 'very weak', then $0.667 \leqq R^{c} \leqq 0.909$ will be 'weak', $0.909 < R^{c} < 1$ will be 'slightly weak', $1 < R^{c} < 1.1$ will be 'slightly strong', $1.1 \leqq R^{c} < 1.5$ will be 'strong' and $1.5 \leqq R^{c}$ will be 'very strong'. Since $R^{c} = 1$ is not found in any of the results, it will be omitted.

3. Results

In this section, we will analyse the purchasing behaviour for each domestic travel related consumption item by occupation.

Table 1. Travel purchase partiality with overnight travel

	Pk	Tp	Ac	FD	Sv	At	S.D. among Consumption Items	
Management	0.887	1.018	1.177	1.051	0.899	0.816	0.132	(3)
Professionals	0.749	1.006	1.115	1.078	0.992	0.964	0.128	(4)
Administration	0.900	1.016	1.094	1.093	1.051	1.069	0.073	(8)
Retail	0.833	0.987	1.046	1.050	1.009	0.984	0.079	(6)
Agriculture	2.194	1.002	0.819	0.769	1.032	1.020	0.529	(1)
Manufacturing	0.856	1.012	0.957	0.981	0.998	0.967	0.055	(9)
Housewives	1.125	1.034	0.943	0.976	1.084	1.121	0.076	(7)
Students	1.306	0.969	0.834	0.921	0.965	1.063	0.163	(2)
Retirees	1.155	0.972	0.889	0.884	0.981	0.984	0.098	(5)
S.D. among Occupations	0.445 (1)	0.022 (6)	0.128 (2)	0.106 (3)	0.053 (5)	0.087 (4)		

Pk: Package, Tp: Transportation, Ac: Accommodation, FD: Food&Drink, Sv: Souvenir, At: Attraction.
Number in parentheses represent the rank order
S.D. represents Standard Deviation

First, domestic travel for the case with overnight stays will be observed. We will investigate the partiality for each consumption item by occupation relative to the average of all travellers. In Table 1, concerning partiality towards *package*, *agriculture* shows a value of 2.194 which is the largest amongst all occupations by far and *professionals* shows the least partiality at 0.749. The dispersity of the partiality towards *package* is the largest amongst all consumption items at 0.445. Next, concerning *transportation*, *housewives* have the strongest partiality at 1.034 and the *students* the least at 0.969. The dispersity amongst occupations is smallest amongst the consumption items at 0.022. Concerning *accommodation*, *management* shows the strongest partiality at 1.177 and *agriculture* the weakest at 0.819. The dispersity concerning the partiality towards *accommodation* is the second largest amongst the consumption items at 0.128. *Food&drink* partiality by *administration* is the strongest at 1.093 and *agriculture* the weakest at 0.769. The dispersity of partiality for *food&drink* is the third largest amongst the six items at 0.106. For *souvenir*, *housewives* show the strongest partiality at 1.084 and *management* the weakest at 0.899. The dispersity amongst the occupations for *souvenir* is the second smallest amongst the items at 0.053. Finally, the partiality towards *attraction* is strongest amongst *housewives* at 1.121 and the weakest with *management* at 0.816. The dispersity of the partiality amongst occupations for *attraction* is the fourth largest at 0.087.

Next, we will examine each occupation and compare the partiality towards each consumption item with the average of all travellers. From Table 1, *management* and *professionals* show weaker partiality than the total average towards *package, souvenir* and *attraction*. However, they show stronger partiality than the total average for *transportation*, *accommodation* and *food&drink*. The partiality towards *accommodation* are especially strong. *Administrators* have a slightly weaker than average partiality towards *package*, but a slightly stronger than average towards the other five consumption items. *Retail* show weak partiality towards *package*, *transportation* and *attraction* with *package* being very weak. However, it shows slightly stronger than the average partiality towards *accommodation*, *food&drink* and *souvenir*. The partiality towards *package* by *agriculture* is very strong and it shows a slightly higher than average partiality towards *transportation*, *souvenir* and *attraction*. However, less than average partiality towards *accommodation* and *food&drink* are identified. *Manufacturing* shows a much weaker than average partiality towards *package* and a slightly less than average towards *accommodation*, *food&drink*, *souvenir* and *attraction*. However, the partiality towards *transportation* is slightly stronger than the average. The partiality towards *package*

and *attraction* by *housewives* are stronger than the average and slightly stronger for *souvenir* and *transportation*, though slightly weaker than average for *accommodation* and *food&drink*. *Students* show a strong partiality towards *package* and slightly stronger partiality for *attraction*, but a weaker than average towards *transportation*, *accommodation*, *food&drink* and *souvenir*. The partiality towards *accommodation* is especially weak. *Retirees* show a strong partiality towards *package*, but less than average for all other consumption items, especially *accommodation* and *food&drink*. The dispersity of partiality amongst the consumption items in order of size is *agriculture*, which is very large, followed by *students*. The third largest is *management*, followed closely by *professionals* and then *retirees*. *Retail*, *housewives* and *administration* show very little difference. The least is *manufacturing*.

The next section will examine the case without overnight stays for domestic travel in Japan. We will first observe the partiality for each consumption item by occupation relative to the average of all travellers.

Table 2. Travel purchase partiality without overnight travel

	Pk	**Tp**	**FD**	**Sv**	**At**	S.D. among Consumption Items	
Management	0.497	1.070	0.995	0.805	0.648	0.238	(4)
Professionals	0.510	1.071	1.069	0.930	0.911	0.230	(6)
Administration	0.660	1.038	1.102	0.971	0.999	0.171	(7)
Retail	0.779	1.041	1.047	0.981	1.003	0.110	(8)
Agriculture	2.175	0.832	0.855	1.113	0.928	0.567	(1)
Manufacturing	0.794	1.026	1.016	1.050	1.043	0.108	(9)
Housewives	1.799	0.922	0.924	1.148	1.032	0.367	(2)
Students	0.774	0.979	1.065	1.018	1.410	0.230	(5)
Retirees	1.592	0.913	0.856	1.047	1.012	0.294	(3)
S.D. among Occupations	0.621 (1)	0.083 (5)	0.093 (4)	0.102 (3)	0.196 (2)		

Pk: Package, Tp: Transportation, Ac: Accommodation, FD: Food&Drink, Sv: Souvenir, At: Attraction.
Number in parentheses represent the rank order
S.D. represents Standard Deviation

From Table 2, the partiality towards *package* by *agriculture* is the strongest amongst all occupations by far at 2.175 and the weakest partiality is at 0.497, by *management,* which is very low. The largest dispersity concerning partiality of consumption item by occupation is also seen in *package* at 0.621. There is a partiality towards *transportation* by *professionals* at 1.071 which is the strongest amongst all occupations and the weakest partiality is seen by *agriculture* at 0.832. However, the dispersity concerning the partiality towards *transportation* is the smallest amongst all consumption items at 0.083. Concerning *food&drink*, *administration* shows the strongest partiality at 1.102 and *agriculture* the weakest at 0.855. The dispersity concerning partiality amongst occupations for *food&drink* is 0.093 which is the second smallest amongst the five consumption items. *Housewives* shows the strongest partiality towards *souvenir* at 1.148 and *management* the weakest at 0.805. The dispersity amongst occupations is 0.102, which is the third largest amongst the five consumption items. Finally, concerning *attraction*, *students* show the strongest partiality at 1.410 and *management* the least at 0.648 which is very low. The dispersity amongst occupations for *attraction* is the second largest amongst all the consumption items at 0.196.

Next, we will observe each occupation and compare the partiality towards each consumption items with the average of all travellers. Table 2 shows that the *managements*' partiality towards *package*, *food&drink*, *souvenir* and *attraction* is lower than the total average, with very weak partiality towards *package* and *attraction*. Results for *souvenir* is also weak. However, the results for *transportation* is slightly higher than the total average. *Professionals* and *administration* show a lower than average partiality towards *package, souvenir* and *attraction*, with very weak partiality towards *package*. They have a slightly

higher than average partiality towards *transportation* and *food&drink*. *Retail* also has a weak partiality towards *package* and slightly lower than average for *souvenir*. However, *retail* show a slightly higher than average towards *transportation*, *food&drink* and *attraction*. *Agriculture* partiality towards *package* is very high compared to the average and partiality for *souvenir* is strong. On the other hand, the partiality for *transportation* and *food&drink* by *agriculture* is particularly weak and partiality towards *attraction* is slightly lower than the average. *Manufacturing* shows a lower than average partiality for *package* and a slightly higher than average for all other consumption items but no noticeable difference amongst them. *Housewives* show a particularly strong partiality towards *package*, higher than average for *souvenir* and slightly higher for *attraction*. However, they show a slightly lower than average partiality for *transportation* and *food&drink*. *Students* have a strong partiality for *attraction* and slightly higher than average for *food&drink* and *souvenir*. The partiality towards *package* is lower than the average and a slightly lower than average for *transportation*. The partiality of *retirees* shows a similar trend to *housewives* with a very strong partiality for *package* and slightly higher than average for *souvenir* and *attraction*. The weak partiality for *food&drink* and slightly lower than average partiality for *transportation* is also similar. The largest dispersity in partiality for consumption items by far is seen by *agriculture*, with *housewives* in second, *retirees* in third. There were no significant differences amongst the fourth to the sixth, which were *management*, *students* and *professionals*. This was followed by *administration.* The difference between the eighth, *retail* and the last, *manufacturing*, was minimal.

In order to observe similarities amongst occupations concerning their preferences for consumption items based on travel with and without overnight stays, the results from Table 1 and 2 have been classified in Table 3 based on the strength of the partiality by the occupation against the average of all travellers. The aim of this analysis is to identify occupations with similar spending behaviour.

Table 3. Partiality of consumption items by occupation compared to the overall average

		Higher than Total Average			Lower than Total Average		
		Slightly High	High	Significantly High	Slightly Low	Low	Significantly Low
Management	With	**Tp**, FD	Ac			***Pk***, **Sv**, ***At***	
	Without	**Tp**			FD	**Sv**	***Pk***, ***At***
Professionals	With	**Tp**, **FD**	Ac		**Sv**, **At**		**Pk**
	Without	**Tp**, **FD**			**Sv**, **At**		**Pk**
Administration	With	**Tp**, Ac ***FD***, Sv, At			***Pk***		
	Without	**Tp**	***FD***		Sv, At		***Pk***
Retail	With	Ac, **FD**, Sv			Tp、At	**Pk**	
	Without	Tp, **FD**, At			Sv	**Pk**	
Agriculture	With	Tp, ***Sv***, At		**Pk**		Ac, **FD**	
	Without		***Sv***	**Pk**	At	Tp, **FD**	
Manufacturing	With	**Tp**			Ac, FD, Sv, At	**Pk**	
	Without	**Tp**, FD, Sv, At				**Pk**	
Housewives	With	Tp, ***Sv***	***Pk***, ***At***		Ac, **FD**		
	Without	***At***	***Sv***	***Pk***	Tp, **FD**		
Students	With	***At***	Pk		**Tp**, FD, Sv	Ac	
	Without	FD, Sv	***At***		**Tp**	Pk	
Retiree	With		***Pk***		**Tp**, Sv, At	Ac, **FD**	
	Without	Sv, At		***Pk***	**Tp**	**FD**	

* Pk: *Package*, Tp: *Transportation*, Ac: *Accommodation*, FD: *Food&Drink*, Sv: *Souvenir*, At: *Attraction.*

** Slightly High: 1.0<PF<1.1, High: 1.1≦PF<1.5, Significantly High: 1.5≦PF, Slightly Low: 0.9<PF<1.0, Low: 0.667≦PF≦0.9, Significantly Low: PF<0.667.

*** Bold: represents that the results for travel with and without overnight stays are the same.

Bold & Italic: represents that the results for travel with and without overnight stays are in the similar range.

Table 3 shows that for *package*, *agriculture*, *housewives* and *retirees* have higher than average partiality and *management*, *professionals*, *administration*, *retail* and *manufacturing* are all below the total average for travel with and without overnight stays. Concerning *transportation*, for both travel with and without overnight stays, *management*, *professional*, *administration* and *manufacturing* are all in the 'slightly high' category and *students* and *retirees* in the 'slightly low'. *Retail* are in the 'slightly high' category for travel without overnight stays, but 'slightly low' with overnight travel. *Agriculture* and *housewives* have a 'slightly high' result for travel with overnight stays, but a lower than average for travel without. Concerning *food&drink*, for both travel with and without overnight stays, *professionals* and *retail* are in the 'slightly high' category and *administration* also shows a higher than average result. *Agriculture* and *retirees* are in the 'low' category and *housewives* display 'slightly low' results. *Management* shows a 'slightly high' result with overnight travel, but a 'slightly low' without. *Manufacturing* and *students* display opposite results with 'slightly low' for travel with overnight stays and 'slightly high' without overnight stays. Concerning *souvenir*, for both travel with and without overnight stays, *agriculture* and *housewives* have higher than average results. *Management* are in the 'low' category and *professionals* in the 'slightly low'. *Administration* and *retail* show 'slightly high' results for travel with overnight stays, but 'slightly low' for without. On the other hand, *manufacturing*, *students* and *retirees*, are in the 'slightly low' category for travel with overnight stays, but 'slightly high' without. For *attraction*, for both travel with and without overnight stays, both *housewives* and *students* show higher than average results, but *management* are below the average. *Professionals* show a 'slightly low' result. *Administration* and *agriculture* are in the 'slightly high' category for travel with overnight stays, but 'slightly low' without. *Retail,*

manufacturing and *retirees* show the opposite results, with 'slightly low' for travel with overnight stays and 'slightly high' for travel without.

Results from Table 1 and 2 have been classified in Table 4 based on the partiality of each consumption item against the average of all travellers. The aim of this analysis is to identify consumption items that can be marketed together.

Table 4. Comparison of partiality between occupations for each consumption item

		Higher than Total Average			Lower than Total Average		
		Slightly High	**High**	**Significantly High**	**Slightly Low**	**Low**	**Significantly Low**
Package	With		***Hw***, St, ***Rt***	**Ag**	***Adm***	***Mgr***, ***Pr***, **Re**, ***Ma***	
	Without			**Ag**, ***Hw***, ***Rt***		***Re***, ***Ma***, St	***Mgr***, ***Pr***, ***Adm***
Transportation	With	**Mgr**, **Pr**, **Adm**, Ag, **Ma**, Hw			Re, **St, Rt**		
	Without	**Mgr**, **Pr**, **Adm**, Re, **Ma**			Hw, **St, Rt**	Ag	
Accommodation	With	Adm, Re	Mgr, Pr		Ma, Hw	Ag, St, Rt	
	Without						
Food & Drink	With	Mgr, **Pr**, ***Adm***, **Re**			Ma, **Hw**, St	**Ag**, **Rt**	
	Without	**Pr**, **Re**, Ma, St	***Adm***		Mgr, **Hw**	**Ag**, **Rt**	
Souvenir	With	Adm, Re, ***Ag***, ***Hw***			**Pr**, Ma, St, Rt	**Mgr**	
	Without	Ma, St, Rt	***Ag***, ***Hw***		**Pr**, Adm, Re	**Mgr**	
Attraction	With	Adm, Ag, ***St***	***Hw***		**Pr**、Re、Ma、Rt	***Mgr***	
	Without	Re, Ma, ***Hw***, Rt	***St***		**Pr**、Adm、Ag		***Mgr***

* Mgr: *Management*, Pr: *Professional*, Adm: *Administration*, Re: *Retail*, Ag: *Agriculture*, Ma: *Manufacturing*, Hw, *Housewives*, St: *Students*, Rt: *Retiree.*

** Slightly High: 1.0<PF<1.1, High: 1.1≦PF<1.5, Significantly High: 1.5≦PF, Slightly Low: 0.9<PF<1.0, Low: 0.667≦PF≦0.9, Significantly Low: PF<0.667.

*** Bold: represents that the results for travel with and without overnight stays are the same.

Bold & Italic: represents that the results for travel with and without overnight stays are in the similar range.

From Table 4, we can observe *management* in the 'slightly high' category for partiality towards *transportation* but in the 'low' for *souvenir* for both travel with and without overnight stays. The partiality for *package* and *attraction* are also lower than the average, with very weak partiality when the travel does not include overnight stays. *Professional* was found to have consistent results for travel with and without overnight stays. The results are *transportation* and *food&drink* in the 'slightly high' category, *souvenir* and *attraction* in the 'slightly low' category and *package* in the 'very low'. *Administration* shows for both travel with and without overnight stays higher than average partiality for *transportation* and *food&drink*, but a lower than average for *package. Souvenir* and *attraction* show slightly higher than average partiality for overnight stays but slightly lower than average for travel without overnight stays. Results for *retail* for both travel with and without overnight stays indicate *food&drink* in the 'slightly higher' category and *package* in the 'low'. *Transportation* and *attraction* indicate slightly higher than average partiality for travel without overnight stays, but slightly lower than average with overnight stays. *Souvenir* shows a slightly higher than average partiality for travel with overnight stays but a slightly lower partiality without. *Agriculture* shows a very strong partiality towards *package* for both travel with and without overnight stays as well as a higher than average for *souvenir*. However, *food&drink* is identified as lower than average partiality for both travel with and without overnight stays. *Transportation* and *attraction* show a higher than average partiality for travel without overnight stays but a slightly lower than average with overnight stays. For *manufacturing*, *transportation* shows a slightly higher than average partiality for both travel with and without overnight stays and a lower partiality for *package*. *Food&drink*, *souvenir* and *attraction* show a slightly higher than average partiality for travel without overnight stays but a slightly lower than average for travel with overnight stays. *Housewives* can be observed to have a higher

than average partiality for *package, souvenir* and *attraction* with a slightly lower than average for *food&drink* for both travel with and without overnight stays. *Transportation* partiality is slightly higher for travel with overnight stays but slightly lower for travel without. *Students* appear to prefer *attraction* with a higher than average for both travel with and without overnight stays, while *transportation* shows a slightly lower than average. *Package* shows a strong partiality with overnight stays but weak partiality without. *Food&drink* and *souvenir* are slightly higher than average without overnight stays but slightly lower than average with overnight stays. *Retirees* results show a higher than average partiality for *package* regardless of overnight stays, but a 'low' partiality for *food&drink*. *Transportation* is in the 'slightly low' category. *Souvenir* and *attraction* partiality are slightly higher than average without overnight stays and slightly lower with overnight stays.

Finally, we will examine whether the partiality towards each consumption item is stronger for travel with or without overnight travel.

Table 5. Ratio of with/without overnight travel

	Pk	**Tp**	**FD**	**Sv**	**At**
Management	1.787	0.951	1.057	1.117	1.259
Professionals	1.467	0.939	1.008	1.068	1.058
Administration	1.363	0.979	0.992	1.082	1.071
Retail	1.069	0.948	1.003	1.028	0.980
Agriculture	1.009	1.204	0.899	0.927	1.100
Manufacturing	1.078	0.986	0.965	0.951	0.927
Housewives	0.625	1.121	1.057	0.944	1.086
Students	1.687	0.990	0.865	0.948	0.754
Retiree	0.725	1.065	1.033	0.937	0.972

Pk: *Package* , Tp: *Transportation* , Ac: *Accommodation* , FD: *Food&Drink* , *Sv: Souvenir, At: Attraction* .

First, we will examine each consumption for occupations where there is a difference in partiality depending on travel with or without overnight stays. The results in Table 5 indicate that for *package*, *management* and *students* have a much stronger partiality when the travel includes overnight stays as well as *professionals* and *administration* showing a stronger partiality. *Retail*, *agriculture* and *manufacturing* also show a slightly stronger partiality with overnight stays. However, *housewives* show a very strong partiality for *package* when the travel does not include overnight stays and *retirees* show a strong partiality. For *transportation*, *agriculture* and *housewives* show a stronger partiality when the travel includes overnight stays and *retirees* also show a slightly stronger partiality. The results differ for *management*, *professionals*, *administration*, *retail*, *manufacturing* and *students*, where they all show a slightly stronger partiality for *transportation* for travel without overnight stays. Slightly stronger partiality for *food&drink* can be observed for travel with overnight stays by *management*, *professionals*, *retail*, *housewives* and *retirees*. On the other hand, results indicated a stronger partiality for *food&drink* by *agriculture* and *students* for travel without overnight stays and a slightly stronger partiality by *administration* and *manufacturing*. For *souvenir*, partiality by *management* for travel with overnight stays is stronger and slightly stronger for *professionals*, *administration* and *retail*. Concerning *souvenir* for travel without overnight stays, *agriculture*, *manufacturing*, *housewives*, *students* and *retirees* all show a slightly stronger partiality. *Attraction* partiality is stronger for travel with overnight stays for *management* and *agriculture* and slightly stronger for *professionals*, *administration* and *housewives*. *Students* show a stronger partiality for *attraction* when travel does not include overnight stays and a slightly stronger partiality by *retail*, *manufacturing* and *retirees*.

Next, we will identify for each occupation the consumption items that show a stronger partiality depending on whether the travel includes overnight stays. Results from Table 5 shows that for travel with overnight stays *management* and *professionals* show a stronger partiality for *package*, *food&drink*, *souvenir* and *attraction*, with very stronger partiality for *package*. For travel without overnight stays, results for *transportation* show slightly stronger

partiality. The consumption items with stronger partiality for travel with overnight stays for *administration* are *package, souvenir* and *attraction*, in particular *package*. For travel without overnight stays, *administration* shows a slightly stronger partiality for *transportation* and *food&drink*. *Retail* shows a slightly stronger partiality for *package*, *food&drink* and *souvenir* with overnight stays and slightly stronger partiality for *transportation* and *attraction* without. The results for *agriculture* show a stronger partiality for *transportation* and *attraction* with overnight stays and a slightly stronger partiality towards *package*. For travel without overnight stays, *agriculture* shows a stronger partiality for *food&drink* and slightly stronger partiality for *souvenir*. For travel with overnight stays, *manufacturing* only shows a slightly stronger partiality for *package*. All other consumption items display a slightly stronger partiality for travel without overnight stays. *Housewives'* results show a stronger partiality for *transportation* and slightly stronger partiality for *food&drink* and *attraction* with overnight stays, while displaying a very strong partiality for *package* and slightly stronger partiality for *souvenir* when there is no overnight stays. Results for *students* are similar to *manufacturing* with very strong partiality towards *package* for travel with overnight stays, as well as stronger partiality for *food&drink* and *attraction* and slightly stronger partiality towards *transportation* and *souvenir* without overnight stays. *Retirees* results indicate slightly stronger partiality for *transportation* and *food&drink* for travel with overnight stays. For travel without overnight stays, strong partiality for *package* and a slightly stronger partiality for *souvenir* and *attraction* can be observed for *retirees*.

4. Discussions

From the results obtained above, the main findings concerning Japan domestic travel from the analysis are as follows.

- The dispersity of the partiality towards *package* is the greatest and most significant, which suggest that multiple strategies may be required to appropriately cover all occupations. Strong partiality can be observed for *agriculture* and *housewives* for both travel with and without overnight stays. This may represent partiality towards travelling in larger groups and a preference for ease of travel and safety. Women have been identified to spend longer hours interacting with others and spend a larger share of their time worrying about safety (Ministry of Internal Affairs and Communications, 2016; Cabinet Office, 2017). For agriculture, this could be influence from rural living where they have stronger ties with their community (Schady, 2001; Ministry of Health, Labour and Welfare, 2006). The aging population of *agriculture* could also be an influential factor, preferring the ease of travel and security provided by package travel (Kaneko, 2013; Cabinet Office, 2017; Ministry of Internal Affairs and Communications, 2017). Weak partiality for *package* was observed by *management*, *professionals, retail and manufacturing*.
- The consumption item with the least dispersity by occupation was *transportation*. This implies that a targeted strategy by occupation may not be necessary for this market.
- The dispersity of the partiality towards *accommodation* was the second greatest. Strong partiality by *management* and *professionals* but weak partiality by *agriculture*, *students* and *retirees*. This may be driven by difference in income level, which would suggest further potential in this market with appropriate products based on different price ranges.
- Partiality towards *food&drink* was lowest amongst *agriculture* and *retirees*.
- The dispersity in partiality of *souvenir* was the least significant after *transportation*. *Souvenir* partiality was weak for both travel with and without overnight stays by *management*, which may suggest that they have a tendency of not purchasing travel gifts.
- Weak partiality was also seen by *management* concerning *attraction* for both travel with and without overnight stays. *Management* will likely have a higher age range and may prefer a different type of leisure activity.
- The occupation that showed the least amount of dispersity amongst the consumption items for both travel with and without overnight stays was *manufacturing*. In other

words, the preference by *manufacturing* is the closest to the average traveller. On the other hand, *agriculture* had the largest dispersity amongst consumption items for both travel with and without overnight stays, which suggests that a specific marketing plan may be required for this occupation.

- Concerning travel with overnight stays, *management* and *professionals* exhibited the most similar partiality towards the consumption items. One reason may be due to similar range in income level. *Agriculture* and *housewives* also showed similar partiality, which may again be due to preference concerning group participation and preference for ease of travel and safety.
- For travel without overnight stays, *professionals*, *administration* and *retail* displayed similar partialities toward the consumption items. *Housewives* and *retirees* also showed similar partialities, which may be due to restraints they have on spending.
- *Management*, *professionals, administration* and *students* all showed stronger partiality towards *package* when the travel included overnight stays compared to without. However, *housewives* and *retirees* exhibited stronger partiality towards *package* when the travel did not include overnight stays.
- *Students* showed an exceptionally strong partiality towards *attraction* when travelling without overnight stays. This suggests that *students* are able to spend on *attraction* when there is no overnight travel expense.

5. Conclusion

This paper attempts to provide some insight to the Japan domestic travel market by analysing the travel related purchasing behaviour for each consumption item by occupation. Policy implications can be obtained from these results. First, the travel industry can benefit from not only the supply side focus of 4P (price, products, place, promotion), but also by focusing on the 4C (consumer value, cost to consumer, convenience, communication), utilizing the results of each occupation and consumption item in its marketing strategies. For example, in order to capitalize on the partiality towards *package* by *agriculture*, marketing communication to this audience with consideration to the type of travel products and services that would be of interest, convenient and affordable would be beneficial. These results could also provide useful insight for marketing and destination marketing/management organizations when they consider the type of traveller, they are interested in attracting. Data based information like this makes it easier to gain cooperation amongst the different stakeholders such as hotels, public transport, restaurants and the local government, since it will help guide strategies for products and services and provide indicators to monitor performance. With the advancement in social media, increasing amount of data to support the tailoring of marketing communication to specific audiences will become more valued. The ability for the travel related industry to strategize and plan based on preference in purchasing behaviour of each occupation and their trends in this way could support them in the demanding need to provide frequently tailored marketing communication through the various media channels now available, which in turn could support the sustainable development of the industry.

Concerning future research, it would be beneficial for similar studies to be conducted in other regions to compare with the results of Japan. For example, are the travel related purchasing behaviour for the occupations of farming, lumbering, fishing and housewives also similar? Other research questions would include analysis on the factors that influence these purchasing behaviours for each occupation and to understand whether different results could be obtained if the travel was broken down into different types of travel such as holiday, business or visiting friends and relatives.

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