

Mastercard Future of Outbound Travel in Asia Pacific (2016 to 2021) Report

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1. Introduction

According to the UNWTO¹, Asia Pacific has been the fastest growing region in the world for international tourist arrivals over the past 10 years (2005-2014). This is due in part to China's huge outbound travel wave – which has grown by double digits since 2004 – with the country now a leading source of global tourism.

This report presents an update of Asia Pacific's regional outlook of outbound travel between 2016 and 2021². 17 markets in Asia Pacific are covered in this report with China, India, Malaysia, Thailand, Indonesia, Philippines, Vietnam, Bangladesh, Myanmar and Sri Lanka representing Emerging Asia Pacific; and Japan, South Korea, Taiwan, Hong Kong, Singapore, Australia and New Zealand representing Developed Asia Pacific.

Combining household growth projections distributed by income brackets, and Mastercard survey data from 2011 to 2016 on the propensity for outbound travel within those income brackets, we have projected outbound travel for the seventeen markets until 2021³.

2. Regional Overview

Collectively, outbound travel in Asia Pacific is expected to grow by an annual rate of 6 percent over the forecast period of 2016-2021. China is projected to be the largest outbound travel market by 2021, (excluding trips to Hong Kong and Macau), followed by South Korea and India. At a projected 103.4 million trips in 2021, outbound China travel will be four to five times that of South Korea and India, and will constitute almost 40 percent of all Asia Pacific outbound travel by 2021.

In our first report in 2014, Japan was the second largest outbound market in the Asia Pacific region and South Korea, the third largest. Although it was initially projected that South Korea would overtake Japan by 2019, this event occurred in 2015 with South Korea surpassing Japan by more than 3 million tourists in that year (ironically largely due to a spurt in South Korean tourists to Japan which experienced a sharp currency devaluation in 2015).

Emerging Asia Pacific currently records about 1.5 times more outbound trips than Developed Asia Pacific and will grow more than twice as fast as Developed Asia Pacific (7.6 percent versus 3.3 percent) over the forecast period. Chart 1 summarizes the outbound trips of the 17 markets between 2011 and 2016 and the growth projections from 2016 to 2021.

Chart 1: 2016-2021 Outbound Travel Forecast

Outbound trips (mn)	Exclusions	2013	2014	2015	2016e	2021	2016-2021 CAGR	Real GDP Growth 2016-2021
Australia		8.8	9.1	9.5	10.0	11.8	3.5%	2.9%
Bangladesh		1.5	2.0	2.1	2.3	2.6	2.9%	6.8%
China	excludes trips to HK and Macau	38.8	48.1	61.6	68.7	103.4	8.5%	6.0%
Hong Kong	excludes travel to China and Macau	4.7	5.2	5.0	5.8	6.8	3.0%	2.8%
India		11.6	12.4	13.5	14.5	21.5	8.2%	7.6%

¹ World Tourism Barometer January 2016, UNWTO.

² See The Future of Outbound Travel in Asia Pacific published in 2014 Q1 by Mastercard

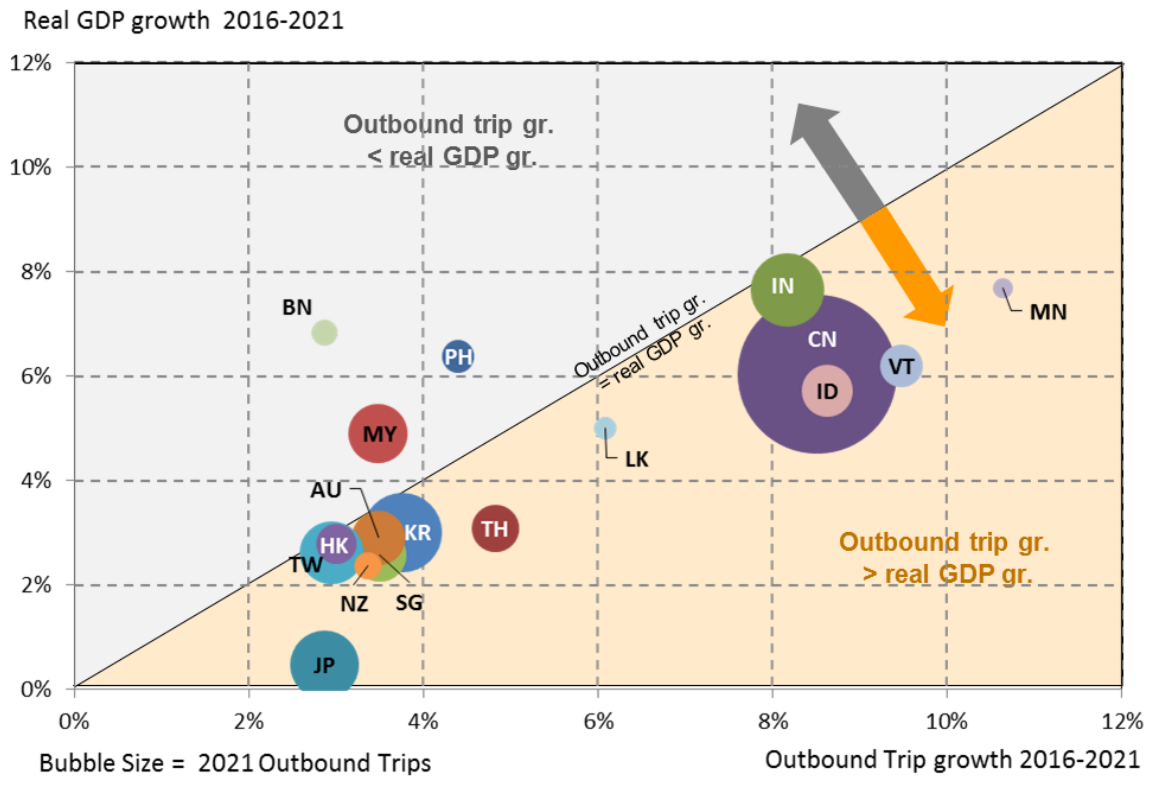
³ See Appendix for research methodology.

Indonesia	excludes trips to Singapore by Sea and Same-day trips to Malaysia	6.9	6.7	6.6	7.0	10.6	8.6%	5.7%
Japan		17.5	16.9	16.2	16.8	19.4	2.9%	0.5%
Malaysia	excludes cross border land travel to Singapore	10.8	10.5	11.1	11.9	14.2	3.5%	4.9%
Myanmar		0.7	0.8	0.9	1.0	1.7	10.6%	7.7%
New Zealand		2.2	2.3	2.4	2.6	3.1	3.4%	2.4%
Philippines		2.8	2.9	3.2	3.4	4.3	4.4%	6.4%
Singapore	excludes cross border land travel to Malaysia	8.6	8.9	9.1	9.8	11.7	3.5%	2.6%
South Korea		14.8	16.1	19.3	21.3	25.6	3.8%	3.0%
Sri Lanka		1.3	1.3	1.4	1.5	2.0	6.1%	5.0%
Taiwan		11.1	11.8	13.2	14.1	16.3	2.9%	2.6%
Thailand		6.0	6.4	6.9	7.2	9.1	4.8%	3.1%
Vietnam		4.2	4.1	4.6	4.8	7.5	9.5%	6.2%
Total - 17 markets		152.1	165.7	186.5	202.7	271.4	6.0%	4.5%
Asia Pacific Developed Markets		67.7	70.3	74.7	80.4	94.6	3.3%	2.4%
Asia Pacific Emerging Markets		84.4	95.4	111.8	122.3	176.8	7.6%	5.9%

Chart 2 maps the positions of the markets in the two-dimensional space combining real GDP growth rates (the vertical axis) and their outbound travel growth rates (the horizontal axis). Myanmar is the fastest growing outbound market at 10.6 percent over the forecast period, followed by Vietnam (9.5 percent) Indonesia (8.6 percent), China (8.5 percent) and India (8.2 percent). The fastest growing developed markets are South Korea at 3.8 percent, followed closely by Singapore, Australia, and New Zealand, all of which are projected to grow by about 3.5 percent over the forecast period.

Chart 2 also shows that outbound travel is forecast to grow faster than real GDP except in the case of Bangladesh, Philippines and Malaysia. Chart 2 also suggests that the outbound travel growth tends to be higher than real GDP growth (as indicated by points further below the diagonal line) for the developing markets of Myanmar, Vietnam, Indonesia, Thailand, and China compared to the developed markets (excluding Japan) which tend to have outbound growth much closer to the forecasted real GDP growth (as indicated by points hugging or close to the diagonal line).

Chart 2: Outbound Travel growth versus Real GDP growth



In addition to projecting overall growth rates of outbound travel, it is beneficial to compare this against the number of households. Chart 3 summarizes the changing ratios of outbound trips-to-households in recent years. Apart from Japan, all the developed markets have a ratio of 100 percent or higher in 2021. While a ratio of 100 percent means that on average at least one person per household goes abroad annually, in practice it is more likely that a certain portion of households make multiple trips a year, implying that there are households that do not go abroad at all. The ratios for Singapore, Hong Kong and Taiwan exceed 100 percent, suggesting high propensities to travel internationally in the respective households. Among the emerging markets, Malaysia stands out with a ratio of well over 150 percent from 2013 to 2016. This may explain why it is in the grey portion of Chart 2 (indicating outbound travel growth is less than real GDP growth over the forecast period), suggesting that Malaysia has undergone a prior “catch-up” phase and is currently operating at a higher propensity to travel compared to other emerging markets.

Among the emerging markets, India’s ratio of about 5 percent of outbound leisure trips to total households between 2013 and 2016 is low, even with a forecasted improvement to 7.3 percent by 2021. Other low ratio markets include Myanmar (between 6 to 9 percent), Indonesia (about 10 percent) and Bangladesh (around 6 to 7 percent). Interestingly, excluding Bangladesh, these markets are also among the highest in growth rates in terms of outbound travel trips over the forecast period, suggesting an impending emerging market “catch-up” effect since low-ratio markets also have the greatest potential for the number of outbound trips to grow. For example, if India recorded the same outbound trip-to-household ratio as China in 2016 (15.6 percent), then Indian outbound leisure travel would have recorded 43.5 million trips in 2016 instead of the 14.5 million. This indicates enormous potential

for growth in outbound travel from India, Indonesia, and Myanmar over the next few decades as the ratio starts to approach that of the other developing markets, assuming an increasing propensity to travel is combined with a healthy increase in households.

Chart 3: Number of Outbound Travel Trips as % of Total Number of Households

Outbound trips as % of total households	Exclusions	2013	2014	2015	2016e	2021f
Australia		98.5%	101.1%	103.2%	107.0%	119.2%
Bangladesh		4.5%	6.2%	6.4%	6.8%	7.4%
China	excludes trips to HK and Macau	8.9%	11.0%	14.0%	15.6%	23.0%
Hong Kong	excludes travel to China and Macau	182.6%	201.1%	192.3%	222.3%	248.9%
India		4.3%	4.6%	4.9%	5.2%	7.3%
Indonesia	excludes trips to Singapore by Sea and Same-day trips to Malaysia	10.8%	10.5%	10.1%	10.7%	15.4%
Japan		35.4%	34.3%	33.0%	34.2%	39.9%
Malaysia	excludes cross border land travel to Singapore	168.3%	161.8%	168.0%	178.4%	198.7%
Myanmar		6.4%	7.4%	8.3%	9.2%	14.6%
New Zealand		128.0%	131.6%	138.5%	147.4%	166.5%
Philippines		14.6%	14.9%	16.1%	17.0%	19.6%
Singapore	excludes cross border land travel to Malaysia	576.0%	582.1%	586.3%	621.5%	693.6%
South Korea		78.4%	84.6%	101.1%	110.9%	131.1%
Sri Lanka		25.8%	26.7%	27.8%	29.4%	38.8%
Taiwan		154.0%	165.9%	184.4%	197.6%	232.0%
Thailand		33.6%	36.1%	38.5%	40.1%	50.2%
Vietnam		20.8%	20.6%	22.4%	23.2%	34.7%
Total - 17 markets		15.7%	17.0%	18.9%	20.4%	26.5%
Asia Pacific Developed Markets		75.1%	77.9%	82.5%	88.7%	103.7%
Asia Pacific Emerging Markets		9.6%	10.8%	12.5%	13.6%	18.9%

Japan is an anomaly among the developed markets with an outbound-trip-to-household ratio of only 34.2 percent in 2016. Japan's ratio has not exceeded 40 percent since 1970, 6 years after the deregulation of outbound travel in Japan. By comparison, South Korea's ratio in 2016 is estimated to be more than triple of Japan at 110.9 percent. Some reasons given by the Japan Tourism Marketing Co. for lackluster Japanese outbound travel are structural changes in Japanese society owing to a declining population, a stagnant economy, natural disasters in Japan, and a series of negative external events since 2001 which has sapped motivation for outbound travel. Japanese consumer confidence levels since the 1990s seem to concur with this view as shown in Chart 4: Japanese consumer confidence has been persistently recorded below the Asia Pacific developed market average except for the period between 2005 and 2007, and more recently in the first half of 2013, and the last three bi-annuals since the first half of 2015 (though it is in danger of going below the Asia Pacific developed market average again). Another supporting statistic of this trend is the declining number of Japanese passport holders since peaking in 2000⁴. In comparison, less than 5 percent of the Chinese population holds a passport, suggesting that Chinese outbound

⁴ "The Chinese Tourism Boom", 20 November 2015, Goldman Sachs Global Investment Research.

travel has a lot of room to grow. Finally, it is worth noting that Japan’s domestic tourism product was ranked 9th in the world in 2015 by the World Economic Forum and competes with outbound international travel considering domestic tourism accounts for 90 percent to 95 percent of total Japanese travel.

Chart 4: Mastercard Consumer Confidence Index – Japan and Developed Asia Pacific Compared

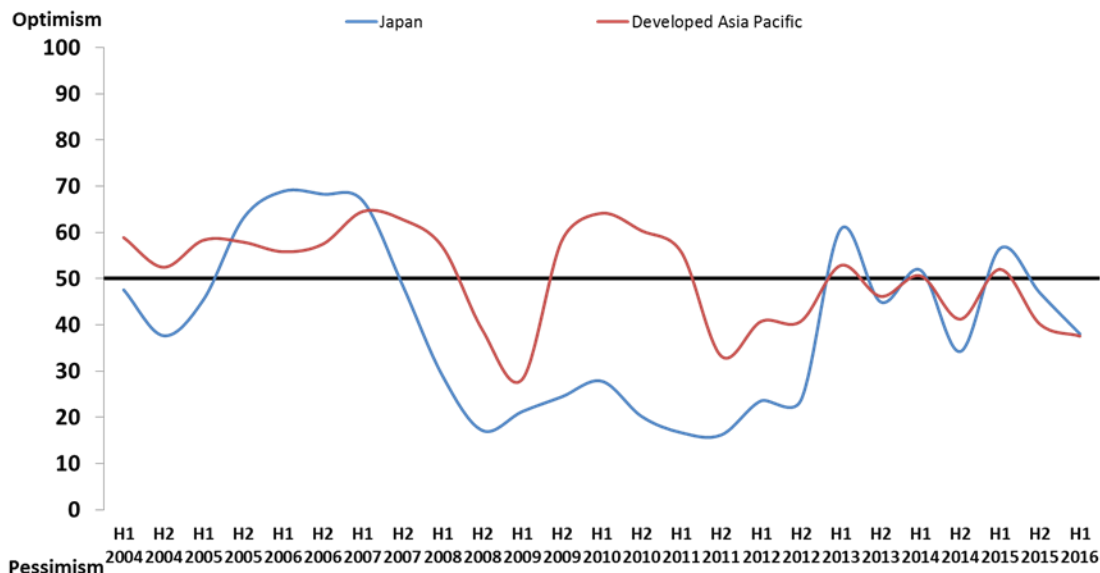


Chart 5 shows outbound trips distributed across 3 household income ranges by using a concentration ratio (the percentage of total outbound trips divided by the percentage of total households). For example, Australian households earning below US\$50,000 per year account for 21.8 percent of all households in Australia but only 10.0percent of all Australian outbound trips giving a concentration ratio of 0.5 (i.e. 10.0percent divided by 21.8 percent)⁵. At the next income bracket of US\$50,000 to US\$100,000, 43.3 percent of all households contribute 38.3 percent of all outbound trips, giving a concentration ratio of 0.9. Finally at the income bracket of >US\$100,000 and above, 34.9 percent of all households contribute to 51.8 percent of all outbound trips giving a concentration ratio of 1.5. A perfect distribution of outbound trips by household income would imply all three household income ranges have a concentration ratio of 1. As expected, we generally see an increasing concentration ratio as income rises because wealthier households have more resources for leisure travel. Notably, some markets demonstrate extremely high concentrations ratios at the upper income ranges in the emerging Asia Pacific markets. For example, at the >US\$30,000 range India has an extremely high concentration ratio of 47.3, followed by 31.1 for Bangladesh and 30.3 for Myanmar, implying a significant proportion of outbound travel is accounted for by a much smaller proportion of households (wealthier households). Comparatively, we see that the developed markets are more evenly spread in terms of outbound travel consumption, with most of them having concentrations below 3 (except for South Korea at 3.1) at the higher income range.

Chart 5: Outbound trip concentration by household income brackets

Concentration Ratio (% of total OB trips / % of total households by income range)				GDP per capita US\$ 2016
2016	Lower Income HHS	Middle Income HHS	Higher Income HHS	
Developed Asia Pacific				

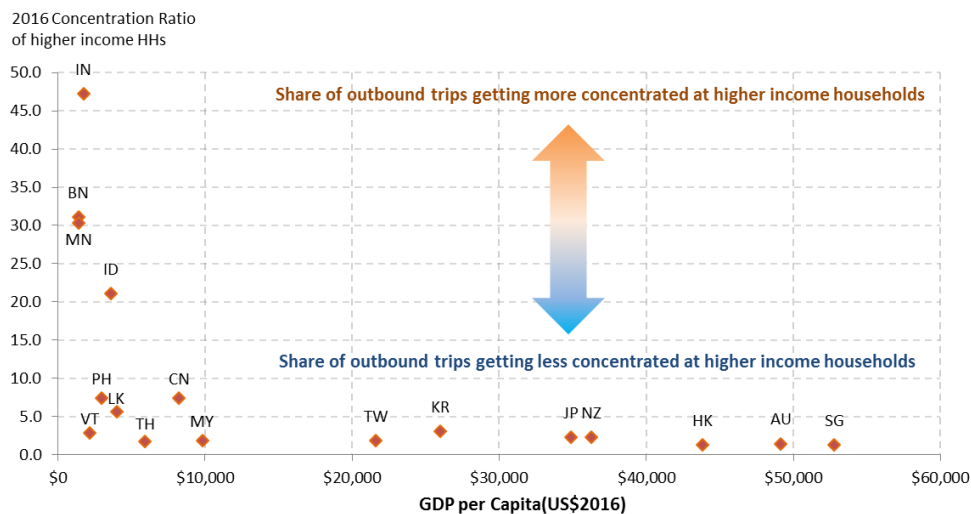
⁵ Chart 5 only shows the concentration ratios. The % of total households and % of Total outbound by household income ranges are not shown in Chart 5, but are covered in the individual markets sections below

	<US\$50k	US\$50k-100k	>US\$100k	
Australia	0.5	0.9	1.5	\$49,145
Hong Kong	0.7	1.1	1.3	\$43,828
Japan	0.5	1.2	2.3	\$34,871
New Zealand	0.5	1.2	2.3	\$36,254
Singapore	0.7	1.2	1.3	\$52,755
South Korea	0.8	2.1	3.1	\$25,990
Taiwan	0.9	1.4	1.9	\$21,607
Emerging Asia Pacific				
	<US\$10k	US\$10k-30k	>US\$30k	
Bangladesh	0.4	5.2	31.1	\$1,401
China	0.1	1.8	7.4	\$8,240
India	0.2	4.1	47.3	\$1,747
Indonesia	0.1	2.0	21.1	\$3,620
Malaysia	0.5	0.9	1.9	\$9,811
Myanmar	0.4	3.5	30.3	\$1,416
Philippines	0.4	1.2	7.4	\$2,978
Sri Lanka	0.5	1.1	5.6	\$3,991
Thailand	0.6	1.2	1.8	\$5,940
Vietnam	0.2	1.0	2.9	\$2,174

As illustrated in Chart 6, the higher income households of developed markets record outbound travel concentration ratios within the range of 1.3 (Hong Kong & Singapore) and 3.1 (South Korea). However, among emerging markets, this range is much greater with Malaysia (1.9), Thailand (1.8), and Vietnam (2.9), which are similar to the developed markets with much higher ratios, i.e. India at 47.3 and Bangladesh at 31.1. However, what is evident is that as GDP per capita rises, outbound consumption becomes less of a luxury good as the concentration of outbound travel among higher income households devolve towards the lower income households.

Chart 6: Relating GDP per Capita to the Concentration Ratio's of Higher Income Households

Concentration Ratio of Higher Income Households Against GDP per Capita (2016)



3. Market Details

3.1 Australia

International outbound travel trips by Australian residents are estimated at 10.0 million in 2016, and are forecasted to grow by an average of 3.5 percent per year to reach 11.8 million trips by 2021. Total outbound trips will grow close to 3 times faster than total household growth (3.5 percent versus 1.3 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 119.2 percent in 2021 from 107.0 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	8.8	9.1	9.5	10.0	11.8	3.5%
Households (mn)	8.9	9.0	9.2	9.3	9.9	1.3%
Total outbound trips as % of total households	98.5%	101.1%	103.2%	107.0%	119.2%	

About 51.8 percent of outbound trips are accounted for by Australian households earning above US\$100,000 per annum in 2016, an income range that accounts for about 34.9 percent of all households. This puts the concentration ratio⁶ at 1.5. Lower-income households earning less than US\$50,000 have a concentration ratio of 0.5 while the middle income-household range of US\$50,000 to US\$100,000 have a ratio of 0.9. This suggests an even distribution of outbound travel across the income levels. Projecting forward to 2021, outbound travel growth will mostly come from households earning above US\$100,000 as they increase their share of outbound travel from 34.9 percent in 2016 to 42.1 percent in 2021 due to the increase in the number of households at this income bracket (from 51.8 percent of total households in 2016 to 58.8 percent in 2021).

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Australia									
2016	10.0%	21.8%	0.5	38.3%	43.3%	0.9	51.8%	34.9%	1.5
2021	6.6%	16.1%	0.4	34.6%	41.9%	0.8	58.8%	42.1%	1.4

⁶ The concentration ratio is calculated by taking the outbound trips of households in a specified income range (as a % of total outbound trips) and dividing that by the % of households in the specified income range. A ratio of 1 implies that the proportion of outbound trips consumed by a specific income range mirrors the income range's portion of total households (e.g. 10% of total outbound trips are consumed by 10% of all households). A ratio that is above one implies that the specific income range is proportionately consuming more outbound trips compared to the number of households in that income range (e.g. 30% of total outbound trips are consumed by 5% of all households).

3.2 Bangladesh

International outbound trips by Bangladesh residents are estimated at 2.3 million in 2016, and are forecasted to grow by an average of 2.9 percent per year to reach 2.6 million trips by 2021. Total outbound trips will grow close to 3 times faster than total household growth (2.9 percent versus 1.1 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 7.4 percent in 2021 from 6.8 percent in 2016. Among the 17 markets, Bangladesh has the second-lowest ratio of outbound trips-to-households after India.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	1.5	2.0	2.1	2.3	2.6	2.9%
Households (mn)	32.2	32.5	32.9	33.3	35.2	1.1%
Total outbound trips as % of total households	4.5%	6.2%	6.4%	6.8%	7.4%	

About 20.7 percent of outbound trips are accounted for by Bangladesh households earning above US\$30,000 per annum in 2016, an income range that accounts for less than 1 percent of all households. This puts the concentration ratio at 31.1 (2nd highest among higher income households after India at 47.3). Lower-income households earning less than US\$10,000 have a concentration ratio of 0.4 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 5.2. This suggests that outbound travel is clearly dominated by the middle and higher-income households which make up less than 10 percent of all households. Projecting forward to 2021, the concentration ratios at the middle and higher-income households will come down sharply and outbound travel growth will be driven by middle income households earning between US\$10,000 to US\$30,000 as they increase their share of outbound travel from 42.4 percent in 2016 to 48.0 percent in 2021 due to the doubling in the number of households at this income range (from 8.2 percent of total households in 2016 to 16.7 percent in 2021).

HH
Income
Range

	<US\$10k			US\$10k–30k			>US\$30k		
	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
Bangladesh									
2016	36.9%	91.1%	0.4	42.4%	8.2%	5.2	20.7%	0.7%	31.1
2021	23.5%	81.7%	0.3	48.0%	16.7%	2.9	28.5%	1.6%	17.7

3.3 China

International outbound travel by China's residents are estimated at 68.7 million in 2016, and are forecasted to grow by an average of 8.5 percent per year to reach 103.4 million trips by 2021. Total outbound trips will grow

much faster than total household growth (8.5 percent versus 0.4 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 23.0 percent in 2021 from 15.6 percent in 2016.

<i>excludes trips to HK and Macau</i>	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	38.8	48.1	61.6	68.7	103.4	8.5%
Households (mn)	435.2	437.5	439.6	441.7	449.7	0.4%
Total outbound trips as % of total households	8.9%	11.0%	14.0%	15.6%	23.0%	

About 39.7 percent of outbound trips are accounted for by Chinese households earning above US\$30,000 per annum in 2016, an income range that accounts for 5.3 percent of all households. This puts the concentration ratio at 7.4. The lower income households earning less than US\$10,000 have a concentration ratio of 0.1 while the middle income household range of US\$10,000 to US\$30,000 have a ratio of 1.8. This suggests that outbound travel is clearly dominated by the middle and higher-income households which together make up 35.7 percent of all households. Projecting forward to 2021, households earning income above US\$10,000 will drive outbound growth as share of these households increase to 48.8 percent.

HH
Income
Range

	<US\$10k			US\$10k-30k			>US\$30k		
China	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
2016	7.0%	64.2%	0.1	53.4%	30.4%	1.8	39.7%	5.3%	7.4
2021	4.2%	52.2%	0.1	47.3%	38.0%	1.2	48.5%	9.8%	4.9

3.4 Hong Kong

International outbound travel trips by Hong Kong residents are estimated at 5.8 million in 2016, and are forecasted to grow by an average of 3.0 percent per year to reach 6.8 million trips by 2021. Total outbound trips will grow more than 3 times faster than total household growth (3.0 percent versus 0.7 percent) over the forecast period resulting in a ratio of outbound trips-to-households that is projected to reach 248.9 percent in 2021 from 222.3 percent in 2016. Hong Kong's households have the second-highest ratio of outbound trips-to-households after Singapore among the 17 Asia Pacific markets covered (Singapore at 621.5 percent in 2016 and 693.6 percent in 2021). The lack of domestic tourism in these two economies (owing to their geographical size) is possibly the main reason for such high ratios.

<i>excludes travel to China and Macau</i>	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	4.7	5.2	5.0	5.8	6.8	3.0%
Households (mn)	2.6	2.6	2.6	2.6	2.7	0.7%

Total outbound trips as % of total households	182.6%	201.1%	192.3%	222.3%	248.9%	
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About 28.6 percent of outbound trips are accounted for by Hong Kong households earning above US\$100,000 per annum in 2016, an income range that accounts for about 21.5 percent of all households. This puts the concentration ratio at 1.3 (lowest of the 17 markets among higher-income households together with Singapore). The lower-income households earning less than US\$50,000 have a concentration ratio of 0.7 while the middle-income household range of US\$50,000 to US\$100,000 have a ratio of 1.1. This suggests that outbound travel is quite evenly spread across income levels. Projecting forward to 2021, outbound travel growth will mostly come from households earning above US\$100,000 as they increase their share of outbound travel from 28.6 percent in 2016 to 34.6 percent in 2021 due to the increase in the number of households at this income range (from 21.5 percent of total households in 2016 to 26.9 percent in 2021).

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Hong Kong									
2016	32.6%	43.7%	0.7	38.8%	34.8%	1.1	28.6%	21.5%	1.3
2021	28.7%	39.0%	0.7	36.7%	34.1%	1.1	34.6%	26.9%	1.3

3.5 India

International outbound travel trips by Indian residents are estimated at 14.5 million in 2016, and are forecasted to grow by an average of 8.2 percent per year to reach 21.5 million trips by 2021. Total outbound trips will grow much faster than total household growth (8.2 percent versus 1.1 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 7.3 percent in 2021 from 5.2 percent in 2016. Among the 17 markets, India has the lowest ratio of outbound trips to households; in 2016 it is only about one-third of China's ratio (15.6 percent) and half of Indonesia's (10.7 percent).

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	11.6	12.4	13.5	14.5	21.5	8.2%
Households (mn)	269.5	272.8	276.0	279.3	295.1	1.1%
Total outbound trips as % of total households	4.3%	4.6%	4.9%	5.2%	7.3%	

About 44.9 percent of outbound trips are accounted for by Indian households earning above US\$30,000 per annum in 2016, an income range that accounts for less than 1 percent of all households. This puts the concentration ratio at 47.3 (highest among higher income households of the 17 markets). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.2 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 4.1. This presents a skewed distribution of outbound travel by households (i.e. very much concentrated at the higher income levels) as outbound travel is clearly dominated by

the middle and higher-income households which make up less than 11 percent of all households. Projecting forward to 2021, concentration ratios for the middle and higher-income households will come down sharply and outbound travel growth will be driven by middle-income households earning between US\$10,000 to US\$30,000 due to the doubling in the number of households at this income range (from 9.8 percent of total households in 2016 to 19.8 percent in 2021).

HH
Income
Range

	<US\$10k			US\$10k-30k			>US\$30k		
India	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
2016	14.8%	89.2%	0.2	40.3%	9.8%	4.1	44.9%	0.9%	47.3
2021	8.3%	78.0%	0.1	40.3%	19.8%	2.0	51.4%	2.2%	23.3

3.6 Indonesia

International outbound travel trips by Indonesian residents are estimated at 7.0 million in 2016, and are forecasted to grow by an average of 8.6 percent per year to reach 10.6 million trips annually by 2021. Total outbound trips will grow much faster than total household growth (8.6 percent versus 1.0 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 15.4 percent in 2021 from 10.7 percent in 2016.

<i>excludes trips to Singapore by Sea and Same-day trips to Malaysia</i>	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	6.9	6.7	6.6	7.0	10.6	8.6%
Households (mn)	63.2	64.0	64.8	65.5	68.9	1.0%
Total outbound trips as % of total households	10.8%	10.5%	10.1%	10.7%	15.4%	

About 55.8 percent of outbound trips are accounted for by Indonesian households earning above US\$30,000 per annum in 2016, an income range that accounts for 2.6 percent of all households. This puts the concentration ratio at 21.1 (4th highest among higher-income households of the 17 markets). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.1 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 2.0. Although the concentration of the higher-income households is very high at 21.1, the middle-income household ratio of 2.0 shows that Indonesian outbound travel distribution is a lot less skewed than India (where middle income households have a ratio of 4.1). Projecting forward to 2021, concentration ratios at the middle and higher-income households will decrease sharply although outbound travel growth will be driven by middle-income households earning between US\$10,000 to US\$30,000 (as the households within this income range increases from 19.5 percent in 2016 to 27.9 percent in 2021) and higher-income households earning more than US\$30,000.

HH
Income
Range

<US\$10k US\$10k-30k >US\$30k

Indonesia a	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
	2016	4.7%	77.8%	0.1	39.5%	19.5%	2.0	55.8%	2.6%
2021	2.9%	67.3%	0.1	35.0%	27.9%	1.3	62.0%	4.8%	13.0

3.7 Japan

International outbound travel by Japanese residents are estimated at 16.8 million in 2016, and are forecasted to grow by an average of 2.9 percent per year to reach 19.4 million trips by 2021. The total number of households are declining in Japan; over the forecast period the ratio of outbound trips-to-households is projected to reach 39.9 percent in 2021 from 34.2 percent in 2016. This ratio is the lowest among the 7 developed markets in the Asia Pacific region. The next lowest ratio for developed markets in 2016 is Australia with 107.0 percent which is more than triple of Japan.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	17.5	16.9	16.2	16.8	19.4	2.9%
Households (mn)	49.3	49.3	49.2	49.1	48.5	-0.2%
Total outbound trips as % of total households	35.4%	34.3%	33.0%	34.2%	39.9%	

About 25.2 percent of outbound trips are accounted for by Japanese households earning above US\$100,000 per annum in 2016, an income range that accounts for about 10.7 percent of all households. This puts the concentration ratio at 2.3. The lower-income households earning less than US\$50,000 have a concentration ratio of 0.5 while the middle-income household range of US\$50,000 to US\$100,000 have a ratio of 1.2. This suggests that outbound travel is relatively evenly spread across income levels. Projecting forward to 2021, outbound travel growth will mostly come from households earning less than US\$50,000 as they increase their share of outbound travel from 26.8 percent in 2016 to 29.1 percent in 2021 due to the increase in the number of households at this level (from 49.4 percent of total households in 2016 to 52.2 percent in 2021). Of the 17 markets, Japan is the only market where the number of lower-income households records a faster growth than the middle or higher-income households owing to graying demographics where the proportion of people aged 65 years old and over is exceeds 25 percent of the total population. As this cohort of over-65s increases relative to that of other ages, as does the number of retired pension households, thereby increasing the shift of households to the less than US\$50,000 range from the above US\$50,000 range.

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Japan 2016	26.8%	49.4%	0.5	48.1%	39.9%	1.2	25.2%	10.7%	2.3

2021	29.1%	52.2%	0.6	47.1%	38.1%	1.2	23.8%	9.7%	2.4
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3.8 Malaysia

International outbound travel trips by Malaysian residents are estimated at 11.9 million in 2016, and are forecasted to grow by an average of 3.5 percent per year to reach 14.2 million trips by 2021. Total outbound trips will grow close to 3 times faster than total household growth (3.5 percent versus 1.3 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 198.7 percent in 2021 from 178.4 percent in 2016 (highest among the emerging markets and 4th highest overall after Singapore, Hong Kong and Taiwan).

<i>excludes cross border land travel to Singapore</i>	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	10.8	10.5	11.1	11.9	14.2	3.5%
Households (mn)	6.4	6.5	6.6	6.7	7.1	1.3%
Total outbound trips as % of total households	168.3%	161.8%	168.0%	178.4%	198.7%	

About 46.1 percent of outbound trips are accounted for by Malaysian households earning above US\$30,000 per annum in 2016, an income range that accounts for 24.4 percent of all households. This puts the concentration ratio at 1.9 (2nd lowest among higher income households of the emerging markets after Thailand at 1.8). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.5 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 0.9. The concentration ratios for Malaysia and Thailand are the most evenly distributed among the emerging markets. For this reason, 2021 projections will show concentration ratios at the middle and higher-income households which are very similar to that in 2016.

HH

Income
Range

	<US\$10k			US\$10k–30k			>US\$30k		
Malaysia	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
2016	16.2%	31.7%	0.5	37.7%	43.8%	0.9	46.1%	24.4%	1.9
2021	14.4%	29.2%	0.5	36.9%	44.1%	0.8	48.7%	26.7%	1.8

3.9 Myanmar

International outbound trips by residents of the Myanmar are estimated at 1 million currently and are forecasted to grow by an average of 10.6 percent per annum (fastest among the 17 markets) to reach 1.7 million trips by 2021. Total outbound trips will grow much faster than total household growth (10.6 percent versus 0.8 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 14.6 percent in 2021 from 9.2 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	0.7	0.8	0.9	1.0	1.7	10.6%
Households (mn)	10.6	10.7	10.8	10.9	11.3	0.8%
Total outbound trips as % of total households	6.4%	7.4%	8.3%	9.2%	14.6%	

About 31.9 percent of outbound trips are accounted for by Myanmar households earning above US\$30,000 per annum in 2016, an income range that accounts for only 1.1 percent of all households. This puts the concentration ratio at 30.3 (3rd highest among higher-income households of the 17 markets). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.4 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 3.5. Projecting forward to 2021, concentration ratios at the middle and higher-income households will decrease sharply and outbound travel growth will be driven by middle-income households earning between US\$10,000 to US\$30,000 as the number of households in this income range more than double, from 9.0 percent in 2016 to 20.8 percent in 2021.

HH Income Range	<US\$10k			US\$10k–30k			>US\$30k		
	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
Myanmar									
2016	36.6%	89.9%	0.4	31.5%	9.0%	3.5	31.9%	1.1%	30.3
2021	16.1%	76.4%	0.2	36.8%	20.8%	1.8	47.1%	2.8%	16.9

3.10 New Zealand

International outbound trips by New Zealand residents are estimated at 2.6 million in 2016, and are forecasted to grow by an average of 3.4 percent per year to reach 3.1 million trips by 2021. Total outbound trips will grow over 3 times faster than total household growth (3.4 percent versus 0.9 percent) over the forecast period resulting in a ratio of outbound trips to households projected to reach 166.5 percent in 2021 from 147.4 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	2.2	2.3	2.4	2.6	3.1	3.4%
Households (mn)	1.7	1.7	1.7	1.8	1.8	0.9%
Total outbound trips as % of total households	128.0%	131.6%	138.5%	147.4%	166.5%	

About 32.5 percent of outbound trips are accounted for by New Zealand households earning above US\$100,000 per annum in 2016, an income range that accounts for about 13.8 percent of all households. This puts the concentration ratio at 2.3. The lower-income households earning less than US\$50,000 have a concentration ratio of 0.5 while the middle income household range of US\$50,000 to US\$100,000 have a ratio of 1.2. This suggests that outbound travel is quite evenly spread across the income levels. Projecting forward to 2021, outbound travel

Philippines	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
	2016	26.0%	69.3%	0.4	31.0%	25.0%	1.2	42.9%	5.8%
2021	24.3%	67.3%	0.4	31.3%	26.5%	1.2	44.4%	6.1%	7.2

3.12 Singapore

International outbound travel by Singapore residents are estimated at 9.8 million in 2016, and are forecasted to grow by an average of 3.5 percent per year to reach 11.7 million trips by 2021. Total outbound trips will grow close to 3 times faster than total household growth (3.5 percent versus 1.3 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 693.6 percent in 2021 from 621.5 percent in 2016. Singapore households have the highest ratio of outbound trips-to-households among the markets covered. The lack of domestic tourism (owing to its geographical size) and easy access to nearby international destinations are possibly the main reasons for such high ratios.

<i>Excludes travel to China and Macau</i>	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	8.6	8.9	9.1	9.8	11.7	3.5%
Households (mn)	1.5	1.5	1.6	1.6	1.7	1.3%
Total Outbound Trips as % of total households	576.0%	582.1%	586.3%	621.5%	693.6%	

About 26.6 percent of outbound trips are accounted for by Singapore households earning above US\$100,000 per annum in 2016, an income range that accounts for about 20.5 percent of all households. This puts the concentration ratio at 1.3 (lowest of the markets among higher-income households together with Hong Kong). The lower-income households earning less than US\$50,000 have a concentration ratio of 0.7 while the middle-income household range of US\$50,000 to US\$100,000 have a ratio of 1.2. This suggests that outbound travel is relatively evenly spread across income levels. Projecting forward to 2021, outbound travel growth will mostly come from households earning above US\$100,000 as they increase their share of outbound travel from 26.6 percent in 2016 to 33.7 percent in 2021 due to the increase in the number of households at this income range (from 20.5 percent of total households in 2016 to 27.1 percent in 2021).

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
Singapore									
2016	34.1%	45.9%	0.7	39.3%	33.5%	1.2	26.6%	20.5%	1.3
2021	29.0%	39.7%	0.7	37.3%	33.1%	1.1	33.7%	27.1%	1.2

3.13 South Korea

International outbound travel by South Korean residents are estimated at 21.3 million in 2016, and are forecasted to grow by an average of 3.8 percent per year to reach 25.6 million trips by 2021. Total outbound trips will grow much faster than total household growth (3.8 percent versus 0.4 percent) over the forecast period resulting in a ratio of outbound trips to households that is projected to reach 131.1 percent in 2021 from 110.9 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	14.8	16.1	19.3	21.3	25.6	3.8%
Households (mn)	18.9	19.0	19.1	19.2	19.5	0.4%
Total outbound trips as % of total households	78.4%	84.6%	101.1%	110.9%	131.1%	

About 4.4 percent of outbound travel is accounted for by South Korean households earning above US\$100,000 per annum in 2016, an income range that accounts for about 1.4 percent of all households. This puts the concentration ratio at 3.1. The lower-income households earning less than US\$50,000 have a concentration ratio of 0.8 while the middle-income household range of US\$50,000 to US\$100,000 have a ratio of 2.1. South Korea and Taiwan are the only 2 among the developed markets where households earning less than US\$50,000 have the highest outbound travel share; households earning less than US\$50,000 make up 63.4 percent of outbound travel in South Korea and 69.0 percent in Taiwan. Projecting forward to 2021, outbound travel growth will come mostly from households earning between US\$50,000 and US\$100,000 as they increase their share of outbound travel from 32.3 percent in 2016 to 41.1 percent in 2021 due to the increase in the number of households at this income range (from 15.3 percent of total households in 2016 to 22.8 percent in 2021).

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
South Korea									
2016	63.4%	83.3%	0.8	32.3%	15.3%	2.1	4.4%	1.4%	3.1
2021	52.4%	74.7%	0.7	41.1%	22.8%	1.8	6.5%	2.5%	2.6

3.14 Sri Lanka

International outbound travel by residents of the Sri Lanka are estimated at 1.5 million in 2016 and are forecasted to grow by an average of 6.1 percent per year to reach 2.0 million trips by 2021. Total outbound travel will grow much faster than total household growth (6.1 percent versus 0.4 percent) over the forecast period resulting in a ratio of outbound trips-to-households that is projected to reach 38.8 percent in 2021 from 29.4 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR

Outbound trips (mn)	1.3	1.3	1.4	1.5	2.0	6.1%
Households (mn)	4.9	4.9	4.9	5.0	5.1	0.4%
Total outbound trips as % of total households	25.8%	26.7%	27.8%	29.4%	38.8%	

About 31.0 percent of outbound trips are accounted for by Sri Lanka households earning above US\$30,000 per annum in 2016, an income range that accounts for only 5.5 percent of all households. This puts the concentration ratio at 5.6 (which is a lot lower than that of the other 2 South Asian markets: India at 47.3 and Bangladesh at 31.1). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.5 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 1.1.

This implies that Sri Lanka has a relatively evenly-distributed outbound travel to household concentration. It is for this reason that in projecting forward to 2021, concentration ratios at the middle and higher-income households will remain very similar to 2016. Projecting forward to 2021, outbound travel growth will mostly come from households earning more than US\$30,000 as they increase their share of outbound travel from 31.0 percent in 2016 to 43.3 percent in 2021 due to the increase in the number of households at this income range (from 5.5 percent of total households in 2016 to 10.6 percent in 2021).

HH

Income

Range

Sri Lanka	<US\$10k			US\$10k-30k			>US\$30k		
	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs = B	Ratio of A/B
2016	25.4%	53.5%	0.5	43.6%	41.0%	1.1	31.0%	5.5%	5.6
2021	11.4%	33.1%	0.3	45.3%	56.3%	0.8	43.3%	10.6%	4.1

3.15 Taiwan

International outbound trips by Taiwanese residents are estimated at 15.4 million in 2016, and are forecasted to grow by an average of 3.4 percent per year to reach 18.2 million trips by 2021. Total outbound travel will grow much faster than total household growth (3.4 percent versus 0.0 percent) over the forecast period resulting in a ratio of outbound trips-to-households that is projected to reach 243.6 percent in 2021 from 205.8 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	11.9	12.9	14.4	15.4	18.2	3.4%
Households (mn)	7.5	7.5	7.5	7.5	7.5	0.0%
Total outbound trips as % of total households	159.8%	172.7%	191.9%	205.8%	243.6%	

About 6.0 percent of outbound trips are accounted for by Taiwanese households earning above US\$100,000 per annum in 2016, an income range that accounts for about 3.2 percent of all households. This puts the concentration

ratio at 1.9. The lower-income households earning less than US\$50,000 have a concentration ratio of 0.9 while the middle-income household range of US\$50,000 to US\$100,000 have a ratio of 1.4. This suggests that outbound travel is spread relatively evenly across the income levels. Like South Korea, Taiwan is one of the two among the developed markets where households earning less than US\$50,000 have the highest outbound travel share; households earning less than US\$50,000 make up 63.4 percent of outbound travel in South Korea and 69.0 percent in Taiwan. Projecting forward to 2021, outbound travel growth will mostly come from households earning between US\$50,000 to US\$100,000 as they increase their share of outbound travel from 25.0 percent in 2016 to 29.1 percent in 2021 due to the increase in the number of households at this income range (from 17.6 percent of total households in 2016 to 21.3 percent in 2021).

HH Income Range	<US\$50k			US\$50k-100k			>US\$100k		
	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Taiwan									
2016	69.0%	79.2%	0.9	25.0%	17.6%	1.4	6.0%	3.2%	1.9
2021	64.0%	74.8%	0.9	29.1%	21.3%	1.4	6.9%	3.9%	1.8

3.16 Thailand

International outbound travel by Thai residents are estimated at 7.2 million in 2016, and are forecasted to grow by an average of 4.8 percent per year to reach 9.1 million trips by 2021. As overall household growth is expected to remain stagnant over the forecast period, the ratio of outbound trips-to-households is projected to reach 50.2 percent in 2021 from 40.1 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	6.0	6.4	6.9	7.2	9.1	4.8%
Households (mn)	17.8	17.9	17.9	18.0	18.2	0.2%
Total outbound trips as % of total households	33.6%	36.1%	38.5%	40.1%	50.2%	

About 25.4 percent of outbound trips are accounted for by Thai households earning above US\$30,000 per annum in 2016, an income range that accounts for 14.2 percent of all households. This puts the concentration ratio at 1.8 (lowest concentration ratio among higher-income households of the emerging markets). The lower-income households earning less than US\$10,000 have a concentration ratio of 0.6 while the middle-income household range of US\$10,000 to US\$30,000 have a ratio of 1.2. Malaysia and Thailand have outbound travel to household concentration ratios that are distributed the most evenly among the emerging markets. It is for this reason that in projecting forward to 2021, concentration ratios at the middle and higher-income households will remain very similar to 2016.

HH Income Range	<US\$10k			US\$10k–30k			>US\$30k		
	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Thailand									
2016	23.7%	41.8%	0.6	50.9%	43.9%	1.2	25.4%	14.2%	1.8
2021	18.2%	34.4%	0.5	51.9%	47.7%	1.1	29.8%	18.0%	1.7

3.17 Vietnam

International outbound trips by Vietnamese residents are estimated at 4.8 million in 2016, and are forecasted to grow by an average of 9.5 percent per year (2nd highest growth rate after Myanmar at 10.6 percent) to reach 7.5 million trips by 2021. Total outbound travel will grow much faster than total household growth (9.5 percent versus 0.9 percent) over the forecast period resulting in a ratio of outbound trips-to-households that is projected to reach 34.7 percent in 2021 from 23.2 percent in 2016.

	2013	2014	2015	2016e	2021f	2016-2021 CAGR
Outbound trips (mn)	4.2	4.1	4.6	4.8	7.5	9.5%
Households (mn)	19.9	20.2	20.4	20.6	21.6	0.9%
Total outbound trips as % of total households	20.8%	20.6%	22.4%	23.2%	34.7%	

About 48.0 percent of outbound trips are accounted for by Vietnam households earning above US\$30,000 per annum in 2016, an income range that accounts for 16.5 percent of all households. This puts the concentration ratio at 2.9. The lower-income households earning less than US\$10,000 have a concentration ratio of 0.2 while the middle income household range of US\$10,000 to US\$30,000 have a ratio of 1.0. Projecting forward to 2021, outbound travel growth will mostly come from households earning above US\$10,000 to US\$30,000 as they increase their share of outbound travel from 48.0 percent in 2016 to 57.2 percent in 2021 due to the increase in the number of households at this income range (from 16.5 percent of total households in 2016 to 26.2 percent in 2021).

HH Income Range	<US\$10k			US\$10k–30k			>US\$30k		
	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B	OB trips of range as % of total trips = A	HH in range as % of total HHs =B	Ratio of A/B
Vietnam									
2016	9.0%	39.6%	0.2	42.9%	43.9%	1.0	48.0%	16.5%	2.9

2021	3.6%	21.7%	0.2	39.2%	52.1%	0.8	57.2%	26.2%	2.2
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Appendix: Research Methodology and Data Sources

Forecasting Methodology

The forecast of outbound travel in Asia Pacific uses the propensity for outbound travel at various household income ranges combined with a five-year forecast of household growth within those income ranges. The propensity data is taken from the 2011 to 2016 editions of Mastercard Survey on Consumer Purchasing Priorities which have been conducted bi-annually since 1993 on 400 to 800 respondents per market aged 18 – 64. Coverage extends to 17 markets across the Asia Pacific region. The five-year forecast of households by income ranges is taken from Canback Danglar data. All references to GDP per Capita and GDP were sourced from the IMF WEO Database (April 2016 edition).

Data for outbound travel from 2013 to 2015 was taken from the national statistics boards of the relevant markets. The forecast for 2016 was calculated using estimates from the 2016 edition of the Mastercard Asia Pacific Destinations Index report. There are two types of outbound data that we have used for this report. The first kind is provided directly by official statistics and counts the number of residents leaving the country for an international destination. Where this is unavailable, we have used UNWTO data to count the number of arrivals at destination countries globally. This was done for Malaysia, Vietnam, Myanmar and Hong Kong. The latter method will generally be larger than the former as a resident leaves the source market only once but may visit more than one market once he leaves.

We have also tried to exclude certain high-volume border crossings where possible as these usually include same-day overland trips for reasons of day-to-day shopping or for day employment (i.e. cross over for work during the day and cross back home at night). These include outbound China to Hong Kong and Macau, outbound Hong Kong to China and Macau, outbound Singapore to Malaysia via the causeway crossings, outbound Malaysia to Singapore again via the causeway crossings and outbound Indonesia to Singapore by sea and same day travel to Malaysia.

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