

## **Forecast of Revenue and Expense- Global Perspective**

I always wondered how a hotel would operate financially if it was located in different parts of the world. To demonstrate these differences and show the impact on the Net Income, I developed the following side-by-side comparison of the revenue and expense for the proposed 200-room Marriott type hotel assuming it is located in the following five regions- China, Europe, India, South America and United States. The projected occupancy and average rate will assume to be the same in each market which will produce identical rooms revenue. The rest of the revenue and expense items will be projected by my local HVS partners based on how this Marriott hotel will be designed and operated in that particular region. For example, in India a Marriott hotel would typically have significantly more food, beverage and banquet outlets thereby generating more food and beverage revenue than a Marriott hotel in the United States.

The following statement of revenue and expense shows the side by side comparison for the five regions as of the Marriott's fourth year of operation.

	China				Europe				India				S. America				USA			
0	4				4				4				4				4			
Number of Rooms	200				200				200				200				200			
Occupancy	71.0%				71.0%				71.0%				71.0%				71.0%			
Average Rate	\$ 250.00				\$ 250.00				\$ 250.00				\$ 250.00				\$ 250.00			
Days Open	365				365				365				365				365			
Rooms Occupied	51830				51830				51830				51830				51830			
<b>Revenues</b>	<b>\$(000)</b>	<b>Percent</b>	<b>\$/Avail Rm</b>	<b>\$/Occ Rm</b>	<b>\$(000)</b>	<b>Percent</b>	<b>\$/Avail Rm</b>	<b>\$/Occ Rm</b>	<b>\$(000)</b>	<b>Percent</b>	<b>\$/Avail Rm</b>	<b>\$/Occ Rm</b>	<b>\$(000)</b>	<b>Percent</b>	<b>\$/Avail Rm</b>	<b>\$/Occ Rm</b>	<b>\$(000)</b>	<b>Percent</b>	<b>\$/Avail Rm</b>	<b>\$/Occ Rm</b>
Rooms	\$ 12,958	63.6%	\$ 64,788	\$ 250.00	\$ 12,958	60.2%	\$ 64,788	\$ 250.00	\$ 12,958	52.8%	\$ 64,788	\$ 250.00	\$ 12,958	61.6%	\$ 64,788	\$ 250.00	\$ 12,958	61.4%	\$ 64,788	\$ 250.00
Food & Beverage	\$ 6,312	31.0%	\$ 31,560	\$ 121.78	\$ 7,390	34.4%	\$ 36,950	\$ 142.58	\$ 9,517	38.8%	\$ 47,585	\$ 183.62	\$ 6,686	31.8%	\$ 33,430	\$ 129.00	\$ 6,973	33.1%	\$ 34,865	\$ 134.38
Telephone	\$ 22	0.1%	\$ 110	\$ 0.42	\$ 19	0.08%	\$ 95	\$ 0.37	\$ 480	76.2%	\$ 2,400	\$ 9.26	\$ 213	45.7%	\$ 1,065	\$ 4.11	\$ 141	146.9%	\$ 705	\$ 2.73
Rentals and Other Income	\$ 371	1.8%	\$ 1,855	\$ 7.16	\$ 768	3.6%	\$ 3,840	\$ 14.82	\$ 505	2.1%	\$ 2,525	\$ 9.74	\$ 932	4.4%	\$ 4,660	\$ 17.98	\$ 829	3.9%	\$ 4,145	\$ 15.62
Spa	\$ 413	2.0%	\$ 2,065	\$ 7.97	\$ 372	1.7%	\$ 1,860	\$ 7.18	\$ 950	3.9%	\$ 4,750	\$ 18.33					\$ 241	1.1%	\$ 1,205	\$ 4.63
Garage	\$ 307	1.5%	\$ 1,535	\$ 5.92																
<b>Total Revenue</b>	<b>\$ 20,361</b>	<b>100.0%</b>	<b>\$ 101,803</b>	<b>\$ 392.83</b>	<b>\$ 21,510</b>	<b>100.0%</b>	<b>\$ 107,548</b>	<b>\$ 415.00</b>	<b>\$ 24,560</b>	<b>100.0%</b>	<b>\$ 122,798</b>	<b>\$ 473.85</b>	<b>\$ 21,042</b>	<b>100.0%</b>	<b>\$ 105,208</b>	<b>\$ 405.97</b>	<b>\$ 21,097</b>	<b>100.0%</b>	<b>\$ 105,483</b>	<b>\$ 395.23</b>
<b>Departmental Expenses</b>																				
Rooms	\$ 2,931	22.8%	\$ 14,655	\$ 56.55	\$ 3,881	30.0%	\$ 19,405	\$ 74.88	\$ 1,345	10.4%	\$ 6,725	\$ 25.95	\$ 2,836	21.9%	\$ 14,180	\$ 54.72	\$ 2,855	22.0%	\$ 14,275	\$ 54.91
Food & Beverages	\$ 4,040	64.0%	\$ 20,200	\$ 77.95	\$ 5,012	67.8%	\$ 25,060	\$ 96.70	\$ 4,332	45.5%	\$ 21,660	\$ 83.58	\$ 4,531	67.8%	\$ 22,655	\$ 87.42	\$ 4,785	68.6%	\$ 23,925	\$ 91.56
Telephone	\$ 19	0.09%	\$ 95	\$ 0.37	\$ 19	0.08%	\$ 95	\$ 0.37	\$ 480	76.2%	\$ 2,400	\$ 9.26	\$ 213	45.7%	\$ 1,065	\$ 4.11	\$ 141	146.9%	\$ 705	\$ 2.73
Rentals and Other Income	\$ 224	60.4%	\$ 1,120	\$ 4.32	\$ 150	19.5%	\$ 750	\$ 2.89	\$ 206	40.8%	\$ 1,030	\$ 3.97	\$ 617	66.2%	\$ 3,085	\$ 11.90	\$ 246	29.7%	\$ 1,230	\$ 4.63
Spa	\$ 231	55.9%	\$ 1,155	\$ 4.46	\$ 283	76.1%	\$ 1,415	\$ 5.46	\$ 389	40.9%	\$ 1,945	\$ 7.51					\$ 177	73.4%	\$ 885	\$ 3.29
Garage	\$ 78	25.4%	\$ 390	\$ 1.50																
<b>Total Departmental Expenses</b>	<b>\$ 7,504</b>	<b>36.9%</b>	<b>\$ 37,520</b>	<b>\$ 144.78</b>	<b>\$ 9,345</b>	<b>43.4%</b>	<b>\$ 46,725</b>	<b>\$ 180.30</b>	<b>\$ 6,752</b>	<b>27.5%</b>	<b>\$ 33,760</b>	<b>\$ 130.27</b>	<b>\$ 8,197</b>	<b>39.0%</b>	<b>\$ 40,985</b>	<b>\$ 158.15</b>	<b>\$ 8,204</b>	<b>38.9%</b>	<b>\$ 41,020</b>	<b>\$ 154.91</b>
<b>Departmental Income</b>	<b>\$ 12,857</b>	<b>63.1%</b>	<b>\$ 64,283</b>	<b>\$ 248.05</b>	<b>\$ 12,165</b>	<b>56.6%</b>	<b>\$ 60,823</b>	<b>\$ 234.70</b>	<b>\$ 17,808</b>	<b>72.5%</b>	<b>\$ 89,038</b>	<b>\$ 343.58</b>	<b>\$ 12,845</b>	<b>61.0%</b>	<b>\$ 64,223</b>	<b>\$ 247.82</b>	<b>\$ 12,893</b>	<b>61.1%</b>	<b>\$ 64,463</b>	<b>\$ 240.32</b>
<b>Undistributed Operating Expenses</b>																				
Administrative & General	\$ 1,440	7.1%	\$ 7,200	\$ 27.78	\$ 1,795	8.3%	\$ 8,975	\$ 34.63	\$ 1,426	5.8%	\$ 7,130	\$ 27.51	\$ 2,388	11.3%	\$ 11,940	\$ 46.07	\$ 1,624	7.7%	\$ 8,120	\$ 30.71
Marketing	\$ 743	3.6%	\$ 3,715	\$ 14.34	\$ 898	4.2%	\$ 4,490	\$ 17.33	\$ 604	2.5%	\$ 3,020	\$ 11.65	\$ 1,086	5.2%	\$ 5,430	\$ 20.95	\$ 1,218	5.8%	\$ 6,090	\$ 22.86
Brand Marketing Fee									\$ 326	1.3%	\$ 1,630	\$ 6.29								
Prop. Oper. & Maintenance	\$ 674	3.3%	\$ 3,370	\$ 13.00	\$ 673	3.1%	\$ 3,365	\$ 12.98	\$ 991	4.0%	\$ 4,955	\$ 19.12	\$ 651	3.1%	\$ 3,255	\$ 12.56	\$ 704	3.3%	\$ 3,520	\$ 13.44
Energy Costs	\$ 1,371	6.7%	\$ 6,855	\$ 26.45	\$ 785	3.6%	\$ 3,925	\$ 15.15	\$ 1,933	7.9%	\$ 9,665	\$ 37.30	\$ 543	2.6%	\$ 2,715	\$ 10.48	\$ 559	2.6%	\$ 2,795	\$ 10.48
<b>Total UDOEs</b>	<b>\$ 4,228</b>	<b>20.8%</b>	<b>\$ 21,140</b>	<b>\$ 81.57</b>	<b>\$ 4,151</b>	<b>19.3%</b>	<b>\$ 20,755</b>	<b>\$ 80.09</b>	<b>\$ 5,280</b>	<b>21.5%</b>	<b>\$ 26,400</b>	<b>\$ 101.87</b>	<b>\$ 4,668</b>	<b>22.2%</b>	<b>\$ 23,340</b>	<b>\$ 90.06</b>	<b>\$ 4,105</b>	<b>19.5%</b>	<b>\$ 20,525</b>	<b>\$ 77.44</b>
<b>Income Before Fixed Charges</b>	<b>\$ 8,629</b>	<b>42.4%</b>	<b>\$ 43,143</b>	<b>\$ 166.48</b>	<b>\$ 8,014</b>	<b>37.3%</b>	<b>\$ 40,068</b>	<b>\$ 154.61</b>	<b>\$ 12,528</b>	<b>51.0%</b>	<b>\$ 62,638</b>	<b>\$ 241.70</b>	<b>\$ 8,177</b>	<b>38.9%</b>	<b>\$ 40,883</b>	<b>\$ 157.76</b>	<b>\$ 8,788</b>	<b>41.7%</b>	<b>\$ 43,938</b>	<b>\$ 163.37</b>
<b>Fixed Charges</b>																				
Management Fee	\$ 508	2.5%	\$ 2,540	\$ 9.80	\$ 646	3.0%	\$ 3,230	\$ 12.46	\$ 614	2.5%	\$ 3,070	\$ 11.85	\$ 633	3.0%	\$ 3,165	\$ 12.21	\$ 633	3.0%	\$ 3,165	\$ 12.21
Property Tax	\$ 433	2.1%	\$ 2,165	\$ 8.35	\$ 424	2.0%	\$ 2,120	\$ 8.19	\$ 252	1.0%	\$ 1,260	\$ 4.86	\$ 110	0.5%	\$ 550	\$ 2.12	\$ 540	2.6%	\$ 2,700	\$ 10.30
Insurance	\$ 107	0.5%	\$ 535	\$ 2.06	\$ 159	0.7%	\$ 795	\$ 3.07	\$ 126	0.5%	\$ 630	\$ 2.43	\$ 66	0.3%	\$ 330	\$ 1.27	\$ 209	1.0%	\$ 1,045	\$ 3.98
Reserve for Replacement	\$ 813	4.0%	\$ 4,065	\$ 15.69	\$ 861	4.0%	\$ 4,305	\$ 16.61	\$ 965	4.0%	\$ 4,925	\$ 19.00	\$ 844	4.0%	\$ 4,220	\$ 16.28	\$ 1,055	5.0%	\$ 5,275	\$ 20.00
Business Tax	\$ 1,117	5.5%	\$ 5,585	\$ 21.55																
Incentive Mgmt Fee	\$ 565	2.8%	\$ 2,825	\$ 10.90	\$ 652	3.0%	\$ 3,260	\$ 12.58	\$ 949	3.9%	\$ 4,745	\$ 18.31	\$ 565	2.7%	\$ 2,825	\$ 10.90				
Turnover Tax													\$ 844	4.0%	\$ 4,220	\$ 16.28				
Bank Credits & Debits Tax													\$ 211	1.0%	\$ 1,055	\$ 4.07				
<b>Total Fixed Charges</b>	<b>\$ 3,543</b>	<b>17.4%</b>	<b>\$ 17,715</b>	<b>\$ 68.36</b>	<b>\$ 2,742</b>	<b>12.7%</b>	<b>\$ 13,710</b>	<b>\$ 52.90</b>	<b>\$ 2,926</b>	<b>11.9%</b>	<b>\$ 14,630</b>	<b>\$ 56.45</b>	<b>\$ 3,273</b>	<b>15.6%</b>	<b>\$ 16,365</b>	<b>\$ 63.15</b>	<b>\$ 2,437</b>	<b>11.6%</b>	<b>\$ 12,185</b>	<b>\$ 46.25</b>
<b>Net Income</b>	<b>\$ 5,086</b>	<b>25.0%</b>	<b>\$ 25,428</b>	<b>\$ 98.12</b>	<b>\$ 5,272</b>	<b>24.5%</b>	<b>\$ 26,358</b>	<b>\$ 101.71</b>	<b>\$ 9,602</b>	<b>39.1%</b>	<b>\$ 48,008</b>	<b>\$ 185.25</b>	<b>\$ 4,904</b>	<b>23.3%</b>	<b>\$ 24,518</b>	<b>\$ 94.61</b>	<b>\$ 6,351</b>	<b>30.1%</b>	<b>\$ 31,753</b>	<b>\$ 121.10</b>

Base on the financial statements set forth above, it is apparent that there are many similarities and differences in the mode of operation and the resulting impact on revenues and expenses for hotels in various parts of the world.

The following is a discussion and reasons for the similarities and differences.

Rooms Revenue- The underlying assumption for all five markets is that the subject property is a 200-room Marriott hotel in its fourth year of operation in 2014. The occupancy is 71% and the average rate is \$250 which produces Rooms Revenue of \$12,958,000.

Food and Beverage Revenue- India shows the highest food and beverage revenue of \$9,517,000 compared to China at \$6,312,000 which is the lowest. Indian hotels typically have extensive food and beverage outlets- usually several restaurants and extensive banquet rooms. Some of the best restaurants in India are located in hotels. The large Indian weddings are often held in hotel banquet rooms. Travelers also appreciate dining in a hotel since driving in the large cities can be challenging and time consuming. Hotels in China also attract banquet business but their restaurants don't cater to as many locals as Indian hotels. The European Marriott is second to India in Food and Beverage revenue with a volume of \$7,390,000. Locals in Europe will often frequent hotel restaurants and utilize their banquet facilities. South American and hotels in the United States derive similar levels of Food and Beverage revenue.

Telephone Revenue- India and South America show the highest Telephone Revenue with a volume of \$630,000 and \$466,000 respectively. India hotels derive significant revenue from Internet charges which are very expensive in this region. The United States Telephone Revenue is \$96,000 and Europe is a low \$22,000. China does not separately account for Telephone Revenue but puts it in Other Income.

Rentals and Other Income- South America and United States have the highest Rentals and Other Income at \$932,000 and \$829,000 respectively. China is the lowest at \$371,000.

Spa Revenue- India's Spa Revenue is the highest at \$950,000. Upscale Indian hotels typically have extensive spa facilities that cater to both hotel guests and the local

community. Spa Revenue for China, Europe and the United States ranged from \$241,000 to \$413,000. South America does not show Spa Revenue because hotels of this size typically have very small spas and the income is insignificant.

Garage Revenue- China a hotel typically have garage revenue and for this property was estimated to be \$307,000. The other regions did not specifically include Garage Revenue but it could be included in Other Income.

Total Revenue- The resulting Total Revenue ranges from \$24,560,000 for India down to \$20,361,000 for China. Europe, South America and United States are similar at approximately \$21,000,000.

Rooms Department Expense- Major financial operating differences among the different regions become apparent when the Rooms Department Expense percentage is compared. India has the lowest at 10.4% and Europe is the highest at 30.0%. China, South America and the United States are similar at around 22%. India's extremely low labor cost is the primary reason why the Rooms Department Expense is so low. Indian hotels appear over-staffed, and usually provide a high level of service, however, wages are extremely low which results in a highly profitable department. Europe's labor costs are very high. Unions, government regulations, vacations and benefits, high cost of health care and social security contribute to staffing costs and a high Rooms Department Expense.

Food and Beverage Department Expense- Again, India with its low labor cost has a Food and Beverage Departmental Expense ratio of 45.5%. The other regions of the world are fairly consistent with a cost ranging from 64% in China to 68.6% in the United States. It appears that Europe's higher food and beverage volume helps control the food and beverage expense ratio at 67.8%. Food and beverage labor is not as large of a component of the Food and Beverage Department as it is in the Rooms Department.

Telephone Expense- All areas of the world the telephone department makes a small profit except the United States where it loses money. This can be attributed to the low Telephone Revenue in the United States.

Spa Expense- India has the lowest Spa Expense at 40.8% with China at 55.9% and Europe and the United States at 76.1% and 73.4% respectively. Again these differences are typical labor cost related.

Garage Expense- Good profit made in the garage of China hotels with an expense ratio of 25.4%.

Administrative and General- On a per available basis South America has the lowest Administrative and General cost at \$11,940 per room. Europe is the next most expensive at \$8,975 per room followed by the United States at \$8,120 per room. Comparatively, India is not as low as might be expected operating at \$7,130 per room. Administrative and General

expenses are not as labor intensive as Rooms and Food and Beverage so India's labor advantage does not show up as much in this expense item.

Marketing- The United States has the highest Marketing expense at \$6,090 per room followed by South America at \$5,430 per room. India is at the lowest at \$3,020 per room. The competitive environment in the United States is particularly difficult and requires higher expenditures in Marketing.

Brand Marketing Fee- India hotels are typically charge a separate marketing fee for chain affiliated hotels.

Property Operations and Maintenance- India pays the most for Property Operations and Maintenance- \$4,955 per room. This can be attributed to the high cost of replacement equipment parts and the wear and tear of operating a hotel in India. The Property Operations and Maintenance in the other areas of the world are similar- around \$3,500 per room.

Energy Costs- India has the highest Energy Costs at \$9,665 followed by China at \$6,885 and Europe at \$3,925 per room. South America and the United States are similar at approximately \$2,700 per room.

Income Before Fixed Charges- With its high Food and Beverage coupled with very low departmental expenses, the proposed Marriott in India generated Income Before Fixed Charges of \$12,528,000 which was 51% of Total Revenue. The other four markets had a fairly tight range of IBFC of \$8,014,000 for Europe up to \$8,788,000 for the United States. These profit ratios were about 40%.

Management Fees- The base Management Fee for all the markets was 3% of Total Revenue except for China and India which was 2.5%. China is a particularly attractive market for international hotel companies who compete aggressively to obtain management contracts.

Property Taxes- The United States pays the most in property taxes- \$540,000. China is next at \$433,000 followed by Europe at \$424,000. India is next at \$252,000 followed by South America at only \$110,000. Note that South America also pays a Turnover Tax of \$844,000 and a Bank Credits & Debits Tax of \$211,000 making it much more expensive than the other regions from a total tax perspective.

Insurance- Insurance ranges from a low of \$66,000 in South America to \$209,000 in the United States.

Reserve for Replacement- All the markets utilized a 4% of Total Revenue Reserve for Replacement except the United States which used 5%.

The following are several additional expenses that are deducted by typical buyers of hotels in the regions where they operate. As appraisers, it is important to reflect the actions of typical buyers and sellers and include these expenses in the Revenue and Expense statement if they are customary deductions use by market participants. For example in China, it is normal for buyers to deduct a Business Tax. This type of tax is normally deducted in other regions of the world.

Business Tax- An additional tax normally deducted in China which amounted to \$1,117,000 or 5.5% of Total Revenue.

Incentive Management Fee- Additional fees paid to hotel management companies usually based on a percentage of Net Income. Marriott typically has an incentive management fee which is traditionally deducted for valuation purposes in other areas of the world. However, as described previously, in the United States, incentive management fee is usually subordinated to debt service and is usually loaded into the equity yield and not specifically deducted during the hotel appraisal process. Occasionally, it may be helpful to include incentive management fees for hotel appraisals in the United States which is also proper methodology. Outside the United States the incentive management fee ranges from 2.7% of Total Revenue in South America to 3.9% in India.

Turnover Tax and Bank Credits and Debits Tax- As previously described, hotel appraisers in South America also deduct a Turnover Tax and a Bank Credit & Debits Tax.



Net Income- The resulting income for these five regions is as follows-

China- \$5,086,000

Europe- \$5,272,000

India- \$9,602,000

South America \$4,904,000

United States- \$6,351,000

India leads the list showing a net income of \$9,602,000 which is significantly higher than the other regions. South America is the lowest at \$4,904,000. Even if you deduct an incentive management fee for the United States it would still be the second highest at \$6,351,000. At least from a profit point of view, these results show why India has been getting some much attention from hotel companies looking to do business there. On the other hand, even with the growth of Brazil, South America is not as active in new development compared to India, United States and China.