

# Marriot corporation cost of capital assignment

[Business](#)



Marriott uses its' cost of capital estimates to create a hurdle rate to effectively run operations. Marriott uses these estimates to operate its four financial strategies. These are managing rather than owning hotel assets, investing in projects that increase shareholder value, optimizing the use of debt in the capital structure and repurchasing undervalued shares. If the company uses its overall WAC it may have divisions accept projects with returns below their respective WAC which will result in losses and vice versa.

The Weighted Average Cost of Capital (WAC) is an average that reflects the expected return on all of a company's securities. For the WAC of Marriott as a whole represents all of Marriott's divisions as one company. Marriott's divisions are lodging, restaurant and contract services. To calculate the WAC a risk free rate was used of 8.72% reflecting the interest rate on 10 year government bonds. A risk premium of 7.76% or the average returns of arithmetic averages of all long term, high grade corporate bonds was used for the WAC. To find the equity beta of 1.1 for Marriott the current debt percentage of 41% was used as shown in their capital structure. The levered beta was calculated using 60% debt from the target capital structure. Cost of debt was calculated by multiplying the cost of fixed rate debt by fraction of debt at the fixed rate and adding it to the cost of floating rate debt multiplied by fraction of debt at the floating rate. The WAC for Marriott is 9.29%. The WAC was calculated by taking the WAC and multiplying it by debt percentage of capital, 1 minus the tax rate and our expected return and adding it to cost of equity multiplied by equity percentage of capital.

The WAC is 8.4% for Marriott as a whole. 3. Marriott faces consequences of using a single WAC because it needs a different WAC for all of its' different

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divisions. By using a single WAC we ignore the fact that each division has its own beta and capital structure. This fact also involves the different betas and capital structures of the firms used to compare each division. It is difficult and Inherently Inaccurate to compare firms with Marriott as a whole because it is not as exact and is easier to find companies to compare with individual divisions.

Each division also creates different percentages of sales and different profits.

4. When calculating the WAC on a divisional level it is necessary to do so using 1 OFF in exhibit 3 so we can compare them to similar firms. These are used to find a weighted average beta for each division. Since each firm has a different capital structure it is necessary to unlevered betas before calculating the weighted average betas for each division. After this is done, the equation from class is used to lever the betas so they may be used in the CAMP model to calculate WAC for each division.

The unlevered beta is multiplied by 1 plus the debt to equity ratio then multiplied by 1 minus the tax rate. The levered betas for lodging and restaurant divisions are 2.84 and .81. The cost of equity for both was calculated by adding the risk free rate to levered beta multiplied by the market premium. The market premium reflects arithmetic average spread between S & P 500 returns and the short term US T-bills between 1926-1987. This was used because it reflects returns of large companies such as Marriott and the rates of government T-bills.

The long duration of the value seed associates a constant market premium over the course of 61 years. The cost of equity for Lodging and restaurant

divisions are 33.03% and 17.84%. The weighted average cost of debt (WAC) was calculated the same way as it was for Marriott as a whole only with the numbers from the respective division. The WAC for Lodging and Restaurant are 8.91% and 10.07%. The WAC was used to find the WAC for each of the two divisions. The WAC for Lodging and Restaurant are 7.49% and 10.39% respectively. This shows that if Lodging uses the overall WAC it will use a higher

WAC than its own so it may reject projects that may be profitable and discount from its growth. Like wise if Restaurant uses the overall WAC it is using a lower WAC so it may accept projects with returns lower than their actual WAC. This results in losses for the restaurant division. 5. The WAC for the contract division of Marriott is 3.99% which appears low but I was not able to figure out the error other than thinking it came from my extremely high beta of 8.7. The beta was found by calculating the number that made the beta of Marriott as a whole the average of all of its divisions betas.

The cost of equity for the contract division was found by multiplying the risk free rate by the market premium of 8.47% that had been multiplied by the levered beta. The cost of equity is low compared to that of both other divisions continuing my notion that my beta was off and had thrown off my cost of equity. My WAC of 9.39% did not seem to be off so I do not think that it would have affected the WAC negatively. Overall I think that the WAC should have been higher for the contracts division but could not figure out what I did wrong.