Marriott Corporation: The Cost of Capital

Third time's the charm...

*P(chosen 3x in a row)=1/12*1/12*1/12=0.00058*

Types of investments we could value using Marriott's WACC

There are two requirements that should be satisfied before using Marriott's WACC to evaluate prospective investments:

- The investment opportunity must have the same systemic risk as Marriott as a whole.
- The investment must have a similar leverage level to Marriott as a whole.

Summary of Case

Marriott Corporation is made up of three divisions:

1. Lodging
2. Restaurants
3. Contract Services

They are looking for the cost of capital for each of their divisions.

How would using a single corporation hurdle rate affect the company over time?

As different divisions have different systemic risks and leverage levels, using a single corporation hurdle rate to evaluate investment opportunities would be inappropriate. Risk for the whole corporation would be lower than the risk for the single project because risk for the whole corporation is more diversified.

- If hurdle rate is too low, more projects will be accepted.
- If hurdle rate is too high, fewer projects will be accepted.

This could ultimately result in investments which are not aligned with overall objectives

Cost of Capital for Each Division

Scenario 1: Equal weighting for comparable company betas

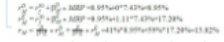
Scenario 2: Revenue-based weighting

Cost of Capital for Marriott as a whole

To find the cost of capital, we use the following information:

mrp=7.43%

beta of debt=0



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Cost of Capital for Each Division

Scenario 1: Equal weighting for comparable company betas

β_L^U=0.8223; β_R^U=0.9586

$r_L = r_f^{20} + \beta_L^U \cdot MRP$ =8.95%+0.8223*7.43%=14.06%

$r_R = r_f^{20} + \beta_R^U \cdot MRP$ =8.95%+0.9586*7.43%=15.84%

To find entire beta, overall asset beta is the sum of the weighted department betas

$\beta_{firm}^U = w_L * \beta_L^U + w_R * \beta_R^U + w_{CS} * \beta_{CS}^U$

=0.45*0.8223+0.55*0.9586+0.10*β_{CS}^U → β_{CS}^U=0.570589

r_{CS} r_f+mrp*β_{CS} 0.0895+0.0743*0.570589 0.147386 = 14.74%

Scenario 2: Revenue-based weighting

β_L^U 0.4119; β_R^U 0.8486

$r_L = r_f^{20} + \beta_L^U * MRP$ =8.95%+0.4119*7.43%=12.01%

$r_R = r_f^{20} + \beta_R^U * MRP$ =8.95%+0.8486*7.43%=15.25%

To find entire beta, overall asset beta is the sum of the weighted department betas

$\beta_{firm}^U = w_L * \beta_L^U + w_R * \beta_R^U + w_{CS} * \beta_{CS}^U$

0.65*0.4119+0.25*0.8486+0.10*β_{CS}^U → β_{CS}^U=0.81728

r_{CS} r_f+mrp*β_{CS} 0.0895+0.0743*0.81728 0.150224 = 15.02%

Cost of Capital for Marriott as a whole

To find the cost of capital, we use the following information:

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beta of debt=0

$r_M^D = r_f^{20} + \beta_M^D * MRP$ =8.95%+0*7.43%=8.95%

$r_M^E = r_f^{20} + \beta_M^E * MRP$ =8.95%+1.11*7.43%=17.20%

$r_M = \frac{D}{D+E} * r_M^D + \frac{E}{D+E} * r_M^E$ =41%*8.95%+59%*17.20%=13.82%

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