

# **FE5105**

## **Corporate Financing and Risk**

### **Phuket Beach Hotel Case**

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- **Introduction**

In Phuket Beach Hotel Case, there are two mutually exclusive capital projects to evaluate, one of which is Planet Karaoke Pub project and another of which is Beach Karaoke Pub project. In Planet Karaoke Pub project, Phuket Beach Hotel will rent part of the unused space out for four years, receive rental fee monthly and afford renovation costs, repair costs, et cetera. In Beach Karaoke Pub project, the hotel will build its own pub, collect revenues and pay relevant costs.

- **Analysis**

First of all, cost of capital used to discount cash flow should be determined. Through the hotel's capital structure, loans interest rate and owners' cost of equity, WACC is 10.75% (exhibit 1).

When evaluating these two projects, there are three key points to be emphasized. First, because the pub might have a negative externality which will discourage tourists with children, the cash flow impacted by such externality should be also taken into consideration. According to the known assumption, the reduced revenues after tax can be figured out from the projection (exhibit 2). Second, because the overhead expenses involves existing toilet, elevators and carpet, although the costs of these facilities will be allocated to the project proportionally, overhead expenses are assumed not as incremental cash flow and not included in cash flow analysis. Third, under Beach Karaoke Pub project, staff could be recruited internally and they had long-term contracts with the hotel, so salary expense is not an additional expenditure for the project and should not be included in the costs and cash flow.

Then, net income should be figured out firstly and then calculating cash flow. For Planet Karaoke Pub (exhibit 3), net income can be got from rental, depreciation, increase in repair and maintenance expenses and tax. Cash flow then can be calculated from net income, renovation cost, reduced revenues after tax and depreciation. For Beach Karaoke Pub (exhibit 4), net income can be got from sale, F&B cost,

operating cost, depreciation, increase in repair and maintenance expenses and tax. Cash flow then can be calculated from net income, capital investment, reduced revenues after tax and depreciation.

- **Compare**

Given WACC and cash flow for these two projects, a series of evaluation indices can be drawn.

	<b>Planet Karaoke Pub</b>	<b>Beach Karaoke Pub</b>
NPV(in Baht)	165,016.99	373,043.31
IRR	20.78%	17.35%
Simple Payback Period(in year)	2.46	3.84
Profitability Index	0.21	0.22
Equivalent Annuity(in Baht)	52,905.69	87,544.58
Average Return on Investment	38.60%	29.54%

According to the graph, NPV and Equivalent Annuity of Beach Karaoke Pub are larger, IRR and Average Return on Investment of Planet Karaoke Pub are higher, Payback Period of Planet Karaoke Pub is shorter and Profitability Index is almost same for these two project. Therefore, these two projects have their own advantages in different aspects.

- **Conclusion**

Under the existing system, which ranks projects according to their average return on investment and payback period, Planet Karaoke Pub has more advantages over Beach Karaoke Pub, so Planet Karaoke Pub project should be recommended to the board of directors. But, the lower IRR and Average Return on Investment of Beach Karaoke Pub project is probably the result of larger cost from running its own pub business. On the other hand, as there is not a capital constraint on project in the hotel, a project that can bring more value to the hotel should be selected. In this case, it is more rational to recommend Beach Karaoke Pub project. Actually, which project is accepted primarily depends on the board of directors' attitude to risk and return. In this situation, Planet Karaoke Pub has less risk for the hotel because the payback period is shorter and the hotel need not take any business risk, but Beach Karaoke Pub has a larger value increasing for the hotel because of running its own pub.

### Exhibit 1 Cost of Capital

<b>Cost of Capital</b>	
Cost of Equity	12%
Cost of Debt	10%
Corporate Tax Rate	30%
Debt/Value	25%
Equity/Value	75%
WACC (Cost of Capital)	10.75%

### Exhibit 2 Existing Hotel Business

<b>Existing Hotel Business (in Bath)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Pre Room Revenues	13,200,000	13,464,000	14,137,000	14,844,000	15,140,000	15,443,000
Post Room Revenues	11,550,000	11,781,000	12,369,875	12,988,500	13,247,500	13,512,625
Reduced Revenues	1,650,000	1,683,000	1,767,125	1,855,500	1,892,500	1,930,375
Tax on Reduced Revenues	495,000	504,900	530,138	556,650	567,750	579,113
Reduced Revenues after Tax	1,155,000	1,178,100	1,236,988	1,298,850	1,324,750	1,351,263

### Exhibit 3 Planet Karaoke Pub

<b>Planet Karaoke Pub (in Baht)</b>		<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Inflows</b>						
Rental			2,040,000.00	2,040,000.00	2,142,000.00	2,142,000.00
<b>Outflows</b>						
Renovation (low estimate)		770,000.00				
Annual Depreciation Expense			192,500.00	192,500.00	192,500.00	192,500.00
Increase in Repair and Maintenance Expenses			10,000.00	10,000.00	10,000.00	10,000.00
<b>Income Before Tax</b>			1,837,500.00	1,837,500.00	1,939,500.00	1,939,500.00
Tax	30%		551,250.00	551,250.00	581,850.00	581,850.00
<b>Net Income</b>			1,286,250.00	1,286,250.00	1,357,650.00	1,357,650.00
Annual Depreciation Expense			192,500.00	192,500.00	192,500.00	192,500.00
Reduced Revenues after Tax			1,155,000.00	1,178,100.00	1,236,987.50	1,298,850.00
<b>Cash Flow</b>		(770,000.00)	323,750.00	300,650.00	313,162.50	251,300.00

### Exhibit 4 Beach Karaoke Pub

Beach Karaoke Pub (in Baht)		0	1	2	3	4	5	6
<b>Inflows</b>								
Sales			4,672,000	4,905,600	5,150,880	5,408,424	5,678,845	5,962,787
<b>Outflows</b>								
F&B Costs	25% of sales		1,168,000	1,226,400	1,287,720	1,352,106	1,419,711	1,490,697
Other operating expenses	22% of sales		1,027,840	1,079,232	1,133,194	1,189,853	1,249,346	1,311,813
Renovation	800,000							
Other Capital Investment	900,000							
Annual Depreciation Expense			283,333	283,333	283,333	283,333	283,333	283,333
Increase in Repair and Maintenance Expenses			10,000	10,000	10,000	10,000	10,000	10,000
<b>Income before Tax</b>			2,182,827	2,306,635	2,436,633	2,573,131	2,716,455	2,866,944
Tax	30%		654,848	691,990	730,990	771,939	814,936	860,083
<b>Net Income</b>			1,527,979	1,614,644	1,705,643	1,801,192	1,901,518	2,006,861
Annual Depreciation Expense			283,333	283,333	283,333	283,333	283,333	283,333
Annual Cap Expenditure			283,333	283,333	283,333	283,333	283,333	283,333
Reduced Revenues after Tax			1,155,000	1,178,100	1,236,988	1,298,850	1,324,750	1,351,263
<b>Cash Flow</b>		(1,700,000)	372,979	436,544	468,656	502,342	576,768	655,598