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Capital Structure of Franchise Restaurants

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One of the many challenges franchise restaurant owners face is profitably growing their businesses in an increasingly competitive environment. Internal growth by increasing same store sales is clearly a requisite for continued success; but external growth through new unit development and acquisitions is important as well, especially to optimize and leverage economies of scale.

Savvy entrepreneurs recognize the importance of financial flexibility in funding this growth. The question is how to best manage your company's capital structure to achieve this financial flexibility. Plainly stated, how is external growth funded while maintaining optimal financial leverage? If the company becomes over-leveraged, a franchise restaurant owner can become the victim of unforeseen defaults or workout situations. Conversely, if the enterprise is under-leveraged, return on equity is not maximized.

This article explores the relationship between unit economics and the use of debt, with an eye toward determining a reasonable target capital structure for franchise restaurant companies.

Until recently, many multi-unit franchise restaurant operators have had the opportunity to finance 100 percent (and in some cases more) of the cost of new unit development or acquisitions, through the securitized markets. This financing appeared to be the panacea to operators allowing dramatic unit growth without substantial cost.

However, the negative effects of hyper-leverage can be seen today, including a) higher default rates and delinquencies and b) limited incremental leverage capacity to finance future growth, necessary unit refurbishments and technological upgrades. Both of these results, unfortunately, typically lead to a continuing drain on company profitability due to increased management attention on dealing with lenders and diminished ability to manage internal growth as unit-level facility upgrades are delayed.

How does this happen?

The answer lies in the risk/return analysis of financing

Table 1
Development Costs for a Typical Franchise

Land	$ 500,000
Building	450,000
Equipment	250,000
Other Costs	50,000
Total Development Costs	$ 1,250,000

Table 2
Unit Economics for First Full Year of Operation

Sales	$1,250,000	100.0%
Cost of Sales	387,500	31.0%
Labor Expense	375,000	30.0%
Rent Expense (Fee Simple Ownership)	-0-	0.0%
Operating Expense	105,000	8.4%
Repairs and Maintenance	20,000	1.6%
Royalty Expense	50,000	4.0%
Advertising Expense	50,000	4.0%
Depreciation Expense	60,000	4.8%
G & A Expense	40,000	3.2%
Interest Expense*	-0-	0.0%
Pre-tax Income	162,500	13.0%
Taxes (40% of Pre-tax)	65,000	5.2%
Net income	97,500	7.8%
EBITDA	**222,500**	**18.0%**

*The interest expense is determined by the amount and terms of the financing and is addressed later in this article.

the external growth opportunity. While prudent use of debt can increase the business owner's cash-on-cash return, the benefits of leverage must be weighed against the downside risks. Franchise restaurant owners should strive to maintain a reasonable ratio of debt to total capital; thus, achieving a balance between the benefits and risks of financial leverage. To demonstrate the effects of leverage on the profitability, financial flexibility and cash-on-cash returns for a franchise restaurant operator, we will consider the following example throughout the remainder of this article.

Measuring Return on Investment

Return on investment (ROI) can be measured in many ways. One popular approach is the cash-on-cash return on investment or the return on equity. This cash-on-cash return is calculated as the free cash flow available (after taxes, debt service and normalized capital expenditures) divided by cash investment.

Free Cash Flow = EBITDA – Taxes – Debt Service – Capital Expenditures

Normalized capital expenditures are incorporated as they are necessary to maintain the earning power of the assets. Most operators anticipate that re-image capital expenditures are required on a regular basis in order to maintain top-line unit performance. In this example, the capital expenditures are assumed to be $20,000 per year. Free cash flow also takes into account changes in net working capital (NWC), however, to simplify our calculations we ignore the effects of NWC changes at the restaurant unit level because these changes are relatively small in comparison to the other elements of free cash flow (due to the predominately cash & near cash nature of these items in the restaurant business).

$$\frac{\text{Free Cash Flow}}{\text{Cash Investment}} = \text{Return on Investment}$$

When considering any project, management will evaluate the project to determine if the expected ROI exceeds a target rate, commonly referred to as the hurdle rate. The minimum hurdle rate for the restaurant industry is typically 30 percent on a pre-tax basis. Assuming a 40 percent tax rate, the after-tax cash-on-cash return should be 18 percent.

After-tax return = (1 – tax rate) * Pre-tax return
= (1 – 40%) * (30%) = 18%

Because equity represents the most expensive cost of capital, the prudent use of debt financing can enhance the expected overall returns of a project by reducing the financing cost. As a result of using debt financing, businesses can increase their cash-on-cash (equity) returns.

To illustrate this fact, assume a restaurant operator can finance 90 percent of the total cost of a new unit using senior debt at a fixed rate of 10.5 percent over twenty years. The total amount financed would be $1,125,000 and the equity required would be $1,250,000 minus the debt financing, or $125,000. The interest expense in the first year would be $118,125 resulting in taxable income of $42,837. The free cash flow would be $50,584 and ROI equals 40.5 percent.

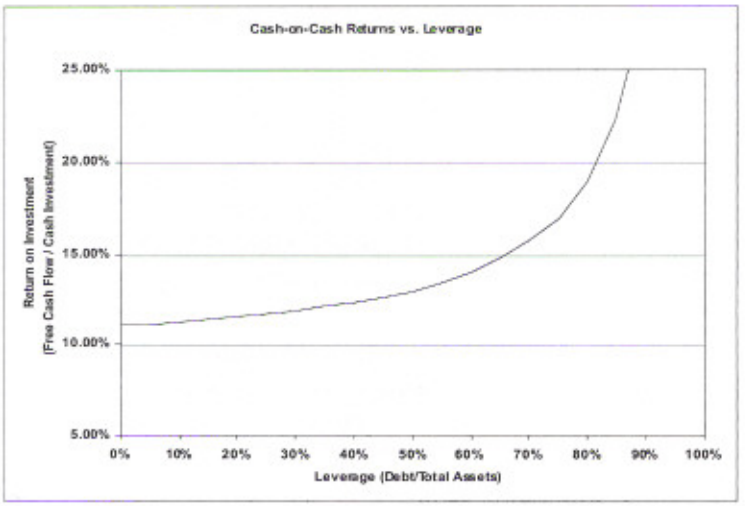
These are calculated as follows:

Free Cash Flow = EBITDA – Taxes – Debt Service – Capital Expenditures
= $222,500 – $17,135 – $134,781 – $20,000 = $50,584

ROI = Free Cash Flow /Cash Investment
= $50,584 / $125,000 = 40.5%

Figure 1 shows expected cash-on-cash return of the example assuming various levels of debt financing

Figure 1
Return on Equity at Various Debt Levels



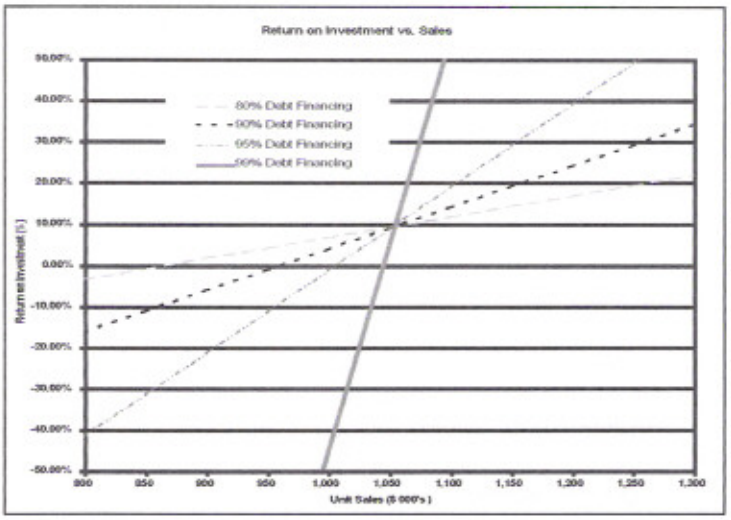
Based upon the assumptions of this example, the minimum debt/equity mix required to achieve the equity hurdle rate is approximately 80 percent debt and 20 percent equity. As management opts for additional leverage, the cash-on-cash returns improve because the denominator in the ROI formula gets increasingly smaller. This encourages many restaurant operators to use the maximum leverage possible to fund new unit growth.

Return on Investment and Leverage

While the use of debt can increase the cash-on-cash return available to the restaurant operator when sales are strong, debt can reduce returns severely when sales are weak. That is why debt is commonly referred to as leverage – the operation's success or failure is magnified. As demonstrated by the graph below, utilizing a higher amount of debt to finance growth increases the slope of the ROI/Sales curve. This means that the returns become more

sensitive to the level of sales as the use of leverage increases (debt service generally is a fixed expense used to increase operating leverage which, in turn, makes performance or the numerator in the ROI formula more sensitive to movements in sales).

Figure 2 – Return on Equity Sensitivity to Leverage



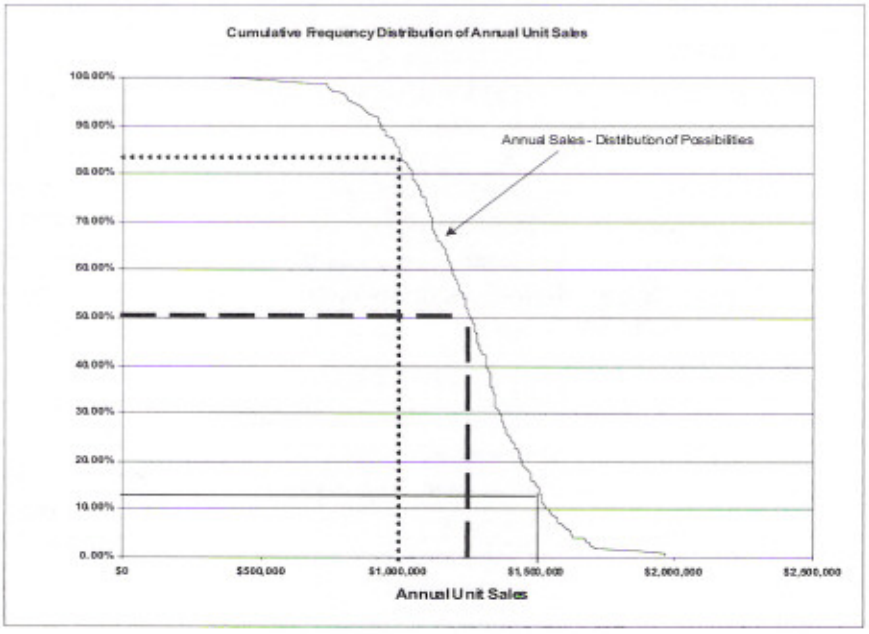
percent (as shown by the heavy solid lines).

The likelihood of achieving sales of $2,000,000 is statistically very remote. An operator who would like to be about 80 percent confident in achieving a positive ROI from his new unit would plan for sales of $1,000,000. Then, referring back to Figure 2, compare the $1,000,000 sales level against the various leverages and it becomes apparent that the maximum leverage that provides a positive ROI is 90 percent debt. Any higher leverage results in a negative ROI at this level of sales.

If we assume that the operator is confident that the new unit will achieve $1,250,000 in sales annually his return on equity will be affected by leverage as outlined in Table 3. Although the results in Table 3 imply that 100 percent leverage should be utilized to maximize return on investment, the risks of increased leverage cannot be ignored. Risk to the restaurant operator (more specifically downside risk) can result in several undesirable events. Among these events are technical default of the loan (e.g., failing to maintain fixed charge covenants), actual monetary default of the loan, failing to achieve the targeted return on investment, and achieving a negative return on investment.

The Probability of Success

A close examination of past experience with new unit development reveals that a range of possible top line performance exists. For instance, a newly developed restaurant (in our example) will most likely have sales of approximately $1,250,000; however, the range of unit sales that we expect is $1,000,000 to $1,500,000. If we assume that 67 percent of the time we experience new unit sales in this range, then we can describe this relationship mathematically using a normal distribution with a mean of $1,250,000 and a standard deviation of $250,000 (derivation is beyond the scope of this analysis).



With the probability of new unit sales determined, the probability of the new unit being successful can be quantified by using a technique called Monte Carlo Simulation. Multiple iterations are performed to determine the possible unit sales that should be expected given these assumptions. The output from the Monte Carlo Simulation is then graphed and used to determine the likelihood of achieving various sales levels. Analyzing the distribution of possible sales of the proposed new unit, it becomes apparent that the likelihood of at least achieving the targeted sales of $1,250,000 is 50 percent (as shown by the heavy dashed lines).

The likelihood of achieving sales of $1,000,000 is just over 80 percent (as shown by the light dotted lines) and the chance of achieving sales of $1,500,000 is just over 10

Table 3
Return on Equity for the $1,250,000 Unit

Leverage	Return on Equity
80%	11.52%
85%	12.77%
90%	15.27%
95%	22.75%
99%	82.65%

Table 4

Probability of Event Occurring at Various Debt Levels

	80% Debt	90% Debt	95% Debt	99% Debt
Negative ROI	8.0%	16.5%	21.0%	22.0%
ROI Less Than Targeted 18%	44.5%	34.5%	27.5%	27.0%
(1) Loan Default – FCCR < 1.0X	5.5%	8.0%	11.0%	13.5%
Technical Default – FCCR < 1.1 X	8.5%	13.5%	19.0%	21.5%

(1) FCCR (Fixed Charge Coverage Ratio) = EBITDAR / (Rent + Debt Service)
EBITDAR is earnings before interest, taxes, depreciation, amortization and rent

Using the tools developed here, the operator can determine the probabilities of any of these events occurring at various levels of debt financing.

This analysis sheds some important insights. The first is that increasing the amount of debt financing used for this project from 80 percent to 99 percent, significantly raises the odds that a negative cash-on-cash return will result as well as increases the likelihood of defaulting on the loan. Second, the probability of achieving the targeted after-tax cash-on-cash return of 18 percent goes up as the use of debt increases; although, the incremental benefit becomes smaller at very high debt levels.

Using a capital structure of 90 percent debt and 10 percent equity, the operator's probability of achieving his hurdle return is approximately 66 percent which increases to 73 percent when 99 percent debt is used. This represents a marginal improvement. However, the risk that the store will not achieve the targeted sales and that the loan will be in technical default goes up from 13.5 percent at 90 percent debt to 21.5 percent at 99 percent debt. The increase in risk is proportionately greater than the benefit from using more leverage.

At about 10 percent equity, the operator has essentially maximized his probability of achieving the target return on investment and additional amounts of debt increase default risk substantially without improving the probability of success substantially.

CONCLUSION

By understanding the risk/reward relationship as it relates to debt financing, franchise restaurant owners can continue to grow their businesses, achieve a handsome return on invested capital and maintain a reasonable target capital structure. How many new restaurants have been constructed that had a high probability of failure? How many highly leveraged acquisitions have been made where the likelihood of success was minimal? What will happen when the longest economic expansion in U.S. history comes to an end?

In the long run, the operator that chooses the proper capital structure without over-leveraging his operation should be able to withstand the eventual economic downturn. However, those that opted to maximize debt proceeds during the good times will find any economic slowdown almost impossible to survive. In order to preserve flexibility and maintain the financial health of their businesses, franchise restaurant owners should strive to maintain a reasonable target capital structure (80% – 90% debt to total capital). Diligently avoiding the temptation to overuse debt financing will increase the odds that adequate growth and an attractive return on equity can be achieved over the long term. ■

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