ENTERPRISE VALUE ENHANCEMENT - THE ROLE OF CFO AND THE FINANCE FUNCTION

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This Note discusses the relationship between enterprise value, growth strategy and risk management and explains how the CFO or the finance function can play an active role in enhancing the value of an enterprise.

Growth, risk and enterprise value

Without overwhelming our readers with details of mathematical formulation, we would point out that the value of an enterprise depends on two principal factors: its rate of growth and risk profile. These two factors are also interrelated as, for example, a company employing a high growth strategy may have to tolerate higher borrowing costs or risks of mechanical failures and human mistakes. It is however useful to look at the relationship between enterprise value and these two factors in isolation first before getting an insight into how the interplay of these factors determines enterprise value.

Let us do this with a few simple graphs. Those interested in mathematical derivation of the graphs may refer to the attached Schedules: (A) a breakdown of the factors, (B) formulas and (C) data set of the base case.

Graph 1 and Graph 2 show respectively the relationship of enterprise value with growth and risk measured with changes in cash flow ("CF") and the weighted average cost of capital ("WACC"). In brief, value rises proportionally with growth and drops inversely as risk increases. These observations correspond well with intuition. Note however that the change in enterprise value is much more sensitive to risk than growth. Further insight can be drawn when we look at Graph 3 that shows how one may choose a particular mix of risk profile and growth strategy to enhance the value of an enterprise. The moral of Graph 3 is that one should choose a relatively low growth strategy along with a low risk profile to produce the best result in terms of enterprise value. We can use the numbers as shown in the graphs to illustrate this point.

Take Graph 1 and 2 as the base case. The enterprise in the example runs a strategy of growing at 30% with a risk profile of 19%. This strategy if effective produces an enterprise value of 236. Graph 3 shows that the enterprise value can be greatly enhanced to about

900 by simply managing its risk profile down to 12% without changing its pattern of growth. On the contrary, if its risk profile is raised to 40%, the enterprise becomes valueless even if it can maintain or even enhance its growth pattern. This explains why some top global companies that we know regard cost control and risk management as a corporate function of overriding importance.

Role of the CFO or Finance Function

The notion as explained is not difficult to understand but putting it into practice requires the enterprise to be able to manage growth and risk in a conscious manner, with sufficiently well ordered and good quantitative information in support. This Noteadvocates along with many, that it is the CFO or the finance function of an enterprise that should bear the responsibility of producing such information for the purpose of managing risk and growth and hence enterprise value.

Why do we think so? One way to look at a business is that it is a value chain, a system adding value when converting inputs into outputs. Outputs are products or value propositions that customers are willing to pay for at a price. Thus the value chain is broadly speaking a production function that can be analyzed into smaller components: functions, risks, transfers and transactions. CFOs or accountants in their traditional role need to understand these functional components and flows, converting them into cost and revenue centers, with data collected and collated in a meaningful manner for financial, management and regulatory reporting purposes. Equipped with such experience and skill sets, the CFO or the finance function is thus in the most relevant position to produce information required for managing growth, risk and enterprise value.

Building a Finance Function to Fulfill a Modern Role

Accordingly the finance function, we would assert, is the key to modernizing the institution of an enterprise. Engineering a finance function that fulfills its contemporary role is thus crucial not only for safeguarding assets, measuring performance and implementing controls, but also for enterprise value enhancement.

With the above in mind, we would propose the following as a working agenda for building such a finance function:

1. Evaluate and benchmark existing positions as the initial point of reference
2. Protect credibility as the most valuable asset for enterprise value enhancement
3. Engineer and equip the finance function to provide information for risk management and value enhancement, in addition to its traditional role in providing information for custodianship, performance measurement and control

Our next Notes will further explain.

SCHEDULE A

Factors Driving Enterprise Value

	Symbol	Description
	V	Total Market Value of the Company
Capital Structure & Leverage	W_d	Debt-Value Ratio
	K_e	Cost of Equity
	K_d	Cost of Debt
	K_0	Required Rate of Return
Market and Specific Risk Factors	β	Beta - Specific Risk of an Investment
	r_f	Risk-free Rate of Return
	r_m	Market Return Rate
	r_{EIT}	Enterprise Income Tax Rate
Time and Cash Flows	j	Period in the Future $1 \leqslant j \leqslant n$
	t_j	Time at Period j
	CF_{tj}	Projected Cash Flow at Period J
	K_{tn}	Terminal Value of Target Company at Period n
	g	Long term growth rate after Period n

SCHEDULE B

Mathematical Formulation

$$V = \sum_{j=0}^{n} \frac{CF_{t_j}}{(1+K_0)^j} + \frac{\kappa_{t_n}}{(1+K_0)^n}$$

$$\kappa_{t_n} = \sum_{l=1}^{\infty} \frac{CF_{t_n}(1+g)^l}{(1+K_0)^l} = \frac{CF_{t_n}(1+g)}{(K_0 - g)}$$

$$K_0 = WACC = K_e(1-W_d) + K_d(1-r_{EIT})W_d$$

$$K_e = R_f + \beta(R_m - R_f)$$

SCHEDULE C

Data Set for a Base Case Scenario

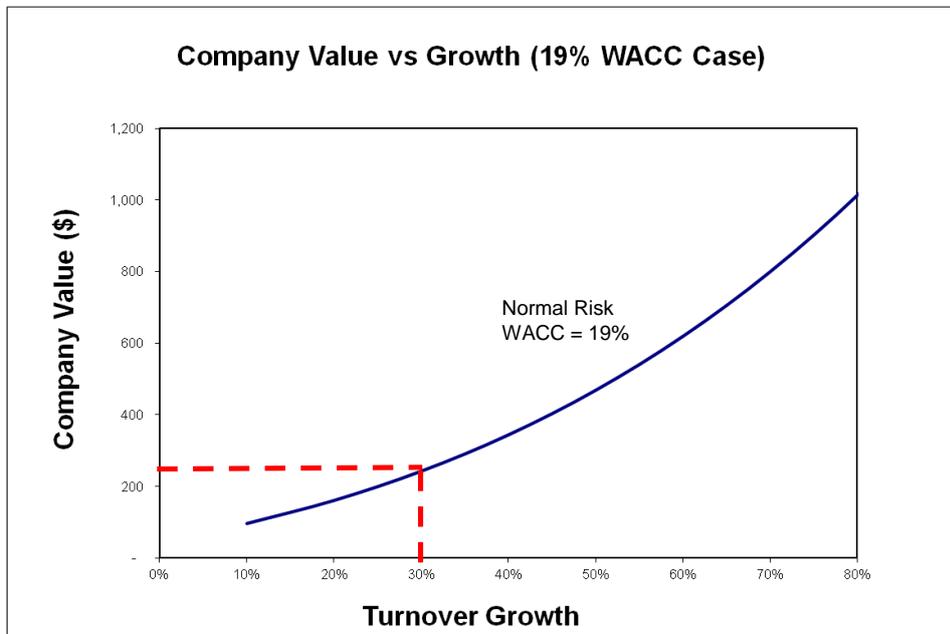|	
Investment	100
Payback period - years (Max)	5
Net profit	5%
First 5 year turnover growth	30%
Growth after 5th year	8%
Loan to equity ratio	0%
WACC	19%

Other assumptions:-
No change in net working capital
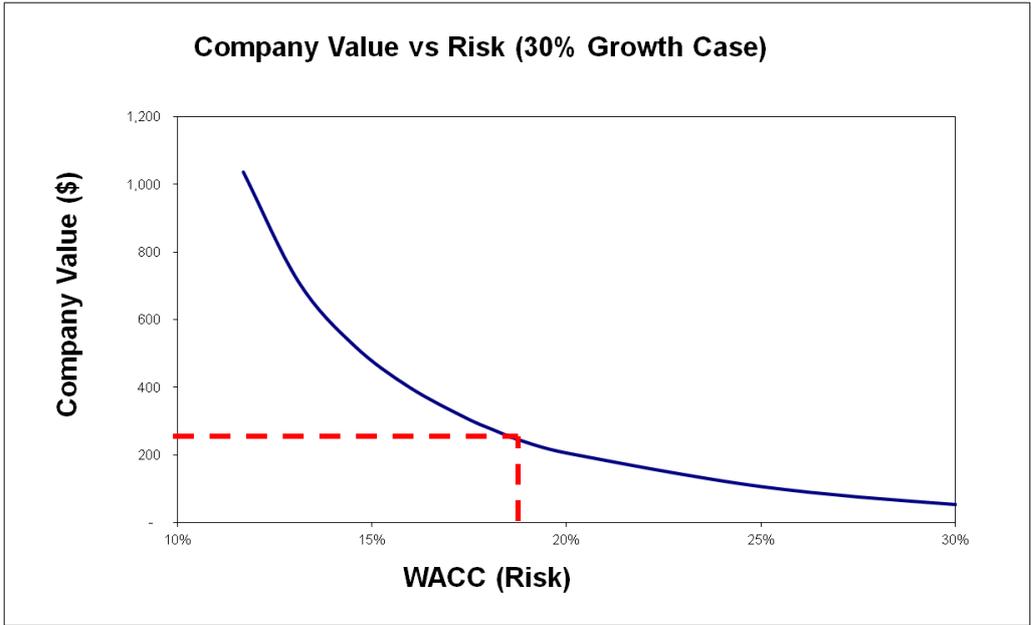Capital expenditure equal depreciation

Enterprise Value (Base Case Scenario)

Year	0	1	2	3	4	5
Turnover		400	520	676	879	1,142
Net profit		20	26	34	44	57
Free Cash flow	-100	20	26	34	44	57
Terminal Value						561
NPV	-100	17	18	20	22	259
NPV total	**236**					

GRAPH 1

Company Value vs Growth (19% WACC Case)

Normal Risk
WACC = 19%

Company Value ($) vs Turnover Growth

GRAPH 2

Company Value vs Risk (30% Growth Case)

GRAPH 3

Company Value vs Growth
(12%,19% & 40% WACC Case)