Method of Valuation of Business of Start Up Companies: A Case Study

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ABSTRACT

Valuation of business is a method to ascertaining the economic value of a business. The method and technique of Business valuation is used to determine the fair value of various assets, both tangible and intangible, as well as liabilities of a business for various reasons which include inviting investors either directly or through capital market, going for mergers and takeovers. Valuation methodology is not similar and identical for valuing all types of Business Concern and it depends on the circumstances, purposes and the objectives behind the Valuation. In case of a startup company the valuation method chosen should be proper as to reflect the true value of the business because potential investors will take a decision whether to invest or not to invest in the business based on the estimated value of the business.

Determining the real worth of the business and putting a price tag to the business has always been a demanding job for the valuer. In order to ensure that the valuation is near realistic there should be transparency in the valuation process and the factors responsible for valuation should be based on realistic consideration. Although a number of valuation models are used by the valuers for the purpose of valuation the real challenge is regarding the use of an appropriate model, keeping in mind the purpose of valuation. The task is far more challenging in case of start ups especially in absence of revenue and real assets.

The present study is based on data obtained from a start-up Company where an effort is made to suggest a method to arrive at the fair value of start up companies. For this purpose the enterprise value has been arrived at within the legally acceptable framework.

Keywords
Start ups, Valuation, Discounted Cash Flow Method

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Introduction

The Position Statement and the income statement, i.e. the Balance Sheet and Profit and Loss Account, are the basic documents which throws light on the position and performance of a business. However these two documents do not always provide data on all the requisite aspects of a business hence it is not always possible to find the value of a business based on these two financial statements. In order to arrive at the value of a business though the choice of methods are many, but the evaluator must use the method which will be most appropriate for the purpose. The present study attempts to find out the factors which will contribute to increase the value of the business for a start-up business.
The term value could be expressed in some of the following ways:

Fair market value:

Fair Market Value is that value of the Business at which a buyer is willing to purchase a Business from the seller where both the buyer and seller of the Business are not under any constraint and are free to exercise the agreement .Further both the parties to the transaction must have reasonable knowledge of regarding the nature of Business, type of Industry and other relevant facts.

Book Value:

Book Value also known as the historical value of the asset is the value of the Asset which is recorded in the Balance Sheet of the Business. It is the value which is equal to the value of acquisition of the asset minus accumulated depreciation.

Liquidation Value:

Liquidation value is the amount of cash that a business is expected to receive when the business is liquidated and its assets are sold in the market .Liquidation could be of two types, i.e. Orderly Liquidation and Forced Liquidation. In case of orderly liquidation assets are sold over a reasonable period of time whereas in case of forced liquidation assets are sold as early as possible. Liquidation value is arrived at when the Company is liquidated and its' liabilities are paid off.

Replacement Value:

Replacement value is the value which is equivalent to the current price of acquiring a new asset which is similar to the existing asset in use in business which is being valued and which will produce utility equivalent to the asset which is being valued.

Review of Literature

The valuation of business or an enterprise is a well discussed topic in the literature. However the concept of Startup Company and their valuation is relatively new. Hence there is till now very limited research that has been carried out in their valuations. The valuation Standard 101 issued by the Institute of Chartered Accountants of India describes business valuation as an "act or process of determining the value of a business enterprise or ownership interest therein ".

The existing literature discusses various methods of business valuation which can be adopted by a business. These methods can be broadly classified as

a) Asset Based Method of Valuation
b) Market Based Method of Valuation
c) Income Based Method of Valuation

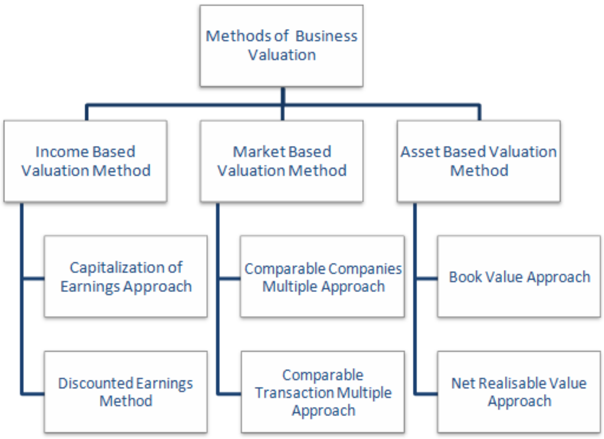

Fig.1. Methods of Business Valuation

The valuation standard explains these methods as under;
Income approach: The income based approach is based on the concept that the value of the Business must be related to the future profits of the Business..P/E Method is widely used for calculating the value of Business of Companies which is listed on the Stock Exchanges. On the other hand Discounted Cash Flow (DCF) method of valuation discounts the expected returns to their present value to calculate the present value of a firm.
Market approach: Market approach is a method of valuation approach which uses various financial ratios or multiples such as the price to book value, price to earnings, EBIT etc. to make a comparison with that of the other firms in the industry. This method is based on historical data as well as market sentiments.
Asset based approach: It is a valuation approach which focuses on a Company's net asset value or the fair market value of it's total assets. From the value of the assets so arrived at total liabilities are deducted to arrive at the value of the firm. This value reflects the amount that would be required currently to replace the service capacity of an asset referred to as current replacement cost.
In case of start –up companies in the absence of assets as well as market to represent business the best suitable method to value their business is the income method of business valuation.

Research Objective

To find out whether income method of Business Valuation using the Discounted Cashflow Method is a suitable method of valuation.

Methodology

1. Approach to Valuation – Income Approach

The income based approach is based on the idea of valuing the present value of future benefits. that the value of the Business must be related to the future profits of the Business..P/E Method is widely used for calculating the value of Business of Companies which is listed on the Stock Exchanges. On the other hand Discounted Cash Flow (DCF) method of valuation discounts the expected returns to their present value to calculate the present value of a firm.

2. Selection of Method – Discounted Cash Flow Method

Discounted Cash Flow method also known as DCF method is a technique to estimates the future free cash flows of a business at its present value. This method estimates the expected fair market value of a business concern by taking into account the future value of cash flows of a business and discounts it into it's present value to arrive at the fair market value.This method is suitable for those concerns where future earnings are expected to be substantially different from current earnings. As in case of a start-up company the future earnings will always be more than the current earnings hence this method is suitable for start-ups.

3. Steps Involved In Valuation :

i. Estimation of the Future Cah Flows:

The future free cash flows to equity are computed in the following manner:

Profit after Tax	XXX
Add/ (Less): Adjustments for Capital Expenditure and Non Operating items	XXX/(XXX)
Add/ Less: Decrease/(Increase) in Working Capital Changes	XXX/(XXX)
Net Cash Flow from Operating Activities	XXX
Less : Cost of Debt (Interest)	(XXX)
Less: Projected Capital Expenditure in future	(XXX)
Free cash flow to equity	XXX
Add : Terminal Cash Flow	XXX

ii. The discount rate considered for arriving at the present value of the free cash flows to equity is computed using the Capital Asset Pricing Model (CAPM) using the formula:

$K_e = R_f + \beta (R_m - R_f)$
Where,
K_e = cost of equity
R_f = Risk Free Return
β = Beta, a measure of Market Risk
R_m = Market Rate of Return

iii. Terminal Value

Terminal value is referred to as the value of the business after the explicit period of forecast where the business is a

going concern and valuation is made up to perpetuity. Taking into account the projected growth of the Indian economy and the factors specific to the company and the industry in which it operates the terminal period's cash flow growth rate could be assumed to be 3% beyond the projection period.
The future value of cash flows and terminal value are discounted with the weighted average cost of capital in order to find the value of the company as on the valuation date.

iv. Adjustments to Valuation

Valuation so arrived at is adjusted for the following to arrive at the value of the Company attributable to the equity shareholders:
i. Discount for any disadvantages to investor,
ii. Cash and Bank Balances
iii. Premium for specific advantages, if any.
In this case income approach is followed and value of all Non Current Assets as well as Current Assets including Cash and cash equivalents are not considered.
No premium is added for specific advantages.
Discount of 50 % is considered for lack of marketability.
v. v) Value per Share
Value attributable to the equity shareholders is then divided by the no of shares outstanding as on the Valuation Date to arrive at the fair value per share. The fair value per share arrived at under most likely scenario. Discounted Cash Flow (DCF) Method of future cash flows are used to value the business of Western land Dairy Private Limited

Data Analysis Of Western Land Dairy Private Limited:

(i) Company Background:

Western land Dairy Private Limited was founded on 3rd October 2012 with the object of carrying on the business of production of milk and other dairy products in an innovative manner and with the latest technology. The company sells the following products under its brand Sreedhara in the state of Odisha.
1. Fresh Milk
2. Curd
The company produces its products from its state of the art manufacturing and processing plant (with a capacity of 30,000 litres per day and expandable up to 50,000 litres per day). WLDPL now collecting quality tested milk from a network of more than 1000 farmers from 50 villages through 30 collection centres and 3 Bulk Milk Chillers (BMCs).
In October 2014 Milk Mantra Dairy Private Limited acquired 91% of shareholding in the company from the existing shareholders, infused further capital approx. 1cr for it expansion activities.As envisaged in Sale and Purchase A, the company acquired remaining 9% shares from existing shareholders in FY15-16 at predefined value to make it 100% subsidiary.

(ii) Valuation Methodology:

As per RBI notification no. FEMA 205/2010 dated April 7th, 2010 the price of shares for the purpose of valuation is to be arrived at by applying the Discounting Cash Flow Method (DCF) of valuation. DCF Technique of valuation based on the future cash earnings potential of the Business Firm and is considered as one of the most practical methods for share valuation. This method reflects the optimum value of the business.
The reason behind the wide acceptance of the method of DCF technique is that it uses the Weighted Average Cost of Capital to discount the free cash flows available for the future periods to the Business and derives the resultant present value of cash flows. Thus it can be said that the DCF method is a strong and widely accepted valuation tool.
The cut-off date for the valuation analysis is 31-03-2019.

(iii) Projected Cash Flow Statement:

Period	Year ending March 2016	Year ending March 2017	Year ending March 2018	Year ending March 2019	Year ending March 2020	Year ending March 2021	Year ending March 2022
Profit After Tax	-1.64	0.77	3.76	7.46	10.57	12.89	15.20
Add:							
Depreciation	1.08	1.16	2.40	2.19	2.00	1.73	1.5
Cash Flow	-0.56	1.92	6.16	9.65	12.57	14.62	16.70

(iv) Present Value of Cash Flow
(Rs. in Crores)

Year	*Cash Flow (Rs. In Crore)*	*Discount Factor*	*Discounted Cash Flow (Rs.)*		*NPV (Rs in crore)*
0	-0.56	1.00	-0.557064128		
1	1.92	0.87	1.68		
2	6.16	0.76	4.69		
3	9.65	0.66	6.40		
4	12.57	0.58	7.28		
5	14.62	0.50	7.38		
6	16.70	0.44	7.35		
			34.22		34.2166
Present Value of Future Cash Flow Beyond 2021					
Valued as a growing Perpetuity					

Growth rate of Perpetuity assumed to be	6.00%		
Terminal Value on beginning of 7th Year	192.99	0.44	84.9586
Total Present Value			119.1753
Total Present Value (in Rs.)			**119,175,252**
Valuation of Equity			
Total Present Value of Cash Flow (in Rs.)			**119,175,252**
No of Equity Shares			1,957,325
Value of Equity Share			**60.89**

(v) Weighted Average Cost of Capital

Cost of Equity				
Cost of Equity	Ke=	Rf+β(Rm-Rf)	=	18.81%
Cost of Debt	Kd=		=	12%
Source	***Value (Rs. In Crore)***	***Weight***	***Cost***	***Weighted Cost***
Equity	2.20	0.39	18.81%	7.33%
Debt	3.44	0.61	12%	7.32%
Total	**5.64**			**14.65%**

Assumptions:

1. Market rate of return(19.05%) is computed comparing closing price of S& P BSE SENSEX on month to month basis from April 2003 to February 2019.

2. Risk free rate of return (7.23%) is computed by averaging T' Bill rate as on 20thFebruary 2019.

3. Beta factor(0.98) is taken as weighted unlevered beta of Indian Companies in Food Processing Industry.

4. Cost of Equity (18.81%) is computed by using Capital Asset Pricing Model.

5. Cost of Debt (11.25%) is assumed to remain unchanged throughout projection period.

6. Growth rate of cash flow beyond Financial Year 2020-22 is assumed to be 6%.

7. Projected Balance sheets and Projected statement of Profit & loss are certified by management.

Conclusion

The valuation as determined by the methodology laid out above and calculations as produced as under

Details	***Value (Rs. In Crores)***
Present Value of Cash Flow till 31st March 2022	34.2166
Present Value of growing perpetuity cash flow beyond 31st March 2022	84.9586
Total Value	119.1753
Number of Shares held	0.1957
Fair Value as per RBI Guideline	***(In Rs.)***
Fair Value per share	**60.89**

References