



Cost of capital and value of a firm

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Abstract

Cost of capital is one essential corporate tool in the world of finance. The importance of the cost of capital is very high as it is directly linked to the valuation of the business. At a time when businesses are keen to get involved in anything and everything that adds value to the firms, the concept of cost of capital is the cynosure. There are numerous activities in which a firm generally gets involved. All such activities can be classified as operational and non-operational. The operational activities are supposed to influence the valuation by design. However, the non-operational activities, namely transparency and valuation, ESG (environmental, social and governance) related initiatives, shareholders activism and corporate governance, all are aimed at adding value to the firm. The ultimate influence of all the operational and non-operation activities fall on the cost of capital (either directly or indirectly) and reflects on its linkages with the valuation of the businesses.

Keywords: Cost of capital; Valuation; Firms; Governance; Disclosures

1. Introduction

The reason for having a business is a question that is asked out of context. Nevertheless, it is important to answer this query at least once. There will always be some people with needs, and those needs generally inspire others to take action to meet those needs. This straightforward drive to meet that need can eventually be transformed into a phenomenon we call business. This outcome makes it clear that anyone fulfils the qualifications would undoubtedly desire to gain in some way from suffering the agony and danger to achieve something that may not have existed in the past.

As the processes expand up and the size of everything increases over time, the entire activity becomes increasingly challenging. The business owners discover that the resources, principally financial, with which they had begun the straightforward endeavour of satisfying the objectives may not be sufficient to advance the venture. They begin hunting for additional individuals to give them the most important and dangerous input-funds. The business owners have two alternatives for obtaining more cash or capital: take out a loan (debt) or borrow by giving up ownership in the company (equity or ownership stakes). However, in order to supply the services to the entrepreneurs, both sorts of capital providers require something.

Debt capital has a clear-cut deal of fixed tenure and a fixed interest rate. However, equity capital does not provide such a condition for fixing anything. Instead, it claims that the equity provider becomes the part-owner of the organization and therefore has to share everything, including profit and losses. Therefore, it can be interpreted that the debt capital providers take less risk than the equity fund providers.

There are no free lunches in this world. The same applies to capital providers of both types. The terms of the transaction of the debt capital providers are defined and detailed in the covenant of debt agreement, but equity capital providers cannot be left in the lurch. They may share in profit and loss equally even without getting a promise of regular income, but still they expect some return for sharing their hard-earned money with the entrepreneurs. However, capturing this expectation is abstract and cannot be as simple as in the case of their debt provider counterparts. This collective expectation of debt fund providers can be termed cost of debt (The minimum acceptable rate of return expected by all the debt providers can be termed as cost of debt). Similarly, the minimum acceptable rate of return expected by all the equity providers is called the cost of equity).

Moreover, a weighted average of the cost of debt and equity is termed as cost of capital. The cost of capital is entirely abstract but can be mathematically calculated for every organization (*in percentages as the rate of return per annum*). A good number of novice entrepreneurs do not understand the nitty-gritty of the cost of capital and think that part of the capital is free (equity capital). The only part of the capital that is to be paid back is debt capital. They think that they can easily survive for long even if they make losses or do poor business and continue to repay their interests to the debt capital providers in time. Businesses are meant to create value for those who are party to run the show. The capital providers provide funds to organizations with certain expectations (cost of capital). Suppose a business can create wealth (rate of return/ return over investment/return over capital employed/return on capital) more than the cost. In that case, we know that the organization is creating VALUE for the fund providers, depleting the value and losing on the funds provided to the organization.

Therefore, the business may be of any type, in any industry or sector, in any country. The basic tenet remains the same: a company adds value only when it creates returns (e.g. Return on Capital) more than its **cost of capital**.

2. Review of Literature

Many instances in the literature reveal the importance of valuation in the business (Shingade *et al.*, 2022a, Rawal *et al.*, 2022, Bhimavarapu and Rastogi, 2020) ^[29, 8, 4]. In the inclusive growth of the nation, valuation has its significant role to play (Rastogi *et al.*, 2020, Rastogi *et al.*, 2021b, Rastogi and Ragabiruntha, 2018, Rastogi *et al.*, 2017) ^[1, 4, 12, 21, 23, 28, 31, 20, 14, 22]. Studies investigating valuation in the banks are also quite frequently seen (Sidhu *et al.*, 2022, Rawal *et al.*, 2022, RASTOGI *et al.*, 2022, Rastogi and Kanoujiya, 2022a, Bhimavarapu *et al.*, 2022, Kuknor and Rastogi, 2021, Kanoujiya *et al.*, 2021) ^[2, 3, 8, 16, 25, 33, 34, 17, 29, 10, 6].

There are several papers where valuation is part of literature review papers (Shingade and Rastogi, 2020, Bhimavarapu and Rastogi, 2020, Athaley *et al.*, 2020, Shingade and Rastogi, 2019, Patil and Rastogi, 2019, Verma and Gautam, 2022, Gautam and Kanoujiya, 2022) ^[31, 4, 11]. A relatively newer concept, Shareholder Activism (SHA), also covers the valuation aspects as an impact of SHA (Shingade *et al.*, 2022b, Shingade *et al.*, 2022a, Shingade and Rastogi, 2020, Shingade and Rastogi, 2019, Gautam *et al.*, 2021, Gautam *et al.*, 2022) ^[30, 32, 29, 31, 32, 6, 7]. Valuation in SMEs is witnessed (Singh and Rastogi, 2022a, Singh and Rastogi, 2022b) ^[15] in various ways. The involvement of valuation is the same for a concept known as transparency and disclosures (TD) (Rawal *et al.*, 2022, Rastogi and Kanoujiya, 2022a, Bhimavarapu *et al.*, 2022, Sharma and Rastogi, 2021, Gautam *et al.*, 2021) ^[8, 4, 6]. Valuation also finds its role in the measurement of volatility and its impact on different securities markets (Rastogi and Kanoujiya, 2022b, Rastogi *et al.*, 2021c, Rastogi *et al.*, 2021a, Sharma and Rastogi, 2020, Rastogi and Agarwal, 2020, Rastogi and Athaley, 2019, Rastogi *et al.*, 2018, Rastogi, 2014, Sarkar and Rastogi, 2011) ^{[30, [1, 4, 12, 21, 23, 28, 31, 20, 14, 22, 13, 14, 24, 26]}.

3. Issues to be solved

1. What is value, and why it is so essential in business?
2. What is the capital, and what is the cost of this capital? Is the capital free, or part of it is free?
3. What is Return Over Capital?

4. Describe
 - a) Find capital in a firm and calculate the amount? Use the enclosed Balance Sheet and estimate the capital.
 - b) What is Return Over Capital in the firm
 - c) Use the enclosed Balance Sheet and estimate the Return on Capital (RoC)

Company 1: Reliance Industries Limited
Company 2: Avenue Supermarket Limited
Company 3: HDFC Bank Limited
Company 4: Tata Consultancy Services

4. References

1. Athaley C, Rastogi S, Goel A, Bhimavarapu V. Factors Impacting Bank's Performance: A Literature Review. *Test Engineering and Management*. 2020; 83:7389-7398.
2. Bhimavarapu VM, Rastogi S, Kanoujiya J. Ownership concentration and its influence on transparency and disclosures of banks in India. *Corporate Governance: The International Journal of Business in Society*, 2022. <https://doi.org/10.1108/CG-05-2021-0169>
3. Bhimavarapu VM, Rastogi S, Kanoujiya J. Ownership concentration and its influence on transparency and disclosures of banks in India. *Corporate Governance: The International Journal of Business in Society*, 2022. <https://doi.org/10.1108/CG-05-2021-0169>
4. Bhimavarapu VM, Rastogi S. Valuation of Transparency-A Systematic Literature Review Paper. *Test Engineering and Management*. 2020; 83:9092-9102.
5. Gautam RS, Bhimavarapu VM, Rastogi S. Impact of Digitalization on the Farmers in India: Evidence Using Panel Data Analysis. *International Journal of Management and Humanities (IJMH)*. 2021; 6(1):5-12.
6. Gautam RS, Kanoujiya J, Bhimavarapu VM, Rastogi S. Financial Technology and Its Impact on Poverty in India. *International Journal of Management and Humanities (IJMH)*. 2021; 6(3):1-0.
7. Gautam RS, Kanoujiya J. Role of Regional Rural Banks in Rural Development and Its Influences on Digital Literacy in India. *Iconic Research and Engineering Journals*. 2022; 5(12):92-101.
8. Gautam RS, Rastogi D, Rawal A. Study of Financial Literacy and Its Impact on Rural Development in India: Evidence Using Panel Data Analysis. *Iconic Research and Engineering Journals*. 2022; 5(9):483-492.
9. Kanoujiya J, Bhimavarapu VM, Rastogi S. Banks in India: A Balancing Act between Profitability, Regulation and NPA. *Vision*, 2021. <https://doi.org/10.1177%2F09722629211034417>
10. Kuknor S, Rastogi S. Determinants of profitability in Indian banks: a panel data analysis. *International Journal of Modern Agriculture*. 2021; 10(2):978-986.
11. Patil AC, Rastogi S. Time-Varying Price-Volume Relationship and Adaptive Market Efficiency: A Survey of the Empirical Literature. *Journal of Risk and Financial Management*. 2019; 12(2):1-18.
12. Rastogi S, Agarwal A. Volatility Spillover Effect in Spot, Futures and Option Markets. *Test Engineering and Management*. 2020; 83:10114-10127.
13. Rastogi S, Athaley C. Volatility Integration in Spot, Futures and Options Markets: A Regulatory Perspective. *Journal of Risk and Financial Management*. 2019;

- 12(98):1-15.
14. Rastogi S, Do J, Nithya V. Volatility Estimation using GARCH Family of Models: Comparison with Option Pricing. *Pacific Business Review International*, 2018; 10(8):54-60.
 15. Rastogi S, Doifode A, Kanoujiya J, Singh SP. Volatility integration of gold and crude oil prices with the interest rates in India. *South Asian Journal of Business Studies*, 2021a. <https://doi.org/10.1108/SAJBS-02-2021-0074>
 16. Rastogi S, Kanoujiya J, Bhimavarapu VM, Gautam RS. The Impact of Competition on the Profitability and Risk-Taking of Commercial Banks in India. *The Journal of Asian Finance, Economics and Business*. 2022; 9(5):377-388.
 17. Rastogi S, Kanoujiya J. Does transparency and disclosure (T&D) improve the performance of banks in India?. *International Journal of Productivity and Performance Management*, 2022a. <https://doi.org/10.1108/IJPPM-10-2021-0613>
 18. Rastogi S, Kanoujiya J. Impact of cryptos on the inflation volatility in India: an application of bivariate BEKK-GARCH models. *Journal of Economic and Administrative Sciences*, 2022b. <https://doi.org/10.1108/JEAS-08-2021-0167>
 19. Rastogi S, Ragabiruntha E. Financial inclusion and socioeconomic development: gaps and solution. *International Journal of Social Economics*. 2018; 45(7):1122-1140.
 20. Rastogi S, Sharma A, Panse C, Bhimavarapu VM. Unified Payment Interface (UPI): A Digital Innovation and Its Impact on Financial Inclusion and Economic Development. *Universal Journal of Accounting and Finance*. 2021b; 9(3):518-530.
 21. Rastogi S, Sharma A, Panse C. Open Banking and Inclusive Growth in India. *Indian Journal of Ecology*. 2020; 47(S19):75-79.
 22. Rastogi S, Suresh V, Leonard D. Financial Inclusion and Demonetization: An Empirical Study Using Exploratory Factor Analysis. *Indian Journal of Commerce and Management Studies*. 2017; 8: 1(5):38-46.
 23. Rastogi S, Tripathi V, Kuknor S. Informational role of futures volume for spot volatility. *Pacific Accounting Review*, 2021c. <https://doi.org/10.1108/PAR-01-2020-0005>
 24. Rastogi S. The financial crisis of 2008 and stock market volatility-analysis and impact on emerging economies pre and post crisis. *Afro-Asian Journal of Finance and Accounting*. 2014; 4(4):443-459.
 25. Rawal A, Rastogi S, Kanoujiya J, Bhimavarapu VM. Impact of transparency and disclosure (T&D) and financial distress (FD) on the valuation of banks in India. *Journal of Economic and Administrative Sciences*, 2022. <https://doi.org/10.1108/JEAS-03-2022-0053>
 26. Sarkar A, Rastogi S. Impact of gold and silver futures on the spot rate volatility: An Indian perspective. *Nice Journal of Business*. 2011; 6(1):23-28.
 27. Sharma A, Rastogi S. Impact of Efficiency on Voluntary Disclosure of Non-Banking Financial Company-Microfinance Institutions in India. *Journal of Risk and Financial Management*. 2021; 14(7):289-311.
 28. Sharma A, Rastogi S. spot volatility prediction by futures and options: An Indian scenario. *International Journal of Modern Agriculture*. 2020; 9(3):263-268.
 29. Shingade S, Rastogi S, Bhimavarapu VM, Chirputkar, A. Shareholder Activism and Its Impact on Profitability, Return, and Valuation of the Firms in India. *Journal of Risk and Financial Management*. 2022a; 15(4):1-20.
 30. Shingade S, Rastogi S, Panse C. Shareholders' Activism in India: Understanding characteristics of companies targeted by activist shareholders using discriminant analysis. 2022 IEEE Technology and Engineering Management Conference (Temscon Europe). 2022b; (IEEE):94-99.
 31. Shingade SS, Rastogi S. Issues raised by activist shareholders: A Review of Literature. *Test Engineering and Management*. 2020; 83:9891-97.
 32. Shingade SS, Rastogi S. Shareholders' Activism and Firm Performance: A Review of Literature. *Indian Journal of Commerce and Management Studies*. 2019; 10(2):22-30.
 33. Sidhu AV, Rastogi S, Gupte R, Bhimavarapu VM. Impact of Liquidity Coverage Ratio on Performance of Select Indian Banks. *Journal of Risk and Financial Management*. 2022; 15(226):1-17.
 34. Verma D, Gautam RS. The Effect of Education on Working Women for Work-Life Balance. *Iconic Research and Engineering Journals*. 2022; 5(9):458-592.