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Valuing Technology Companies

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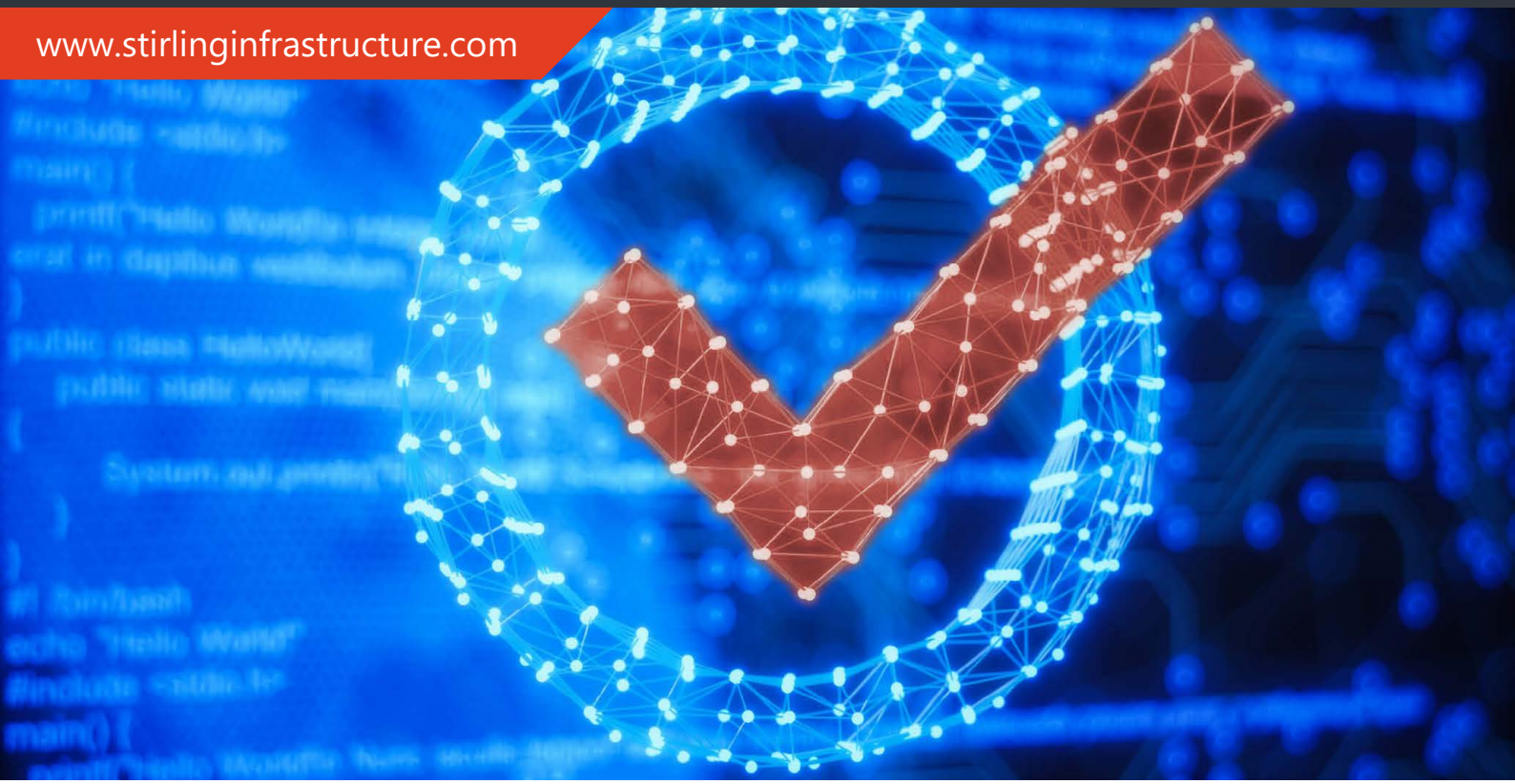

FOREWORD

This paper gives an overview of the most useful methods when it comes to the assessment of the value of technology companies. With the nuance and variation in company structure and revenue models, this paper navigates the void, providing accurate, actionable information regarding the pros and pitfalls of each valuation method and which companies they ought to apply best. The role of this paper is to outline a robust methodology for valuing technology companies which considers how each of the strengths of different valuation methods will apply to the assessment of certain types of technology companies. In summary, this paper outlines how each method ought to be weighted according to its relevance to the company in question.

EXECUTIVE SUMMARY

The technology sector is extremely nuanced with regard to the function and structure of companies. As such, Stirling Infrastructure attempts to remedy this nuance with an attentive and balanced methodology considering a wide range of valuation techniques. While some valuation methods will apply well to certain companies, they may give unrepresentative valuations for others. Our methodology outlines these advantages and disadvantages and suggests a system of weighting each, depending on the structure and operation of the company in question.

This paper outlines a methodology that comprises two parts. The first regard the execution of each valuations process. This is followed by a strategy for weighting each method in order to come up with an overall valuation.

This paper finds that valuations methods such as the Discounted Cashflow and Venture Capital methodologies are most effective when applied to companies with long histories of stable and consistent incomes. However, the assumptions and forecasting required to give an accurate value must be incredibly precise, and as such they tend not to suit companies that are growing quickly, operate in relatively new sectors or are "pre-revenue" companies.

Other methodologies such as Berkus' method or the comparable and scorecard methodology can be incredibly useful when considering firms that are growing quickly or have the capacity to grow quickly in the future. Since some companies' revenues won't be representative of their overall value, the methodology outlined in this paper emphasises the importance of weighting each valuation in order to find a balanced value that accurately reflects the structure and potential of a business.

The methodology considers two further "post-valuation" methodologies in the Comparable and Scorecard, and the Risk Factor Summation methodologies. Such methods employ the assessment of a company based on their performance against competitors in the market and their ability to have addressed risks adequately. As such, it awards greater value to companies which fulfil these extra considerations.

The process of valuing companies begins with a request for information to the company being valued. There are many factors which need to be understood in order to determine which methodologies ought to be weighted more heavily and then to value the company. Once such information is ascertained, the valuations process can commence. Overall, this results in a clear strategy being devised incorporating each method to some extent in the overall calculation of value.

INTRODUCTION

This paper begins with an analysis of several revenue models of technology companies. Firstly, there is a consideration of exactly what is meant by a tech company. Our methodology argues that any company can be considered a tech company as long as they incorporate technology within their business in order to create efficiency or to provide a service which they otherwise would not be able to provide. Several revenue models and different kinds of technology companies are identified. Early-stage technology companies (ESTCs) have an entirely different structure from larger, older tech companies. This paper also outlines how the location and market sector of a technology company can have a significant impact on its revenue models while also the sales structure of business-to-business (B2B) versus business-to-consumer (B2C) is another dimension which is considered.

Following on, this paper goes on to outline and analyse a selection of valuation methods. For each method, this paper discusses the strengths and weaknesses concerning their application to different types of technology companies.

This paper concludes by outlining the process used when valuing technology companies. This process begins with a request for information and is followed by an assessment of the product and the team leading the company. Other factors to be considered in the valuations process are the returns strategy, the level of debt the company holds and the strength of the market in which it operates.

Overall, this paper provides an overview of the valuations process for technology companies. By discussing the strengths and weaknesses of different valuation methods this paper outlines which of the methods ought to be considered with greater weight when accurately finding the value of technology companies.

TECHNOLOGY COMPANIES – FEATURES AND STRUCTURE

In the modern day, the term "tech company" has been broadening as many companies look to brand themselves as innovative and advanced in order to appeal more attractive to investment. Our methodology identifies several types of tech companies. Firstly, there are those who employ technology solutions in order to complete a task or offer a service they otherwise would be unable to. We identify companies which use AI or machine learning in order to streamline their processes and create business efficiencies as examples of tech companies which may be primarily involved in other sectors. However, because of the incorporation of technologies such as AI into their business strategy, a valuation from the perspective of a technology company will be more insightful than another assessment of value.

Other types of technology companies include those which provide software as a service (SaaS) or have their business in providing innovative tech solutions to other companies. Companies dealing in a B2B method require less to be spent on marketing and therefore have a different strategy and revenue model to B2C companies.

Tech companies also vary wildly as they grow. Some companies may be small but will have the potential to grow rapidly in a short space of time. As such, valuations processes need to take this into account by looking at their management as well as any patents or copyright they may own. On the other hand, a tech company may be well established with strong incomes and therefore it would be more appropriate to value them in other ways.

This paper does not outline a dichotomy between tech companies. Rather, this methodology proposes a continuous spectrum between start-ups and well-established sector giants. As such, when considering the development of companies, the methodology can be tweaked to account for an increase in relevance of certain valuations models over others.

VALUATION METHODS

The methodology outlined in this paper is not absolute, and simply uses the best data available. Valuation techniques are weighted based on market and economic assumptions and seek to apply the right discounts for the risks that are being assumed in the transaction.

Within the methodology outlined, once the company in question has been evaluated against the valuations measures available, a weighting is assigned. In the case that a specific method is not particularly relevant, it may be given a lower weighting of around 0-15%.

When considering the overall value of the company, a percentage of the value of each method is taken and contributed. If the DCF is weighted at 10% and gives a value of £11,000,000, then it will contribute £1,100,000 to the overall valuation.

Methodology	Weighting	Value	Contribution
Discounted Cashflow	10%	£11,000,000	£1,100,000
Comparables & Scorecard	40%	£14,600,000	£5,840,000
Venture Capital	10%	£14,400,000	£1,440,000
Berkus'	15%	£13,800,000	£2,070,000
Risk Factor Summation	25%	£14,200,000	£3,550,000
Total	100%		£14,000,000

The strength of this methodology is that each valuation can be weighted on a continuous scale with regard to its precision and application to the company in question. As such, when companies develop and change, different valuations methods may become more relevant, and this can be accounted for within the methodology outlined. For example, if a company's revenues begin to stabilise and consistent revenue streams are seen in adjacent years, this could be accounted for in the methodology outlined by assigning greater weighting the valuations methods which rely on consistent income streams.

Overall, the methodology outlined considers each valuation method to an appropriate degree in order to give a value that reflects the inner workings and structure of the company in question.

CONCLUSIONS

The methodology outlined in this paper considers an array of valuations methods ought to be used in order to achieve a representative value for tech companies. There are many factors which are taken into account including the company directors, the product available as well as any copyright owned by the company. Furthermore, the methodology considers the financial models used, the markets in which the company operates, debt, revenues and expenses. The capital raising strategy is another key factor which is considered in the valuations process. Overall, the methodology concludes that for the largest companies with consistent revenues, the DCF methodology can apply quite well and should be considered with greater weight when determining the overall valuation. Furthermore, the methodology outlines that the Comparable and Scorecard methods can also suit larger companies given that they have similar revenue models to their competitors. With regard to ESTCs, Berkus' method is a much more robust way of accurately accounting for the value a company has locked up in its potential. While the Comparable and Scorecard methodology can also be useful in this regard, ESTCs can vary wildly from one to another, therefore further context is required when considering how to weight this method against the others. With tech businesses often pioneering solutions in new markets, a useful model will always be the Berkus and Risk Factor Summation models are often useful but also have to be considered in the wider context of the market in which the technology firm is operating.

FOR FURTHER INFORMATION

This paper provides an overview and our insights of how we evaluate and value into trend data with analysis for institutional investors to make an informed investment decision into the infrastructure asset class.

The firm provides a comprehensive range of services which includes M&A transaction services, raising both debt and equity to finance infrastructure projects globally and the objective selection of asset managers for capital allocation.

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