

Applying Reputation Data to Enhance Investment Performance

Simon Cole, Michael Brown and Brian Sturgess

Key points

- The relationship between brands and the corporate reputations they underpin is not properly understood within the investment community.
- This paper describes how the impact of measured reputation on company performance, designed to help companies' manage their reputation assets, is useful to investors.
- A model of reputation's impact on value supported the view that disproportionately greater value trends are more likely to be found outside of the leading stock market indices.
- Estimates of over or under-valuation based on individual corporate reputations can provide the all-important first stage filter in an intelligent stock picking model.

If this business were split up, I would give you the land and bricks and mortar, and I would take the brands and trademarks, and I would fare better than you.
(John Stuart, CEO, Quaker Oats Co. 1922–1953)

Introduction

Building brands for the economic benefits delivered to their owners is a well-understood management practice. The value a successful brand



Simon Cole is the founding partner of Reputation Dividend



Mike Brown is Head of the Centre of Corporate Reputation and Strategy at Birmingham City Business School



Brian Sturgess is the Managing Editor of *World Economics* and currently teaches at BPP University College

delivers now and in the future has been analysed in depth, as have the development strategies recommended to achieve it. The gains from applying these approaches have often been considerable within the firm and brand building is one of the core pillars of marketing theory and practice. However, the relationship between brands and the corporate reputations they underpin is, as yet, not properly understood outside of branded companies and, in particular, within the investment community who are by definition 'buying' or 'selling' shares in a company rather than its products or services.

This needs to be changed. The growing influence of the intangible asset that is a company's reputation demands that its impact on share price can no longer be ignored. The level of competition between fund managers seeking the edges that will push their portfolios up the performance rankings requires that they look beyond the usual metrics and seek ever more innovative ways to find advantage. The wealth of corporate performance data available now stretches well beyond the usual financial metrics employed by investment analysts and is creating opportunities for fresh approaches and more productive investment strategies.

The purpose of this paper is to describe how one such metric, the impact of measured reputation on company performance, which was designed originally as a consultancy service to help companies' manage their reputation assets for value delivery, can also reveal significant potential to investors. The paper discusses some of the findings arising out of three years of tracking the value of individual FTSE 350 companies' corporate reputations by Reputation Dividend from the perspective of advising corporations on reputation management. One of the numerous outputs of this tracking process allows an assessment of the extent to which individual listed companies appear to be either under- or over-valued based in terms of how they are performing against a single aggregate measure of their reputation. To the extent that reputations change over time as a result of events, management action or a reassessment by institutional investors, then a prediction of under- or over-valuation could provide a useful signal to lighten or increase portfolio holdings of the companies in question. This is obviously predicated on the assumption that, in many cases, the undervaluation will be corrected over time in the case of long positions in a company's stock or that the stock of overvalued companies

will fall in relative terms in the case of companies where holdings are sold.¹ Calculating the impact of measurable reputation on market capitalisation could, therefore, be a useful investment tool.

The analysis on which this paper is based was designed to test this possibility and thus the results presented are not meant to be definitive but rather as providing pointers to further work and more detailed research.

Calculating the impact of measurable reputation on market capitalisation could be a useful investment tool.

Background

The idea that intangible assets such as brands, or, more accurately, the reputations they guide and support, can be a guide to corporate value is nothing new. Ever since the now commonly accepted process for measuring ‘brand’ value was first developed for the British food conglomerate Rank Hovis McDougall in the course of defending a hostile takeover bid from Goodman Fielder Wattie in the late 1980s, brand owners have devoted considerable time, attention and resource to establishing a deeper understanding of the economic value their charges return. Applications of the thinking have been many and varied but, notwithstanding a few exceptions, directed at supporting the brand management process rather than serving as an indicator of investment opportunity.

This is a shortcoming. Objective explanations of how those intangible assets create value by influencing customer choices can be enormously helpful when making decisions about the scale and direction of brand development at the micro level, but offer little to the investment community, which is by definition more concerned with company performance as a whole. Attempts to bolster investment cases using ‘brand value’ were limited to the odd appearance on a balance sheet when, for example, there was a need to account for acquired goodwill – Cadbury Schweppes, Grand Metropolitan (when it acquired Pillsbury for US\$5 billion), Guinness, Ladbroke’s (when it acquired Hilton), United Biscuits (Smith’s) and more

¹ If it is believed that there may not be a natural correction in the impact of reputation on market capitalisation in the case of undervalued companies, or a sharp correction is imminent for overvalued companies, then performance may be further enhanced by shorting the stock in question.

recently the likes of LVMH, L'Oréal and Gucci – but wider usage was restricted for a combination of reasons.

First of all, they operate entirely at the product or service brand level. The focus is on the like of Pampers, Gillette, Head & Shoulders, etc., rather than on Procter and Gamble; on Coca-Cola, Sprite, Dasani, etc., rather than the Coca-Cola Company, and so on, which significantly restricts the ability to provide insight into the value-generating potential of the business as a whole. Second, the measurement processes themselves are concerned only with a brand's 'impact' on the revenue line and tends to be unduly dependent on sales forecasts and the ability to translate income into economic profit. Third, calculations of brand value tend to be highly dependent on which particular measurement process is used and the particular approach employed. Calculations of a brand's value can vary enormously from one consultancy to another (*Economist* 2014), leaving the neutral observer having to juggle the meaning and merits of different approaches before they can even start to think about any implications for shareholder returns.

Something needed to change. The extent of the value tied up under the banner of 'intangibles' has soared in the past few decades to the point where, by the start of 2014, the tangible book or net asset value of companies in the FTSE350 accounted for just 51% of the total market capitalisation. Earnings expectations help to account for some of the shortfall but the balance remains a function of companies' intangible assets creating a variety of problems for investment analysts. First, it reduces the veracity of traditional value calculations, which otherwise tend to focus purely on the financial metrics. Second, it limits their ability to take a suitably measured account of events and actions that are increasingly affecting company value (*Management Today* 2014). Third, and arguably most importantly, it introduces an element of uncertainty and reduces the generally marginal advantages that distinguish institutional investors in their own race to compete.

In order to mitigate these and related issues, investors need to look beyond the traditional balance sheet and accounting data, and the industrial volume of similar reports submitted by buy or sell-side analysts, and employ some of the metrics being used by brand and reputation owners seeking to optimise the economic impact of their assets. One such tool is reputation value analysis. Unlike traditional brand valuation with its

restricted and somewhat distanced focus on just one of the drivers of the revenue line, this approach provides a much more comprehensive perspective on the bigger picture of a company's performance as a complete operating entity. It identifies the extent to which a company's reputation is directly adding to or detracting from the confidence investors have in its ability to deliver the economic returns expected and through that produces a higher or lower share price.

Measuring the impact of reputation on company value

Reputation value analysis is based upon the idea that a company's market capitalisation and thus its stock price can be explained using a combination of factors including financial indicators and empirical measures of corporate reputation (Cole 2012). It is designed to fulfil a number of criteria: to be logically sound, transparent and based on empirical evidence; to be sensitive to the changing interests of investors; and to be capable of withstanding the inevitable scrutiny of the boardroom and investment committee.

The underlying analyses employ econometric techniques that are used to identify the nature and scale of the drivers of companies' market capitalisations in a three-stage process.

1. Data sourcing

Reputation value analysis combines data drawn from predominantly two sources.

Financial data relating to upwards of 200 of the UK's leading companies (nearly 400 in the US) are accessed from commercial providers such as Factset, Thomson Reuters or Bloomberg. These constitute the potential (non-reputational) 'predictors' of a company's stock price and were selected initially as the most relevant/likely variables in the course of a series of qualitative interviews with buy and sell-side investment analysts. They cover both actual (i.e. reported data) and expected (i.e. consensus forecasts), and relate to a wide variety of indicators.

Measures of the 'company brand' or, more precisely, its corporate reputation are taken from the annual Britain's Most Admired Companies study conducted by Professor Mike Brown of Birmingham City University (Brown & Turner 2008) and published by *Management*

Today (December edition, 2004–2012). Now in its 22nd year, the Britain's Most Admired Study provides an independent assessment of the status and standing of the corporate reputations of close to 240 of the UK's leading companies across a wide spread of industry sectors. It commands a good degree of robustness and a high degree of credibility within the business community.

Unlike other studies, the survey research underpinning the Britain's Most Admired Companies study focuses on the corporate entity as an operating business and, most importantly, polls the views of an 'expert' stakeholder audience in the shape of people who are likely to be cognisant of the underlying business rather than simply consumers of its products or services. C-suite executives, i.e. board- or senior-level individuals, or 'chiefs' as in operating officer, financial officer, marketing officer, etc., along with a number of investment analysts from related sectors are invited to rate their closest peers and competitors on a variety of reputational factors² on a scale of 0–10 (where 0 = 'poor' and 10 = 'excellent'). Three of the factors relate to 'financial' characteristics and six to somewhat 'softer' aspects relating to companies' management and operation. The views of this 'professional' audience are, as a whole, recognised to offer a good proxy for informed investor opinion.

2. Econometric analysis

The statistical analysis of the data is structured around cross-sectional step-wise regression. Raw data are tested for independence using correlation analysis. Variables exhibiting signs of any relationship with market capitalisation are designated possible predictor variables and are prioritised. Variables showing high levels of correlation with one another are either consolidated or removed. Analysis explores the relationships between possible predictors and the response variable and identifies requirements for further variable transformation and or compounding.

The conclusion of the econometric analysis can be described as a model of investor behaviour that 'explains' the market capitalisation of individual companies in terms of the main drivers of that value. This is used to produce a 'predicted' value of each company in the study – based

² These are: Quality of management, Innovation, Quality of goods and services, Community & environmental responsibility, Financial soundness, Long-term investment value, Use of corporate assets, Ability to attract talent, Quality of marketing.

on the status of the individual explanatory variables at the time – and a series of principal outputs designed to facilitate more effective reputation management.

3. Principal outputs

Each of the reputation metrics produced from the modelling is constructed to assist managers to organise their communications and messaging around strategies that will optimise the returns on investment. They include the following.

- **Reputation Contribution:** the proportion of a company's market capitalisation attributable to its reputation. The primary measure of reputation value.
- **Reputation Risk Profile:** an explanation of how a company's reputation value is distributed between the individual component drivers.
- **Reputation Leverage:** the extent of the economic return that can be expected from specific increases in reputation strength (expressed in terms of projected increases in market cap).

Reputation management tools such as these have proven their worth as an effective means by which managers can both guard and enrich a valuable, though often neglected and misunderstood, corporate asset. From this perspective the reputation value modelling process has proved to be highly successfully in assessing value at risk and the contribution of reputation to a company's market value. Moreover, the modelling process provides a diagnosis of the levers that will raise market value furthest and fastest. It is an essential tool for executives wishing to guard or enhance their company's reputations and, through that, its market capitalisation, but there is another side of the coin and that is the potential value of the results to another constituency, professional fund managers and other investors or 'value seekers'.

Reputation and investment performance

In addition to ranking companies in terms of the contribution of reputation to market capitalisation, Reputation Dividend's modelling provides an objective measure of the extent to which companies are 'over' or 'under-valued' in relation to their reputation, derived from the ratio of predicted and actual market cap. This can be used to identify companies, which may be revalued upwards or downwards by the stock market as their reputations evolve and/or are reassessed over time by the investment community. Alternatively, valuations may be reassessed after the executives of under-valued companies, in particular, manipulate the composites of total reputation to improve and/or communicate individual components. Identifying fundamental cases of under- or over-valuation could add an extra dimension to stock picking and ultimately to the performance of an equity portfolio.

An extra dimension to investment performance can make a large difference to a fund's performance over time.

Adding an extra dimension to investment performance, even if it contributes only a small amount to portfolio returns in each period, can make a large difference to a fund's

performance over time. This added return is particularly important given the increasing reliance by fund managers on methods that rely less and less on fundamentals and more on following the value of market indices. In the United Kingdom, for example, the FTSE 100 is the most widely used market cap weighted index employed by active funds to benchmark their performance against when buying under-valued stocks and shorting over-valued ones while it is also used by passive funds as a tracker.

One of the problems with actively or passively basing investment decisions on the value of a cap weighted index is that more weight can be placed upon companies that are already over-valued by the stock market and less weight on those that are under-valued. Over time, as valuations adjust, this will lead to relatively unspectacular investment performance. Indeed a research paper by Clare, Motson and Thomas (2013) of the Cass Business School based on an analysis of fund performance using 43 years of price data from 1968 to 2011 concluded that 'the most important result of this paper is that since the late 1990s the market-capitalisation weighted index has proved to be a relatively unsuccessful investment strategy' (Clare *et al.* 2013, p. 2).

Should we be surprised? Malkiel (1973), four decades ago, argued that a blindfolded monkey throwing darts at a newspaper's financial pages could select a portfolio that would do just as well as one carefully selected by experts. The results of Clare *et al.* (2013) suggest that this conclusion is unfair to monkeys. Even more damning of the methods favoured by many fund managers was the researchers' finding that a random process for choosing equity index weights carried out by a million monkeys 'would have often outperformed more "intelligent" index designs', but in particular, that such 'an "unintelligent" approach would nearly always have outperformed the market-cap based approach to the formulation of constituent weights' (Clare *et al.* 2013, p. 26).

The reason why the monkeys' portfolios performed better than those of most fund managers was that they were using equal-weighted, not cap-weighted funds. A report written by Edwards and Lazzara (2014) at S&P Dow Jones Indices points out that the S&P 500 Equal Weight index has returned 9.1% a year over the past 15 years, beating the S&P 500 cap-weighted index by 4.6 percentage points a year. They argue that the relatively small number of fund managers who stray far from the S&P 500's weightings have posted the best returns. Equally weighted indices put a greater importance on smaller cap stocks than market cap-weighted indices, which can outperform over time for a number of reasons.

The reasoning behind using reputation contribution as an 'intelligent' means of selecting a list of companies is similarly based on unearthing a fundamental characteristic affecting performance, such as company size in the case of equally weighted portfolios. The method used with reputation value modelling should first select a list of possible candidates for investment since two things will happen to companies whose reputation contribution is underrated: either the management will act or the market will reassess the company positively or, alternatively, there has been a good reason why reputation is not being rewarded by the market, and underperformance of the company's equity will continue.

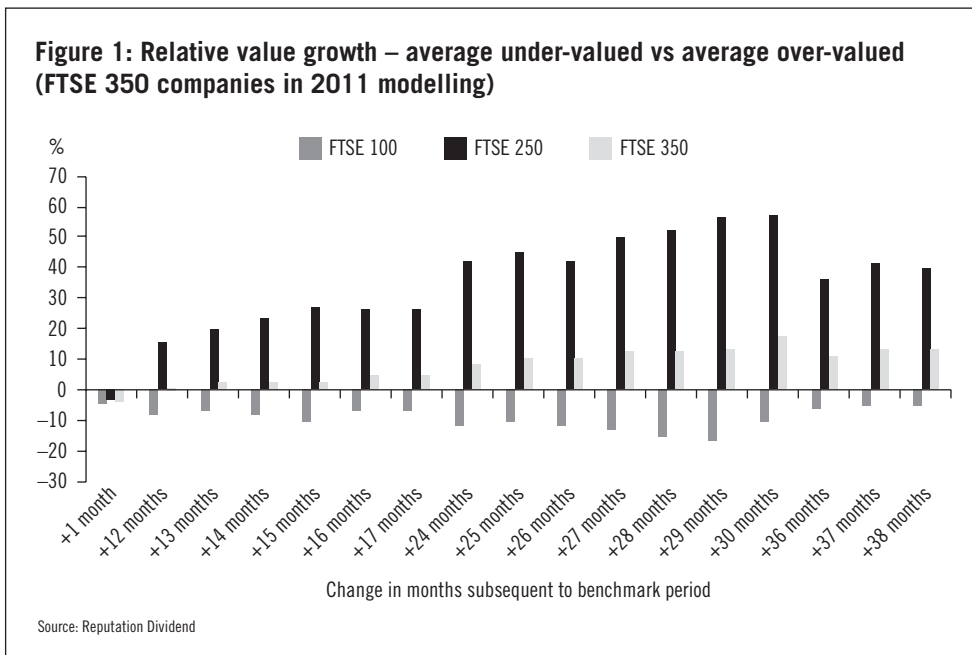
Reputation as a basis for identifying above trend growth potential

In order to test the merit of using corporate reputation as the basis of an 'intelligent' system for stock picking, the market capitalisation growth of

FTSE 350 companies was monitored in the months following each of three successive waves of reputation value benchmarking: autumn 2011, 2012 and 2013. Companies in each wave – between 155 and 169 per year – were separated into three groups in order to isolate the ‘extremes’ of under- and over-valuation and facilitate a focus where any reputation effect should be more marked. Those that the modelling suggested were over-valued by more than 20%, i.e. where the predicted value given the standing of the company’s reputation was 20% or more below the value set by the market at the time, those that were under-valued, i.e. where the predicted value was more than 20% higher and those that were in between. Each year, close to 20% of all the companies tracked fell into the under-valued group and 25% into the over-valued group. The remaining 55% were judged too close to ‘fair value’ to be included.

A simple comparison of the market capitalisation growth trends in the months following the benchmark of the under-valued and over-valued groups immediately revealed a clear and more importantly, consistent distinction.

Overall, the average market cap growth in the three years following the 2011 benchmarking was more than 7% points higher for the FTSE 350



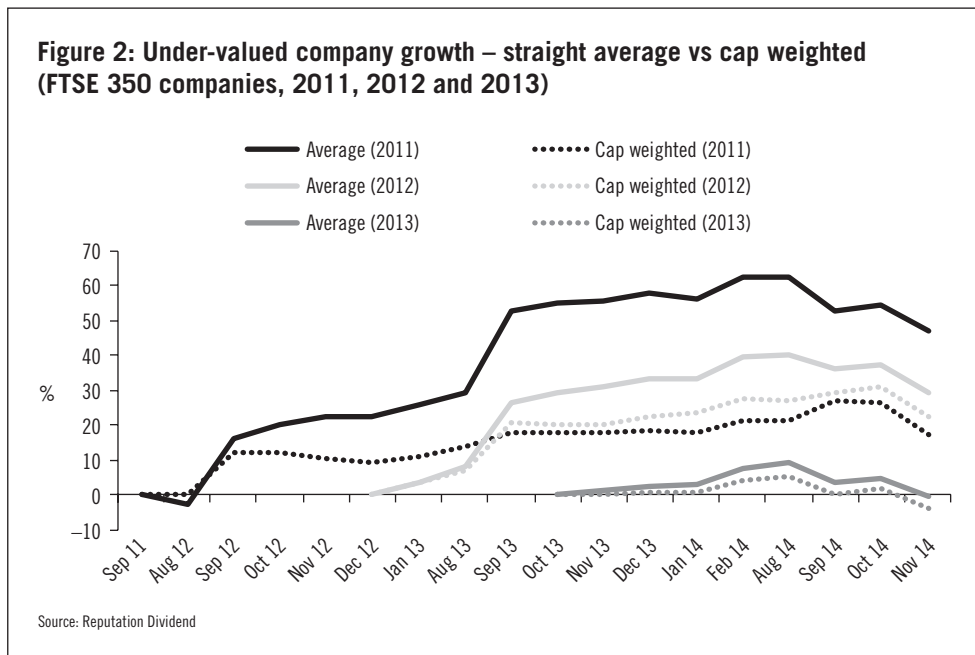
companies identified at the time as under-valued. A pattern that was repeated for the companies tracked in the 2012 and 2013 benchmarking, albeit to a lesser degree (the under-valued companies subsequently outperformed the over-valued ones by an average of close to 3%).

Within that, the out-performance of the FTSE 250 companies was especially marked (average 35% points higher), underlining the commonly held view that disproportionately greater value trends are more likely to be found outside of the leading indices.

Second, the relative shortcomings of combining companies in a cap-weighted format was readily apparent when the growth rates were compared to those for the same group of companies combined as a straight average.

The straight average growth rate of the under-valued companies (predicted values greater than 120% of actual at benchmark period) exceeded the cap weighted in all three models

Finally, and as suggested in the discussion and in Figure 1, the superior performance was particularly marked in the smaller index. Between August 2011 and October 2014 the relative outperformance of the FTSE 250 (average under-valued company growth minus average over-valued company



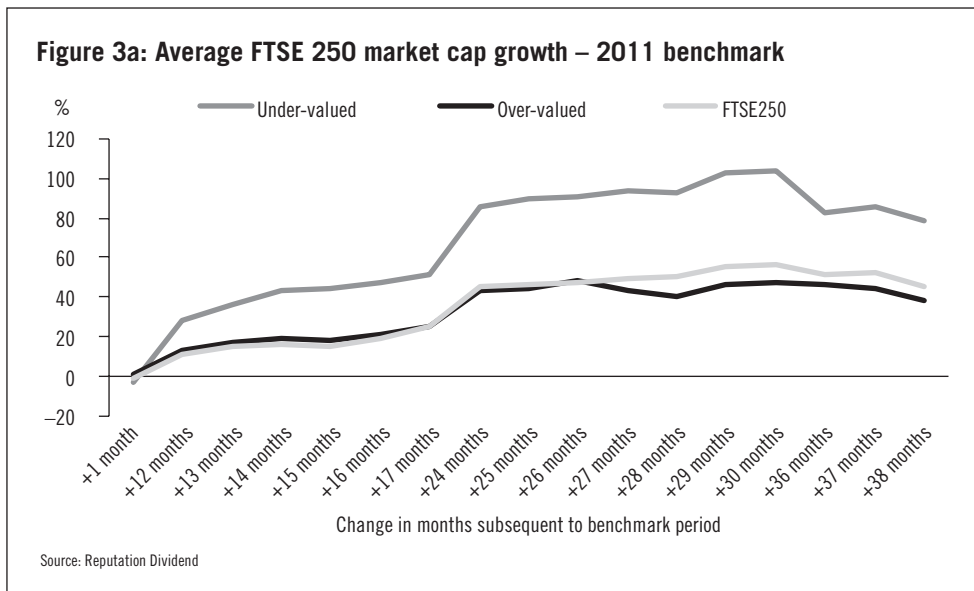
Evidence suggests reputation is more effective amongst companies less subject to the scrutiny and attention received by their larger peers.

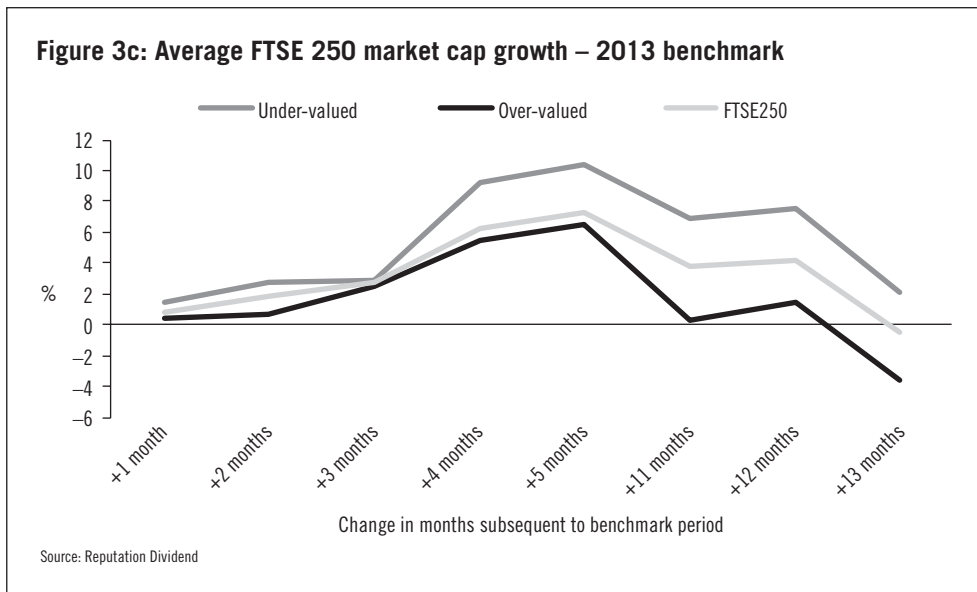
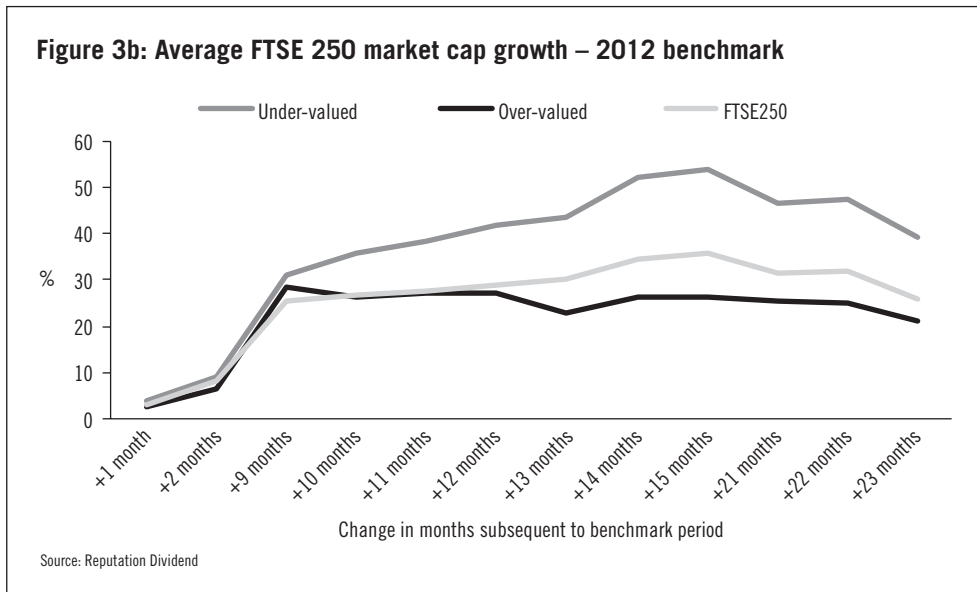
growth) was 44%, suggesting that a reputation indicator would be considerably more effective among companies less subject to the scrutiny and attention received by their larger peers.

Having indicated a potential for reputation value analysis to provide a material distinction between under- and over-valued companies, the question becomes how those groups perform relative to a broader average and/or the index as a whole; moreover, the extent to which any difference is enduring or reverts to norm in the short, medium or longer term.

Again, the evidence from the companies benchmarked in 2011, 2012 and 2013 is compelling. In each instance, the under-valued FTSE 250s significantly outpaced both the over-valued group and the index, and generated higher rates of return over up to three years following the benchmark period.

Equally, growth across the over-valued group largely underperformed compared to the index albeit in the longer term rather than over the short to medium term.





Conclusion

Although reputation value analysis was originally designed to help the managers and owners of reputations guide messaging and communications, an

assessment of the wider implications and opportunities suggests that it can make a substantial contribution to buy-side users, i.e. investors. Estimates of the degree of over- or under-valuation based on individual corporate reputations can provide the all-important first-stage filter in an intelligent stock-picking model. By weeding out companies where there is neither a reputation advantage nor disadvantage before segmenting between those that appear to be materially over- or under-valued, the investor is presented with two tightly defined groups. These can then be assessed in more detail with a view to establishing the nature of any underlying reputational problems and/or the likelihood that the company's management is equipped and capable to turn it round.

References

Brown, M. and Turner, P. (2008) *The Admirable Company*. London: Profile Books.

Clare, A., Motson, N. & Thomas, S. (2013) An evaluation of alternative equity indices. Part 1: Heuristic and optimised weighting schemes. Cass Consulting, March. Available online at: www.cassknowledge.com/sites/default/files/article-attachments/evaluation-alternative-equity-indices-part-1-cass-knowledge.pdf (accessed 15 January 2015).

Cole, S. (2012) *World Economics*, **13**, 3, July–September, pp. 47–67. Available online at: www.world-economics-journal.com/Pages/Download.aspx?AID=526 (accessed 19 January 2015).

Economist (2014) What are brands for? *Economist*, 30 August.

Edwards, T. & Lazzara, C.J. (2014) Equal-weight benchmarking: raising the monkey bars. *S&P Dow Jones Indices*, June.

Management Today (2014) Goodwill hunting: the value of corporate reputation and the corporate morality tale that is Tesco. *Management Today*, December.