CFA UK is a member society of

Kay UK Equity Market Review
Department for Business, Innovation and Skills
1 Victoria Street
London
SW1H 0ET

18th November 2011

Dear Professor Kay,

The Chartered Financial Analyst Society of the UK (CFA UK) welcomes the opportunity to respond to The Kay Review of UK Equity Markets and Long-Term Decision Making – Call for Evidence. This response builds on our response to the Department for Business Innovation and Skills (DBIS) Call for Evidence regarding the Long Term Focus for Corporate Britain[1] . The key themes for this response focus on value generation, return generation and market discipline/integrity. It is important to understand these themes and the interaction between them.

Before addressing these themes, we have a number of observations about the scope of the review.

Most UK businesses rely on sources other than equity capital to achieve their long-term objectives. There are more than four million businesses in the UK of which 2.6 million are companies; only a small proportion (9,950)[2] of these companies are publicly listed. Equity finance is just one source of capital. It is the overall cost of equity and non-equity capital – and a business' ability to generate returns that match or is in excess of that cost – that matters and the review should have taken a broader approach.

Additionally, the review's narrow focus on the role of the UK equity markets in supporting UK business is surprising. The UK equity market is a leading source of equity capital for global companies. This characteristic benefits the UK by providing UK investors with access to an extended range of investment opportunities within a UK market. The review should not have been limited to considering the role of the UK equity market in supporting UK listed companies. Furthermore equities are usually not the only asset class held by institutional investors (see Background to the UK equity market in the Appendix). Therefore from an investor's viewpoint, it is the portfolio perspective that should matter, not the allocation to a single asset class.

This response has been prepared by the CFA UK's Market Practices and Professional Standard Committee, with support from the Financial Reporting and Analysis Committee on behalf of the CFA UK membership. The society has surveyed members in relation to key elements of the Department's paper. We make observations and cite evidence that we believe to be important and which we hope will be useful in informing the Department when it comes to achieving its policy objectives.

[1]CFA UK response to Long Term Focus for Corporate Britain
https://secure.cfauk.org/assets/2162/CFAUKDBIS_Long_Term_responseSENT.pdf

[2] Companies House November 2010

About CFA UK and CFA Institute

The CFA Society of the UK (CFA UK) represents the interests of more than 9,000 leading members of the UK investment profession most of whom work as front office investment professionals (managing portfolios, researching securities and advising on asset management). The society, which was founded in 1955, is one of the largest member societies of CFA Institute and is committed to leading the development of the investment profession through the promotion of the highest ethical standards and through the provision of continuing education, advocacy, information and career support on behalf of its members. Most CFA UK members have earned the chartered financial analyst (CFA) designation, or are candidates registered in CFA Institute's CFA Program. Both members and candidates attest to adhere to CFA Institute's Code of Ethics and Standards of Professional Conduct.

CFA Institute is the global association for investment professionals. It administers the CFA and CIPM curriculum and exam programs worldwide; publishes research; conducts professional development programs; and sets voluntary, ethics-based professional and performance-reporting standards for the investment industry. CFA Institute has 111,000 members in 135 countries, of whom more than 101,000 hold the Chartered Financial Analyst® (CFA®) designation.

In July 2006, CFA Institute published 'Breaking the Short-Term Cycle'[3]**.** The CFA Institute Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics held a series of symposia through 2005 and 2006 addressing the issue of short-term thinking. This report and the proposals it contains reflects the opinions of panel participants in these meetings. Participants included corporate leaders, asset managers, institutional investors, and analysts. The report encouraged all market participants to refocus on long-term value and provided recommendations concerning earnings guidance, incentives and compensation, leadership, communications and transparency, and education.

The report made 20 recommendations which were summarised to a list of five. These were:

1. Reform earnings guidance practices: All groups should reconsider the benefits and consequences of providing and relying upon focused, quarterly earnings guidance and each group's involvement in the "earnings guidance game."

2. Develop long-term incentives across the board: Compensation for corporate executives and asset managers should be structured to achieve long-term strategic and value-creation goals.

3. Demonstrate leadership in shifting the focus to long-term value creation.

4. Improve communications and transparency: More meaningful, and potentially more frequent, communications about company strategy and long-term value drivers can lessen the financial community's dependence on earnings guidance.

5. Promote broad education of all market participants about the benefits of long-term thinking and the costs of short-term thinking.

[3] Breaking the Short-Term Cycle , CFA Institute Codes, Standards, and Position Papers (July 2006) http://www.cfapubs.org/toc/ccb/2006/2006/1

Executive summary

When considering the integrity of the UK equity market (UKEM) and its ability to impose market discipline effectively, it is crucial to understand the interaction between value generation and return generation (which also includes the market for corporate control). CFA UK questions the perceived wisdom that return generation and value generation need to be perfectly aligned at all times.

1) Value generation – publicly listed companies generate value when they generate economic profits - returns that meet or exceed the cost of capital. To ensure company managers focus on value generation, they are exposed to other market participants that are focused on generating returns for themselves or their investors. As the evidence in the UK indicates, corporate managers are prone to focus on accounting profit and use metrics to determine their remuneration that may not be aligned with value generation.

2) Return generation – Return generation is about identifying opportunities in the UKEM to generate investment performance for the ultimate beneficiary by anticipating share price movements. Such opportunities can be identified using a variety of approaches each of which comes with its own investment horizon. In seeking out these opportunities, agents have to incur costs and risks while bringing benefits to the overall UKEM. Each type of approach has its costs and benefits and the key reason why there is a diversity of approaches to generate returns in the UKEM is because the UKEM is not frictionless or complete. Prices in the UKEM can deviate from fundamentals for a variety of reasons ranging from economic ones such as limits to arbitrage, to non-economic ones related to “animal spirits.”

CFA UK survey results- CFA UK surveyed its membership with regard to relevant aspects of the review and received 267 responses from analysts and investors.

The key highlights from the survey are as follows –

1. 86% of respondents agreed (or strongly agreed) that the Board and senior executives of UK listed companies should focus on economic profits ahead of accounting profits. However, only 9% of respondents agreed that the Boards and senior executives of UK listed companies actually do focus on economic profits.

2. 88% of respondents agreed (or strongly agreed) that to generate economic value a publicly listed company should at least cover its weighted cost of capital (equity and non-equity). 56% of respondents disagreed (or strongly disagreed) that remuneration structures at UK listed companies were focused on delivering economic value.

3. 63% of respondents felt that the Board and senior executives of UK listed companies paid too much attention to short term share price movements.

4. The top five factors that are cited when developing a forecast or recommendation are (share price momentum is the least popular factor) -

   - Cashflows
   - Current share price relative to fundamental value
   - Competitive advantage/position
   - Balance Sheet strength
   - Management quality/earnings outlook.

5. The same five factors dominate when investors consider changing their holding in a UK listed company.

6. Respondents stated that they use a variety of analytical approaches, but fundamental analysis is used by almost all respondents. Other approaches that contribute to analysis and investment decisions include quantitative analysis, technical analysis and factor analysis.

7. 93% of respondents agreed (or strongly agreed) that fundamental analysis is necessary to estimate share value. While 53% agreed (or strongly agreed) they would invest in a company if its share price undervalued its cashflows irrespective of whether the market came to the same conclusion over the course of a year.

8. 68% of respondents agreed (or strongly agreed) that the role of the investment manager is to generate returns to investors by investing in the equities of those companies likely to deliver the greatest economic value (cashflow in excess of the weighted average cost of capital) over their investors' anticipated holding period.

9. 30% of respondents had investment horizons of 2 years or more, while 20% had an investment horizon of between 1 to 2 years. The remainder had shorter time horizons.

10. 82% of respondents agreed (or strongly agreed) that even for long-term (i.e. three year) investment mandates, managers are assessed relative to short-term (i.e. quarterly) benchmark performance.

Summary comments

Publicly listed companies and their managers are judged on their ability to generate economic value as construed from their accounts and other sources of information. Company management and Boards should pay greater attention to the generation of economic profits and should attempt to link remuneration to models of economic value creation. The review might wish to consider the following questions in addition to those that it poses:

- How many senior board members of UK publicly listed companies know the cost of capital for their companies?

- How many board members know the extent to which their companies generate returns that cover their cost of capital?

The UK Government should examine the extent to which limits to arbitrage and the market for corporate control hinder the ability of the UK capital markets to impose the appropriate level of market discipline on publicly listed and private companies.

The review – and subsequent policy decisions – should take care to view the UK capital markets as a network that provides its own benefits. This network has contributed to the UK's position as a leading financial centre. Given that UK markets are imperfect and contain frictions, investment professionals use a variety of methods to generate performance for the ultimate beneficiary. Investors should be allowed to engage in the approach that they have designed and let the market determine the value of such strategies. If government policy was to be based on narrow items such as holding periods (which are typically incorrectly calculated and reported) there is a danger that the government may undermine the integrity and benefits of this network. Additionally, the review would then miss this valuable opportunity to remind market participants on the need to focus on fundamental analysis and the generation of real economic value.

Value generation of publicly listed companies – from first principles to reality

"The most important thing we do is meet our (earnings) numbers. It's more important than any individual product. It's more important than any individual philosophy. It's more important than any individual cultural change we're making. We stop everything else when we don't make the numbers." (2001 Qwest Communications International CEO Joseph Nacchio).

UK publicly listed companies, like any business entity, are allocatively efficient when they generate economic profits. In generating value for shareholders the aim is to maximize the net present value of the firm's cashflows discounted by the weighted average cost of capital (WACC). Discounted cashflow analysis does have its limitations but it provides a useful starting point. Cashflows are defined in different ways by different agents. According to a senior investment practitioner Michael Mauboussin, free cashflows to the firm (FCFF[4]) should be the basis for any valuation. FCFF is preferred to earnings because as Mauboussin states, "in reality, EPS (earnings per share) tells very little about value because EPS does not explicitly take into account capital intensity."

Reported earnings (composed of cash and accruals) uses information only from the income statement. In other words, two businesses can have the same EPS growth rates but different returns on capital; therefore, they will have, quite understandably, different valuations.' Sloan adds that 'the balance sheet can be used to help judge the quality of the asset side, where most of the earnings quality problems arise." FCFF also provides the benefit of using information from both the income statement and the balance sheet. In Figure 1 Mauboussin provides the derivation of FCFF.

The distinction between earnings and FCFF is crucial one to understand. It indicates that a company can grow earnings as much and as fast as it likes, but if it does not cover the cost of capital it is destroying value just as fast as it grows earnings. This is further demonstrated by Mauboussin in Table 2, which demonstrates how to understand the direction of the relationship between the return on invested capital (ROIC) and earnings. The information is based on an all equity financed company to make the analysis more accessible.

Table 2 presents three essential observations about valuation as a multiple of a company's earnings -

I. The P/E multiple will be maintained as long as the company covers its cost of capital regardless of the growth rate of earnings.

II. The P/E multiple will decline if a company does not cover its cost of capital.

III. The P/E multiple will increase if the company earns a return greater than its cost of capital.

However, this does not imply that rising P/E multiples necessarily indicate that companies are generating returns in excess of the cost of capital. As equity markets have demonstrated on a regular basis, sentiment can diverge dramatically from fundamentals. Rising P/E multiples should be supported by returns in excess of the cost of capital. Companies that make accounting profits while making economic losses are not delivering value.

[4] Free cashflow to the firm (FCFF) = Net income to shareholders + noncash charges + Interest Expense (tax adj.) – investment in fixed and working capital.

Figure 1 – Cashflow derivation from the income statement and balance sheet

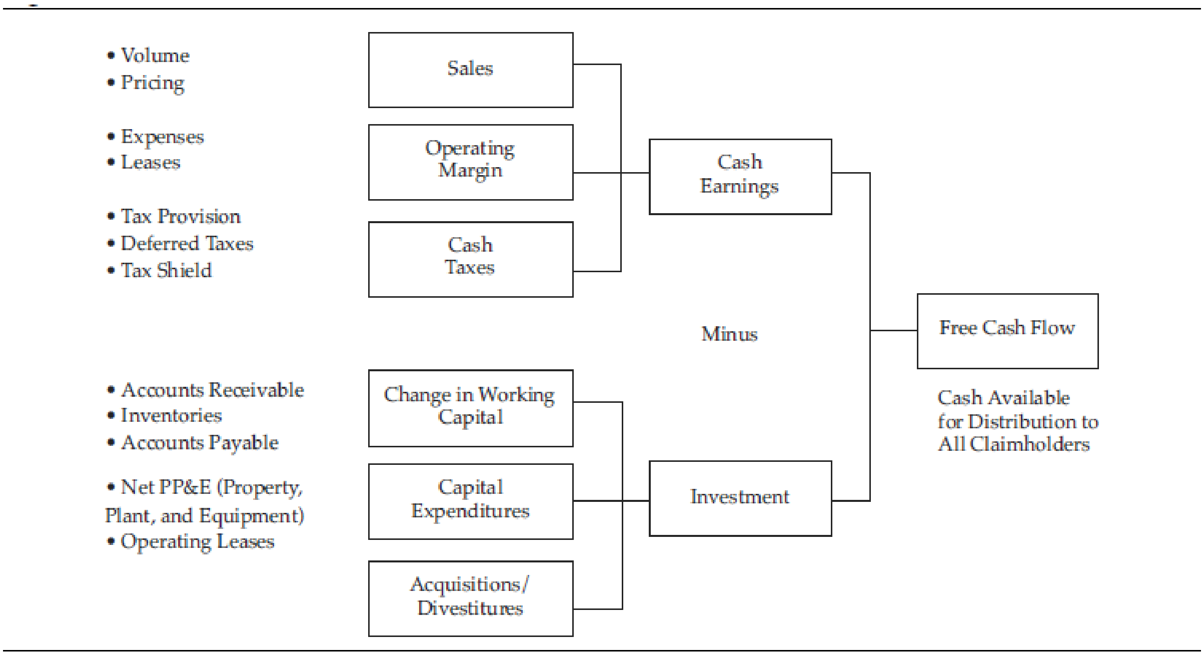


Table 2 ROIC and P/E Multiples Theory

Earnings Growth	ROIC 4%	8%	16%	24%
4%	6.1×	12.5×	15.7×	16.7×
6	1.3	12.5	18.1	20.0
8	NM	12.5	21.3	24.2
10	NM	12.5	25.5	29.9

NM = not meaningful.

Note: Assumes all equity financed; 8 percent WACC; 20-year forecast period.

The ability of a company to cover its cost of capital will be determined by a variety of factors that include quality of management, the economic environment, industry factors and the period of time it can enjoy a competitive advantage. Mauboussin states that each company will respond differently to the value triggers, factors and drivers (see Figure 2).

All too often, equity market participants can place too great an emphasis on accounting profits – the published net profit figure which is then used to derive earnings per share. Similarly, company executives' remuneration contracts also incorporate share price related metrics such as total shareholder return. CFA UK recommends that the onus should be on economic profits because earnings and share price based metrics are not robust[5].

[5]CFA UK on How to Defuse the Earnings Time-Bomb, Annabel Gillard, Citywire, 7 November 2011, http://citywire.co.uk/wealth-manager/cfa-uk-on-how-to-defuse-the-quarterly-earnings-bomb/a539844/3

1) Public equity markets have bull and bear cycles and sentiment can have a greater impact on the value of a company than fundamentals indicate. The best example of these swings can be demonstrated by the inflation and bursting of the dotcom bubble and the recent financial crisis which has resulted in a reassessment of the value of many publicly listed companies especially financial organizations. This indicates that the share price is not a robust enough metric when assessing the value generated by a listed company.

2) Earnings management – there is significant evidence that earnings management does take place which in some cases can distort the economic viability of a company. Extreme forms of earnings management were evident in a variety of companies in different industries. Financial market history demonstrates the volatility of stock markets although the issue of earnings management has been given less attention than otherwise should be the case. Corporate history demonstrates that publicly listed companies are not averse to engage in earnings management either to meet market expectations or to trigger incentive payments.

   In addition to prominent examples such as Enron and Lehman, Schilit[6] also identifies other large companies that engage in various forms of "financial shenanigans," practices that corporate managers use to provide (in most cases) a positive representation of the company's financial performance and position. The most common approaches aim to hide costs or inflate revenues. What is more remarkable is that financial shenanigans although known to occur, their root causes have not declined over time. As Schilit states, "people sometimes ask me if I have plans to write another book, but each time I prepare a new edition of Financial Shenanigans, I feel like I am writing a new book. The players are new, and the creativity of management is simply astounding. Yet certain themes remain consistent, and the manipulations remain within the same parameters."

   Schilit's investigations focus mainly on US listed companies although there is evidence that UK listed companies engage in earnings management. The research is not as broad or abundant as it is for the U.S. Reported earnings are usually composed of cash and accruals. Accruals are those elements where company management exercises judgement and discretion about future cash inflows and outflows.

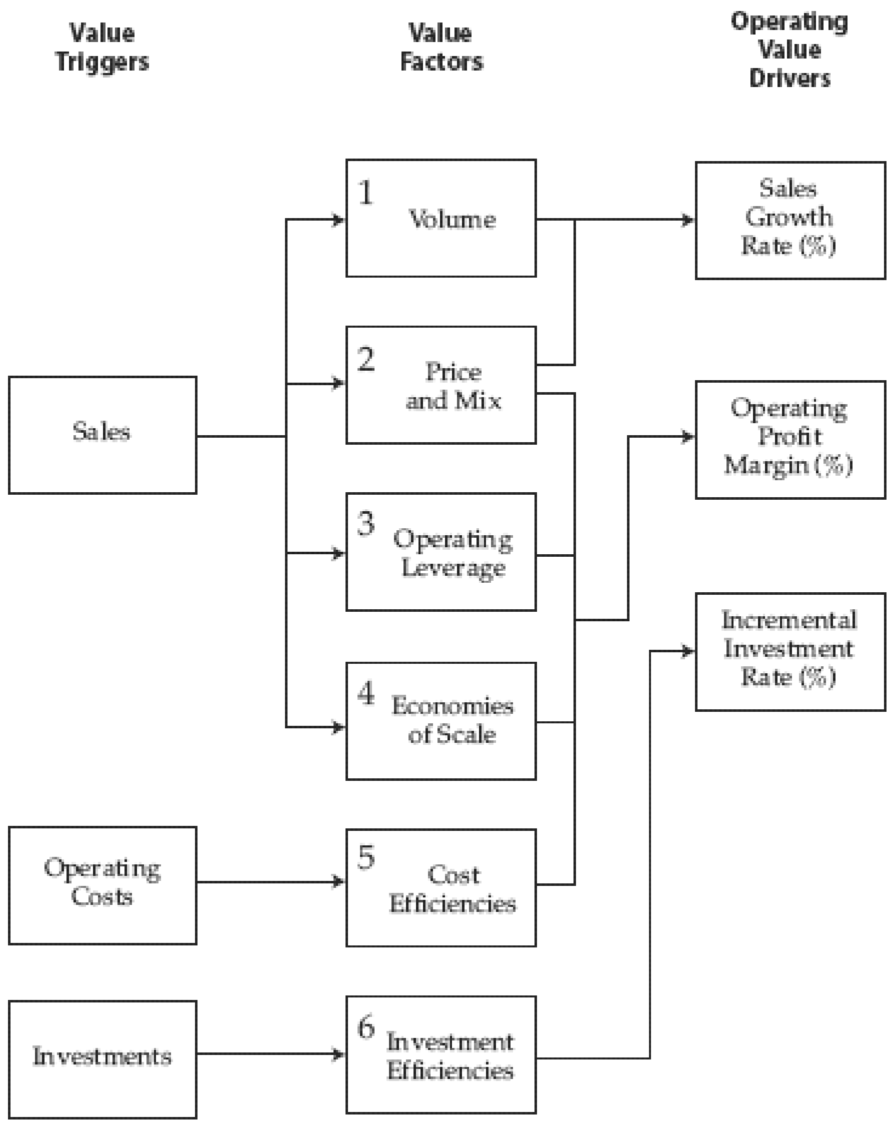
   Gore et al (2007) undertook a statistical analysis of the relationship between discretionary accruals and earnings. Gore et al found that the use of discretionary accruals increased the frequency of positive earnings levels, changes and surprises. According to Iatridis and Kadorinis UK firms that have low profitability or high leverage are more likely to use earnings management. Earnings management is also used by firms that are seeking debt or equity capital or on the verge of debt covenant violations. Furthermore, earnings management is more likely when it will support compensation arrangements and to meet/exceed analysts' forecasts. The desire to meet expectations and even create positive earnings surprises has been also observed by Lakonishok et al.

   Interestingly, the issue of earnings management is not always mitigated by managers and non-executive director owning equity in the firms they oversee. Bos et al's study of managerial ownership and discretionary accruals for UK listed companies finds that earnings management increases for equity stake between 5% and 10% but then accruals based earnings management is mitigated for

[6] Financial Shenanigans: Detecting Accounting Gimmicks that Destroy Investments Howard M. Schilit
Founder and CEO Financial Shenanigans Detection Group, LLC, Key Biscayne, Florida.
CFA Institute Conference Proceedings Quarterly, December 2010.

ownership stakes above 15%. Furthermore, Bos et al also find that equity ownership by non-executive directors does not mitigate earnings management.

Figure 2 – Value – triggers, factors and drivers



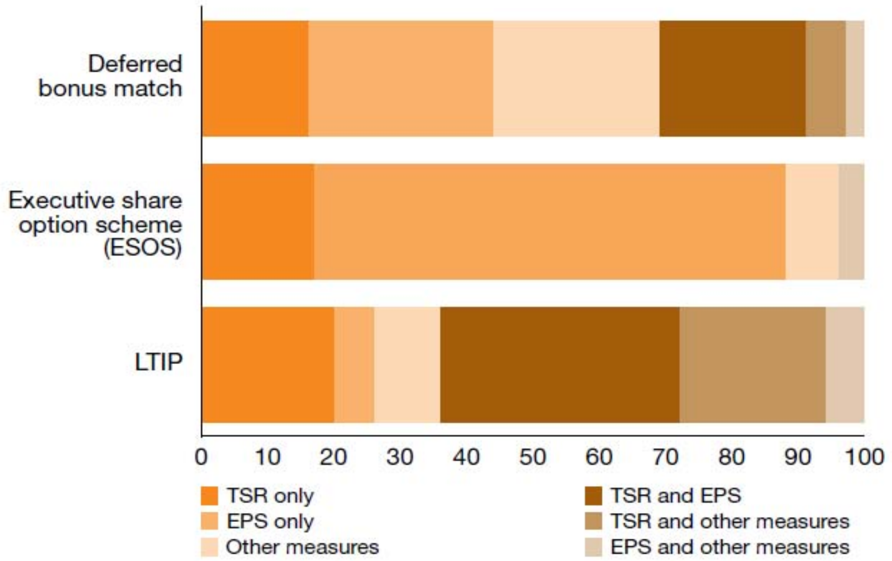
According to one study by Graham et al (2006) "real earnings management" (such as deferring value enhancing projects and investment to meet earnings expectations to minimise the cost of equity capital) has destroyed more value than that destroyed by those companies involved in high profile fraud cases. These events highlight the undesirable consequences of "running a company with the sole aim of raising the share price" in the short-term.

Despite the well documented evidence stressing the lack of robustness of such metrics they are still prevalent in relation to senior executive remuneration according to a report by the professional services organization PwC. Chart 1 below highlights the dominance of total shareholder return (TSR) and earnings per share (EPS) as metrics for assessing performance of Chief Executive Officers of FTSE 100 companies for their deferred bonuses, share option schemes and long term incentive plans (LTIPs). The pharmaceutical company Glaxo provides a good example of a company that has an interest in the long-term but uses incentives that favour shorter time horizons[7]. For FTSE 250 CEOs the metrics used to determine remuneration are not much different that for FTSE 100 CEOs. Other measures remain a minority among the metrics used to assess the performance of company executives (Chart 2).

To some extent the PwC report identifies growing frustration with the use of TSR and ESP and there have been more use of other measures. However, it appears that there may be challenges with calibrating these other measures with performance and so companies use relative TSR.

Instead of focusing on TSR and EPS, companies and investors should value companies by determining the net present value of future free cash flows to the firm[8] (FCFF) discounted by its weighted cost of capital[9] (WACC – the rate of return required by investors for investing capital in the company). Meeting the cost of capital involves assessing information from both the balance sheet and the income statement and cannot be assessed merely by the change in a company's earnings or its share price.

Chart 1 - metrics for assessing performance of Chief Executive Officers of FTSE 100 companies

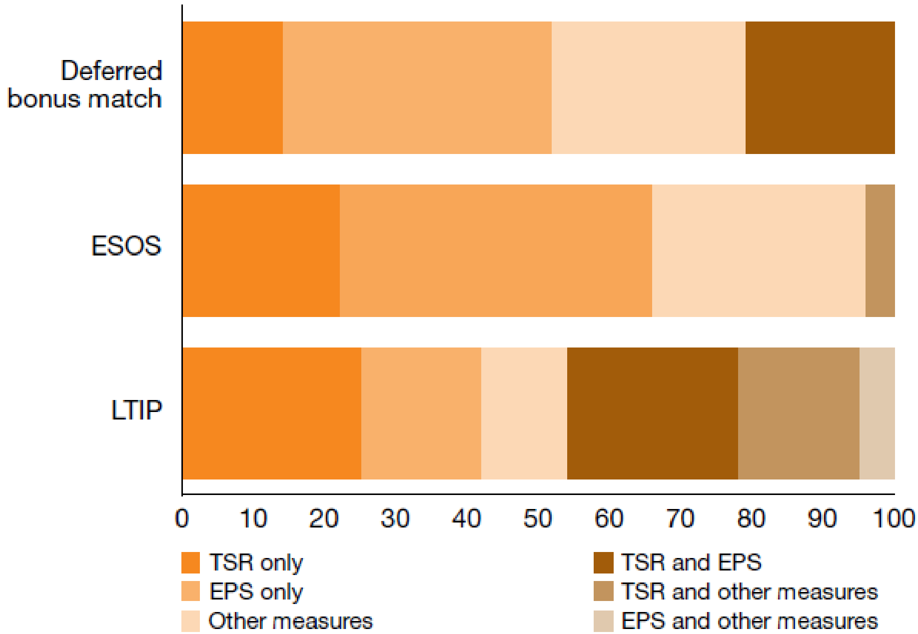


Source: Annual reports, PwC-Monks database, IVIS

[7] "Are investors the victims of board short termism," Colin McLean, Financial News, 26 October 2011.
[8] Free cashflow to the firm (FCFF) = Net income to shareholders + noncash charges + Interest Expense (tax adj.) – investment in fixed and working capital.

[9] WACC – weighted average cost of a company's debt, preferred equity and equity. The cost of capital will include a risk premium required by investors for providing this capital to companies.

Chart 2 metrics for assessing performance of Chief Executive Officers of FTSE 250 companies



Source: Annual reports, PwC-Monks database, IVIS

Return Generation

"An investment operation is one which, upon thorough analysis promises safety of principal and an adequate return. Operations not meeting these requirements are speculative." (Benjamin Graham)

Traditionally, UKEM delivers returns that are composed of dividends and capital gain which combined provide a total return. The diversity of UKEM participants, especially the sell-side, buy-side and investors, demonstrates that each type of agent will seek returns in the UKEM in their own way. In doing so each participant incurs costs and risks while it delivers benefits in terms of market integrity, liquidity and the pricing of risk. CFA UK accepts that no capital market is perfect but the key issue is how each type of participant contributes to market integrity in generating returns either for themselves or other investors.

Investment approaches include, but are not limited to:

- Active, long-only strategies
- Hedge fund strategies e.g equity long/short, equity market neutral, merger arbitrage, quantitative funds, algorithmic trading.
- Passive strategies e.g funds that track a UKEM index like the FTSE All Share.
- Arbitrage - seeking to generate returns by exploiting price discrepancies between equity markets and equity related instruments.
- Activist investing - taking material stakes in publicly listed companies so that they can encourage operational improvements in those companies.

Other equity related strategies include momentum strategies and mean reversion that look the nature of the movement in share prices and try to anticipate whether they will be sustained or reverse. There are also different investment styles that include investing in companies that are value stocks, or growth stocks; one can access specific sectors or focus on large, medium or small market capitalization stocks. Access can be gained via passive or active managers. One can also invest in the volatility of UKEM. Even the concept of investing in market capitalization weighted UKEM indexes is being challenged. Alternative equity indexes have been created that weight a company by fundamental factors such as sales, book value, dividend and cashflow rather than the market value of a company’s equity. Such alternative indexes have been shown to outperform their better known counterparts[10].

The diversity of participant types employing these strategies also determines the variation in the type and level of engagement with UKEM companies. Those that are activist managers by definition are more willing to engage with company management. Other equity managers have different approaches. Investing in any UK listed company carries an inherent opportunity cost of not investing in an alternative company. It may be better to enhance returns for the equity fund manager to change its holding rather than undertake the costs and risks involved with a more involved process of engaging with company management, especially if there is a limited probability of success. A holding in a business destroying value is likely to harm returns.

[10] A Survey of Alternative Equity Index Strategies, Tzee-man Chow, Jason Hsu, Vitali Kalesnik, and Bryce Little, Financial Analysts Journal Volume 67 Number 5

CFA UK's survey results suggest that investors typically use a variety of means to engage and communicate with UKEM companies. Only 18% of respondents who invest in equities indicated that they choose not to engage with senior management at any level.

How do you engage with the senior managers of UK listed companies?		
1 At a distance, through the company's website, presentations and annual report	99	47%
2 Direct dialogue with the company's management and Board	96	45%
3 Voting	67	32%
4 It is not our purpose to engage with senior management	38	18%
5 Indirectly, through the company's IR team and/or corporate broker	61	29%
Other, please specify	10	5%

Diverse UKEM participants use a variety of approaches to generate returns which range from fundamental analysis, to quantitative methods to technical analysis of share price charts. Analyst respondents to our recent survey indicated that they almost all used fundamental analysis as the basis for their work, though they might employ different analytical techniques as subsequent layers.

In analysing companies, which analytical techniques do you use? (Select as many as appropriate).		
1 Fundamental analysis	157	99%
2 Technical Analysis	52	33%
3 Momentum analysis	38	24%
4 Factor analysis	33	21%
5 Quantitative analysis (e.g correlation, volatility, etc.)	56	35%
Other, please specify	6	4%

It is reasonable for investors to focus on return generation rather than solely value generation (as defined above) and as such there can be a place for high turnover strategies in the portfolios of even the longest term investors.

Recent commentary has suggested that the UKEM suffers from investor short termism and this claim has attracted policy-maker attention. Most of the evidence that has been cited has been qualitative in nature and singled out specific types of market participant as a root cause of short termism. High frequency traders (HFT) are typically the target of choice and the benefits they may bring is often overlooked.

Irrespective of the differences of opinion around HFT, the broad claim of short termism in the UKEM is not robust. Significant weight has been placed on the work done by Andrew Haldane, executive director of the Bank of England. We have attached with this response our comments on the limitations that we have found in the analytics supporting his paper 'The Short Long' (please see Appendix 2). In essence, CFA UK identified three main weaknesses of the analysis which undermine the policy recommendations made in the paper. The first weakness is that it does not take in to account the structural changes in the UKEM that have occurred during the time period being examined (such as the decline in trading costs, increased availability of information and the expansion of the diversity of equity market participants and the techniques they use to generate returns). Second, the paper takes the view that changing expectations over time is irrational whereas common sense (and recent academic research) suggests that it is rational to consider distant cashflows as riskier than the near term flows that can be more certainly predicted. Third, the limitations in the data and methodology used have not been addressed and so undermine the validity of the result.

We have also attached a note with this response (see Appendix 3) describing the flaws in the typical reporting of investment holding periods. As we note there, 'It is frequently stated that the "average holding period" of large capitalisation UK equities is of the order of one year or less. This assertion is incorrect and it is important to understand why this fallacy arises as it leads to the incorrect assertion that shareholders, particularly institutional shareholders have a short-term investment horizon. In order to demonstrate the nature of the fallacy, consider the following hypothetical example. Assume that there are only two classes of investor, types A and B, in the market. Assume that investors of type A own 20% of the outstanding equity of all companies and hold shares for 20 years on average and that investors of type B own the remaining 80% of equities and hold shares for 3 months on average. Clearly the average holding period will be (0.2 X 20) + (0.8 X ¼) years….4.2 years. Fallacious commentators, however, will observe that every year the total market experiences turnover of 20% of 5% plus 80% of 400% which is 321% from which they will wrongly deduce that the average holding period is less than 4 months as opposed to the correct figure of 4.2 years.'

CFA UK believes that the focus on holding periods (particularly when incorrectly calculated) is an unnecessary diversion from looking at the structural issues impeding value creation. As CFA UK has previously stated, there is no optimal holding period. The appropriate holding period is that determined by the investor's requirements, risk appetite and expectations.

Each participant in the UKEM provides their own benefits to the functioning of the market. Participants with short term horizons can coexist with those that have medium to long term investment horizons and benefit each other. In a recent article by Roni Israelov and Michael Katz (2011)[11], the authors state that long term investors can improve the risk adjusted returns (Sharpe ratio) net of costs of their portfolios by paying more attention to signals created by short-term activity. In essence the long-term portfolio manager has to decide whether or not to take advantage of a short-term market signal when it aligns with the manager's views on any of the portfolio holdings. The authors state that long-term portfolio mangers may ignore short-term signals either because it is not relevant to them or too costly to inform their trading of their portfolio. Perhaps, during the market dislocation following the demise of Lehmans, it could be argued that Warren Buffet took advantage of a short term market signal by investing in Goldman Sachs. The authors provide evidence that shows long-term investors can generate value by incorporating short-term market signals. The authors do emphasise that this does not mean long-term portfolio managers become high frequency traders.

Table 3 provides the performance statistics for the uninformed-trading long-term portfolio, the uninformed-trading optimally mixed portfolio, and the informed-trading long-term portfolio (these are simulations). The results show that informed trading does improve the Sharpe ratios (net and gross of costs) compared to the traditional uninformed long-term portfolio and the optimally balanced portfolio.

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[11] To Trade or Not to Trade? Informed Trading with Short-Term Signals for Long-Term Investors, Roni Israelov and Michael Katz, Financial Analysts Journal Volume 67 Number 5

Table 3 Portfolio simulation summary statistics

	Long Term	Short Term	Optimally Mixed	Informed Trading
Gross Sharpe: Full rebalancing	0.75	1.50	0.80	0.86
Net Sharpe: Full rebalancing	0.32	–2.37	0.34	0.62
Optimal rebalancing aggressiveness	3.8%	—	5.0%	10.2%
Gross Sharpe: Optimal rebalancing	0.73	—	0.79	0.80
Net Sharpe: Optimal rebalancing	0.67	—	0.69	0.71
Exposure to long-term portfolio	0.90	—	0.89	0.92
Exposure to short-term portfolio	0.00	—	0.03	0.04
Costs at optimal rebalancing	–0.06	—	–0.10	–0.09

Investing in the UKEM is not without risk. Figure 3 in Appendix 4 shows that the long-term real return on UK equities was an annualized 5.3% as compared to bonds and bills, which gave a real return of 1.4% and 1.0% respectively. However, the historical volatility of equity market returns (represented by the standard deviation of returns) is 80% higher than for bonds. Given the risk/return profile for equities it is important to understand that this asset class is often combined with other asset classes to derive the appropriate portfolio that aligns with the investors risk appetite, objectives and circumstances. For example (Table 1 in the Appendix) in 2008, pension funds hold about 27.6% of their portfolios in equities (12.8% of which is in UK equities). General insurers hold 10.9% of their portfolios in equities (9% UK equities) because they require more liquidity to honour their sterling based liabilities to meet insurance claims. The complexity of portfolios can increase turnover that is nothing to do with the trading strategies or time horizon of the appointed fund manager(s). Turnover can be created by rebalancing strategies back to the asset allocation dictated by liabilities and risk tolerance. Switching an equity mandate from one fund manager to another also adds to turnover. Therefore, from an investor's viewpoint, it is the portfolio perspective that should matter, not the allocation to a single asset class.

Market Efficiency, Market Discipline, Market Integrity

"In an efficient market, apparent overreaction will be about as frequent as underreaction. If anomalies split randomly between underreaction and overreaction, they are consistent with market efficiency." (Fama)

"If you're too high half the time and too low half the time, I would say that the market is always getting it wrong." (Ritter)[12]

While recent events may have caused some to question the 'market knows best' approach to resource allocation, stockmarket dislocations are not new but have occurred throughout financial history. This in turn has raised concerns not only about the allocative efficiency of the UKEM but also its ability to impose market discipline on publicly listed companies.

Pioneers in Behavioural Economics and Finance such as Thaler, and Statman have provided empirical evidence that raised doubts about the standard finance paradigm. Even Professor Michael Jensen of Harvard, who previously stated efficient markets as an undeniable fact has begun to revise his view. Similarly, the observations regarding various market anomalies have encouraged the pursuit of strategies designed to "beat the market." Several reasons have been put forward as to why markets may not always be efficient and these range from economic ones such as limits to arbitrage to the irrational behaviour of market participants and hubris in the market for corporate control.

This raises questions about both the allocative efficiency of the UKEM and the market discipline imposed on publicly listed companies. Perhaps an additional perspective of the UKEM is required one which views the UKEM as a network that delivers its own benefits and enables us to understand and answer some of the key puzzles related to the UKEM. One such paradigm is Network Value Theory which states that the infrastructure of public equity markets and its participants are of value in themselves. By quantifying this value Snigaroff and Wroblewski (2011)[13] have been able to solve puzzles such as the size of the equity premium and inverse relationship between equities and inflation. The UK Government would be advised to understand the value provided by the UKEM and then assess where enhancements may be required. Otherwise, focusing on cosmetic aspects of this complex network is likely to result in unintended and unforeseen outcomes. The regulatory environment should encourage value generation and thereby contribute to the country's prosperity and well-being of equity investors. By gaining insights to the UKEM, the UK Government can focus on what may be required to reduce the cost of equity capital.

The effective interaction of regulatory frameworks and requirements can also help reduce the cost of equity capital. Hail & Leuz (2005) and Leuz (2006) attempt to understand and analyse the complexity of the influences of legal institutions, securities regulation and the level of integration of a nation's capital markets. Emphasising, the inherent caveats, they find some empirical support for the claim that firms from countries with more extensive disclosure requirements, stronger securities regulation and stricter enforcement mechanisms (as enabled by a high quality legal infrastructure) have significantly lower cost of equity capital than those that do not rate as highly on these parameters. Table 3[14] below lists the 10 nations with the lowest cost of equity capital. The table is derived from the sample cited by Hail & Leuz and each nation is scored on the quality of legal

[12] Fama and Ritter quotes can be found in the article "Rethinking the Rational Man," by Susan Trammell, CFA , Chartered Financial Analyst (CFA) Magazine, Feb 2006, Vol. 17, No. 2: 30-33.
[13] A Network Value Theory of a Market, and Puzzles, Snigaroff and David Wroblewski Financial Analysts Journal Volume 67 Number 5
[14] Department for Business, Innovation and Skills (BIS) Economics Paper No1- BERR's (BIS) role in raising productivity: new evidence ch. 2 http://www.bis.gov.uk/files/file44504.pdf

infrastructure (LAW), disclosure (DISREQ) and securities regulation (SECREG). The UK is tenth.

Table 4 - Regulatory frameworks and the cost of equity capital

Country*	Average cost of equity capital (1992 – 2004)	DISREQ**	SECREG**	LAW**
Japan	6.16%	0.75	0.47	0.9
Taiwan	9.87%	0.75	0.64	0.85
Singapore	10.01%	1	0.84	0.86
Germany	10.05%	0.42	0.21	0.92
United States	10.24%	1	0.97	1
France	10.37%	0.75	0.58	0.9
Canada	10.53%	0.92	0.91	1
Italy	10.61%	0.67	0.46	0.83
United Kingdom	10.64%	0.83	0.73	0.86
Malaysia	10.65%	0.92	0.78	0.68

(Source: Hail & Leuz (2005); Note*: sample size differs with country; **based on indices)

Limits to Arbitrage

In standard finance textbooks, mispricing of any asset is unlikely to be sustained because of arbitrage activity that would bring prices back into line. In frictionless markets with negligible transaction costs and the absence of other barriers such as taxes etc, riskless arbitrage can be easily implemented and so ensure prices remain in line. The reality is that arbitrage is not riskless and is costly to implement, especially when it involves taking short positions. As Nobel prize-winning financial economists learned at Long Term Capital Management (LTCM), even "pure" arbitrage opportunities in publicly listed equity markets do not behave as standard finance theory would predict, 'the market can remain irrational longer than you can remain solvent.'

Sloan (2006) updated his 1996 research that devised a trading rule based on fundamental analysis that focused on the quality of earnings for U.S publicly listed companies. In essence earnings that included a high proportion of accruals were considered low quality earnings. Through the analysis Sloan could identify companies that engaged in activity to manage earnings and thereby devised a trading rule based on quality of earnings analysis to generate superior risk adjusted returns from US publicly listed companies. Sloan felt that when this work was published in 1996 the trading rule would be arbitraged away, but to his surprise Sloan did not find this and in the updated paper Sloan contends that the rule will be arbitraged away eventually. In an efficient market one would anticipate that inappropriate earnings management would be uncovered and the price of that publicly listed company's share would reflect this. However, despite Sloan's research and analysis, limits to arbitrage may be one rational reason as to why such anomalies persist longer than they should.

Sullivan et al (2011) investigated the accrual and asset growth anomalies for US listed companies. The authors provide a quantitative explanation by using idiosyncratic volatility or IVOL as to why the equity markets allow the anomalies related to asset growth and accruals to persist. High IVOL implies that it is difficult for the arbitrageurs to diversify away the arbitrage risks when stocks do not have perfect substitutes. The results show that between 1962-2008 shorting the shares of high IVOL companies and going long the low IVOL would have resulted in average monthly excess returns (alpha) of 100-150bps but since the greatest opportunity lies in the high IVOL companies, the arbitrageur has to take on greater uncertainty; high IVOL stocks are hard to arbitrage. To account for the publication of Sloan's 1996 research, Sullivan et al divided the data periods at 1996; the outcome was the same.

In a perfect world arbitrageurs would be able to eliminate IVOL but in the real world this is more challenging. The higher the IVOL, the higher the arbitrage risk and so provides a barrier to bring prices back into line. Where IVOL is high, mispricings would still persist in a rational informationally efficient but imperfect market because of the arbitrage risk. If arbitrage risks are present in stocks where there is a transparent relationship and so are near perfect substitutes e.g Royal Dutch/ Shell or Unilever NV/Plc (as LTCM and others found to their cost); then the risks will be higher where the relationship between stocks that are seen as close substitutes is less clear e.g Ford and General Motors. For policymakers this raises the issue of how to improve the market mechanism to reduce the barriers to enhance the effectiveness of activity of arbitrage and thereby improve market discipline.

Policy implications from Sullivan's paper are :

1. The market may be aware of the accrual and asset growth anomalies but in some cases will be unable to do anything about them until the companies concerned have to slow the pace of asset growth or can no longer manage their earnings.

2. This may add to the CFA UK's view that more should be done by companies to show that they cover the cost of capital.

3. It may also give regulators food for thought as to how the limits to arbitrage can be reduced rather doing the opposite (e.g short selling bans).

4. Perhaps there may be scope to have a different way in which accounts are set out e.g corporate performance sheet as suggested by Rappaport'[15] (see Exhibit 1).

5. The Sullivan paper may also infer that holding periods are not a structurally key issue.

[15] The Economics of Short-Term Performance Obsession Alfred Rappaport, Financial Analysts Journal Volume 61 • Number 3, May/June 2005

Exhibit 1. The Corporate Performance Statement

Revenue	$		
(minus) Operating expenses:[a]			
Production			
Selling and marketing			
Administrative			
Current taxes			
= "Cash" operating profit after taxes			
(plus or minus) Change in working capital			
= Cash flow from operations			
(minus) Investments:			
Capital expenditures (minus proceeds from asset sales)			
Research and development			
Other intangible investments			
= Free cash flow (for debtholders and shareholders)	$		
	Most Likely	Optimistic	Pessimistic
Medium-uncertainty accruals			
Uncollectible receivables	$	$	$
Warranty obligations			
Restructuring charges			
Deferred income taxes			
Unrealized gains on long-term contracts			
High-uncertainty accruals			
Defined-benefit pensions			
Employee stock options			

Management Discussion and Analysis

[a]Excludes noncash charges, such as depreciation, amortization, deferred taxes, and asset and liability revaluations.

Incentive structures

The recent crises have focused minds on incentive structures in those firms that generate returns in the UKEM. Incentive structures do influence behaviour although it is important how these differ between UKEM participants and how they are driven. For example sell-side incentives may be driven more by transactional revenues or volumes whereas in buy-side organisations the incentives may be based on the size of the assets under management and/or performance fees. Each type of remuneration structure has been developed in accordance to the type of business; each has its strengths and weaknesses and there is no perfect design.

It is difficult to collect evidence relating to incentive-driven behaviour. Anecdotal evidence suggests that bankers and brokers – aware of their potential fee earnings - have been keen to encourage clients to undertake corporate activity. Similarly, investment managers are often accused of 'hugging the index' driven by a desire to reduce career risk. And corporate management are said to take decisions that are not in the long-term interest of their company if those decisions will allow them to achieve the targets that will trigger enhanced remuneration.

Despite past evidence that indicated conflicts in sell-side analyst research, it can provide value in terms of the information and forecasts provided and the contribution to forming expectations. In a recent global study carried out by Harvard academics[16] (see Table 2);survey data was used to judge how analyst forecasts are related to evaluations of companies' industry competitiveness, strategic choices, and internal capabilities. The survey was sent to both sell-side and buy-side analysts. Interestingly the survey did not include any questions about whether or not the companies generated returns that at least covered the cost of capital.

Table 5 reports the response frequencies for the survey variables that were used in the study. For almost all questions, analysts consistently favored the top three ratings. As a result, the median rating was 4 (out of 5) for 11 of the 16 variables and 3 for the remainder. Variables with high frequencies of 4 and 5 included strategy communication, strategy execution, management quality, understanding of competitors, forecasted industry growth, superior product/service strategy, and balance sheet strength. Variables with relatively high frequencies of 1 and 2 included all the forecasted financial and stock performance metrics, strategy communication, high performance standards, low-price strategy, and industry competitiveness.

Table 5 – Frequency distributions of responses (5 most important, 1 least important)

Variable	Percentage of Responses Rated As				
	1	2	3	4	5
Forecasted revenue growth (FRG)	4.1%	14.4%	28.9%	36.6%	16.0%
Forecasted gross margin (FGM)	2.0	13.9	35.5	36.3	12.3
Forecasted earnings growth (FEG)	2.9	12.4	29.1	38.8	16.8
Forecasted stock appreciation (FSG)	3.6	13.8	31.3	36.4	15.0
Clear, well-communicated strategy (SCLR)	3.8	12.7	22.7	34.4	26.6
Ability to execute strategy (STRATEX)	3.1	10.9	25.0	38.2	22.8
Governance strength (GOV)	4.9	11.8	36.2	31.3	15.8
Quality of top management (MGT)	1.8	11.0	28.0	38.2	21.0
Innovation leader (INNOV)	3.7	11.9	29.2	35.7	19.5
Low-price strategy (LPR)	9.1	22.8	42.2	17.8	8.2
Superior product/service strategy (DIFF)	0.8	4.8	24.3	41.0	29.1
Balance sheet strength (FSTR)	3.5	9.0	24.3	29.7	33.4
High performance standards (PSTD)	2.8	13.1	42.8	34.0	7.3
Understands competitors (COMP)	1.6	7.6	28.9	38.9	23.0
Forecasted industry growth (IG)	3.8	12.1	25.6	33.8	24.8
Industry competitiveness (ICOMP)	1.6	22.3	52.0	22.0	2.1

Notes: Industry growth (IG) is the rating to the question whether industry demand is expected to grow faster than GDP growth (Question 1). Industry competitiveness (ICOMP) is the analyst's average rating for Questions 2–5, which deal with whether the analyst expects greater price competition, higher input prices, and increased threats from new products and/or competitors in the next 12 months. Strategic clarity (SCLR) is the rating for Question 10, which asks the analyst whether the company has a clear strategy that is well communicated. The two strategic positioning variables are LPR, representing the rating for Question 11 (whether the company's value proposition is low prices), and DIFF, which is the analyst's maximum rating for Questions 12 and 13 (whether the company's value proposition is superior products/services). Strategy execution (STRATEX) is the rating for Question 14, which asks the analyst to assess how well a company executes its strategy. Innovation (INNOV) is the analyst's rating for Question 15, which asks how often the company is at the leading edge of innovation in its industry. Note that innovation includes both process and product/service innovation and is thus not merely another proxy for company strategy. MGT is the analyst's rating of the quality of top management (Question 16). Governance (GOV) is captured by the rating for Question 17 (the quality of the company's governance). Understanding one's competitors (COMP) is captured by the rating for Question 18 (the company's understanding of the strengths and weaknesses of its competitors). High performance standards (PSTD) is captured by the rating for Question 19 (the extent to which the company's performance standards are demanding). Financial strength (FSTR) is captured by Question 20 (the strength of the company's balance sheet).

The authors found that analyst forecasts are associated with many of the factors that money managers rate as important in their assessments of analyst contributions. They also found wide variation in ratings consistency across variables among analysts covering

[16] "What Factors Drive Analyst Forecasts?" Boris Groysberg, Paul Healy, Nitin Nohria, George Serafeim, Financal Analyst Journal VOL. 67, NO. 4 JULY/AUGUST 2011

the same company. On average, consistency is higher for sell-side analysts than for buy-side analysts.

In recent times, attention has been focused on the remuneration of bankers , but the compensation arrangements for senior managers at publicly listed companies are now also coming under review. This is welcome. The remuneration structures for company management are likely to be a key determinant of the extent to which these companies are allocatively efficient and respondents to our recent survey believe that these are not aligned with shareholders' interest.

The remuneration structures for corporate executives at listed UK companies are effectively designed to deliver economic value and, thus, returns to shareholders.		
1 Strongly agree	0	0%
2 Agree	27	13%
3 Neither agree nor disagree	60	28%
4 Disagree	94	44%
5 Strongly disagree	33	15%
Total	214	100%

Behavioural theory and reality - *"From Homo Economicus to Homo Sapiens." (Thaler)*

In standard economics and finance texts, any business entity (public and private) has the aim of maximising economic profit. Rational (in the economic sense) risk neutral shareholders (principals) rely on risk-averse managers (agents) to maximise shareholder value. This separation of ownership and control can give rise to a principal-agent problem.

Principals need to effectively monitor and to some extent control their agents to ensure that managers are acting in the best interests of the company's owners and that the scope for moral-hazard is minimised. In doing so principals incur agency costs related to efforts they make by which agents can be monitored and influenced in the interests of owners. In addition to these internal mechanisms to align interests between principals and agents, the managers of listed companies are also subject to the discipline of two external mechanisms –

1) Informationally efficient markets can assist in lowering agency costs by ensuring managers behave appropriately to use scarce resources efficiently and maximise shareholder value. Shareholders can sell their shares, deflating prices and signalling poor quality management and prospects. They may do this if, for example, returns are less than the company's cost of capital.

2) The market for corporate control - incumbent managers faced with the credible threat of take-over would endeavour to deliver value to shareholders or be replaced by agents that are more allocatively efficient.

These approaches work well in a world populated by Homo Economicus, where firms maximise economic profits, investors hold efficient portfolios and complete, frictionless efficient markets are present. However, corporate and financial market history indicate that the world is populated by Homo Sapiens that have bounds on their rationality, willpower and self control – people have difficulty in calculating the optimum and choosing it (Mullainathan and Thaler). Markets are not always efficient and that firms' managers may prefer to pursue goals that are different from economic profit-maximisation, all of which implies that "the basic assumption of modern economics—rationality—does not stack up against the evidence" (Roxburgh).

Behavioural finance has demonstrated that markets and participants can act in a manner that is different from standard finance theory and this is driven by non-economic factors. The literature in behavioural finance is extensive and has highlighted a variety of anomalies such as the size of the equity premium and the inversion relationship between equities and inflation. The literature has also presented instances when professional and non-professional market participants can undertake actions that are not in their best interests. We must also not forget that companies that engage in activity that tries to portray their companies in the best possible light are also succumbing to behavioural factors which in this case would be a framing effect.

Evidence relating to the market for corporate control – an important component in the application of market discipline – suggests that behavioural factors can have a detrimental effect. The evidence suggests that large buyouts are value destroying. Bayazitova et al's (2010) analysis of mergers involving publicly listed companies in the US between 1980-2007 found that 43% of all activity by value was associated with megamergers (acquirers with market capitalization of more than $4.7B) but accounted for only 2% of the number of transactions. On average the mega-merger was value destroying compared to non-mega mergers which were value creating.

In another study by Netter et al (2010) the analysis covered a shorter period (1992-2009) and included private transactions. The results were similar to Bayazitova et al. However, in most of these studies the analysis uses share price movements as the metric for whether or not value is destroyed. There is little stated about whether or not the acquirers' actions enhance their ability to cover or even earn returns in excess the cost of capital. In addition, on the basis that investors hold diversified portfolios, gains by holding the target may be offset by losses by holding shares in the acquirer; this may mean that the gains and losses may be overstated. Despite these key issues regarding metrics, many of the large takeovers in recent years have seen the acquirers subject to write-downs of shareholder equity due to the high premiums paid for their acquisitions.

The evidence cited indicates that an element of hubris is at work when mergers and acquisitions (M&A) take place. Roll[17] who proposed the hubris hypothesis in 1986 has recently revisited his work to see if CEOs learn from their involvement in M&A activity. The analysis indicates that rational CEOs do learn from the M&A activity. However, hubris driven CEOs also learn but at a slower pace. The study does involve the M&A activity in the 1990s but does not compare each of the M&A waves and so it is unclear if rational CEOs also become hubris driven or whether hubris driven CEOs become more rational. Underlying all of the M&A activity is the access to funding for these actions. As it became clear in the period leading up to the recent crisis, the capital supporting these transactions was too generously priced.

[17] Working Paper "Learning, hubris and corporate serial acquisitions" Richard Roll, Nihat Aktas & Eric de Bodt (February 1, 2007).

Conclusion

The allocative efficiency of the UK equity market is an important issue, not just for UK companies, but for UK savers and global investors and companies, too. It is disappointing, though, that the review has opted to consider just the equity component within the broader capital allocation process. We would have welcomed a broader approach.

Institutions hold multi-asset portfolios. In determining the proportion of their portfolio to be allocated to publicly listed equities, institutions seek to invest in companies that are generating economic profit, in other words companies that at least cover their cost of capital or generate returns exceeding their cost of capital. In order to generate returns for their beneficiaries, they may also invest in companies that appear temporarily mispriced. They will use a variety of strategies to do so. The duration of these strategies will differ. There is no optimal holding period. The appropriate holding period is that determined by the investor’s requirements, risk appetite and expectations.

As we said in our summary, publicly listed companies and their managers are judged on their ability to generate economic value as construed from their accounts and other sources of information. The review should find mechanisms to encourage company management and Boards to pay greater attention to the generation of economic profits and should attempt to link remuneration to models of economic value creation. The review might wish to consider the following questions in addition to those that it poses:

- How many senior board members of UK publicly listed companies know the cost of capital for their companies?

- How many board members know the extent to which their companies generate returns that cover their cost of capital?

The review could also usefully examine the extent to which limits to arbitrage and the market for corporate control hinder the ability of the UK capital markets to impose the appropriate level of market discipline on publicly listed and private companies.

Beyond that, while CFA UK accepts that the UK equity market is not perfect, we believe that the review – and subsequent government policy-making - should be careful to ensure that any recommendations take into account the substantial value generated by the UK equity market. Any need for policy decisions should be supported by robust evidence in order to minimize any unintended costs and consequences while maximizing the benefits to be delivered.

We welcome the review, hope that the evidence that we have provided helps the review team complete its work and would be delighted to provide any further assistance that the team might seek.

Consultation Questions

The terms of reference set out ten broad questions for the review to consider. These are set out below. In each case this paper sets out those questions and issues on which we would particularly welcome evidence:

1. Whether the timescales considered by boards and senior management in evaluating corporate risks and opportunities, and by institutional shareholders and asset managers in making investment and governance decisions, match the time horizons of the underlying beneficiaries.

As we stated in the section on return generation, the approaches used by agents seeking to generate investment performance for the ultimate beneficiary do not need to align with the horizons of companies that are concentrating on value generation. For example, a pension fund rebalancing its portfolio that requires a reduction in its equity holdings should not influence the value generation plans of UK listed companies. Similarly, a general insurance company that needs to reduce its equity holdings to fund some of its liabilities should not be taken as a signal about the value generation capability of the equities it sells. Value generation and return generation do not always have to align.

Of greater concern is the evidence we cite in value generation that highlight the practice of earnings management and potential financial shenanigans which cannot always be addressed by market discipline because of the limits to arbitrage..

We would particularly welcome evidence on:

a. the relationship between reporting timescales and those used for internal planning and appraisal;

No comment

b. what timescales are used by companies in investment appraisal;

No comment

c. how companies review investment in intangible assets (e.g. corporate reputation, workforce skills);

No comment

d. what timescales are used by equity investors, and in particular institutional investors such as pension scheme trustees, who appoint fund managers in determining investment strategy.

Please see our section on return generation to provide context and rationale for separating return generation from value generation.

Based on our survey results for analysts' time horizons, 65% have a time horizon of at least one year while 33% have a time horizon of more than two years.

To which single timeframe do you give the greatest emphasis when considering the development of a forecast/recommendation? (Please select only one):		
1 Up to three months	8	5%
2 Three to six months	11	7%
3 Six months to one year	36	22%
4 One to two years	52	32%
5 Beyond two years	53	33%
Total	160	100%

Similarly for responses from investors, 31% had a time horizon of more than two years. As we stated in our section on return generation, the UKEM has a variety of participants that use a variety of approaches to generate returns. Each approach will have its own relevant time horizon. It should be noted that the time horizons for return generation do not always have to be aligned with those applied for value generation.

To which time horizon do you give the greatest emphasis when considering a buy/sell decision? (Please select one option):		
1 Up to three months	29	14%
2 Three to six months	27	13%
3 Six months to one year	48	23%
4 One to two years	42	20%
5 Beyond two years	65	31%
Total	211	100%

2. How to ensure that shareholders and their agents give sufficient emphasis to the underlying competitive strengths of the individual companies in which they invest.

We would particularly welcome evidence on:

a. how equity analysts and asset managers assess the competitive advantages of companies;

Analysts and asset managers use a variety of metrics to assess the investment appeal of UK listed companies of which competitive advantage/position is highly ranked. Based on the responses to our survey the top five in terms of importance to analysts with respect to the development of an equity forecast/recommendation are as follows ('competition' is ranked third)-

	Mean	Median	Mode	Range	Standard Deviation	Standard Error	Confidence Interval
Cashflows	4.13	4	3	12	2.58	0.21	[3.72 - 4.54]
Current share price relative to fundamental value	4.36	3	1	12	3.51	0.29	[3.80 - 4.93]
Competitive advantage/position	4.63	4	4	11	2.83	0.23	[4.18 - 5.08]
Balance sheet strength	4.84	4	2	11	2.68	0.22	[4.41 - 5.26]
Earnings outlook	5.64	5	3	12	3.39	0.28	[5.09 - 6.18]

For investment managers the top five factors of importance when making a buy/sell decision are –

	Mean	Median	Mode	Range	Standard Deviation	Standard Error	Confidence Interval
A changed outlook for earnings	4.74	4	2	12	3.43	0.25	[4.26 - 5.22]
Changes to the company's competitive advantage/position	4.84	4	1,2	12	3.16	0.23	[4.39 - 5.28]
Changes in cashflows	4.9	4	2	12	3.11	0.22	[4.46 - 5.34]
A change in the current share price relative to fundamental value	5.05	4	1	12	3.81	0.28	[4.51 - 5.60]
Changes to balance sheet strength	5.47	5	3	12	3.11	0.23	[5.03 - 5.91]

b. the extent to which trading on equity markets is guided by analysis of underlying corporate performance, and the extent to which it is driven by analysis of short-term market trends;

Both investors and analysts rank share price momentum as the least important criteria when assessing UK listed companies. As the tables in the answer to question 2 (a) highlight analysts and investors place much greater weight on fundamental metrics. 93% of respondents agreed that fundamental analysis is necessary to estimate share value. While 53% agreed they would invest in a company if its share price undervalued its cashflows irrespective of whether the market came to the same conclusion over the course of a year.

c. how have technological advances such as automated trading affected investment decisions in equity markets;

The evolution of the equity market has enabled a variety of market participants to engage in a variety of ways to generate returns for the beneficiary. Each participant provides their own benefits to the UKEM.

d. whether corporate managers feel able to communicate effectively about issues related to the competitive position of their businesses.

No comment.

3. Whether the current functioning of equity markets gives sufficient encouragement to boards to focus on the long term development of their business.

As we cite in our response, there is evidence that indicates that the UKEM may contain frictions that could prevent the market from imposing discipline on companies. These limits to arbitrage may enable companies to be mispriced. Similarly, history suggests that the market for corporate control may be ineffective in ensuring company management focus on value generation.

86% of all respondents agreed that the Board and senior executives of UK listed companies should focus on economic profits ahead of accounting profits. However, only 9% of respondents agreed that the Boards and senior executives of UK listed companies actually focus on economic profits.

88% of respondents agreed that to generate economic value a publicly listed company should at least cover its weighted cost of capital (equity and non-equity). 56% of respondents disagreed that remuneration structures at UK listed companies were focused on delivering economic value.

63% of respondents felt that the Board and senior executives of UK listed companies paid too much attention to short term share price movements, though 55% of respondents agreed that short term volatility of a company's share price influences its ability to invest. This reluctance to invest is evident from compensation agreements that focus on earnings per share and share price movements.

According to one study by Graham et al (2006) "real earnings management" (such as deferring value enhancing projects and investment to meet earnings expectations to minimise the cost of equity capital) has destroyed more value than that destroyed by those companies involved in high profile fraud cases. These events highlight the undesirable consequences of "running a company with the sole aim of raising the share price" in the short-term.

We would particularly welcome evidence on:

a. whether changes in reporting obligations have influenced the perspectives and timescales of managers and boards, and whether these changes in perspectives and timescales help or hinder long-term decision making;

No comment

b. how the perspectives of managers and boards vary between listed companies, companies whose equities are traded on AIM and PLUS

There are more than four million businesses in the UK of which 2.6 million are companies; only a small proportion (9,950) of these companies are publicly listed. Productivity depends on all of these businesses using their capital efficiently and having capital allocated to them appropriately. The review's scope is too narrow.

c. whether publicly traded companies pay too much attention (or feel obliged to pay too much attention) to short-term fluctuations in their share prices;

63% of respondents to our survey felt that the Board and senior executives of UK listed companies paid too much attention to short term share price movements. Our evidence suggests that they are incentivised to do so by remuneration structures that are mainly composed of unreliable metrics related to share price changes and earnings per share.

d. whether companies feel that their engagement with fund managers and analysts is properly focused on the competitive capabilities of the business.

Our survey results indicate that analysts and investors place significant emphasis on a business' competitive capabilities. A business' competitive position ranks third out of 13 factors that analysts consider when determining a forecast or recommendation and second out of 13 factors for investors considering a change to their investment position. We do not have any comment on companies views as to whether or not analysts and investors focus on this factor.

4. Whether Government policies directly relevant to individual quoted companies (such as regulation and procurement) sufficiently encourage boards to focus on the long term development of their businesses.

No comment.

We would particularly welcome evidence on:

a. whether government policies encourage undue focus on cost cutting, or otherwise damage the ability of firms to engage in long-term investment and the building of sustainable competitive advantage;

b. whether government policies aimed at facilitating long-term investment by companies have been effective and whether there are other ways Government could support long-term business growth.

5. Whether Government policies directly relevant to institutional shareholders and fund managers promote long-term time horizons and effective collective engagement.

We have stated that a diverse investor base implies a diversity of investment horizons which do not need to always align with value generation. However, CFA UK respondents agree that even where the investment mandate is medium term in nature, the performance assessment is often still short-term.

We would particularly welcome evidence on:

a. whether pension regulation, insurance regulation, supervision of charitable endowments and regulatory requirements for asset managers lead to excessive emphasis on benchmarking and on short-term performance measurement;

82% of investors that responded to our survey agreed that managers are assessed to short-term benchmark performance.

Even for long-term (i.e. three year) investment mandates, managers are assessed relative to short-term (i.e. quarterly) benchmark performance.		
1 Strongly agree	66	31%
2 Agree	110	51%
3 Neither agree nor disagree	24	11%
4 Disagree	13	6%
5 Strongly disagree	1	0%
Total	214	100%

b. whether the broader regulation of equity markets has an impact on the investment timescales of market participants;

c. whether the regulation of contact between companies and investors is an obstacle to effective engagement.

6. Whether the current legal duties and responsibilities of asset owners and fund managers, and the fee and pay structures in the investment chain, are consistent with these long-term objectives.

We would particularly welcome evidence on:

a. whether there is a more rapid turnover of asset managers and whether this makes it more difficult for these managers to take a long term view of the companies in which they invest;

38% of the investment manager respondents to our survey indicated that clients typically provided capital over a sufficient period for their investment strategy to be applied. 28% disagreed with the statement.

Clients typically provide capital for periods of a sufficient length of time for the value that managers identify to be realised.		
1 Strongly Agree	10	5%
2 Agree	70	33%
3 Neither agree nor disagree	72	34%
4 Disagree	50	24%
5 Strongly disagree	9	4%
Total	211	100%

In a study cited by Montier (a UK based senior investment practitioner) it appears that pension funds have an uncanny knack of firing their managers at the wrong time, given their propensity to focus on short term performance. In the study, managers who had underperformed and fired went onto generate better performance than those that did well in the recent past and were hired. In essence, the clients that undertake this sell-low/ buy-high activity are undermining their own investment performance.

b.how individual asset managers are rewarded, and their performance measured, and whether this gives insufficient incentive for them to take a long term view of the companies in which they invest;

More of the investment manager respondents to our survey disagreed that their compensation structures are aligned with their clients' interests than agreed: 41% to 31%.

The compensation structures for investment professionals are effectively designed to align the interests of investment firms and their clients.		
1 Strongly agree	16	8%
2 Agree	50	23%
3 Neither agree nor disagree	60	28%
4 Disagree	68	32%
5 Strongly disagree	19	9%
Total	213	100%

This result tallies with the finding of a June 2010 survey undertaken by the society in which 56% of investment manager respondents indicated that the remuneration structure could be better aligned with their clients' interests. That survey indicated that roughly half of investment manager respondents (49%) had some form of deferred compensation, but performance related compensation was typically calculated against a one-year period (66%).

CFA UK is developing a position paper on fee structures and remuneration practices and would be pleased to share this with the review team in due course.

c. whether there are agency problems in the objectives and operations of asset managers that may be deleterious to the interests of the corporate sector or savers;

This question should be broader and look at potential agency issues across all market participants, not only asset managers.

d. how other intermediaries and market participants are remunerated and what impact this has on their incentives and those of their clients.

No comment.

7. Whether there is sufficient transparency in the activities of fund managers, clients and their advisors, and companies themselves, and in the relationships between them.

We would particularly welcome evidence on:

a. whether the existing rules on disclosure of material stakes are excessive or inadequate;

No comment.

b. whether asset managers should be subject to more extensive disclosure requirements, e.g. of costs and remuneration structures;

c. whether the growth of investment consultants has encouraged or discouraged engagement by share owners with companies;

d. whether the overall costs of intermediation are understood by beneficiaries, and are proportionate to the value of the services provided;

e. whether investors have sufficient information to understand the investment approaches of asset managers and to judge whether they are aligned with their investment objectives and timescales.

Investors vary in their level of expertise and understanding about how returns are generated. Whether clients are classified as retail or professional, the duty of the adviser should be the same in that the actions and advice should always be in the client's best interests. When constructing a portfolio and allocating to the appropriate asset managers, the onus is on the adviser to ensure that the portfolio and its constituents align with the requirements and best interests of their clients. Institutional clients use investment policy statements (IPS) that address the issues raised by the question. In the non-institutional arena, IPS are becoming more common and their use for retail clients is considered good practice by CFA Institute.

8. The quality of engagement between institutional investors and fund managers and UK quoted companies, and the importance attached to such engagement, building on the success of the Stewardship Code.

The diversity of UKEM participants indicates that the level of engagement will vary depending on the type of approach used and whether or not it generates net benefits.

How do you engage with the senior managers of UK listed companies?		
1 At a distance, through the company's website, presentations and annual report	99	47%
2 Direct dialogue with the company's management and Board	96	45%
3 Voting	67	32%
4 It is not our purpose to engage with senior management	38	18%
5 Indirectly, through the company's IR team and/or corporate broker	61	29%
Other, please specify	10	5%

As can be seen from the table above, investors that responded to our survey have a variety of approaches to engage with the companies they invest in. A small proportion do not engage at all. Engagement is only viable if there are net benefits to the ultimate beneficiary. Sometimes it may be more cost effective to sell a holding in a company when that business continues to destroy value and redeploy the capital where economic profits are being generated.

We would particularly welcome evidence on:

a. whether the measures taken to stimulate engagement by investors with companies have been sufficiently effective;

b. whether the corporate governance activities of asset management businesses are sufficiently integrated with the decisions of fund managers.

9. The impact of greater fragmentation and internationalisation of UK share ownership, and other developments in global equity markets, on the quality of engagement between shareholders and quoted companies.

The UK is a global financial centre that prices equity and non-equity capital and that attracts participants from across the globe. Internationalisation should be welcomed as it expands the potential supply of capital. If businesses generate economic value then they should attract capital away from businesses that do not generate economic profits regardless of where these businesses reside.

We would particularly welcome evidence on:

a. what has been the effect of the internationalisation of UK equity markets on the priorities of companies and fund managers;

b. whether the growth in overseas ownership of UK equities, and in the overseas activities of UK listed companies, has affected engagement between UK investment institutions and UK companies.

10. Likely trends in international investment and in the international regulatory framework, and their possible long term impact on UK equity markets and UK business.

No comment.

We would particularly welcome evidence on

a. how UK asset managers, and UK companies, expect the pressures on them to change with further internationalisation of equity investment;

b. whether recent or planned regulatory actions by authorities outside the UK, and particularly regulatory policy developments at EU level, will affect engagement between asset managers and the companies in which they invest, and the ability of companies to respond to that engagement.

We hope that the CFA UK's response is helpful to the Department and would be open to further discussions with the Department about any of the points we have raised.

Yours,

Natalie WinterFrost, CFA FIA
Chair Professional Standards & Market Practices Committee, CFA UK

Jane Fuller
Chair, Financial Reporting and Analysis Committee
CFA Society of the UK

Will Goodhart
Chief Executive, CFA UK

Sheetal Radia, CFA
Policy Adviser CFA UK

APPENDICES

Appendix 1 – Breaking the Short-Term Cycle Recommendations

Breaking the Short-Term Cycle

Discussion and Recommendations on How Corporate Leaders, Asset Managers, Investors, and Analysts Can Refocus on Long-Term Value

Proceedings of the CFA Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics Symposium Series on Short-Termism

EXECUTIVE SUMMARY

Beginning in September 2005, the CFA Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics co-sponsored a "Symposium Series on Short-Termism." The purpose of these symposia was to address the issue of "short-termism"—corporate and investment decision making based on short-term earnings expectations versus long-term value creation for all stakeholders—from a unique cross-group perspective.

The insights of our symposia participants ("the Panel")—thought leaders from the corporate issuer, analyst, asset and hedge fund manager, institutional investor, and individual investor communities—confirm what the academic research suggests: namely, that the obsession with short-term results by investors, asset management firms, and corporate managers collectively leads to the unintended consequences of destroying long-term value, decreasing market efficiency, reducing investment returns, and impeding efforts to strengthen corporate governance.

SUMMARY OF RECOMMENDATIONS

Corporate leaders, asset managers, investors, and analysts should:

1. **Reform earnings guidance practices:** All groups should reconsider the benefits and consequences of providing and relying upon focused, quarterly earnings guidance and each group's involvement in the "earnings guidance game."
2. **Develop long-term incentives across the board:** Compensation for corporate executives and asset managers should be structured to achieve long-term strategic and value-creation goals.
3. **Demonstrate leadership in shifting the focus to long-term value creation.**
4. **Improve communications and transparency:** More meaningful, and potentially more frequent, communications about company strategy and long-term value drivers can lessen the financial community's dependence on earnings guidance.
5. **Promote broad education of all market participants about the benefits of long-term thinking and the costs of short-term thinking**.

The Panel asserts that our broad set of recommendations—focused on the issuer, analyst, institutional investor, asset manager, and hedge fund manager communities—could mitigate the current overemphasis on short-term performance.

The CFA Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics thank the many commentators and participants for their contributions.

Appendix 2 – CFA UK response to Andy Haldane's speech "The Short Long."

CFA UK is a member society of

Mr. Andrew Haldane,
Executive Director,
Financial Stability,
Bank of England,
Threadneedle Street
London EC2R 8AH

11th July 2011

Dear Mr. Haldane,

The Chartered Financial Analyst Society of the United Kingdom (CFA UK) has a clear interest in your recent speech "The Short Long." We commend you and your co-author, Richard Davies, for attempting the very difficult task of quantifying short-termism.

After reviewing the speech and its analysis, we feel compelled to write to you and share with you our views about the content of the speech; especially as it has been used to support the UK Government's emphasis on the importance of investment holding periods and their impact on the ability of the equity market to allocate capital and price risk.

We believe that there are three key areas that require further attention, which in turn may affect the results and policy implications. We would also suggest that the paper would be strengthened by a rigorous academic peer review process especially because of the policy implications.

1) **Time inconsistent preferences are irrational**

The speech is based on the premise that because prices appear to reflect time inconsistent preferences, this is irrational and indicates short-termism. However, this premise is valid when there is considerably more certainty about future discount rates. Where there is greater uncertainty about future discount rates, hyperbolic discounting is more appropriate and in the view of Farmer and Geanakoplos, rational. In the equity market where future discount rates are uncertain, agents would be prone to act in a manner that is akin to applying hyperbolic discounting rather than exponential discounting. This becomes more important given the market dislocations that occurred between 1995-2004, a period that is used to demonstrate that myopia is rising. Rasmusen states that hyperbolic discounting does not imply impatience or lack of self control; conversely, patience and self-control can be time inconsistent; as the facts change, over time we change our minds.

2) **Data and methodology -**

a) Data and sample period - the data period chosen for the analysis contained several instances of market dislocations that may have influenced the results of your analysis. The period between 1984-2004 included to name but a few - the 1987 stock market crash, the UK's ejection from ERM in 1992, the Federal Reserve hiking interest rates 6 times in 1994; Emerging Market crisis in 1997; Russia's debt default in 1998, the collapse of Long-Term Capital Management in 1998; the dotcom bust; 9/11 and the invasion of Iraq in 2003. Underlying these events would have been the merger and acquisitions cycles that would have further influenced equity market valuation. All of these events would have added to the uncertainty around future discount rates and would have needed to be accounted for in the analysis. It is not clear from the analysis how the issues such as survivorship bias have been dealt with in the data. Similarly, other factors like limits to arbitrage, changes in the constituents of the equity indexes used in the analysis and share buybacks, require more attention.

b) Methodology - valuing equities using a discounted cash flow model is the appropriate approach, although the analysis does not incorporate the limitations of this approach. For example, terminal value often accounts for over 50% of the net present value. The cashflow used for discounting is the dividend which is a useful choice, however additional analysis should have been carried out using other measures of cashflow. Prominent practitioners use free cashflow to equity holders by using data from a company's income statement and balance sheet. Earnings - the use of lagged earnings raises questions about the robustness of these metrics. Earnings are measured in a variety of ways and can often be revised. It is unclear whether the reliability and consistency of earnings measurement has been accounted for.

c) Discount rates - the calculation of discount rates using CAPM is a useful starting point although the limitations of CAPM have not been taken into account. Both Roll and Markowitz have demonstrated that when any of the assumptions of this single period model do not hold, the results of the model are also invalid. In addition, for the Beta to be meaningful, the market index must represent the portfolio of all risky assets and must be mean variance efficient. The empirical evidence concludes that the market capitalisation weighted indexes such as the FTSE 100 and S&P 500 do not fulfil both of these criteria and so the Beta calculated using these indexes is not meaningful.

3) **Structural changes in the equity market** -

The analysis also needs to take into account that price formation in the equity market is the result of a variety of participants with different investment horizons and possibly different required rates of return. For example, following the dotcom bust hedge funds attracted more interest and so started to alter the composition of equity market participants. Since 2004 the rise of algorithmic trading has further altered the landscape and could further distort the results. As we are aware prices can be affected by more than fundamentals alone: e.g liquidity, availability of stock borrow, stock overhang, buybacks, etc. So unless such factors are taken into account, the results of the analysis will be spurious. The evolution of the equity markets between 1984-2009 does highlight structural change and this needs to be taken into account in the analysis.

CFA UK welcomes any initiative that can demonstrate how financial markets can improve their ability to allocate capital and price risk more effectively. However, CFA UK is of the view that the holding period is not a significant factor. Our own view on the arguments against short-termism and in favour of a policy to encourage long-termism is that the argument is misplaced. Our preference, expressed in our response to the UK Government's ‘Long Term Focus for Corporate Britain’ is for corporate managers to focus on at least covering the cost of capital and for investors to focus on earning the required rate of return for the risk in providing that capital.

We hope that our feedback is useful to you and Richard Davies, and we would be open to meeting with you to discuss the contents of this letter or the issues related to it.

Yours sincerely

N. Winterfrost

Natalie WinterFrost, CFA FIA
Chair Professional Standards & Market Practices
Committee, CFA UK

Will Goodhart
Chief executive
CFA Society of the UK

Appendix 3 – Holding Period calculations

HOLDING PERIODS OF EQUITIES

It is frequently stated that the "average holding period" of large capitalisation UK equities is of the order of one year or less. (Similar assertions are made about other classes of equities). This assertion is incorrect and it is important to understand why this fallacy arises as it leads to the incorrect assertion that shareholders, particularly institutional shareholders have a very short-term investment horizon.

In order to demonstrate the nature of the fallacy, consider the following hypothetical example. Assume that there are only two classes of investor, types A and B, in the market. Assume that investors of type A own 20% of the outstanding equity of all companies and hold shares for 20 years on average and that investors of type B own the remaining 80% of equities and hold shares for 3 months on average. Clearly the average holding period will be (0.2 X 20) + (0.8 X ¼) years….4.2 years.

Fallacious commentators, however, will observe that every year the total market experiences turnover of 20% of 5% plus 80% of 400% which is 321% from which they will wrongly deduce that the average holding period is less than 4 months as opposed to the correct figure of 4.2 years.

Is this similar to reality and does it matter?

Reality In fact a large proportion (in excess of 20%) of the UK large cap equity market is passively managed with an average holding period in excess of 10 years and an even larger proportion is either explicitly or implicitly managed on a core and satellite basis with very long holding periods. The balance of the market does turn over rapidly. This would suggest that the average holding period is rather long and certainly not less than 1 year. There are short-term investors in the stock market and there are long-term investors as well. They both have an important part to play in the provision of capital and in the maintenance of liquid markets.

Significance It is very important that policy decisions and media commentaries are made on the basis of fact and not derived from fallacious reasoning which is the basis of many assertions of "short-termism". For this reason UKSIP, as the representative of investment professionals, will not hesitate to clarify this point at every opportunity.

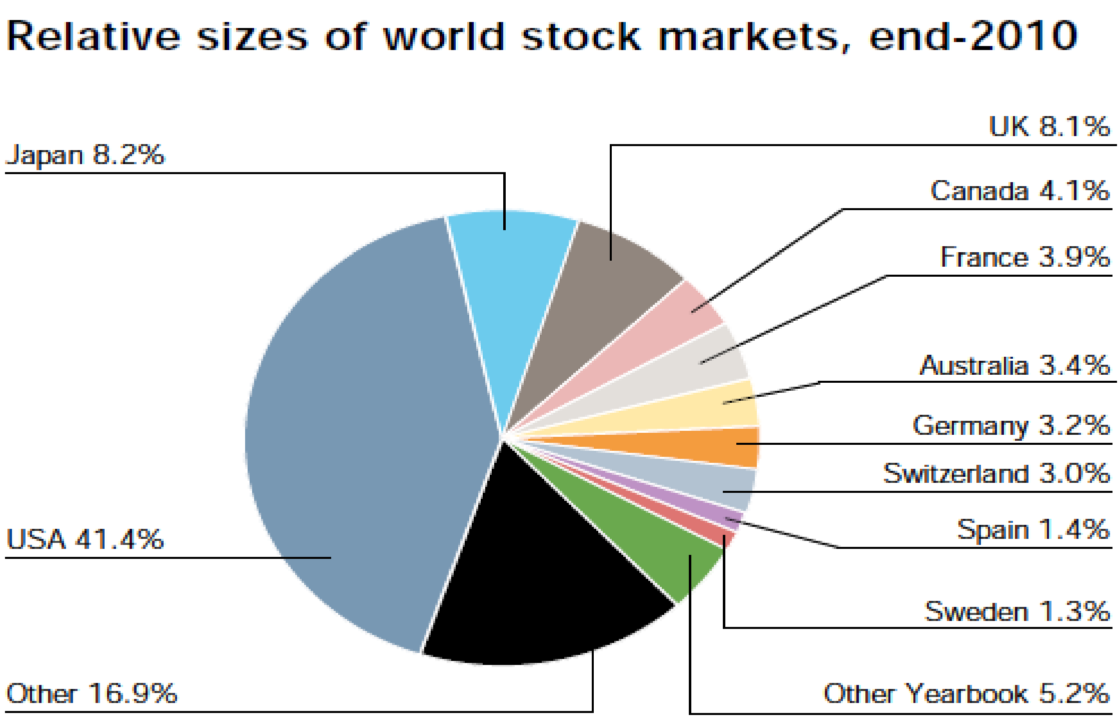
Footnote: In purely arithmetical terms the fallacy is based on the mistaken belief that the weighted average of the reciprocals of a set of numbers is equal to the reciprocal of the weighted average of these numbers.

Appendix 4 - Background to the UK Equity Market (UKEM)

The UK is a major global financial centre that prices the risk of and allocates equity and non-equity capital. The focus on public equity markets is too narrow given that businesses do rely on non-equity capital to achieve their long-term objectives. There are over 4 million businesses in the UK of which 2.6 million are companies; only a small proportion (9,950)[18] of these companies are publicly listed. Productivity depends on all of these businesses using their capital efficiently and having capital allocated to them appropriately.

Despite its prominence as a leading financial centre, UK equity market (UKEM) by capitalization is less than 10% of total global stock market value (see chart 1). Based on the London Stock Exchange data for September 2011 the Main, TechMark and AIM markets had a combined market valuation of GBP 1.9tln. Graph 1 sets out the distribution of listed companies by market capitalization.

Chart 1



Source: Elroy Dimson, Paul Marsh and Mike Staunton, Credit Suisse Global Investment Returns Sourcebook 2011.

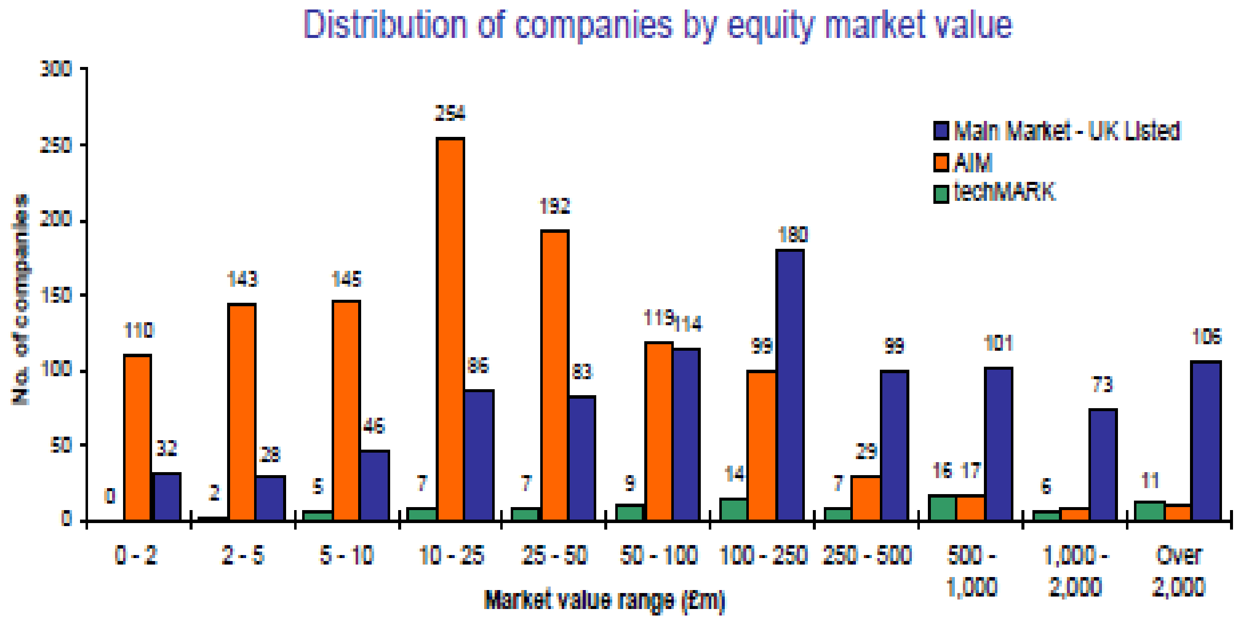
UKEM serves the following purposes –

1) Brings buyers and sellers of equity securities together and enables them to execute transactions
2) Enables the raising of equity capital and for providers of equity capital to invest it.
3) Prices equity capital risk

[18] Companies House November 2010

4) Provides a source of market discipline for publicly listed companies through pricing or the market for corporate control
5) Provides liquidity and price discovery for publicly listed securities.

Graph 1



Participants in the UKEM are diverse with each having its own approach with respect to their business models, how they generate returns and their holding periods. The evolution and development of capital markets globally has been reflected in the UKEM encouraging the diversity of UKEM participants that include –

Publicly listed companies

- Publicly listed companies – issuing and buying back equity; engaging in mergers and acquisitions.
- New companies raising new equity capital

Sell-side institutions – e.g banks (commercial, investment, universal etc), UKEM brokers.

- Sell-side firms e.g investment banks (equity sales, market making, proprietary trading, and corporate finance services).
- Brokers – retail stockbrokers, interdealer brokers.

Buy-side institutions – institutional investors and fund managers

- Institutional investors e.g insurance companies, pension funds, endowments, charities
- Active and hedge fund strategies e.g long only, equity long/short, equity market neutral, merger arbitrage, quantitative funds, algorithmic trading.
- Passive fund managers e.g funds that track a UKEM index like the FTSE All Share.
- Arbitrageurs that seek to generate returns by exploiting price discrepancies between equity and equity related instruments.
- Activist investors that take material stakes in publicly listed companies so that they can encourage operational improvements in those companies.

- Private Equity firms seeking to take publicly listed companies private; or alternatively seeking a public listing to exit from a privately held company.

Investors – agents that either invest directly or use a third party (buy-side or sell-side firm) to gain access to and implement their public equity investment strategies in a variety of ways.

- Trusts, Endowments, Charities, and foundations
- Retail investors – which include the highly sophisticated to the least sophisticated.
- Government

Other – securities lending engaged by sell-side and buy-side firms.

The diversity of non-corporate UKEM participants also demonstrates that the manner by which they generate returns also varies and these will be associated with different holding periods and how often they turn over their equity portfolios. The UKEM can be viewed as a network that provides the infrastructure that is composed of a variety of participants aiming to maximise their objectives.

The UK Government should also be aware of the return profile for equities and be sensitive to the risk associated with investing in the UKEM. Equity investing is not a risk free endeavour. Equities are risk assets and this volatility has been demonstrated by the recent financial crisis and the equity market dislocations throughout history. Based on the Credit Suisse Global Investment Returns Sourcebook for 2011, figures 1-3 demonstrate both the rewards and the risk associated with UKEM. Figure 1 shows that, over the last 111 years, the real value of equities, with income reinvested, grew by a factor of 317.4 as compared to 4.6 for government bonds and 3.1 for government bills. As we all know past performance is not an indication of future performance. Figure 2 shows that, since 1900, the risk taken for investing in equities (the equity risk premium) earned 3.9% more per year over bonds and 4.3% per year more than bills. However, as can be seen for the period 2001-2010,equities provided a negative risk premium, so investors were not compensated for taking equity risk during this period. Figure 3 shows that the long-term real return on UK equities was an annualized 5.3% as compared to bonds and bills, which gave a real return of 1.4% and 1.0% respectively. However, the historical volatility of equity market returns (represented by the standard deviation of returns) is 80% higher than for bonds.

Investment in equities is only warranted if the investor deems it worthwhile based on their risk preferences, investment horizon and capacity for losses. To obtain the appropriate portfolio given an investor's risk tolerance would entail combining equities with other asset classes such as bonds, property, commodities, hedge funds and private equity. Table 1 demonstrates that portfolios are not identical and these differences can be attributed to the specific requirements of each type of investor. For example general insurance funds allocate less to equities than pension funds. Investors are not homogeneous and equities are not the sole constituent of portfolios. From an investor's viewpoint, it is the portfolio perspective that should be the priority.

Once the portfolio has been constructed, it is essential for investors to maintain the appropriate allocations and so rebalance back to the required weights for each asset class. It is has even been observed that undertaking such transactions enables the investor to earn a rebalancing premium[19] which is the main source of return from holding a diversified portfolio. This also indicates that equity market transactions can occur for reasons other than the arrival of new information. Similarly, if the investor's

[19] Diversification Return, Portfolio Rebalancing, and the Commodity Return Puzzle, Scott Willenbrock Financial Analyst's Journal VOL. 67, NO. 4 JULY/AUGUST 2011

circumstances change or they change their outlook than this may also generate turnover.

Figure 1

Annualized performance from 1900 to 2010

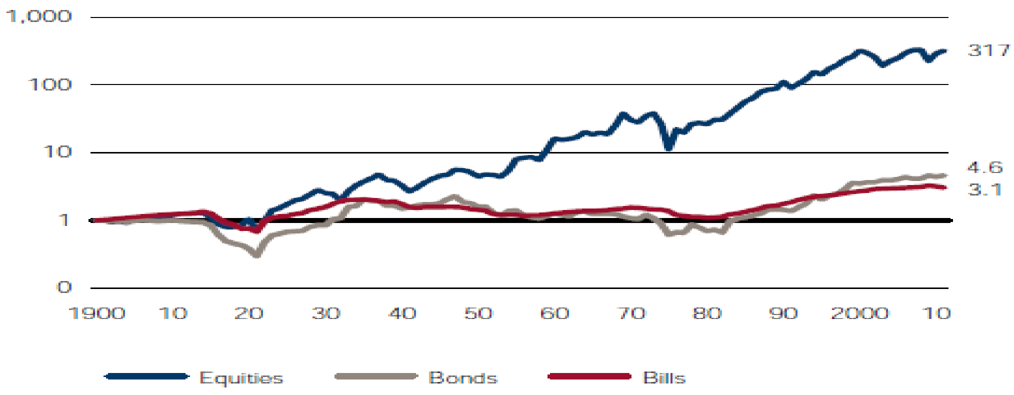


Figure 2

Equity risk premium over 10 to 111 years

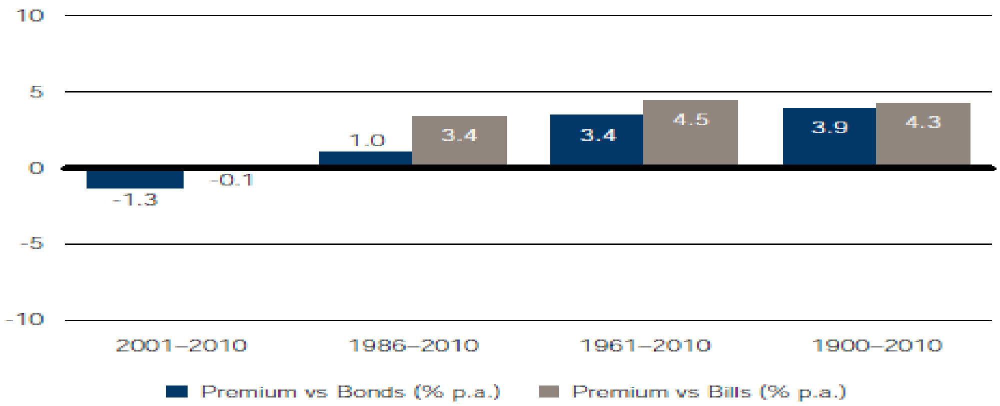
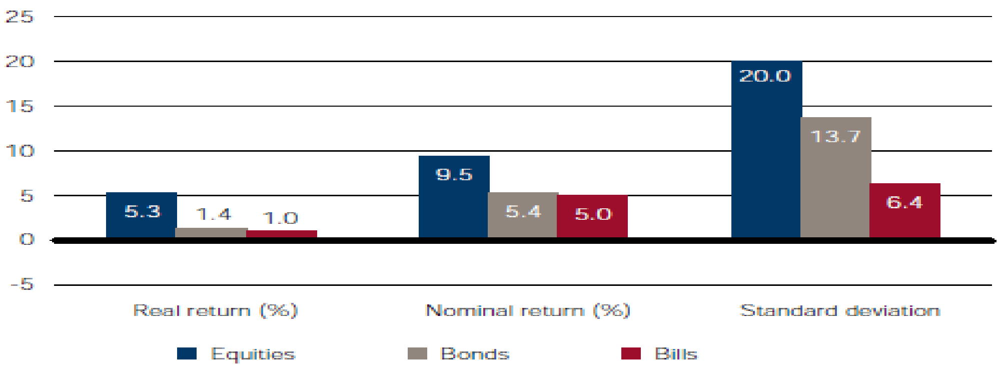


Figure 3

Returns and risk of major asset classes since 1900



Source: Elroy Dimson, Paul Marsh and Mike Staunton, Credit Suisse Global Investment Returns Sourcebook 2011.

Table 1 –Portfolio holdings (%) of UK insurance funds (life and general) and pension funds at the end of 2008.

	Pension funds	Insurance – life	Insurance – general
Short term assets	11	8.5	23.7
Gilts			
Index-linked gilts	6.8	4.7	1.4
less than 7 years/ 5 years[1]	1.1	1.5	10.1
7 or 5[1] to 15 years	0.8	2.5	3.8
15+ years	2.8	5.7	0.5
Total gilts	11.5	14.4	15.8
Other fixed income	6.4	2.1	25.9
Ordinary shares			
UK equities	12.8	16.5	9
Overseas equities	14.8	11.6	1.9
Total equity	27.6	28.1	10.9
Unit trusts (exc. property unit trusts)	11.9	15.2	1.4
Land & property (inc. property unit trusts)	4	4	0
Other assets	27.6	27.7	22.3
Total net assets	100	100	100

Note: [1] Up to 5 years for pension funds and 7 years for life and general insurance funds

Source: Office for National Statistics.

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