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## **Corporate Share Repurchases in the UK: Perceptions and Practices of Corporate Managers and Investors**

### **Abstract**

**Purpose:** This study examines motivations underlying UK repurchase activity. Specifically, the paper inquires into the relevance of a range of different explanations and perceptions of regulation surrounding repurchases, although emphasises the role of motives linked specifically to repurchases rather than income distribution more generally.

**Methods:** The study uses a survey approach to capture the views on repurchases of corporate managers and investors. It supplements the survey data with secondary information about the companies to better understand repurchase behaviour.

**Findings:** Results indicate that repurchase use is influenced by motives linked specifically to this tool rather than by those associated with income distribution more generally. In particular, repurchases are used to return surplus cash to investors, signal undervaluation and influence gearing and earnings per share levels. In the latter case, companies appear to use repurchases to perform a value added role, alongside manipulating the EPS level and thus the latter may simply be a by-product of the former. Private investors may nevertheless be vulnerable to such manipulation, given their limited financial literacy.

**Research Limitations:** The study relied on a survey of managers and investors and univariate analysis. In the former case, respondent numbers, particularly for the investor community were low, raising questions as to the generalizability of the data. In the latter, the results may be mis-stated owing to the simplicity of the analysis.

### *Key words*

Share repurchases, survey, corporate managers, investors, regulation, UK

# Corporate Share Repurchases in the UK: Perceptions and Practices of Corporate Managers and Investors

## 1. Introduction

Share repurchases have become a global phenomenon in capital markets. Previously restricted largely to the US, repurchase programmes have been widely exercised in Europe and elsewhere since the 1990s. In the UK, repurchase activity was introduced and legalised in 1981. Twenty-five years later, in 2006 it is estimated that British companies spent a record £46 billion on buying back their shares (Durrant 2007), a remarkable growth rate of 64% on the previous year, and a notable comparison to the dividend spend of £62 billion in the same year (Connon 2007). Moreover Scholey (2007) reported that, at the turn of the century, the volume of activity in companies listed on the main London Stock Exchange (LSE) and the Alternative Investment Market (AIM), for the first time, exceeded that of their counterparts listed on the US stock exchanges. While the 2008 global financial crisis witnessed a considerable decline in repurchase activity (for year ends between June 2008 and March 2009, FTSE 100 companies reported a fall of some 46% as compared to the same period the previous year), its popularity as compared to dividend payments remained largely unchanged during this period (Prince 2008) and repurchases have since bounced back to the levels of the mid-2000s (Lazonick and Mazzucato 2012). The unprecedented number of companies that issued profit warnings and filed for bankruptcy and the paralysis of the money markets during the crisis may have meant that funds to enact repurchase programmes were simply unavailable.

Against the background of the rising popularity of share repurchases, the investment press has suggested that repurchase activity is often unnecessary and misused and may actually contribute to value destruction rather than value creation (Cox et al 2007). Cox et al (2007) and Mauboussin (2012), for example, commented that the inflated EPS resulting from a repurchase is often naively seen as a value creation when this outcome may simply be a fall-out of the accounting systems of repurchases rather than an indicator of the economic effect of the programme. Similarly, the UK Shareholders Association (UKSA) (2002) argued that repurchases work in favour of institutional shareholders who better understand such products and are able to extract the benefits from them to the detriment of private shareholders. Moreover, following the financial crisis, some institutional investors have noted that the de-equitisation of companies through repurchase programmes may lead to their financial instability and may have also been a small contributing factor to the crisis (Partington 2012). Finally, from a macro perspective, Lazonick and Mazzucato (2012) and Lazonick (2013) commented that repurchases have contributed to the financialization of the economy - extracting value from companies for salient stakeholders while impeding value creation through innovation for the betterment of the economy and the wider society. Given the conflicting views surrounding repurchase programmes, why individual companies engage in such activity and how markets respond to it have been and continue to remain of significant interest.

This study examines the motivations underlying share repurchase programmes in the UK. In particular, it considers the relevance of a broad range of motives associated with repurchases and views about current regulation but emphasises motivations associated specifically with repurchase programmes rather than those linked to income distribution more generally (and by extension to dividend payments). The intensive regulation surrounding repurchases and their recent popularity in which activity levels have surpassed those of the US (where regulation is broadly absent) presents an intriguing financial environment in which to study repurchase activity. On the one hand, the stringent regulatory environment, it would be expected, restricts repurchase activity and the tools are selectively utilised to perform roles

that cannot be performed by dividend payments. On the other, however, the recent heightened activity would suggest a more liberal use with a possibility that regulation plays a limited role to curb company activity. The UK repurchase market remains relatively under-researched whereby not all repurchase-related hypotheses (e.g. gearing) have been examined and for those that have (signalling, taxation and agency theory), the evidence from capital market based studies is mixed.

This study employs a survey approach to examine UK repurchase activity. This approach complements the existing capital market based studies and offers a different perspective from which to understand repurchases (Tufano 2001, Graham and Harvey 2001, Beattie et al 2006, Baker et al, 2012). The survey approach also enables researchers to examine the multiple motivations simultaneously and assess the relative importance of individual motives and in turn offer a more comprehensive understanding of repurchase activity. In addition, to gain a further understanding of repurchase activity, the study supplements managerial views with corporate information. Finally, as an aside, the study surveys the views of the investor community, seeking to address how investors perceive repurchases, relative to companies. While investor-based surveys are increasingly featuring in disciplines such as auditing (for example Dart and Chandler 2013), they are infrequently used in financial management research despite investors playing a crucial role in the market dynamics.

The survey underlying this study was administered between October 2007 and May 2008, just prior to the onset of the global financial crisis. The survey focused on repurchase activity for the time period 2003 – 2007, a timeframe in which UK repurchase activity peaked (Durant 2006). While activity fell during the economic financial crisis in 2008, usage appears to be returning to pre-crisis levels (Mazzucato and Lazonick 2012). Thus, it is likely that the results of the study continue to explain why companies repurchase their shares and how institutional and private shareholders perceive them. Alternatively, even if the underlying motivations of repurchase activity in the post-crisis period differ to those of the pre-crisis period, the results here offer an important benchmark against which to compare new trends in activity and elucidate possible explanations for them.

The remainder of the paper is structured as follows. Section two describes the UK repurchase market while sections three and four present the theoretical bases of share repurchase programmes and prior evidence, respectively. Section five presents the a priori expectations in relation to repurchase motives based on the characteristics of the responding repurchasers and their matched non-repurchasers. Finally, section six describes the research approach adopted, section seven reports the results of the survey, and section eight concludes.

## **2. UK Share Repurchase Activity**

Traditionally, repurchases were considered to be a manipulation of the market that could create perverse incentives and were consequently banned across much of the world (bar the US). UK repurchase activity was legalised in 1981 and companies were and continue to be subjected to high regulation to protect shareholder interests. Presently and as was at the time of the survey reported in this study (2007-8), repurchase activity is regulated by the Companies Act 2006 and the UK Listing Authority (UKLA) Listing Rules. This regulation exists to protect shareholder interests by preventing companies from influencing market behaviours through large transactions and/or inflating share prices through purchases at a premium, and preventing agency concerns between management and shareholders during periods of high information asymmetry. It can be broadly categorised into three groups: (i) the operational requirements; (ii) conditions agreed with shareholders; and (iii) reporting requirements. The UK regulatory framework differs markedly from the traditional hub of repurchase activity, the US, where regulation is broadly absent, but is closely aligned to those of other large stock markets such as France, Switzerland and Germany (Kim et al 2005, Sakinc 2012).

UK statutory regulations place volume, pricing and timing restrictions on repurchase activity. For example, for open market repurchases, the volume cannot exceed 15% of the number of shares outstanding of any class of equity and if it does, the repurchase is treated as a tender offer repurchase. Similarly, the repurchase price for open market repurchases cannot exceed 105% of the average share price five days prior to the repurchase day and companies cannot engage in repurchase activity during 'close periods'. Further, directors and managers are not allowed to trade shares when a repurchase is underway, and companies may only hold up to 10% of any class of listed shares purchased as treasury shares, subject to regulatory and disclosure requirements.

In addition, UK companies can only engage in repurchase activity subject to formal prior approval from shareholders to do so. Shareholder approval is valid for a period of 18 months, and specific terms and conditions under which repurchase activity can take place are also agreed and include arrangements such as: the purpose for which the programmes will be used; the maximum volume of shares that can be repurchased; and the minimum - maximum price range at which they can be repurchased. Finally, companies engaged in repurchase activities need to disclose decisions to engage in open market repurchases and actual enactments to the Financial Services Authority (FSA) acting as the UKLA. Details include the date of repurchase, the number of shares repurchased, and the highest and lowest purchase prices. Companies also have to summarise their volume of repurchase activity and the average prices of repurchases in their annual reports.

### **3. Relevant Theory**

Share repurchase programmes are often closely associated with dividend payments as mechanisms to distribute income to investors. The seminal work of Miller and Modigliani (1961) on dividend irrelevance forms the basis for the motivations underlying the use of corporate share repurchase programmes. Miller and Modigliani (1961) showed that under conditions of perfect and complete markets, financial managers cannot alter the value of their firms by the way in which they return income to shareholders. When the conditions of perfect and complete capital markets are, however, relaxed to reflect real world situations, income distribution may enable managers to enhance the market values of their companies.

Theories that support share repurchases can be categorised as those that support income distribution generally (and by extension dividend payments) and those that support repurchases specifically by creating a different financial position for the company. Given the extensive regulation that surrounds UK repurchase activity, it would appear that UK companies would more likely engage in repurchases to perform roles specifically associated with these tools and not the generic motives associated with income distribution. In other words, companies would be expected to utilise the relatively unregulated dividend payment mechanism to perform roles associated with income distribution more generally, and repurchases to perform roles that cannot be performed through dividend payments.

Principal motivations supportive of repurchases specifically include the (i) undervaluation hypothesis; (ii) gearing hypothesis; and (iii) management of EPS levels (Mitchell et al 2001; Baker et al 2003; Brav et al 2005). The basis of the undervaluation hypothesis is that when managers deem markets to be inefficient and their company to be undervalued, they signal this phenomenon to investors by purchasing their own shares at a discount. Further, in relation to the gearing and EPS hypotheses, repurchases operate to increase the two variables by simply reducing the value and volume, respectively of shares outstanding. With the gearing hypothesis, companies can further increase their gearing levels by funding repurchases with debt. In addition to the core motives, repurchases also enable firms to accumulate shares for re-issue, for example, for employee stock options, and to manage takeover threats by eliminating shareholders with the lowest valuations who are willing to tender in the

repurchase and skewing the distribution of remaining shareholders towards a more expensive pool.

Motivations that support the use of both dividend payments and share repurchase programmes as covered in the literature include: (i) the free cash flow hypothesis; (ii) signalling future performance; (iii) capital structure - investment decision hypothesis; (iv) managing principal-agent problems; (v) managing investor expectations and (vi) taxation hypothesis (Dhanani 2005; Brav et al 2005; Baker et al 2012). Specifically, the free cash flow hypothesis proposes that companies use dividends and repurchases to return surplus cash to investors. The free cash flow hypothesis can also be linked to efficient capital reallocation and the principal agent hypotheses. In the former case, in the absence of value enhancing projects, funds can be returned to investors for them to reinvest them more efficiently. In the latter, returning surplus cash flows to investors prevents its misuse by management and if additional funds have to be sourced to fund investment projects, the companies will likely be subjected to increased monitoring. Importantly, however, even though dividends and repurchases have been identified as suitable vehicles with which to return funds to investors, the capacity in which they are used may vary. Repurchases have been distinguished from dividend payments as flexible tools that companies can delve into intermittently. In contrast, dividends are considered to be stickier with managers reluctant to make downward adjustments. Thus, repurchases are more likely to be used to supplement dividend payments on an as and when basis. The signalling hypothesis postulates that dividend payments and repurchases serve as a useful signalling tool to manage information asymmetry between managers and investors and only the well performing companies will be in a position to afford such payment. Income distribution decisions also enable more efficient capital structure and investment projects are made prior to any returns of funds to investors. Dividend payments and repurchases may also help to meet investor expectations by offering them returns they expect on their investments. Finally, the two mechanisms may be influenced by taxation systems of individual countries as managers attempt to reduce corporate and investor tax charges.

Overall, repurchases may be utilised for a variety of different motives. Whilst most of these motives seek to enhance company value or at least protect investor wealth, the management of EPS levels is an exercise to window dress the accounting ratio and give the impression of an enhanced company value. In the UK, given the stringent regulation surrounding repurchases, they are likely to be utilised selectively to perform roles that dividend payments cannot perform. These relate to undervaluation, gearing and EPS. In addition, given their differing characteristics as compared to dividend payments, they are more likely to be used as a flexible, intermittent tool with which companies return surplus cash to investors.

#### **4. Prior Research**

Prior research into share repurchase programmes has examined the specific motivations underlying the programmes and the extent to which they enhance shareholder value using a capital market based approach or surveys. Research in the US has been particularly prominent reflecting its strong repurchase tradition. Repurchase activity in the UK has been examined only through capital market based studies.

With the exception of the practitioner studies commissioned by Morgan Stanley (Durrant 2007 and Hasell 2007), capital based research in the US suggests that repurchase programmes enhance corporate market value as reflected in the positive reactions from the markets to them and are used to signal undervaluation and influence EPS levels and capital structure decisions (Ikenberry et al 1995, Grullon and Michaely 2002 and Chan et al 2004). The studies do not, however, agree on the level of the positive effect of repurchase programmes and are also uncertain about their roles in returning surplus funds to investors, substituting dividend payments and signalling improvements in future income (Guay and Harford 2000, Fama and French 2001, Chan et al 2004, and Grullon and Michaely 2004). The survey evidence confirms the undervaluation hypothesis and identifies optimising leverage and EPS levels as

important repurchase features of recent times (Wansley et al 1989, Baker et al 2003). Brav et al (2005) who surveyed companies about both their repurchase and dividend policies also noted that investors are perceived to be indifferent between dividend payments and repurchases and managers therefore prefer the latter owing to their flexibility. Mitchell and Robinson (1999) and Mitchell et al (2001) reported similar results for Australian companies though noted that repurchase activity was somewhat more restricted by the associated legal complexities, relatively high transaction costs, and negative investors attitudes towards such programmes.

In the UK, research into repurchase programmes is sparse. Rau and Vermaelen (2002) and Oswald and Young (2004) examined the undervaluation and taxation hypotheses and while both studies noted positive market reactions to repurchase programmes, they reached opposing conclusions about the factors that drove the programmes. Rau and Vermaelen (2002) reported that taxation considerations for pension funds (and not undervaluation) motivated repurchases while Oswald and Young (2004) using more comprehensive data reported the converse results with undervaluation (not taxation considerations) leading repurchase activity.

Oswald and Young (2008) examined repurchase use in an agency theory context on the basis that the distribution of surplus cash flows would reduce the opportunity for management to misuse the funds for personal interests. The authors reported that companies did repurchase programmes to return surplus cash to investors, and that this behaviour was indeed encouraged by other mechanisms to manage agency problems including initiatives to align managerial interests with those of investors and closer monitoring by external shareholders. In contrast, Renneboog and Trojanoski (2011), who examined the decision to distribute funds as well as the choice of payout channel, reported that company decisions to combine dividends with repurchases *increased* with the voting power held by executive directors suggesting that contrary to agency theory, managers with a greater opportunity to pursue 'empire building' activities, chose to return surplus funds to investors.

Finally, Young and Yang (2011) examined the link between repurchase programmes and the presence of EPS performance conditions in executive compensation contracts. The authors reported a heightened activity of repurchases in EPS-contingent compensation arrangements. Such activity, nevertheless, yielded positive net benefits to shareholders; specifically, it reduced manipulation of accounting accruals and also improved shareholders value through a higher overall pay-out level, an increased propensity for a disbursement of surplus funds and a higher propensity to signal undervaluation.

To supplement the capital markets based research, this paper employed a survey approach to understand UK repurchase activity. It canvassed opinions across the range of different motives to assess their relative values, and the regulation surrounding repurchases. The emphasis of the paper, however, is on motives linked specifically to repurchases. Given the stringent regulation, it was expected that UK companies would use repurchases selectively to perform roles that cannot be performed by the relatively unregulated dividend payment mechanism. This position differs markedly from that of the US, as discussed above, where there appears considerable fluidity between dividend payments and repurchase programmes (Grullon and Michaely 2002; Brav et al 2005). The survey targeted repurchasers and matched non-repurchasers and the investor community. While the repurchasers were posed questions specific to their repurchasing activities, all three groups offered generalist opinions on the different motives underlying repurchase programmes and the regulation surrounding UK repurchase activity.

## **5. Further Analysis**

To attain a more detailed understanding of motives specific to repurchase activity, following Bancel and Mittoo (2004), Dhanani (2005) and Beattie et al (2006), further analysis was performed on respondent views with additional corporate data. Two approaches were adopted for this purpose to gain a fuller understanding of how these motivations played out in practice. In the first instance, the respondent data was analysed by the stock exchange listing of the firms. Following prior research (Clatworthy and Peel 1997; Dhanani, 2005; Marshall et al 2013), the rationale here was that AIM listed companies face different circumstances to those listed on the main market, and consequently use repurchase programmes in different contexts to them. AIM companies tend to be smaller and younger with high growth opportunities. They also tend to find raising debt more difficult and have a greater propensity to experience high information asymmetry as value of their growth opportunities may not be fully apparent. In the context of repurchase programmes, our a priori expectations were as follows. AIM companies, as compared to their counterparts listed on the main market, were:

- i. less likely to use repurchases to return surplus cash flows to investor as they have a lower propensity to hold surplus cash (excess cash flow hypothesis); and
- ii. less likely to use repurchases to gear up as they often find raising debt difficult and a high gearing ratio would simply exacerbate this difficulty (gearing hypothesis), but
- iii. more likely to use repurchases to signal undervaluation as they have a higher propensity to experience undervaluation (undervaluation hypothesis).

The stock exchange listing was not seen to be an intermediary influence on the role of repurchases to influence EPS levels.

In the second instance, supplementary market data from financial databases was collected to once again assess how the repurchase specific motivations played out in practice. Here specific financial characteristics of the repurchasers who cited specific motivations were compared to those of their matched non-repurchasers to determine if the repurchases appeared justifiable. By eliminating all cases in which management believed that the individual motive did not apply but where the repurchase activity may have nevertheless taken place and influenced data relating to the motive (for example through higher gearing or EPS levels), the approach strengthened the results reported as they pertained specifically to the motivation identified. The matched non-repurchasers need not necessarily have responded to the survey as the remit of the analysis was to compare the financial characteristics of the two groups which were acquired via independent databases.

The specific a priori expectations were as follows.

- i. Excess cash flow hypothesis: repurchasers were expected to demonstrate significantly higher levels of free cash flow than their non-repurchasers counterparts in the year of repurchase to fund the repayment programmes. Consistent with the definition in Thomson One Banker, free cash flow was defined as the net cash flow from operating activities less capital expenditure for the year and dividend payments to ensure that companies had met their asset requirements and fulfilled their sticky dividend payments.
- ii. Undervaluation hypothesis: measuring undervaluation in terms of the market to book ratio, repurchasers were expected to have lower market-to-book ratios than their non-repurchaser counterparts during the year of repurchase. This comparison was made in relation to the lowest monthly market-to-book ratio for the repurchasing year. At the same time, by the end of the financial year, market-to-book ratios were likely to have recovered as a result of the repurchase activity and the end of year ratio for the

- repurchasers likely to have converged to the mean of those of their non-repurchaser counterparts.
- iii. Gearing hypothesis: repurchasers were expected to be under-g geared (exhibit lower gearing ratios than their matched counterparts) at the start of the year of the repurchase but converge to their matched counterparts' average ratios by the end of the year as a result of the repurchase activity. Gearing was defined as the debt to equity ratio of firms.
  - iv. EPS hypothesis: repurchasers were expected to have underperformed relative to the non-repurchasers during the repurchase year or in the previous year and used repurchases to remedy this situation. Thus, the repurchasers concerned were expected to be underperformers relative to their matched non-repurchasers at time  $t - 1$ , but closer to the non-repurchasers average ratios at time  $t - 0$  as a result of the repurchase activity.

## 6. Research Approach

A postal questionnaire survey was used to gather data for the study. Surveys are becoming increasingly popular in financial management research (see for example, Bancel and Mittoo 2004, Dhanani 2005; Beattie et al 2006; Baker et al, 2012) as they enable researchers to test the hypotheses set directly by asking corporate managers and market participants about them and as such complement the quantitative approach of capital market based studies (Tufano 2001 and Graham and Harvey 2001). The survey, conducted from October 2007 – May 2008 (just prior to the announcement of the global financial crisis) was administered to a set of repurchasing companies, a matching sample of non-repurchasing companies and a group of corporate investors, comprising institutional and private investors. The timing of the survey reflected a period in which repurchase activity amongst UK firms had escalated.

<Insert Table 1 here>

Table 1 summarises various aspects of the survey by recipient group. Repurchasers were defined as all non-investment companies engaged in repurchase activity between 2003 and June 2007 inclusive. They were identified using the LSE website. Given that repurchases may be used in an intermittent fashion, a multi-period timeframe to capture repurchasers and their motivations was considered suitable. A four year time frame leading to the period of the survey was considered sufficiently recent for managerial responses to bear a relevance; sufficiently long to capture a significant level of repurchase activity; and also manageable in terms of data collection – identifying the repurchasers for each calendar year and their non-repurchaser equivalents. Non-repurchasers, companies not engaged in repurchasing shares during this period, were matched to the repurchasers based on the stock exchange listing, industrial sector and company size by market value (in that order). In anticipation of a lower response rate from non-repurchasers, an additional set of companies were added to the list, to capture similar sectors and size as the repurchaser companies, to the extent possible. A small proportion of questionnaires were returned for reasons including delistings and mergers, generating final sample sizes of 325 repurchasers and 390 non-repurchasers.

As an aside, the sample for the investor-based survey, which formed a smaller part of the overall study was determined by categorising investors as institutional and private. The private shareholder list was made up of a sample of 400 shareholders randomly selected from the bulk shareholder list for one FTSE 100 company. A decision to target a large sample without a reminder was made in anticipation of a relatively low response level to the original and reminder mail shots. An institutional investor sample of 200 was generated from multiple databases to capture diverse groups of investors, namely investment trust companies, unit trusts, unit trusts and open ended investment companies (OEICs), assurance companies and

pension funds. Investment trust companies were drawn at random from those quoted on the main market and the AIM. Unit trusts and OEICs were sought from the Financial Express website that provides details for these organisations and a list of assurance companies was determined from the Financial Analysis Made Easy (FAME) database using a Standard Industry Classification (SIC) code for insurance companies and subsequently verified by the companies' substantial investments. Finally, the pension fund sample was purchased from a company that holds details of all UK pension funds; the pension fund sample comprised the top 50 funds by capital value. In total, a list of 600 investors was drawn up. Once again, a small proportion of questionnaires were returned for reasons including sub-contracting investment decisions to hedge fund managers and a failure of hold shares in the case of institutional and private shareholders. The final sample sizes were 187 institutional investors and 395 private investors.

A primary questionnaire for repurchasing companies, which was subsequently amended to suit the non-repurchasing group and investor community, was developed. It was pilot-tested by two practitioners and three academics who commented on the content, length and layout. The recommendations, all minor adjustments, were incorporated into the final version. The questionnaire content was as follows: a section on background information on repurchasing arrangements at the repurchasing companies; two sections on repurchase motivations of which one sought managerial views in general, and the second specifically in relation to their firm for the period 2003 – 2007; a section relating to repurchase regulation; and a final section which invited additional comments from participants. The non-repurchaser and investor questionnaires were adjusted to suit the different audience. They were shorter and inquired mainly into basic characteristics of the respondents and their generalist views on repurchase motivations and regulation. Mailshots were phased, starting October 2007 and ending May 2008. Once lists and addresses of recipients were finalised, the relevant questionnaires were dispatched. The order of list compilation was repurchasers, non-repurchasers, institutional and private shareholders. The reminder mail shot for the three former groups took place six – eight weeks after the first attempt.

To elicit a higher response rate, the questionnaires were sent to named individuals at the selected organisations and personally to individual investors. A postal survey conveying a more personal approach was also favoured in place of an online survey for similar reasons. The overall response rates for the repurchasers, non-repurchasers and investor community were 26%, 11% and 12%, respectively. The poorer response rate from the non-users and investors was anticipated and larger sample sizes were employed to address this to the extent possible. Of the respondents, a proportion declined to participate, generating a final useable response rate of 12% overall (separated into 20%, 8% and 12%, respectively for repurchasers, non-repurchasers and investor community). To test for respondent bias, differences in company size (as measured by market value and turnover) of the early and late respondents and the core investment objectives of the early and late responding institutional investors (as collected in section one of the questionnaire) were statistically examined. No statistically significant differences were found, indicating that the results reported below are generalizable to the corporate and institutional investor populations. In the absence of a second mailshot, there was no way to test for bias amongst the private investors. A large majority here identified themselves as reasonably literate about share repurchases and thus the results may be biased upwards towards more financially literate private investors.

For the further analysis, the additional market based data to test for the four core repurchase specific motivations were collected. The data were collected specifically for the responding repurchaser companies that cited the specific hypothesis as motivating their repurchase and their matched non-repurchaser companies (regardless of their participation in the survey). The matching approach ensured that the user companies' circumstances were compared with as close a match (by exchange, industry and size in that order) as was possible. Accounting data for individual companies for the repurchasing years were collected from the FAME database

but due to the patchiness of the information collected, particularly in relation to EPS, they were supplemented with details from Thomson One Banker. The market-to-book ratios were collected from Datastream. One problem encountered here was that in a significant proportion of companies (45%), the repurchasing year(s) and consequently, the repurchasing motives, which were assessed in terms of calendar years did not match the financial reporting periods, which formed the basis of the accounting data. When this was the case, data from the financial reporting period which offered the greatest correspondence to the repurchase year were collected. Thus, for companies with a reporting year ending in March, accounting data for a repurchase in 200X were collected from financial year April 200X to March 200X+1 (i.e.  $\frac{3}{4}$  200X +  $\frac{1}{4}$  200X+1), and similarly, for a company with a reporting year ending in September, accounting data for the same repurchase year were collected from financial year October 200X-1 to September 200X (i.e.  $\frac{1}{4}$  200X-1 +  $\frac{3}{4}$  200X).

## **7. Results**

This section presents the results of the survey. Section 7.1 presents the core characteristics of the responding companies and Section 7.2 reports on the core motives that influenced UK repurchase activity. Section 7.3 examines the motives linked specifically to repurchase programmes. Finally Section 7.4 presents the respondents' views on regulation surrounding UK repurchase activity.

### *7.1 Core Company Characteristics*

#### *7.1.1 Basic Characteristics*

Table 2 summarises the basic financial and market characteristics of the repurchasing and non-repurchasing groups. Repurchasing company respondents on average were larger than non-repurchasers. This difference is perhaps explained in terms of larger companies having access to more resources and therefore being better equipped to engage in repurchase programmes. Seventy-one percent of the respondents were listed on the main market. Further, consumer products and services represented the largest proportion of the total sample and the repurchase/non-repurchase subcategories, and utility companies had the lowest representation and of the six companies participating, two engaged in repurchase activity.

<Insert Table 2 here>

Repurchasing companies engaged in repurchase programmes on an intermittent basis, using them generally for one or two years over the 4.5 year period. Further, open market repurchases were the most popular form of repurchase activity. The most popular method with which to finance the repurchase programmes was existing cash balances (81%) although one quarter and one fifths of respondents relied on short-term and long-term debt, respectively.

Despite the increasing popularity of share repurchase programmes, only one third of the companies surveyed had formalised repurchase policies. Most companies, however, sought approval from shareholders for their use as a matter of routine rather than to enable a specific repurchase programme, and slightly over half employed external advisors to guide their repurchase programmes. In most cases, the latter position was occupied by company brokers and financial advisors to advise on market perceptions, although companies occasionally sought advice from legal experts. Three non-repurchasing participants had repurchased shares prior to 2003 but a much higher proportion had sought approval to engage in these programmes without actually enacting them: 48% prior to 2003 and 68% by 2007.

### *7.2 Motivations Underlying Actual Repurchase Activity*

Table 3 presents the results for the motivations underlying UK repurchase activity. All core theoretical motives were considered. Responses from the companies were ranked in order of

popularity. With the exception of the most popular motive, responses were tested for a statistically significant difference as compared to the next most popular motive and grouped such that all responses that were statistically indifferent to the next most popular motive were grouped together. Four groups were identified.

<Insert Table 3 here>

Most repurchasing companies identified multiple reasons for engaging in share repurchases. The mode value for the number of motivations was four. Whilst accepting that companies may have engaged in repurchase programmes at different points in time (possibly within one year) for different reasons, it remains possible that multiple motivations may have driven a single repurchase as reported in Young and Yang (2011). For example, companies may have sought to signal undervaluation and/or return excess cash whilst also seeking to improve their EPS levels (Young and Yang 2011) or similarly, companies seeking to optimise their gearing levels or signal undervaluation may have also benefited from allocating resources efficiently.

As per expectations, motives driving UK repurchase activity stemmed principally from theories related to repurchases specifically rather than generic theories of income distribution. All four of the motives in the first two groupings were associated with repurchases specifically.

Seventy three per cent of the 66 companies cited the opportunity to return excess cash to shareholders as a motivation for a repurchase. This was by far the most popular motivation, with the next most popular motivation being statistically significantly different from it. The buoyant economic climate at the time (before the 2007-8 crisis) may have been responsible for the availability of the surplus cash flows that companies chose to return to investors. Importantly, repurchases were not used as a replacement for dividends (3% support) and the two mechanisms offered distinctly different attributes for returning surplus cash to investors.

The need to improve the reported EPS level (49%); signal undervaluation of company shares (39%); and optimise the firms' gearing ratios (36%) followed, and these three motivations were grouped together whereby the second and third explanations were not statistically significantly different from those ranked higher than them. Motivations in group three were increasingly less popular, present in fewer than one third of the companies and included explanations such as responding to investor expectations and enabling capital structure and investment decisions. The remaining motives such as managing agency problems featured even less frequently.

Overall, the survey results support the findings of Oswald and Young (2004) in relation to the undervaluation hypothesis and Young and Yang (2011) in relation to the distribution of surplus cash and management of EPS. They also highlight the role of repurchases in optimising corporate gearing, a feature not examined in prior capital markets based research. Importantly, in combination, they suggest that UK repurchase activity is influenced by motives linked specifically to repurchases. This situation differs to that of the US where the choice between dividends and repurchases appears more fluid (Grullon and Michaely 2002; Brav et al 2005). The next section examines the four core motivations underlying repurchase activity in more detail.

### 7.3 *Examination of Individual Motives linked specifically to Repurchase Programmes*

This section is divided into four sub-sections, one for each of the four core hypotheses. They include results of the further statistical analysis based on the stock exchange listing of the responding repurchasers and the financial characteristics of these firms and their matching

non-repurchasers to better understand UK repurchase behaviour (Panels A, Tables 4 –7). Given the small sample size and the nature of the data, non-parametric tests, as detailed in the tables, were performed. Moreover, generalist opinions of all responding companies and investors are also considered in this section (Panels B, Tables 4 – 7) on statements of specific motives posed to companies and investors. Opinions were sought using a Likert scale of 1 – 5 (with 1 strongly disagree and 5, strongly agree) and qualitative comments offered by respondents. Further, the views of repurchasers and non-repurchasers, AIM and main market companies, and companies and investors were compared.

### 7.3.1 *Returning Surplus Cash to Investors*

<Insert Table 4 here>

In line with expectations that the AIM listed firms are unlikely to have surplus cash to return to investors, significantly fewer managers from these firms (50%) as compared to those from the main market (83%) cited returning surplus cash to investors as a repurchase motivation. These results were statistically significant at the 1% level. Further, on comparing the free cash flow levels of the repurchasers who cited this motive as driving their activity to those of the matched non-repurchasers, as expected, repurchasers had statistically significantly higher free cash flows (at the 1% level). Overall, these results suggest that repurchases were used in an appropriate context and offer further support for the cash flow hypothesis.

Looking into the generalist views of respondent firms and investors (Panel B), this motivation was once again the most popular. The corollary statement to this that repurchases are used to replace dividends on the other hand was the least popular from the 27 statements posed to respondents. Comparing views of the different categories of respondents (AIM and main market companies, repurchasers and non-repurchasers, companies and institutional investors and companies and private investors), while all four categories generated statically significant results, the significance was owed to the strength of the levels of agreement/disagreement cited rather than the actual opinion around the motive. For example, while both repurchasers and non-repurchasers were supportive of the motive (mean values of 4.20 and 3.73, respectively), repurchasers were more enthusiastic. Overall the results suggest companies and investors alike looked upon repurchases as a distinctive income distribution mechanism, separate from dividends, and the repurchasers, given their favourable financial positions, utilised these financial management tools.

### 7.3.2 *Increasing Corporate Gearing*

To further assess the gearing hypothesis which has previously not been examined in a UK context, (i) the proportions of companies on the main market and the AIM that cited this motive as a reason for their repurchase, and (ii) the gearing levels of the responding repurchasers with those of their matched non-repurchasers prior to the repurchase (time  $t - 1$ ) and following the repurchase (time  $t = 0$ ) were compared. As per expectations, companies on the main market used repurchases to influence gearing ratios more readily than their AIM counterparts (46% versus 15%, results significant at the 5% level). At the same time, gearing levels of repurchasers were significantly lower than those of their matched non-repurchasers (results significant at the 5% level) prior to the repurchase and while they continued to be lower in the year of repurchase, the difference between the two groups had narrowed and was no longer statistically significant. Following the 2008 financial crisis, the media suggested that repurchases may have contributed to the crisis in a small way by destabilising the equity base of companies. Our results, here, whilst based on a simplistic statistical analysis that looks at one point in time and compares the gearing outcomes only across matched pairs, provides little support for this view. Even by enacting repurchases, the repurchasers continued to be relatively under-g geared. UK regulation that restricts the volume of shares repurchased may in part explain these results.

<Insert Table 5>

Considering the generalist views of overall respondents, companies were generally supportive of this motive (mean 3.35). Repurchasers and non-repurchasers shared the same general views (Panel B) suggesting that repurchases were driven not by a difference in attitude between them, but rather their corporate circumstances. Moreover, once again, differences arose between firms on the main market and the AIM. These differences offer further evidence on

the views presented above. Firms on the main market cited increasing gearing with repurchases as a suitable motive while their AIM counterparts disagreed with this view. Finally, companies and investors broadly agreed on the role of repurchases for this particular motive (results insignificantly different), although investors seemed less enthusiastic about this motive than company managers.

Overall, the different respondent groups support the gearing hypothesis and managerial actions of repurchaser firms also appear appropriate with the tools being used to gear upwards.

### 7.3.3 *Signalling Undervaluation*

Once again, in accordance with a priori expectations that AIM listed firms are more likely to suffer from undervaluation than firms listed on the main market, a statistically significantly higher proportion of AIM managers (70%) used repurchases to signal undervaluation as compared to managers on the main market (26%) (result significant at the 1% level). Indeed, upon considering the generalist views of the respondents (where the motive was broadly supported with a mean score of 3.34), only the results between companies on the AIM and the main market differed significantly from all the dichotomous groups considered (Table 6, Panel B). These differences lay with two statements: one related to market inefficiency and the other to the role of repurchases to convey such inefficiency to investors (Panel B). Specifically, AIM firms expressed a much higher incidence of market inefficiency than their counterparts listed on the main market; and (ii) cited undervaluation as a suitable motive for a repurchase (mean 3.92) in comparison to managers from the main market who expressed a neutral view (3.13).

Further, analysis of the market to book value ratio as a proxy for undervaluation during the repurchase shows that the lowest monthly ratios for the repurchasers were statistically significantly lower than those of the matched non-repurchasers; repurchasers were therefore potentially undervalued. At the same time, by the end of the period, the ratios of the repurchasers had recovered as they converged more closely to those of the non-repurchasers. This change could at least in part be attributed to repurchase activity. Indeed, the absence of a significant difference in the views of responding repurchasers and responding non-repurchasers to the generalist statements posed (Panel B) suggests that it was not manager perceptions that determined repurchase use but as seen here, the financial circumstances faced by the companies.

Finally, comparing the views of investors and companies, both institutional and private investors, like companies agreed that overall repurchases can serve as a suitable signal of undervaluation. Overall, further analysis of the survey data suggests that repurchases are recognised as a suitable mechanism with which to signal undervaluation. Moreover, they were once again used suitably in this capacity – used by firms listed on the alternative market and those with significantly lower market to book value ratios as compared to their matched non-repurchaser counterparts. These results support those of Oswald and Young (2004) but negate those of Rau and Vermaelen (2002). Even though repurchase use in the UK is disallowed during ‘closed periods’ when information asymmetry is likely to be at its highest, there appears to be potential for the tool in this capacity at other times. Indeed, managers believe that the strict regulation adds credibility to repurchases (Table 8 below) and in this capacity as Hackenthal and Zdantchouk (2006) note may enable repurchases to serve as a more powerful signalling tool.

<Insert Table 6 here>

#### 7.3.4 *Influencing EPS Level*

Efforts to influence EPS levels were the second most popular motive of a repurchase. No differences by company were anticipated and this was indeed confirmed by the results reported. Whilst a higher proportion of firms listed on the AIM than those listed on the main market used repurchases specifically for this purpose, the results were not statistically significant.

Results for differences in EPS performance of repurchasers and non-repurchasers differed from expectations. Contrary to expectations, repurchasing companies that sought to influence EPS levels were not underperformers relative to their matched counterparts in the year prior to the repurchase period (average EPS of 0.26 versus 0.2) and they excelled even further in the year of the repurchase (average EPS of 0.30 versus 0.14). While the differences in the EPS levels observed between the two sets of companies were not statistically significant in the two time periods examined, the results suggest that converse to expectations repurchasing firms did not use repurchases to raise their performance relative to that of their counterparts. Consequently, other factors may have played a role. Possibilities include raising performance to meet analyst forecasts or influence directors' EPS based remuneration. Regardless, these explanations, if valid, suggest that repurchases were used simply to manipulate accounting ratios and do not add value for companies.

An alternative view for the EPS hypothesis is that the responding companies may have noted this motive simply because the opportunity to influence the EPS ratio existed as the companies engaged in repurchase activity for other organisational agendas. Indeed, upon analysing a multi-motive agenda for all repurchasers that cited influencing EPS levels as a motive, with the exception of one firm, all others had also cited at least one of the other three key motives as driving their repurchases. The final firm had also cited multiple motives but these related to market mechanisms such as influencing share liquidity and raising shares for a reissue.

<Insert Table 7 here>

Results in Panel B that report on the generalist opinions of companies and investors are interesting. While no significant differences were identified between the views of repurchasers and non-repurchasers and the main market and AIM managers, significant differences arose between the views of investors and companies. Managers as compared to institutional investors expressed stronger views (rather than a difference in opinion) that repurchases could be used to manage EPS levels. The somewhat dampened view of the institutional investors here may be explained by the additional comment that several institutional investors noted in the comment box. Respondents explained that they would simply discount any effects to EPS that resulted from a repurchase. In other words, as predicted by Grullon and Ikenberry (2000), institutional investors were well versed with the accounting concerns of repurchases as raised by Cox et al (2007) and Mauboussin (2012) and accounted for them when assessing company performance. Linking these results to Young and Yang (2011), to the extent that the influence of repurchases on EPS levels discourages companies from engaging in other window dressing tactics, markets are likely to receive information that accurately represents corporate circumstances.

Addressing the position of private investors, results were similar to those of institutional investors: managers expressed much stronger views than investors. However, to the extent that the financial literacy of this investor group may be limited, there remains scope for companies to mislead them with heightened EPS levels. There are two possible explanations for the limited knowledge base of private investors. One, as mentioned earlier, the fact that the respondents felt comfortable to participate in the survey suggests that they were more financially literate than the general pool of investors. Two, the participants themselves who,

on average, described their knowledge of repurchase programmes as reasonable, it is likely overstated it as they commented that they relied on the regulatory process that requires shareholder approval as an educational opportunity to learn about repurchases from managers (Table 8, below).

#### 7.4 *Repurchase Regulation*

<Insert Table 8 here>

Finally, this section draws on the views between companies and investors in relation to repurchase regulation (Table 8). Managers were content with existing regulation, believing that they did not curb their repurchase activity but added credibility to the tools. At the same time, they believed that the regulation had prevented the overuse of repurchases and protected investor value.

Institutional investors broadly echoed the views of managers. In contrast, private investors expressed views that were statistically significantly different. Specifically where managers disagreed with statements that suggested that existing regulation was either restrictive or insufficient, private investors expressed neutral views. Whilst these differences in opinion are not fundamental (such as agreeing with statements and disagreeing with them), the neutral views of private investors perhaps reflect an absence of a sound understanding of repurchase programmes. This conclusion is further supported with the private investors voicing that the process of seeking approval from investors offered an educational opportunity for them. Such a position as recognised by UKSA makes private investors more vulnerable. They may, for example, be easily influenced by managers and may readily consent to their plans to engage in repurchases, and as mentioned above, may not fully appreciate the non-value adding role of repurchases through manipulating accounting information.

### **8. Discussion and Conclusion**

This study examined the motivations underlying repurchase activity in the UK. Specifically, the study canvassed views of managers and investors on a wide range of motives and regulation surrounding repurchases, although the focus of this paper is on the motives linked specifically to repurchases and not generalist theories of income distribution. The four most popular explanations for repurchase use cited by managers actively engaged in repurchases were returning surplus cash to investors, signalling undervaluation and influencing gearing and EPS levels. In the former case, repurchases were used in a different capacity to dividend payments – on an intermittent, flexible basis as opposed to a regular, stickier basis. These results are consistent with those of Oswald and Young (2004), Young and Yang (2011) and Rennebourg and Trajonawski (2011) but negate those of Rau and Vermaelen (2002). They also suggest that UK repurchase practices differ from those of the US where there appears to be more fluidity between dividends and repurchases (Grullon and Michaely 2002). The extensive use of repurchases in the UK, where levels surpassed those of the US therefore seems surprising and needs to be further investigated. One possible explanation is that just as US firms are shying away from dividend payments, they are shying away from repurchases. UK companies on the other hand have an appetite for both dividend payments and repurchases.

Secondly, further analysis on the excess cash flow, undervaluation and gearing hypotheses provided further support for these hypotheses. Here, assessing motives by the listing status of the respondent repurchasers and the financial characteristics of these companies and their matched non-repurchaser counterparts suggested that repurchases were used in appropriate circumstances for all three hypotheses. Moreover, a comparison of the generalist views of responding repurchasers and responding non-repurchasers and managers on the AIM and main market lent support for the hypotheses. All responding firms (repurchasers and non-repurchasers, for example) supported the hypotheses in general terms and it was the corporate

circumstances that determined whether firms ultimately enacted repurchases. Similarly, where differences were anticipated between AIM firms and their main market counterparts, they materialised for both the responding repurchasers and their specific motivations and for responding firms and their opinions to generalist statements. Investors were also agreeable to the use of repurchases for these motives.

The EPS hypothesis was the second most popular motive cited by managers of repurchases. Interestingly, companies who cited this motive were not underperforming (in EPS terms) relative to their matched competitors and factors other than this influenced repurchase use. Possible explanations include managerial self-interest and meeting analyst forecasts, the non-value adding outcomes. Alternatively, companies may have enacted repurchases for other purposes and enhancing EPS levels may just have been a by-product that they benefitted from and recognised. Indeed all but one firm who expressed their intentions to use repurchases for this purpose also cited at least one of the other three core motives as influencing repurchase practice. These findings tie in with Young and Yang (2011) who also noted that the EPS motive was supported by value enhancing motives. Investors, both institutional and private were less enthusiastic about this motive than managers. While the former, it was clear, recognised the window dressing outcomes and discounted them when assessing company performance, private investors who are more likely to have limited financial literacy may be vulnerable to such window dressing practices, a concern frequently raised in the repurchase literature (Mauboussin 2012, Lazonick and Mazzucato 2012 and Lazonick 2013). Indeed, their limited literacy was apparent through their reliance on managers to educate them about repurchases and their neutral views on repurchase regulation which differed from both the views of managers and institutional investors.

Limitations of a study such as this should be acknowledged when interpreting the results. First, it is assumed that the respondents were honest in their views and did not seek to offer responses that would be perceived as 'popular' or 'right'. Second, the sample sizes, particularly for the investor community were relatively small, introducing a scope for bias, even though the significance tests between early and late respondents suggested that the results were generalizable. A larger sample size, particularly of investors, should be used in future research. Finally, the univariate analysis based on company information (Section 5), posed three limitations. First, the variables used were likely to have been influenced by a range of different factors and not only repurchase programmes, which our simplistic analysis overlooked. The price element in the market to book value ratio used as a measure of undervaluation, for example, would have been influenced by multiple industry specific and company specific factors and not just repurchase activity as assumed in this study. Second, attempts to overcome the mismatch between the repurchasing years and the financial reporting periods from which the additional data were collected may have been inaccurate and influenced the results reported. Finally, to ensure that the survey was not unnecessarily long, repurchasing companies were asked about their repurchase motives for the entire study period of 2003 – 2007, rather than for each individual repurchasing year. Thus, for the 24% of companies that had repurchased their shares multiple times in the study period, it was not possible to identify which motive related to which year and so it was assumed that all the motives related to all the repurchasing years.

Notwithstanding these limitations, the survey approach as employed in this study offered a novel way with which to understand repurchase activity. It should be encouraged in future financial management-type research as a complimentary method to traditional capital markets based studies. As apparent from this study, this approach enables researchers to examine multiple hypotheses in a single study and therefore determine their worth relative to one another. Further, it offers them the opportunity to capture and compare the views of multiple interested parties (in this study repurchasing/non-repurchasing companies; main market/AIM companies; and managers and investors) and supplement these views with additional secondary data, all of which shed additional light on the topic examined.

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Table 1: Key Features of the Questionnaire Survey

Survey Feature	Target Audience			
	Companies	Companies	Investors	Investors
	Repurchasers	Non-repurchasers	Institutional	Private
Sample population	Repurchasers 2003 - 2007	Non-repurchasers 3003 – 2007 Matched to repurchasers by listing, sector and size (in this order)	Investment trust companies Unit trusts and open ended investment companies Assurance companies Pension funds	Private shareholders of one FTSE repurchasing company
Sample population numbers <sup>1</sup>	338 reduced to 325	400 reduced to 390	200 reduced to 187	400 reduced to 395
Questionnaire content	Background information Repurchase motives: generalist Repurchase motives: specific Regulation Commentary box	Background information Repurchase motives: generalist Regulation Commentary box	Background information Repurchase motives: generalist Regulation Commentary box	Background information Repurchase motives: generalist Regulation Commentary box
1 <sup>st</sup> / 2 <sup>nd</sup> mailshot <sup>2</sup>	1 <sup>st</sup> and 2 <sup>nd</sup>	1 <sup>st</sup> and 2 <sup>nd</sup>	1 <sup>st</sup> and 2 <sup>nd</sup>	1 <sup>st</sup> only
Notes				
<sup>1</sup> States the original number of recipients in the group. This number fell as in a number of companies, the audiences targeted had merged, delisted etc. and investors no longer held shares or had passed the investment responsibility onto a third party.				
<sup>2</sup> Only one mailshot was sent to private investors. In anticipation of a low response rate, it was deemed more appropriate to target a larger population once than a smaller one twice.				

Table 2: A Summary of the Corporate Respondents' Financial and Market Characteristics

<i>Panel A Financial Characteristics</i>									
	<i>All Companies</i>			<i>Repurchasers</i>			<i>Non-Repurchasers</i>		
	<i>Mean</i>	<i>Max</i>	<i>Min</i>	<i>Mean</i>	<i>Max</i>	<i>Min</i>	<i>Mean</i>	<i>Max</i>	<i>Min</i>
	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>
Total Assets	14,342	666,947	5	19,728	666,947	5	2,085	11,384	8
Market Capitalisation	5,765	134,376	5	7,843	134,376.	5	1,341	7,069	8

*Notes: Market Capitalisation at 31/12/2007; Turnover and Total Assets for year ending 31/12/2007 (or closest to)*

<i>Panel B Market Characteristics</i>						
	<i>All Companies</i>		<i>Repurchasers</i>		<i>Non-Repurchasers</i>	
	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>
<i>Market</i>						
Main Market	69	71.1	46	69.7	23	74.2
Aim	28	28.9	20	30.3	8	25.8

<i>Panel C: Industry</i>						
<i>Consumer</i>	59	60.8	38	57.6	21	68.8
<i>Financials</i>	9	9.3	8	12.1	1	3.2
<i>Industrials</i>	13	13.4	10	15.2	3	9.7
<i>Technology</i>	10	10.3	8	12.1	2	6.5
<i>Utility</i>	6	6.2	2	3.0	4	12.9

Table 3: Motivations Underlying Actual Share Repurchases

Panel A: Actual Motivations Underlying Repurchases	Repurchasers n = 66	Grouping
(Likely) Motivational Factors	%	
to return excess cash to investors	73	1
to improve the firm's reported EPS	49	2
to signal undervaluation of the company's shares to investors	41	2
to increase the firm's gearing ratio	36	2
in response to investor expectations	27	3
to facilitate capital structure and reinvestment decisions by introducing a flexible cash distribution mechanism	27	3
to increase share price	26	3
to invest in the best available investment opportunity at the time	20	3
to signal an expected improvement in future performance to investors	18	3
to provide shares for reissue	18	3
in response to falling markets	9	4
to improve the liquidity of the shares in the market	6	4
to manage the perception that funds may otherwise be misused internally	6	4
to protect against a potential takeover	6	4
to replace dividend payments	3	4
in response to market trends	2	4

Note: Grouping for the repurchasers is based on statistical difference at the 10% level using the Mann Whitney test between the specific motive and the immediately higher ranked motive.

Table 4: Returning Surplus Cash to Investors

**Panel A: Further Analysis by Stock Exchange Listing and Financial Information**

<i>Company Stock Exchange Listing</i>	<i>Main Market (%)</i>	<i>AIM (%)</i>	<i>Significance (Chi<sup>2</sup>)</i>
	83	50	***
<i>Excess cash flow positions:</i>	<i>Repurchasers</i>	<i>Matched Non-repurchasers</i>	<i>Significance (Mann Whitney)</i>
End of year free cash flow/total assets at time t	0.1660	0.0383	***

**Panel B: Generalist Views of Companies and Investors**

## Statement 1: Share repurchases offer a flexible means to return surplus cash

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	4.05	0.86	85	6	1
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
<i>Repurchasers versus non-repurchasers</i>	<i>Repurchasers</i>	<i>Repurchasers</i>	<i>Non-repurchasers</i>	<i>Non-repurchasers</i>	<i>Significance (T test)</i>
	4.20	0.89	3.73	0.69	**
<i>Main Market versus AIM</i>	<i>Main Market</i>	<i>Main Market</i>	<i>AIM</i>	<i>AIM</i>	<i>Significance (T test)</i>
	4.19	0.77	3.68	0.99	***
<i>Corporate versus Institutional</i>	<i>Corporate</i>	<i>Corporate</i>	<i>Institutional</i>	<i>Institutional</i>	<i>Significance (T test)</i>
	4.05	0.86	3.68	0.95	*
<i>Corporate versus private</i>	<i>Corporate</i>	<i>Corporate</i>	<i>Private</i>	<i>Private</i>	<i>Significance (T test)</i>
	4.05	0.86	3.28	1.19	***

## Statement 2: Share repurchases are used to replace dividends

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	1.71	0.77	3	91	10
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
<i>Repurchasers versus non-repurchasers</i>	<i>Repurchasers</i>	<i>Repurchasers</i>	<i>Non-repurchasers</i>	<i>Non-repurchasers</i>	<i>Significance (T test)</i>
	1.76	0.77	1.60	0.77	-
<i>Main Market versus AIM</i>	<i>Main Market</i>	<i>Main Market</i>	<i>AIM</i>	<i>AIM</i>	<i>Significance (T test)</i>
	1.69	0.83	1.77	0.59	-
<i>Corporate versus Institutional</i>	<i>Corporate</i>	<i>Corporate</i>	<i>Institutional</i>	<i>Institutional</i>	<i>Significance (T test)</i>
	1.71	0.77	1.68	0.88	-
<i>Corporate versus private</i>	<i>Corporate</i>	<i>Corporate</i>	<i>Private</i>	<i>Private</i>	<i>Significance (T test)</i>
	1.71	0.77	2.83	1.27	***

Notes: Panel A analyses further the specific motive by the listing status of the companies and the financial data on the responding repurchasers and their non-repurchasing counterparts. Panel B presents the generalist views of the respondent companies and investors on statements associated to the motive. Grouping was determined by statistically comparing the mean score of the statement to the next ranked statement. If a significant difference materialised, a new group was created. Further, the respondent views are analysed by repurchasing characteristic, stock exchange listing and company view versus investor view. \*\*\*, \*\* and \* refers to significance levels of 1, 5 and 10%, respectively.

Table 5: Increasing Gearing

**Panel A: Further Analysis by Stock Exchange Listing and Financial Information**

<i>Company Stock Exchange Listing</i>	<i>Main Market (%)</i>	<i>AIM (%)</i>	<i>Significance (Chi<sup>2</sup>)</i>
	46	15	**
<i>Gearing (%)</i>	<i>Repurchasers</i>	<i>Matched Non-repurchasers</i>	<i>Significance (Mann Whitney)</i>
End of year debt to equity ratio, time t -1	52	73	**
End of year debt to equity ratio time t	68	79	-

**Panel B: Generalist Views of Companies and Investors**

## Statement 1: Share repurchases are used to increase corporate gearing

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	3.35	1.13	56	29	3
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
Repurchasers versus non-repurchasers	<i>Repurchasers</i>		<i>Non-repurchasers</i>		-
	3.35	1.18	3.34	1.05	
Main Market versus AIM	<i>Main Market</i>		<i>AIM</i>		**
	3.53	1.11	2.88	1.07	
Corporate versus Institutional	<i>Corporate</i>		<i>Institutional</i>		-
	3.35	1.13	3.21	1.13	
Corporate versus private	<i>Corporate</i>		<i>Private</i>		-
	3.35	1.13	3.20	0.80	

Notes: Panel A analyses further the specific motive by the listing status of the companies and the financial data on the responding repurchasers and their non-repurchasing counterparts. Panel B presents the generalist views of the respondent companies and investors on statements associated to the motive. Grouping was determined by statistically comparing the mean score of the statement to the next ranked statement. If a significant difference materialised, a new group was created. Further, the respondent views are analysed by repurchasing characteristic, stock exchange listing and company view versus investor view. \*\*\*, \*\* and \* refers to significance levels of 1, 5 and 10%, respectively.

Table 6: Signalling Undervaluation

**Panel A: Further Analysis by Stock Exchange Listing and Financial Information**

<i>Company Stock Exchange Listing</i>	<i>Main Market (%)</i>	<i>AIM (%)</i>	<i>Significance (Chi<sup>2</sup>)</i>
	26	70	***
<i>Undervaluation positions:</i>	<i>Repurchasers</i>	<i>Matched Non-repurchasers</i>	<i>Significance (Mann Whitney)</i>
Lowest market to book ratio at time t	2.77	3.11	***
End of year market to book ratio at time t	3.51	3.82	-

**Panel B: Generalist Views of Companies and Investors**

## Statement 1: Share repurchases are used to signal undervaluation

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	3.34	1.08	51	27	3
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
<i>Repurchasers versus non-repurchasers</i>	<i>Repurchasers</i>		<i>Non-repurchasers</i>		
	3.30	1.08	3.43	1.00	-
<i>Main Market versus AIM</i>	<i>Main Market</i>		<i>AIM</i>		
	3.13	1.06	3.92	0.94	***
<i>Corporate versus Institutional</i>	<i>Corporate</i>		<i>Institutional</i>		
	3.34	1.08	3.42	1.02	-
<i>Corporate versus private</i>	<i>Corporate</i>		<i>Private</i>		
	3.34	1.08	3.42	0.84	-

## Statement 2: Market efficiency – 4 point scale from markets are always/often (4, 3) to seldom/never efficient (2, 1)

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	3.27	0.75	n/a	n/a	n/a
	(from 4)				
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
<i>Repurchasers versus non-repurchasers</i>	<i>Repurchasers</i>		<i>Non-repurchasers</i>		
	3.22	0.77	3.37	0.72	-
<i>Main Market versus AIM</i>	<i>Main Market</i>		<i>AIM</i>		
	3.49	0.68	2.68	0.63	-
<i>Corporate versus Institutional</i>	<i>Corporate</i>		<i>Institutional</i>		
	3.27	0.75	Question not posed		
<i>Corporate versus private</i>	<i>Corporate</i>		<i>Private</i>		
	3.27	0.75	Question not posed		

Notes: Panel A analyses further the specific motive by the listing status of the companies and the financial data on the responding repurchasers and their non-repurchasing counterparts. Panel B presents the generalist views of the respondent companies and investors on statements associated to the motive. Grouping was determined by statistically comparing the mean score of the statement to the next ranked statement. If a significant difference materialised, a new group was created. Further, the respondent views are analysed by repurchasing characteristic, stock exchange listing and company view versus investor view. \*\*\*, \*\* and \* refers to significance levels of 1, 5 and 10%, respectively.

Table 7: Influencing EPS Levels

**Panel A: Further Analysis by Stock Exchange Listing and Financial Information**

<i>Company Stock Exchange Listing</i>	<i>Main Market (%)</i>	<i>AIM (%)</i>	<i>Significance (Chi<sup>2</sup>)</i>
	43	60	-
<i>Undervaluation positions:</i>	<i>Repurchasers</i>	<i>Matched Non-repurchasers</i>	<i>Significance (Mann Whitney)</i>
End of year EPS at time t - 1	0.26	0.20	-
End of year EPS at time t	0.30	0.14	-

**Panel B: Generalist Views of Companies and Investors**

## Statement 1: Share repurchases are used to improve EPS levels

<i>Overall firm Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Agree %</i>	<i>Disag. %</i>	<i>Grouping</i>
	3.83	0.86	76	10	2
<i>Comparison of Firm/Investor Views</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Significance (T test)</i>
<i>Repurchasers versus non-repurchasers</i>	<i>Repurchasers</i>	<i>1.90</i>	<i>Non-repurchasers</i>	<i>0.77</i>	-
	3.85		3.79		
<i>Main Market versus AIM</i>	<i>Main Market</i>	<i>0.87</i>	<i>AIM</i>	<i>0.82</i>	-
	3.78		3.96		
<i>Corporate versus Institutional</i>	<i>Corporate</i>	<i>0.86</i>	<i>Institutional</i>	<i>1.01</i>	***
	3.83		3.37		
<i>Corporate versus private</i>	<i>Corporate</i>	<i>0.86</i>	<i>Private</i>	<i>1.14</i>	***
	3.83		3.31		

Notes: Panel A analyses further the specific motive by the listing status of the companies and the financial data on the responding repurchasers and their non-repurchasing counterparts. Panel B presents the generalist views of the respondent companies and investors on statements associated to the motive. Grouping was determined by statistically comparing the mean score of the statement to the next ranked statement. If a significant difference materialised, a new group was created. Further, the respondent views are analysed by repurchasing characteristic, stock exchange listing and company view versus investor view. \*\*\*, \*\* and \* refers to significance levels of 1, 5 and 10%, respectively.

Table 8: Repurchase Regulation

<b>Panel B: Repurchase Regulation</b>					
	Managers	Institutional		Private	
<i>Regulation surrounding repurchases has had little impact</i>	2.06	2.95	***	3.09	***
<i>Regulation surrounding repurchase activity has not fully protected shareholders</i>	2.04	2.84	***	3.11	***
<i>Regulation to seek regular approval from shareholders restricts repurchase activity</i>	2.65	2.74	-	3.17	***
<i>The motives agreed with shareholders at approval restrict repurchase activity</i>	2.67	2.94	-	3.21	***
<i>The volume and pricing conditions of repurchases agreed with shareholders at approval restrict repurchase activity</i>	2.80	3.04	-	3.15	**
<i>The requirement to seek shareholder approval offers an educational opportunity re: shareholders</i>	+3.13	3.21	-	3.56	**

*Notes: Statements have been paraphrased as compared to what appeared in the questionnaires. \*\*\*, \*\*, \* indicates a significant difference at the 1, 5 and 10% levels, respectively, between the views of financial managers and institutional/all investors.*