

FINANCIAL POLICIES AND PRACTICES OF COMPANIES LISTED
ON THE IRISH STOCK EXCHANGE:
CAPITAL STRUCTURE, DIVIDENDS AND CAPITAL BUDGETING

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ABSTRACT

This paper reports the results of a recent comprehensive survey of the chief financial officers of companies listed on the Irish Stock Exchange. The survey focused upon three major areas of financial policy and practice: capital structure, dividends and capital budgeting. In the area of capital budgeting, discounted cash flow methods are used by the listed companies in our sample to a much greater extent than reported for Irish companies in previous surveys. Responses in this survey on capital structure policy are generally consistent with the pecking order hypothesis, whilst Lintner's lagged partial adjustment model continues to be generally consistent with the dividend policy and practices of listed Irish companies.

INTRODUCTION

This paper reports the results of a comprehensive survey of the chief financial officers of companies listed on the Irish Stock Exchange (ISE) regarding their views on various theoretical issues and their companies' financial policies and practices in three major areas: capital structure policy and financing decisions, dividends and capital budgeting. In this research project, we were also interested in how the current global financial crisis has affected listed Irish companies in these areas. Survey research is extensive in the accounting and finance literature with regard to capital

budgeting practices. However, surveys of financing and dividend policies are less common. The goal of this paper is to assess the views of Irish executives regarding their views and their companies' practices and, where applicable, to compare our results to previous surveys carried out in both Ireland and other countries.

The responses of financial executives of listed companies in Ireland to the survey questions on capital structure policy are generally consistent with the pecking order hypothesis. They indicate a preference for following a financing hierarchy rather than adhering to a target capital structure. It would also appear that financial executives of listed Irish companies believe that a company's investment and dividend decisions are more binding than capital structure decisions. As in previous surveys of Irish companies, Lintner's lagged partial adjustment model continues to be generally consistent with the dividend practices of listed Irish companies and executives seem to be aware of signalling and clientele effects. The study also found that there is now more extensive use of discounted cash flow (DCF) techniques than evidenced in previous surveys of Irish companies. Net present value (NPV) is growing in popularity and is ranked by the respondents as the most important quantitative evaluation method for evaluating and ranking capital investment projects.

The results of this study should be of interest to both academics and practitioners. The survey questionnaire elicits executives' views on a variety of theoretical and practical issues related to capital structure policy, dividends and capital budgeting. The results also provide insight into company practices and the extent to which listed Irish companies use the assumptions, models and decision rules generated and taught by academics for making financial decisions.

The next section describes the survey design and method, which is followed by reviews of the relevant literature and discussions of the results in the areas of capital structure policy and financing decisions, dividends and capital budgeting. The final section presents our conclusions.

RESEARCH DESIGN AND METHOD

Postal questionnaires consisting of various closed- and open-ended questions were used to obtain information regarding the financial practices and policies of companies listed on the ISE.

In an attempt to identify the effects that the current global financial crisis has had on listed companies in Ireland, the survey questionnaire included open-ended questions asking the respondents to comment on how their companies' financial policies and practices have changed as a result of the crisis.

Copies of the four-page questionnaire, which did not ask respondents to identify themselves, their titles or their companies, were mailed with explanatory cover letters under the letterhead of the National University of Ireland, Galway to the chief financial officers of companies listed on the ISE. Companies listed on both the ISE's Main Market and the Irish Enterprise Exchange (IEX) were included. Companies in the finance and real estate sectors were excluded. In total, the survey questionnaires were mailed to 43 companies in November 2009. A complete second mailing was conducted to further improve the response rate. Eighteen questionnaires were

returned, resulting in a survey response rate of 41.9 per cent. Table 1 contains an industry breakdown of the responding companies.

TABLE 1: INDUSTRY SECTORS OF RESPONDENTS

Number	Sector
1	Agricultural
1	Aviation
2	Distribution
1	E-learning software services
2	Media
1	Mining and exploration
1	Oil and gas exploration and production
4	Pharmaceutical and healthcare
1	Retail
2	Transportation
2	Technology and telecommunications

The previous literature and the results of the survey on capital structure, dividends and capital budgeting are discussed in the following sections.

CAPITAL STRUCTURE POLICY AND FINANCING DECISIONS

Background

In a seminal paper, Nobel laureates Modigliani and Miller (1958) advanced the proposition that, based upon several simplifying assumptions, capital structure has no effect on the value of a company. However, recognising the impact of taxes, bankruptcy, agency costs and asymmetric information, capital structure theory has evolved to acknowledge that the use of debt does affect the value of a company. Modern theories of capital structure can be classified into two basic categories: 'static tradeoff models' and the 'pecking order hypothesis'. Static tradeoff models imply an optimal debt-equity mix, which is determined by a tradeoff between the benefits and costs of debt (i.e. balancing the tax advantages of debt against the risk of bankruptcy and agency costs). The pecking order hypothesis implies a hierarchy in raising funds, in which the company prefers internal to external financing and, if it obtains external funds, debt to equity. This empirically motivated hypothesis, which has been theoretically justified on the basis of asymmetric information by Myers (1984) and Myers and Majluf (1984), is consistent with Donaldson's (1961) classic description of actual financing practices, in which he observed that companies prefer internal financing and have an aversion to issuing common stock.

Over the years, the pecking order hypothesis has been supported empirically by Titman and Wessels (1988), Shyam-Sunder and Myers (1999) and others. In their survey of 176 *Fortune* 500 companies in the United States (US), Pinegar and Wilbricht

(1989) found that the financing hierarchy implied by the pecking order hypothesis is more descriptive of actual practice than the static tradeoff model. They also found that capital structure policy is less binding than either the company's investment decisions or dividend policy, a result also consistent with the US survey findings of Pruitt and Gitman (1991).

In a 2002 survey of 117 Irish technology-based software companies, Hogan and Hutson (2005) found that internal funds are the most important source of funding, a result consistent with the pecking order hypothesis. However, in contradiction to the pecking order hypothesis, they found that if external financing is required, the use of equity rather than debt is the preferred source of financing. This result, however, may be unique to new companies in the technology sector.

Survey Results: Capital Structure Policy and Financing Decisions

To assess executive views on capital structure policy, questions were adapted from the questionnaire used by Pinegar and Wilbricht (1989).

Target Capital Structure versus Financing Hierarchy

To assess whether the static tradeoff model or the pecking order hypothesis most accurately describes the views of executives of listed companies in Ireland, we asked respondents to indicate whether, in raising new long-term funds, companies should 'maintain a target capital structure by using approximately constant proportions of several types of long-term funds simultaneously' or 'follow a financing hierarchy in which the most advantageous sources of long-term funds are exhausted before other sources are used'. Only 22.2 per cent of the respondents indicated a preference for maintaining a target capital structure. The majority (77.8 per cent) expressed a preference for following a financing hierarchy. This result is consistent with the pecking order hypothesis as well as the results of Pinegar and Wilbricht (1989) in the US.

Financing Hierarchy

The respondents who expressed a preference for the financing hierarchy were asked to rank seven sources of long-term funds in order of preference for financing new investments: internal equity (retained earnings), new ordinary shares, preference shares, warrants, loans from affiliated companies, bank loans and bonds. The results are shown in Table 2. For each source, the percentage of responses within each rank, the percentage of respondents who did not rank the source and the mean of the rankings are shown. Higher means indicate higher preferences.

As indicated, 66.7 per cent of the respondents (who expressed a preference for following a financing hierarchy) ranked internal equity (retained earnings) as their first choice of financing; bank loans were ranked second; bonds ranked third; external equity (new ordinary shares) ranked fourth. These results are also consistent with the pecking order hypothesis, in which companies prefer internal to external financing, and if external financing is obtained, debt is preferred to equity.

These results are not consistent with the previously mentioned findings of Hogan and Hutson (2005) in their survey of Irish technology-based software companies, in which equity is preferred to debt if external financing is required. However, Hogan

Mean ratings are calculated by multiplying the percentage in each category with assigned scores 1 through 7, respectively. A score of 0 is assigned when a score is not ranked.

and Hutson's (2005) sample of technology-based software businesses are small, private and extremely specialised companies that often have difficulty obtaining finance from banks that prefer fixed assets as collateral. Moreover, as reported by the authors, the companies' founders place more importance on the pursuit of innovation and being at the forefront of technological change than independence.

Relative Importance of Various Financial Planning Principles

The next question elicited ratings, on a scale of 1 to 5 (where 1 = unimportant and 5 = important), of the relative importance of various financial planning principles affecting a company's financing decisions. The results, ranked in order of importance, are shown in Table 3.

Ensuring the long-term survival of the firm and maintaining financial independence¹ were viewed as the two most important considerations affecting a company's financing decisions. Maintaining financial flexibility was the third most important consideration. Ensuring long-term survival and financial flexibility were also ranked highly by US executives surveyed by Pinegar and Wilbricht (1989). Graham and Harvey's (2001) survey of US companies found that financial flexibility was of primary concern to managers in making financing decisions. Bancel and Mittoo (2004) had a similar result in their survey of managers in sixteen European countries. Financial flexibility allows financial managers to take advantage of unforeseen opportunities whilst also allowing them to cope with unexpected events.

Most finance textbooks begin with an extended discussion of the rationale for the assumption that the goal of the business firm is to maximise shareholder wealth. However, as indicated in Table 3, the maximisation of share prices ranked only fourth as an important factor governing a company's financing decisions by Irish executives. The implication is that either the responding Irish executives do not explicitly consider maximising share prices as important as the other financial planning principles when making financing decisions or they believe that placing importance on the other financial planning principles will in turn ultimately lead to share price maximisation.

This result is consistent with the often-cited findings of Stonehill, Beekhuisen, Wright, Remmers, Toy, Pares, Shapiro, Egan and Bates (1974) from their survey of the financial executives of 87 companies in 5 countries (France, Japan, the Netherlands, Norway and the US), where they found that not a single country's financial executives ranked maximisation of the market value of shares as their first or even second most important financial goal. Similarly, in more recent surveys of executives of listed companies in Australia, Hong Kong, Indonesia, Malaysia, the Philippines and Singapore, Kester, Chang, Echanis, Isa, Skully, Soedigno and Tsui (1998) reported that maximising share prices was not ranked as an important factor governing a company's financing decisions in any of the six countries surveyed.

The need to maintain comparability with firms in the same industry was ranked least important by the responding Irish executives. Apparently, they do not attach a high level of importance to adhering to industry norms, at least relative to other factors affecting financial decisions. The executives responding to Pinegar and Wilbricht's (1989) survey in the US also ranked maintaining industry comparability last.

TABLE 3: RELATIVE IMPORTANCE OF VARIOUS FINANCIAL PLANNING PRINCIPLES

Planning Principle by Order of Importance	Percentage of Responses Within Each Rating					Mean*
	Unimportant	2	3	4	Important	Not Rated
1. Ensuring the long-term survival of firm	16.7%	0.0%	0.0%	8.3%	75.0%	0.0%
2. Maintaining financial independence	0.0%	0.0%	25.0%	33.3%	41.7%	0.0%
3. Maintaining financial flexibility	8.3%	8.3%	8.3%	33.3%	41.7%	0.0%
4. Maximising prices of publicly traded shares	8.3%	8.3%	33.3%	16.7%	33.3%	0.0%
5. Maintaining a predictable source of funds	0.0%	16.7%	33.3%	33.3%	16.7%	0.0%
6. Maintaining long-term relationships with banks	8.3%	16.7%	25.0%	25.0%	25.0%	0.0%
7. Maintaining comparability with firms in same industry	8.3%	41.7%	25.0%	0.0%	16.7%	8.3%

* Mean ratings are calculated by multiplying the percentage in each category with values of 1 through 5 for ratings from 'unimportant' to 'important', respectively. A score of 0 is assigned when not rated.

Relative Importance of Capital Structure

Another question examined the importance of capital structure decisions relative to other decisions. When presented with an attractive new growth opportunity that could not be taken without departing from the target capital structure or financing hierarchy, cutting the dividend or selling off other assets, 77.8 per cent of the respondents indicated that they would deviate from their target capital structure or financing hierarchy. Only two of the responding executives would forgo the opportunity, one indicated that dividends would be cut and one indicated that assets would be sold. These results, summarised in Table 4, suggest that capital structure decisions are less binding than either investment or dividend decisions.

TABLE 4: RELATIVE IMPORTANCE OF CAPITAL STRUCTURE

Likely Action to Be Taken in Response to a Growth Opportunity	Percentage
Forgo the opportunity	11.1%
Deviate from the target capital structure or financing hierarchy	77.8%
Cut the ordinary share dividend	5.6%
Sell off other assets	5.6%

Perceived Market Efficiency

Executives were also asked 'approximately what percentage of the time would you estimate that your company's outstanding shares are priced fairly by the market?' As indicated in Table 5, only one of the responding Irish executives believed that their companies' shares were priced fairly by the market 'more than 80 per cent of the time'. Pinegar and Wilbricht (1989) reported that 47.2 per cent of US executives believed that their companies' shares were priced fairly by the market 'more than 80 per cent of the time'. Conversely, 38.9 per cent of the Irish executives indicated that their companies' shares were correctly priced 'less than 50 per cent of the time', as compared to the 11.9 per cent of US executives reported by Pinegar and Wilbricht (1989). The remaining 55.5 per cent indicated that their companies' shares were priced correctly 'between 50 per cent and 80 per cent of the time'.

TABLE 5: PERCEIVED MARKET EFFICIENCY

Percentage of Time Firm's Shares Are Believed to Be Fairly Priced	Percentage
More than 80% of the time	5.6%
Between 50% and 80%	55.5%
Less than 50% of the time	38.9%

Effects of the Global Financial Crisis on Capital Structure Policies and Financing Practices

To identify some of the effects of the global economic crisis on capital structure policies in Ireland, which have been especially severe, the questionnaire included an open-ended question asking executives to identify how their companies' capital structure policies and financing decisions have been affected by the crisis and resulting global recession.

The respondents' answers to this question are listed in Table 6. As would be expected, respondents cited the higher cost and difficulty of obtaining debt financing, reduced investment and, in the case of two respondents, resorting to new share issues.

TABLE 6: RESPONSES TO QUESTION 'HOW HAS THE CURRENT GLOBAL FINANCIAL CRISIS AFFECTED YOUR COMPANY'S CAPITAL STRUCTURE POLICIES AND FINANCING DECISIONS?'

1. Limited as was conservative in any event.
2. No new funding is available from the banking community.
3. It hasn't.
4. Not at all as we have net cash.
5. Yes, the company is being taken private because access to capital via new equity issues is no longer an advantage of being listed in all practical reality.
6. It has put extreme pressure on the company to maintain its EBITDA [earnings before interest, taxes, depreciation and amortization] and cash flow and is now driven by meeting its required banking covenants.
7. It is more difficult to raise financing of any sort. Therefore, we maintain a conservative cost structure, seek to maximise short-term revenue and raise money when the opportunity arises.
8. Reduced availability of sources of funds and a substantial increased cost for those available.
9. Limited impact on capital structure. We have deferred any major financing and investment decisions.
10. Yes. Ability to raise debt financing due to credit crunch leading to many banks not being open for business. Funding done through new share issue rather than debt as a result.
11. Equity markets closed to new issues from small caps.
12. Reduced appetite for investment due to high financing cost.
13. Shift away from bank debt (which was the cheapest in 2007) to new equity.
14. Crisis has severely limited available sources of external debt and lease financing.
15. We are reverting to export credit financing as opposed to traditional debt and sale-and-leaseback structure.
16. Mainly we cannot execute our M&A [merger and acquisition] strategy as public to private valuations are not aligned.
17. Cost of debt increasing and covenants tightening, therefore cash conservation has become a priority.
18. Cost-cutting measures necessary to streamline operations.

DIVIDENDS

Background

The focal point of financial management is the goal of shareholder wealth maximisation, which is operationalised by the NPV criterion for accepting or rejecting investments. According to the NPV criterion, a company should accept all investment opportunities promising returns greater than available elsewhere for the same level of risk. From this follows the residual dividend policy: dividends should be paid from earnings left over after financing the equity portion of all positive NPV projects. Any leftover earnings should be distributed to the company's shareholders, who can in turn earn higher returns on other investments with the same level of risk. However, depending upon the timing and magnitude of earnings and the investment opportunities available to the company, strict adherence to the residual policy on a year-to-year basis results in an erratic pattern of dividends. Much of the debate surrounding dividend policy deals with the effects that changes in dividends have on share value.

Traditionalists believe that shareholders prefer dividends to the capital gains that would be expected to result from the reinvestment of earnings by the firm. All else remaining constant, any cuts in dividends resulting from the residual policy would likely result in a decrease in share price. Early proponents of this so-called 'bird-in-the-hand' theory, Gordon (1959) and Lintner (1962) argued that dividends are less risky than capital gains. Capital gains depend upon not only the profitable reinvestment of earnings by the company, but also upon movements in the overall stock market. Because dividends are perceived to be less risky than capital gains, shareholders will more highly value the shares of companies with high dividend payout ratios than the shares of companies with low payout ratios, all else remaining constant.

An alternate view is that dividend policy is irrelevant. In another seminal theoretical paper, Nobel laureates Miller and Modigliani (1961) demonstrated that dividend policy is irrelevant in a world of perfect and efficient capital markets. This position, which has been extended by Black and Scholes (1974) and Miller and Scholes (1978), argues that shareholders are concerned only with the firm's earnings, not the proportions retained in the company and paid out as dividends. Shareholders are indifferent to whether or not dividends are paid and consequently would be indifferent to the erratic dividends that would result from adherence to the residual policy.

Notwithstanding the debate that continues among academics, practitioners behave as though dividend policy *does* matter; behaviour that may or may not be rational and theoretically justified. In a classic study based upon interviews with US corporate executives in the mid-1950s, Lintner (1956) reported that although many firms do have long-run payout ratios based upon earnings, year-to-year dividends respond slowly to earnings. Temporary increases or decreases in earnings have little effect on dividends in the short run. In short, he found that companies are reluctant to increase dividends to levels that cannot be sustained for fear of later having to cut dividends.²

As a result of these interviews, Lintner (1956) hypothesised a lagged partial adjustment model that relates changes in dividends to both past dividends and current earnings. Lintner's behavioural model, or variations of it, has been empirically tested over the years by a number of researchers. For example, it has been applied to market financial data in the US by Fama and Babiak (1968), Watts (1973) and Roy and Cheung (1985), in Canada by Chateau (1979) and in the UK by Ryan (1974). In general, the results of these studies are consistent with Lintner's hypothesised partial adjustment toward a target payout ratio.

Lintner's model has also been the focus of empirical studies of Irish companies. For example, based on an examination of 40 public companies in the manufacturing sector during the period 1980–1984, Barrett and Cotter (1990) concluded that the dividend behaviour of the Irish companies, which have a tendency to maintain dividends at constant levels, was consistent with Lintner's partial adjustment model. Using data on 38 Irish companies over the period 1984–1988, Green and McKenny (1991a) found that although Lintner's model had predictive ability, a model developed by Waud (1966), which assumes that dividends are partially adjusted with a lag in response to changes in long-run expected earnings, had greater explanatory power.

Lintner's findings have also been supported by surveys of company executives. For example, Baker, Farrelly and Edelman (1985) surveyed the chief financial officers of firms in the US and found that executives continue to place importance on maintaining dividend continuity. Most respondents agreed that companies should avoid making changes in dividends that might soon be reversed and should strive for an uninterrupted record of dividend payments. In their survey of US firms, Pinegar and Wilbricht (1989) found additional evidence of a strong managerial preference for dividend continuity.

To explore the relationship between dividend, investment and financing decisions in Ireland, Green, Pogue and Watson (1993) surveyed the finance directors of 89 Irish companies and, based on responses from 36 companies, concluded that although the dividends of Irish companies tend to be stable, they are not determined in isolation from the companies' investment and financing decisions. A more recent survey was conducted by McCluskey, Burton and Power (2003), who surveyed 1,000 Irish companies in 2001. From a responding sample of 269 companies, they found high levels of agreement that companies should maintain uninterrupted dividend payments, avoid making changes in dividends that may later have to be reversed, and adopt a target payout ratio. Their respondents also believed that their companies should be responsive to their shareholders' preferences regarding dividends. The respondents in their survey were less certain about whether dividend policy affects share value.

Survey Results: Dividends

To assess executive views on issues concerning dividend policy, the respondents were asked to indicate their level of agreement with each of the thirteen closed-end statements based upon a seven-point scale. The statements were adapted from the questionnaire used by Baker et al. (1985). Table 7 contains summary statistics on the

responses to the closed-end statements (identified below by 'S'). The statements are not shown in the order listed in the survey questionnaire.

TABLE 7: LEVELS OF AGREEMENT REGARDING DIVIDEND POLICY

	Disagree- ment (-3, -2)	(-1, 0, +1)	Agreement (+2, +3)	Mean
Attitudes on Dividends and Share Value				
1. Dividend payout affects the share price.	0.0%	16.7%	83.3%	2.11
2. Capital gains expected to result from earnings retention are less certain than expected dividends.	22.2%	55.6%	22.2%	0.78
Attitudes on Lintner's Findings				
3. A company should strive to maintain uninterrupted dividend payments.	11.1%	33.3%	55.6%	1.33
4. A company should avoid increases in dividends that might have to be reversed in a year or so.	0.0%	33.3%	66.7%	1.94
5. A company should have a target payout ratio and periodically adjust its payout toward that target.	0.0%	50.0%	50.0%	1.22
6. A change in the existing dividend payout is more important than the actual amount of dividends.	0.0%	83.3%	16.7%	0.83
Attitudes on Signalling Effects				
7. Reasons for dividend policy changes should be adequately disclosed to investors.	0.0%	5.6%	94.4%	2.72
8. Dividend payments provide a device for 'signalling' future company prospects	5.6%	33.3%	61.1%	1.50
9. The market uses dividend announcements as information for assessing security values.	0.0%	33.3%	66.7%	1.61
Attitudes on the Clientele Effect				
10. Management should be responsive to its shareholders' preferences regarding dividends.	5.6%	38.9%	55.6%	1.56
11. Investors are basically indifferent between returns from dividends versus those from capital gains.	50.0%	27.8%	22.2%	0.52
2. Capital gains expected to result from earnings retention are less certain than expected dividends.	22.2%	55.6%	22.2%	0.78
Attitudes on the Residual Policy				
12. New capital investment requirements of the company generally have little effect on modifying the pattern of dividend behaviour.	16.7%	50.0%	33.3%	0.78
13. Dividend distributions should be viewed as a residual after financing desired investments from available earnings.	11.1%	44.4%	44.4%	1.39

Attitudes on Dividends and Share Value

As previously noted, much of the controversy in the literature deals with the relationship between dividends and share value. Irish executives strongly agree with the statement that dividend payout affects share prices (S1) and therefore is not irrelevant. There was only slight agreement that the capital gains expected to result from earnings retention are less certain than expected dividends (S2), the basic justification offered by traditionalists in support of their belief that shareholders prefer dividends to capital gains.

Attitudes on Lintner's Findings

Four statements pertained to Lintner's lagged partial adjustment model: (S3), (S4), (S5) and (S6). The responding Irish executives agreed that a company should have a target payout ratio and periodically adjust its payout toward that target (S5) and that a company should strive to maintain uninterrupted dividend payments (S3). There was strong agreement that companies should avoid making changes in dividends that might have to be reversed in a year or so (S4). These results are consistent with Lintner's model and the findings of McCluskey et al. (2003) in their survey of Irish companies.

Lintner's findings also suggest that managers prefer to maintain stable dividends and focus on changes in the existing rate of dividend payout rather than the total amount of dividends paid. There was only slight agreement with the statement that a change in the existing payout is more important than the actual amount of dividends (S6).

Attitudes on Signalling Effects

One explanation offered to justify stable dividends is the 'signalling effect' (or 'information content of dividends'), which focuses upon the information that changes in dividends convey to investors. According to the signalling effect, changes in the level of dividends may convey new information to investors regarding future earnings or cash flows. This is due to information asymmetries between managers and investors. Therefore, reductions in dividends that may periodically result from year-to-year adherence to the residual policy would send out negative signals to shareholders regarding the prospects of the firm, thereby adversely affecting its share price.

Three statements involved signalling effects: (S7), (S8) and (S9). Executives strongly agreed that reasons for dividend policy changes should be adequately disclosed to investors (S7). (This statement received the highest mean level of agreement of all thirteen statements.) Executives also agreed that dividend payments provide a 'signalling of the company's prospects' (S8) and that the market uses dividend announcements as information for assessing security values (S9). These results are consistent with the survey evidence of McCluskey et al. (2003) and the findings of McCluskey, Burton, Power and Sinclair (2006) who, based upon an examination of the stock market reaction to dividend announcements of 50 Irish companies over a 15-year period, found that dividend announcements are important to Irish investors.³

Attitudes on the Clientele Effect

Another reason offered to justify stable dividend policies is the 'clientele effect', which describes the tendency of each firm to attract its own clientele of investors who are in part attracted to the firm because of its dividend policy.⁴ Some investors prefer high payout shares, whereas others prefer capital gains. If the firm strictly adheres to the residual policy on a year-to-year basis, the resulting volatile dividends would cause shifts in the composition of its shareholders (its clientele) which may at least temporarily disrupt its share price as the old shareholder group sells its shares.

Three statements dealt with clientele effects: (S10), (S11) and (S2). As in the case of the survey results of McCluskey et al. (2003), the responding executives agreed that management should be responsive to its shareholders' preferences regarding dividends (S10). No strong opinion was expressed regarding the statement that investors are indifferent between returns from dividends versus those from capital gains (S11). As previously mentioned, there was only slight agreement that the capital gains expected to result from earnings retention are less certain than expected dividends (S2).

Attitudes on the Residual Policy

As previously discussed, an implication of the signalling and clientele effects is that the residual policy should not be adhered to in the short run (i.e. year-to-year) due to the erratic pattern of dividends that may result. If applied, it should be applied over a longer period in order to smooth the firm's dividend payments. Statements (12) and (13) address application of the residual policy. Whereas the responding executives expressed slight agreement with the statement that new capital investments generally have little effect on modifying the pattern of dividend behaviour (S12), they agreed with the statement that dividend distributions should be viewed as a residual after financing desired investments from earnings (S13). The latter result is consistent with the findings of Green et al. (1993), who found that interdependency exists among dividend, investment and financing decisions.

Effects of the Global Financial Crisis on Dividend Policies

To identify some of the effects of the global economic crisis on dividend policies in Ireland, the questionnaire included an open-ended question asking executives to identify how it has affected their companies' dividend policies. The responses to this question are listed in Table 8. Eight of the respondents indicated that their companies do not pay dividends. In three cases, the companies have reduced dividends. One company increased its dividend in 2009. One respondent indicated that no dividends were declared. It is unclear whether this represents a cut in dividends or that the company does not pay dividends. The other respondents reported no significant changes.

TABLE 8: RESPONSES TO QUESTION ‘HOW HAS THE CURRENT GLOBAL FINANCIAL CRISIS AFFECTED YOUR COMPANY’S DIVIDEND POLICY?’

1. No impact.
2. Yes. Earnings have been badly hit and the dividend was cut significantly (but one was paid).
3. It hasn’t.
4. Not at all – increasing dividend in 2009.
5. No change. We have never paid dividends.
6. For the first time since the company was formed (50 years), no interim dividend was paid and there is uncertainty about a final dividend.
7. We have never paid a dividend and don’t anticipate doing so in the medium term – no change from prior to the crisis.
8. Reduced dividends.
9. No change.
10. We don’t pay dividends at present.
11. N/A.
12. More cautious on dividends.
13. We don’t currently pay dividends, but would like to do so as soon as possible. Investors are now more focused on dividends and we are more reliant on new equity. Therefore [there is a] clear imperative to pay dividends.
14. The company has not paid a dividend since flotation.
15. We don’t have a dividend policy – no dividend as we are a growth stock.
16. N/A.
17. Not significantly.
18. No dividends declared.

CAPITAL BUDGETING

Background

Executives of large corporations in the US have been extensively surveyed regarding their companies’ capital budgeting practices, especially during the 1970s and 1980s.⁵ Among the oft-cited surveys include those reported by Mao (1970), Klammer (1972), Fremgen (1973), Petty, Scott and Bird (1975), Gitman and Forrester (1977), Schall, Sundem and Geijsbeek (1978), Kim and Farragher (1981), Hendricks (1983), Klammer and Walker (1984), Bierman (1993), Trahan and Gittman (1995), Chen (1995), and Payne, Heath and Gale (1999). These surveys, which have focused upon methods of evaluating project profitability and risk, have shown that the analytical techniques used by US executives have increased in sophistication over time. Discounted cash flow (DCF) techniques, such as NPV and internal rate of return (IRR), have become the dominant method of evaluating and ranking proposed

capital investments. For example, whereas Klammer (1972) found that only 19 per cent of his sample of large industrial firms used DCF techniques as the primary basis for ranking projects in 1959, the percentage increased to 57 per cent in 1970. Klammer and Walker (1984) found that over 70 per cent of the respondents in their 1980 survey of large firms used DCF techniques; Hendricks (1983) reported that the percentage was 76 per cent in 1981. Bierman (1993) reported that 99 per cent of the respondents in his 1992 survey of the 100 largest *Fortune* 500 companies used IRR or NPV as either the primary or secondary evaluation measure. These studies have shown that although non-DCF techniques such as payback and accounting return of return (ARR) continue to be used, their use as primary evaluation measures has declined. However, they are used as secondary measures. For example, Bierman (1993) found that although payback was used extensively (84 per cent of the respondents in his 1992 survey), not a single respondent used it as a primary measure.

Chen (1995) studied the use of different quantitative evaluation techniques across three types of investments: equipment replacement, expansion of existing products and expansion into new products. The certainty of the related cash flows varies greatly when comparing proposals for routine equipment replacement with expansion into new products. He found that DCF techniques are used more widely than non-DCF techniques such as payback and ARR to evaluate all three types of investments. He also found that DCF techniques are relied upon more heavily in expansion projects than in equipment replacement decisions and that non-financial considerations play a significant role in capital budgeting, especially in decisions related to new products.

In the UK, Pike (1988) found that larger companies are more likely to use DCF methods than smaller companies. He found that payback was the most popular evaluation method used, followed by IRR. Sixty-three per cent of the responding companies in his survey use three or more methods. In a longitudinal survey of 100 companies between 1975 and 1992, Pike (1996) found that the analytical techniques used by executives in the UK, like those in the US, have increased in sophistication over time.

In a survey of 89 Irish companies in 1989, Green and McIlkenny (1991b) found payback to be the most popular evaluation method among the 23 responding companies. They reported that 70 per cent used payback, with NPV ranked second, at 35 per cent. They also found that 39.1 per cent of the respondents used a DCF method alone or in combination with other methods. In a more recent survey in 1993 of 1,000 Irish companies with 424 responses, Lucey, McCabe and McHugh (1995) found that 49.1 per cent of the respondents used a DCF method, alone or in combination with other methods. They also found a strong size effect: larger companies are more likely to use a DCF technique. They also found that Irish companies that are subsidiaries of multinational companies are more likely to use DCF methods than indigenous Irish companies.

Survey Results: Capital Budgeting

Table 9 shows the distribution of the average size of the responding companies' annual capital budgets.

TABLE 9: SIZE OF CAPITAL BUDGETS

Average Size (in € millions)	Percentage
0–10	27.8%
11–25	22.2%
26–50	5.6%
51–100	11.1%
101–1,000	16.7%
>1,000	5.6%
No response	11.1%

Quantitative Evaluation Techniques

One of the goals of this study was to determine the quantitative investment evaluation techniques used by listed companies in Ireland. Several techniques are available for use in evaluating projects. Two of these, NPV and IRR, consider the time value of money and hence are DCF techniques. Although there are numerous non-DCF techniques, two of the more widely used and better known are payback and ARR.

In their surveys of Irish companies, Green and McIlkenny (1991b) and Lucey et al. (1995) asked executives to indicate which quantitative methods were used in their companies to evaluate proposed capital investments. The same approach was used by Kim and Farragher (1981) in the US. However, as acknowledged by Wong, Farragher and Leung (1987), this approach has a weakness, in that it does not provide information about the weight that executives place on each method in making final accept/reject decisions. To overcome this weakness, we asked executives to rate the various methods on a scale of 0 to 5 (where 0 = not used, 1 = unimportant, and 5 = very important). This approach not only reveals which of the methods are used, it also provides information on the relative importance of each method in making final accept/reject decisions.

The results are shown and rated according to perceived importance in Table 10. For each evaluation technique, the percentage of responses within each rating, the percentage of executives who did not rate the technique and the mean of the ratings is given. Higher means imply higher perceived importance.

Whereas Lucey et al. (1995) found that payback was the most frequently used method among the Irish companies in their 424-company sample, the respondents in our survey indicated that the DCF technique NPV was the most important measure for decision making, followed closely by payback. Because cash flows expected in the distant future may be viewed as more risky than near-term cash flows, payback also may be viewed as a method of assessing the temporal dimension of risk. IRR was ranked third. The least important technique was ARR, with 18.8 per cent of the respondents indicating that it was not used by their firms. This result is similar to the findings of Payne et al. (1999) in a 1994 survey of 90 US and 65 Canadian companies. In both countries, NPV and IRR were the most important measures for decision making, followed by payback.

TABLE 10: COMPARATIVE MEAN RATINGS OF QUANTITATIVE EVALUATION TECHNIQUES RANKED BY ORDER OF IMPORTANCE*

Evaluation Technique	Percentage of Responses Within Each Rating					Mean**	
	0 (Not Used)	1 (Unimportant)	2	3	4		5 (Very Important)
1. Net present value	0.0%	12.5%	0.0%	6.3%	18.8%	62.5%	4.19
2. Payback period	0.0%	6.3%	0.0%	31.3%	25.0%	37.5%	3.88
3. Internal rate of return	6.3%	25.0%	6.3%	25.0%	12.5%	25.0%	2.88
4. Accounting rate of return	18.8%	25.0%	18.8%	25.0%	6.3%	6.3%	1.94
5. Other	81.3%	12.5%	0.0%	0.0%	0.0%	6.3%	0.44

* Executives were asked to indicate the relative importance of the quantitative evaluation techniques on a scale of 0 to 5, where 0 = not used, 1 = unimportant and 5 = very important.

** The mean ratings are calculated by multiplying the percentage of responses in each category with values of 0 through 5. A score of 0 is assigned when not rated.

One hundred per cent of the respondents in our survey indicated that they use a DCF method, as compared to the earlier surveys of Green and McIlkenny (1991b) and Lucey et al. (1995), who found that 39.1 per cent and 49.1 per cent of their respondents, respectively, used a DCF method alone or in combination with other methods.

Risk Assessment Techniques

Another area of interest in our survey was the techniques used to assess risk. Again, in order to obtain information on the relative importance of each method, we elicited ratings, on a scale of 0 to 5 (where 0 = not used, 1 = unimportant and 5 = very important) of various techniques for assessing risk, including scenario analysis (optimistic/most likely/pessimistic forecasts), sensitivity analysis, decision trees and probabilistic (Monte Carlo) simulation. The results are summarised and ranked according to perceived importance in Table 11.

Scenario analysis (optimistic/most likely/pessimistic forecasts) and sensitivity analysis were perceived to be the two most important techniques for assessing risk. More sophisticated probabilistic techniques, such as Monte Carlo simulation, appear to be seldom used by listed companies in Ireland.

These results are consistent with the findings of Green and McIlkenny (1991b) for Irish companies and Pike (1983) for UK companies. In these surveys, the most frequently used method of risk analysis by the Irish companies was sensitivity analysis (82.6 per cent of respondents), followed by scenario analysis (78 per cent). For UK companies, the most popular method was scenario analysis (93 per cent), followed by sensitivity analysis (71 per cent).

Income Taxes

Respondents were asked whether estimated cash flows (or earnings) of proposed capital investments were evaluated before or after corporate taxes. The majority (64.7 per cent) of respondents indicated that cash flows are evaluated before corporate taxes. Only 35.3 per cent indicated that cash flows (or earnings) are evaluated after corporate taxes.

Capital Rationing

Under ideal circumstances, classic microeconomic theory tells us that a firm should expand (accept investment projects) to the point where its marginal return is just equal to its marginal cost. However, some firms place an absolute limit on the size of their capital budgets. The principal reason for capital rationing is that some firms are reluctant to obtain external financing. There may be a limit placed upon the firms' borrowing by internal management or external lending institutions. In the case of external equity (selling shares), there may be a fear of losing voting control. In their 1976 survey of large US firms, Gitman and Forester (1977) found that 52 per cent of their respondents engaged in capital rationing. By far the most prevalent cause was a limit placed on borrowing by internal management. In a more recent survey of *Fortune* 500 companies in 1992 and 1993, Mukherjee and Hingorani (1999) reported that 64 per cent of their respondents encountered capital constraints some of the time. Of those companies, 82 per cent reported that the constraints were

TABLE 11: COMPARATIVE MEAN RATINGS OF RISK ASSESSMENT TECHNIQUES RANKED BY ORDER OF IMPORTANCE*

Evaluation Technique	Percentage of Responses Within Each Rating					Mean**	
	0 (Not Used)	1 (Unimportant)	2	3	4		5 (Very Important)
1. Sensitivity analysis	0.0%	5.6%	0.0%	22.2%	22.2%	50.0%	4.11
2. Scenario analysis	0.0%	0.0%	11.1%	16.7%	33.3%	38.9%	4.00
3. Decision tree analysis	61.1%	11.1%	5.6%	11.1%	0.0%	11.1%	1.11
4. Probabilistic simulation	83.3%	5.6%	5.6%	5.6%	0.0%	0.0%	0.33
5. Other	94.4%	5.6%	0.0%	0.0%	0.0%	0.0%	0.06

* Executives were asked to indicate the relative importance of the risk assessment techniques on a scale of 0 to 5, where 0 = not used, 1 = unimportant and 5 = very important.

** The mean ratings are calculated by multiplying the percentage of responses in each category with values of 0 through 5. A score of 0 is assigned when not rated.

internally imposed. The primary reason for capital rationing was the reluctance to obtain external financing.

To determine whether listed companies in Ireland engage in capital rationing, respondents were asked to indicate 'yes' or 'no' to the question, 'Does your company place a limit on the size of its annual capital budget?' The majority (70.6 per cent) of respondents indicated that their companies do not practice capital rationing. The remaining companies (29.4 per cent) do practice capital rationing.

Discount Rates Used to Evaluate Proposed Capital Investments

Respondents were asked to indicate whether their firms used a single discount rate for all investments, multiple risk-adjusted discount rates, or a discount rate based upon the costs of the specific capital used to finance proposed capital investments. The results are shown in Table 12.

TABLE 12: DISCOUNT RATES USED TO EVALUATE CAPITAL INVESTMENTS

Discount Rate*	Percentage
<i>Single discount rate</i> based on company's overall weighted average cost of capital is used to evaluate all proposed capital investments.	66.7%
The discount rate used for each project is the cost of the <i>specific capital used to finance project</i> (i.e. the discount rate for a project that will be financed entirely with debt is the cost of debt).	11.1%
<i>Multiple risk-adjusted discount rates</i> are used; the riskier the investment, the higher the rate.	22.2%
Other	0.0%

* Italics added by authors; not used in survey questionnaires.

The majority (66.7 per cent) of the responding executives indicated that their firms use a single discount rate based on their firms' overall weighted average cost of capital (WACC) to evaluate all proposed capital investments. Theory tells us that in order to use the WACC as the discount rate for all proposed capital investments, they must be homogeneous with respect to risk and have the same risk level as the average risk of the company. If the risk of a proposed investment differs substantially from that of the overall company, then it is necessary to determine a specific return for that investment. In other words, if proposed capital investments are heterogeneous with respect to risk, a multiple risk-adjusted discount (hurdle) rate system should be employed, with riskier investments requiring higher minimum rates of return. Otherwise, accept/reject decisions will be biased in favour of poor high-risk investments and against good low-risk investments. Interestingly, only four of the respondents indicated that their companies use multiple risk-adjusted discount rates.

As also shown in Table 12, two of the respondents indicated that their firms based the discount rate on the specific capital used to finance the investment under consideration. This of course conflicts with the theory of weighted average cost of capital (WACC), which implies that investments are financed out of a pool of funds,

as opposed to being individually financed out of debt, preferred stock or ordinary shares.

Method of Estimating Multiple Risk-Adjusted Discount Rates

For those four firms that use multiple risk-adjusted discount rates, estimating the risk and required returns for individual projects can be a difficult task. One common approach is to classify proposed capital investments into subjectively defined risk categories (i.e. replacement, expansion of existing products, expansion into new products or markets, and so forth). The discount rate for higher-risk investments is a rate higher than the firm's overall WACC. The discount rate for lower-risk investments is a rate lower than the firm's WACC.

Another approach is to use a two-step procedure, which first requires estimating the divisional cost of capital for each major operating division of the firm. This reflects the different levels of risk inherent in the different businesses in which the firm operates. Generally speaking, this involves estimating the costs of capital for other firms with the same risk characteristics as the division under evaluation ('pure play' method). The result is that higher-risk divisions have a higher cost of capital than the firm's overall WACC; lower-risk divisions have a cost of capital lower than the firm's overall WACC. Recognising that there is also a risk-return spectrum with each division, the second step is to classify proposed capital investments within each division into risk categories. Then, each division uses its divisional cost of capital for average risk investments, and higher and lower discount rates for investments of higher and lower risk, respectively.

A third approach is to estimate each investment's beta (market risk) and use the Capital Asset Pricing Model (CAPM) to determine the WACC for individual investments. From a theoretical standpoint, the rationale of this approach is that well-diversified investors should be concerned only with market risk as measured by beta.

To determine which of these methods are used in practice, the respondents who indicated that their firms use multiple risk-adjusted discount rates were asked which method was used. All four of the respondents adjust for risk by classifying proposed investments into subjectively defined risk categories. None of the respondents estimate divisional WACCs and risk categories within each division or use the CAPM to determine project-specific discount rates.

Methods of Estimating the Cost of Equity Capital

Finance textbooks usually describe three methods to estimate a company's cost of equity capital.⁶ These usually include (1) the CAPM, based upon the firm's beta, (2) dividend yield plus expected growth rate and (3) the risk premium method (cost of debt plus risk premium). To determine which methods are used by listed companies in Ireland, we asked respondents which method their companies used. The results are shown in Table 13.

The most popular method was the CAPM, with 50.0 per cent of the respondents indicating that their companies use it to estimate the cost of equity capital. By comparison, Graham and Harvey (2001) found that 73 per cent of surveyed US and Canadian companies used the CAPM. In a telephone survey of 27 US firms judged by

TABLE 13: METHOD OF ESTIMATING COST OF EQUITY CAPITAL

Method	Percentage
Capital Asset Pricing Model (CAPM, based upon the firm's estimated beta)	50.0%
Dividend yield plus growth rate	5.6%
Cost of debt plus risk premium	44.4%
Other	0.0%

their peers to be 'among those with the best financial management', Bruner, Eades, Harris and Higgins (1998) found that the CAPM is the dominant model for estimating the cost of equity capital. Over 80 per cent of respondents used the CAPM. Brounen, De Jong and Leodijk (2004) found that 31 per cent of surveyed companies in the UK, 31 per cent in the Netherlands, 18 per cent in Germany and 27 per cent in France used the CAPM. In their survey of companies in the UK, McLaney, Pointon, Thomas and Tucker (2004) found that 47 per cent used the CAPM.

Of the remaining respondents in our survey of listed Irish companies, 44.4 per cent indicated that that their companies use the risk premium method and one respondent uses the dividend yield plus growth rate method.

Effects of Global Financial Crisis on Capital Budgeting Policies and Practices

To identify some of the effects of the current financial crisis on capital budgeting policies and practices in Ireland, our questionnaire included two open-ended questions asking executives to identify (1) how it has affected their companies' capital budget, and (2) how it has affected their companies' capital investment analysis procedures. Listings of the respondents' responses to these questions are listed in Tables 14 and 15 respectively.

TABLE 14: RESPONSES TO QUESTION 'HOW HAS THE CURRENT GLOBAL FINANCIAL CRISIS AFFECTED YOUR COMPANY'S CAPITAL BUDGET?'

1. No impact.
2. Cut it by 90%. 'Cash is King', so hold onto it until there is more certainty.
3. It hasn't.
4. Not at all.
5. Some fiscal tightening, but no dramatic change.
6. Yes, there has been no capital investment.
7. No significant impact, but generally more conservative approach.
8. Reduced availability of funding means reduced capital expenditure budgets.
9. Major investment decisions have been deferred.
10. Source of funding has changed.
11. Reduced it.
12. Reduced it.

(Continued)

TABLE 14: (CONTINUED)

-
- 13. More conservative as WACC increased. Therefore, fewer projects get green light.
 - 14. Limited funding available for new vehicle acquisition.
 - 15. Not at the moment.
 - 16. No response.
 - 17. Key banking covenants likely to reduce therefore restricting cash available for strategic investment.
 - 18. Reduced it.
-

TABLE 15: RESPONSES TO QUESTION 'HOW HAS THE CURRENT GLOBAL FINANCIAL CRISIS AFFECTED YOUR COMPANY'S CAPITAL INVESTMENT ANALYSIS PROCEDURES?'

-
- 1. No impact.
 - 2. Not changed.
 - 3. It hasn't.
 - 4. Not at all.
 - 5. No change.
 - 6. Yes. Investments are being analysed more regularly and options considered.
 - 7. More detail required for approval.
 - 8. Yes, more detailed analysis and more financial analysis of project undertaken.
 - 9. No.
 - 10. More emphasis on pessimistic forecasts in sensitivity/scenario analysis.
 - 11. No change.
 - 12. More rigorous.
 - 13. Use more methods.
 - 14. No.
 - 15. None.
 - 16. No response.
 - 17. We use more aggressive discount rates reflecting higher bank margins.
 - 18. As before.
-

As shown in Table 14, four respondents indicated that the financial crisis has had no impact on their companies' capital budget. Nine respondents indicated that their companies have reduced and, in one case, eliminated their capital expenditures due to limited funding availability. Regarding the effects on the capital investment analysis procedures used, the list of responses in Table 15 shows that ten of the respondents indicated that the financial crisis has not resulted in changes to their companies' capital investment analysis procedures. The other respondents cited the requirement for more rigorous and detailed analysis, the use of higher discount rates, and more emphasis on pessimistic forecasts.

CONCLUDING COMMENTS

Before making any concluding comments, it is important to acknowledge several limitations of our survey. Firstly, the survey was limited to companies listed on the Irish Stock Exchange. The financial policies and practices of our small sample of listed firms are not likely to be representative of all companies in Ireland. Moreover, after excluding companies in the finance and real estate sectors, only 43 companies were surveyed. Even though the response rate was quite respectable (41.9 per cent), the number of returned questionnaires was small (18). This is especially problematic when examining subsets of the sample.

Secondly, surveys measure perceptions, not necessarily reality. As pointed out by Aggarwal (1980), responses to questionnaires by individuals in large companies do not always reflect the practices used throughout the firm. Thirdly, the results from our survey were compared with the results of previous surveys in Ireland and elsewhere. However, such comparisons among countries must be approached cautiously. The various cited surveys were conducted at different times and during different economic conditions. Lastly, it may be that the questionnaire itself caused non-response bias in the results. The survey results may largely reflect the responses of executives more familiar with finance theories, concepts and terminology inherent in the questionnaire. With these limitations in mind, the following conclusions can be drawn from our surveys.

Overall, the results of our study suggest that the assumptions, theories and models of modern finance are applicable in Ireland and for the most part are descriptive of the views and practices of Irish executives. As noted in the results sections, the responses of Irish executives to the various questions in the survey questionnaire were similar to their counterparts in other surveyed countries.

The responses of financial executives of listed companies in Ireland to the survey questions on capital structure policy are generally consistent with the pecking order hypothesis. They indicate a preference for following a financing hierarchy rather than adhering to a target capital structure. They rank internal equity (retained earnings) as their first choice for long-term financing and, if external financing is obtained, they rank debt ahead of new ordinary shares. They believe that the long-term survival of the firm and maintaining financial independence are the most important considerations affecting a firm's financing decisions. Maintaining comparability with companies in the same industry is ranked least important. Financial executives of listed Irish companies appear to believe that a company's investment and dividend decisions are more binding than capital structure decisions.

As in previous surveys of Irish companies, the responding executives agreed that reasons for dividend policy changes should be adequately disclosed to investors, dividend payout does affect share prices, and companies should avoid increases in dividends that might have to be reversed in a year or so. In general, Lintner's lagged partial adjustment continues to be generally consistent with the practices of listed Irish companies and executives seem to be aware of signalling and clientele effects.

Capital budgeting practices in Ireland, at least among listed companies, appear to have improved over the past decade or so with an increasing number of companies

using more sophisticated DCF techniques. To assess risk, scenario analysis and sensitivity analysis are perceived to be the two most important techniques. More sophisticated probabilistic techniques appear to be seldom used. The survey results also indicate that most of the firms evaluate project cash flows on a before-tax basis and that the majority of firms do not practice capital rationing. In estimating the cost of equity capital, the most popular method is the CAPM, followed by the risk premium method.

The results of our survey have implications for both academics and practitioners. For example, in selecting the discount rates to be used in project evaluation, only four of the respondents indicated that multiple risk-adjusted discount rates are used. As previously mentioned, this result is not consistent with a basic principle of finance theory, that the return required on an investment should reflect the riskiness of the investment and the return available elsewhere from investments of similar risk. If proposed investments differ with respect to risk, a multiple risk-adjusted discount rate system should be employed. When selecting the discount (hurdle) rates to use for evaluating proposed investments, the majority of respondents indicated that a single discount rate is used. Capital budgeting decisions will be biased in favour of high-risk investments when single discount rates are used, even though the potential returns may not be high enough given the perceived risk. Conversely, decisions will be biased against low-risk investments. Because the discount rate is too high for low-risk investments, too few low-risk investments would be undertaken. Over time, a firm's risk will increase, but without higher commensurate returns, thereby reducing the value of the firm.

Another result that should be of concern to academics who study the Irish stock market and rely on models of risk and return that presume high levels of market efficiency, and investors who invest in listed Irish companies, is the perception of the responding executives about market efficiency. Only one of the respondents believed that his or her firm's shares were priced fairly by the market 'more than 80 per cent of the time', as compared to 47.2 per cent of executives in Pinegar and Wilbricht's (1989) survey of *Fortune* 500 companies in the US. A surprisingly high 38.9 per cent of the respondents indicated that their companies' shares were correctly priced 'less than 50 per cent of the time'. How much of the scepticism reflected in this result relates to questions regarding the efficiency of the ISE or is a consequence of the global financial crisis is an open question.

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ENDNOTES

- 1 Although we cannot be certain how 'maintaining financial independence' was interpreted by the respondents to our survey, the intended meaning pertains to being able to finance internally (using internal equity) and avoiding outside financing, which of course would be consistent with the pecking order hypothesis.
- 2 The 'stickiness' of dividends was also noted by Donaldson (1961) in a study of the financing practices of a sample of large US corporations published in 1961. He observed that although firms adapt target payout ratios to their investment opportunities, they do so gradually, trying to avoid sudden changes in dividends.
- 3 When both dividends and earnings were disclosed at the same time, McCluskey et al. (2006) found that the earnings signals had a greater impact on share prices.
- 4 The clientele effect was originally suggested by Miller and Modigliani (1961). However, they argued that one clientele is as good as another, thus concluding that its existence did not imply that one dividend policy is better than another.
- 5 Surveys have been so widely used in the US that a financial executive at Armco, Inc. was prompted to write an article to help researchers improve the quality and response rates of surveys. The author claimed to have received over 200 questionnaires over a 5-year period. See Singhvi (1981).
- 6 See, for example, Brigham and Davies (2002).

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