



Does asymmetric information drive UK dividends propensity?

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Abstract

Purpose – This paper aims to extend and contribute to prior UK research on the association between information asymmetry and dividends propensity. It seeks to investigate the impact of the number of analysts following firms, a proxy for information asymmetry, on dividends propensity.

Design/methodology/approach – Using a 282 UK FTSE-All Share non-financial/non-utilities firms with fiscal year ends on 2007, the paper uses a multiple regression model to investigate the association between dividends and analysts following.

Findings – The paper finds that after controlling for firm-specific characteristics, there is a significant negative association between the number of analysts following firms and dividend propensity. The finding suggests that higher coverage of financial analysts for UK firms reduces levels of information asymmetry between managers and shareholders, which results in lower dividend propensity. These findings are consistent with agency theory and pecking order theory, but inconsistent with signalling theory.

Originality/value – The paper contributes to prior research related to the drivers of dividend propensity by being the first UK study to examine the association between dividend propensity and information asymmetry.

Keywords Dividend propensity, Information asymmetry, Analysts following, Dividends, Information disclosure, United Kingdom

Paper type Research paper

1. Introduction

Our paper is mainly motivated by the extensive research on the drivers of dividends propensity, in general, and research examining the association between information asymmetry and dividends propensity in particular. In spite of the extensive research on the determinants of corporate dividend policy, the dividend puzzle still exists. There is no sole and satisfactory evidence explaining firms' decision to pay dividends (Naceur *et al.*, 2006). Prior literature examined the factors affecting firms' dividend policy; however, the results are always mixed. US researchers contributed to existing research on the determinants of dividends propensity by examining the association between information asymmetry and dividend propensity (Deshmukh, 2003, 2005; Li and Zhao, 2008)[1]. They found a negative relation between dividend propensity and information asymmetry (measured by the number of analysts following firms).

In the UK, only two studies have been undertaken to examine the association between dividend propensity and information asymmetry (Hussainey and Walker, 2009; Hussainey and Al-Najjar, 2011). Hussainey and Walker (2009) examined the effect of both dividends propensity and information asymmetry (measured by the level of future-oriented voluntary disclosure in annual report narrative sections) on share price anticipation of earnings. They found that voluntary disclosure and dividend propensity are substitute forms for communicating value relevant information to the



stock market participants (i.e. investors). Their results are consistent with signalling theory. To complement the findings in Hussainey and Walker (2009), Hussainey and Al-Najjar (2011) directly examine if there is any association between levels of future-oriented voluntary disclosure and dividends propensity, after controlling for other factors affecting corporate dividends levels. They found a significant positive association between the voluntary disclosure and dividends propensity suggesting that dividend propensity is negatively associated with levels of information asymmetry. However, it is clear that future-oriented information is only one component of corporate information environment. Companies voluntarily publish different types of information in their annual reports and other media of communication (i.e. interim report, conference calls, press release, and internet reporting). For that reason, it is often not sensible to use this type of information only as a proxy for the overall level of corporate information asymmetry.

Since financial analysts collect and disseminate information about firms (Bhushan, 1989), prior empirical research shows that analysts are less likely to be attracted to firms with poor disclosure (Lang and Lundholm, 1996; Healy *et al.*, 1999). In addition, Bushman *et al.* (2004) found a positive association between analyst following and disclosure.

We focus on UK firms for two reasons. First, the number of UK dividend-paying firms is significantly greater than the number of US dividend-paying companies (see Denis and Osobov, 2008 for more details). US-based research provided evidence that asymmetric information affects dividends policy. We revisit the same research issue in a UK setting and examine to extent to which information asymmetry drive UK dividend policy decisions. Second, Vieira and Raposo (2007) noted that the dividend propensity of UK firms has recently declined. We ask whether the decline in the dividend propensity is due to a change in the corporate information environment.

Our study makes an important and novel contribution to the literature on the drivers of corporate dividends propensity. To the best of our knowledge, we are aware it is the first UK paper to examine the association between firms' dividends propensity and the number of analysts following UK firms. By examining this association in a UK setting, we provide evidence on the extent to which extant US findings can be generalised to a different governance and financial reporting regime (Beekes *et al.*, 2004).

The remainder of the paper is organised as follows. Section 2 discusses dividend theories. Section 3 reviews prior literature and develops the research hypotheses. Sections 4 and 5 discuss the research design, sample, and data. Section 6 discusses our empirical results. Section 7 concludes and suggests lines for future research.

2. Dividend theories

Agency theory

Jensen and Meckling (1976) defined agency theory as an engagement between two or more people, namely, the principals (or owners) and the agent (or manager), whereby principals grant an agent authority to perform services on their behalf, including decision making. Al-Najjar and Hussainey (2010) stated that agency theory assumes that inherent conflicts of interests exist between the principal (the owner) and the agent (managers), resulting in an agency-cost problem. This problem is mainly driven by the information asymmetry between managers and shareholders. One of the mechanisms used to mitigate this problem is to pay dividends to shareholders (Rozeff, 1982; Easterbrook, 1984; Jensen *et al.*, 1992; Bhaduri, 2002). One expects that paying

dividends to shareholders will reduce the information asymmetry between managers and owners and hence reduce such agency-cost problem. Therefore, agency theory suggests that a measure of asymmetric information should be considered when examining the drivers of corporate dividends propensity. In addition to information asymmetry, Al-Najjar and Hussainey (2010) argued that asset tangibility may explain firms' dividend policies from an agency theory perspective and should also be considered as one of the drivers of dividends propensity.

Signalling theory

As discussed in Bhattacharya (1979), John and Williams (1985), and Miller and Rock (1985), signalling theory assumes that, in comparison with investors, managers have superior information about their firm's value. Hence, investors carefully review changes in dividend policy as signals for management's valuation of the firm's future performance (Li and Zhao, 2008; Al-Najjar and Hussainey, 2010). As an extreme example, a firm that announces a huge increase in its dividend payment would be regarded as financially healthy, but investors consider the announcement of dividends decline as bad news. Furthermore, Deshmukh (2003, 2005) argued that, in the presence of a higher level of asymmetric information in the firm, the level of dividend payment will be relatively higher to signal similar level of earnings, and vice versa. Given that dividend policy is assumed to be used as a signal of the firm's future performance, a positive sign in the relationship between UK dividend policy and information asymmetry is expected. Similarly, a positive association between dividend policy and profitability is anticipated.

Pecking order theory

This theory originated from Myers (1984) and Myers and Majluf (1984). It assumes that firm managers hold private information, which investors do not have. Furthermore, it assumes that firms prefer to finance their investment activities through the lowest-cost avenue such as retained earnings. The second option of finance will be through debt. The last option of finance is the highest-cost avenue, the issuing of new shares in the stock market (Al-Yahyaee, 2006; Faulkender *et al.*, 2006; Al-Najjar and Hussainey, 2010). The amount of distributed dividends, therefore, decreases firms' retained earnings, which can result in a need for debt financing (Al-Yahyaee, 2006). Based on this theory, a positive relationship between dividend payout and debt ratio is expected. Furthermore, more profitable firms are expected to depend heavily on retained earnings, thus meaning that a positive relationship between dividend policy and profitability is expected. In addition, Myers and Majluf (1984) argued that, when information asymmetry exists in a firm, it is highly likely to have underinvestment, which occurs from the association of lemon problem in the issue of new capital (Deshmukh 2003, 2005)[2]. This problem can be mitigated by retaining the amount of slack by reducing the level of dividends (Myers and Majluf, 1984). Therefore, the pecking order theory anticipates a negative association between dividend payment and information asymmetry.

Transaction-cost theory

On one hand, a higher dividends propensity mitigates agency cost but, on the other, a higher dividends propensity would increase the transaction costs that constrain external sources of financing (Rozeff, 1982). Al-Najjar and Hussainey (2010) argued that larger firms have an incentive to reduce transaction costs. Hence, larger firms are

expected to have higher dividend payout ratios and, simultaneously, are more likely to rely on equity financing than debt. Given that large firms are presumed to have an incentive to lessen transaction costs, a positive relationship between dividend payments and firm size is expected, and it is plausible to suggest a positive association between profitability and dividend payment under transaction-cost theory.

3. Literature review and hypotheses development

Dividend policy and information asymmetry

Studies from the USA found evidence suggesting that there is an association between dividend policy and information asymmetry (Deshmukh, 2003, 2005; Li and Zhao, 2008). Deshmukh (2003) investigated the initiation of firms to pay dividends based on the pecking order theory and tested the association between asymmetric information and dividend changes. He also examined this relationship based on young start-up firms that recently went public. Therefore, these companies were, on the one hand, highly likely to have a high level of information asymmetry and growth period, while on the other, they would most likely face a low level of cash flow, thus depending on external sources of finance. Similarly, Deshmukh's (2005) examination focused mainly on the impact of asymmetric information on dividend policy, based on the pecking order explanation using the logarithm of an analyst following a firm as a measure of information asymmetry. He investigated the association between issue costs, which arise from the information asymmetry problem, and dividend policy. Notably, these articles included both dividend payers and non-dividends-paying firms. Furthermore, Li and Zhao (2008) investigated the information environment's role in dividend policy through the use of the number of analysts following firms as a proxy for asymmetric information. The above-mentioned articles demonstrated the significance of information asymmetry in determining firms' dividend policy. In particular, Deshmukh (2003, 2005) and Li and Zhao (2008), found a negative relationship between asymmetric information and dividend policy. In other words, firms that are subject to low levels of information asymmetry prefer to distribute greater amounts of dividends, whereas firms that are subject to high levels of asymmetric information disburse lower amounts of dividends. Deshmukh (2003, 2005) concluded that the association between dividend policy and information asymmetry is consistent with pecking order theory and inconsistent with signalling theory. Similarly, Li and Zhao (2008) confirmed the prediction of the inconsistency of the relationship between asymmetric information and dividend policy with signalling theory. In summary, prior papers indicate that dividend policy is inversely related to asymmetric information. Based on the above-reviewed articles, we formulate the following hypothesis:

- H1. There is a negative association between dividend payout and information asymmetry.

Dividend policy and firm characteristics

Al-Najjar and Hussainey (2009) examined the factors that drive firms' decisions to disburse or not to distribute dividends. In terms of firm characteristics, they investigated a set of firms-specific characteristics, such as firms' liquidity, size, growth opportunities, profitability, asset structure, and firm risk. These characteristics have witnessed pivotal role in determining dividend policy in preceding literature. For instance, Fama and French (2001) and Li and Zhao (2008), addressed the significant position of three characteristics – firms' profitability, investment opportunities, and

size – in determining firms' decision to pay dividends. They posited that firms with more investment opportunity have fewer propensities to disburse dividends, while large firms and firms with high profits are highly likely to distribute dividends. Benito and Young (2001) looked at the associated factors in the omission of UK dividend payments. They revealed that firm characteristics such as gearing, investment opportunities, and cash flow play a major role in the omission of UK dividends. They observed that UK firms' propensity to cut dividends stems from insufficient cash flow, high levels of investment opportunities, and gearing. Consistent with prior literature, Ferris *et al.* (2006) found that profitability, investments opportunities, and firm size are the most effective factors in determining dividend policy of UK firms.

Dividend policy and profitability

Jensen *et al.* (1992), Aivazian *et al.* (2003a), and Al-Najjar and Hussainey (2009), among others, empirically examined the relationship between dividend payments and profitability. They found that profitable firms are more likely to pay dividends than non-profitable firms. In addition, their findings demonstrated a significant and positive association between these two variables. Based on the above reviewed articles, we formulate the following hypothesis:

H2. There is a positive relationship between dividend payout and firms' profitability.

Dividend policy and liquidity

Noticeably, Al-Najjar and Hussainey (2009) documented an insignificant relationship between liquidity position and UK firms' dividend policies. However, Ho (2003) found a positive association between dividend policy and liquidity level in Japan when comparing the factors associated with determining dividend policies of Australia and Japan. In contrast, in Pakistan, Mehar (2002) investigated the association between dividend policy and liquidity position, and observed a negative relationship between the former and the latter. Because of the above mixed evidence, the next hypothesis is formulated as follows:

H3. An association between dividend payout and liquidity position is anticipated.

Dividend policy and growth opportunities

The examination of the association between dividend policy and growth opportunities in the UK, USA, Canada, France, Japan, and Germany by Denis and Osobov (2008) showed contradictory relationships in the investigated countries. As an extreme example, firms that pay dividends in Canada, the UK, and the USA are shown to have worthless growth opportunities, while in France, Germany, and Japan, growth opportunities provide mixed evidence. However, Al-Najjar and Hussainey (2009) documented an insignificant relationship between growth opportunities and payments of dividends. In contrast, Jensen *et al.* (1992) found a significantly negative relationship between the former and dividend payments. Given the above discussion of the mixed evidence, the next hypothesis is formulated as follows:

H4. There is a relationship between dividend payout and growth opportunities.

Dividend policy and firm size

Benito and Young (2001) found a negative association between UK firms' size and their tendency to omit dividends, which indicates a positive relationship between dividend payments and firm size. Furthermore, Ferris *et al.* (2006) found size of UK dividend-paying firms to be ten times larger than non-dividend-paying firms. In addition, Al-Najjar and Hussainey's (2009) study concluded that large firms are less vulnerable than small firms to suffering financial distress, and have a higher ability to distribute dividends. Therefore, the following hypothesis is formulated as follows:

H5. There is a positive association between dividend payout and firm size.

Dividend policy and asset structure

Aivazian *et al.* (2003a) and Al-Najjar and Hussainey (2009), found a negative association between dividend policy and asset structure, which implies that firms with more tangible assets disburse lower amounts of dividends. This is due to the assumption that, in the existence of a large size of tangible assets in the firm, the size of short-term assets' tends to be low. As a result, the reliance on the source of debt financing will be used least as firms will depend on retained earnings, triggering firms to have lower propensity to pay dividends. Based on the evidence from prior research, the following hypothesis is formulated as follows:

H6. There is a negative relationship between UK dividend payout and asset structure.

Dividend policy and debt level

Kowalewski *et al.* (2007) investigated the determinants of dividend policy in Poland. The empirical results indicated a negative association between dividend policy and debt level. Conversely, a positive association between dividend policy and leverage was found by Chang and Rhee (1990, cited by Al-Najjar and Hussainey, 2009). Moreover, Al-Najjar and Hussainey (2009) observed an insignificant negative relationship between UK dividend policy and borrowing ratio. Given the mixed evidence, we formulate the following hypothesis:

H7. There is a relationship between dividend payout and level of debt.

Table I shows the combined expectation for the association between dividend payout and the investigated variables based on dividend theories and prior literature.

Asymmetric information	Profitability	Liquidity	Growth opportunities	Size	Asset structure	Debt level
Negative Agency theory	Positive Signalling theory	Mixed	Mixed	Positive Transaction cost theory	Negative Agency theory	Positive
Pecking order theory	Pecking order theory Transaction cost theory					

Table I.
Independent variables:
expected sign based on
prior research and
dividends theories

4. Research design

Sample selection

The population of our study is the UK STFE-All Share companies with a financial year ends on year 2007. Following Deshmukh (2003), companies related to financial and utilities sectors are removed from the study because of their unique reporting and regulatory requirements. Firms with missing dividends, analysts following, and/or firm-specific data are also deleted. This leaves a final sample of 282 firms for our study.

Data collection

We collect firms' dividend per share (DPS), profitability, liquidity, size, asset structure, and growth opportunity from the FAME and Thomson One Banker databases. We collect the number of analysts following from the FactSet database.

Regression model

We use the following multiple regression model to examine the association between dividends propensity and information asymmetry after considering other firm-specific characteristics:

$$\begin{aligned} \text{Dividend} = & \alpha + \beta_1 \text{Assy Info} + \beta_2 \text{PROF} + \beta_3 \text{LIQU} \\ & + \beta_4 \text{GROPP} + \beta_5 \text{SIZE} + \beta_6 \text{ASSTRU} + \beta_7 \text{DL} + e \end{aligned}$$

where *Dividend* is the dividend per share, α the intercept, *Assy Info* the asymmetric information measured by number of analysts following a firm, *PROF* the profitability measured by return on shareholders funds, *LIQU* the liquidity measured by current ratio, *GROPP* the growth opportunities measured by price to book value ratio, *SIZE* the log of total assets, *ASSTRU* the tangibility, and *DL* the debt level measured by gearing ratio.

5. Variables definitions

Dependent variable

Dividend payments. This study follows Aivazian *et al.* (2003b) and Naceur *et al.* (2006), by employing DPS as a dependent variable. DPS is defined as the amount of dividend received by a stockholder in 2007 divided by total shares outstanding for the same period.

Independent variable

Asymmetric information. The number of analysts following UK firms in 2007 is used in the regression model as a proxy for asymmetric information. A noticeable number of papers in the literature, as noted by Li and Zhao (2008), used the number of analysts following a firm as a proxy for asymmetric information. It would seem necessary to clarify the use of number of analyst following a firm as a proxy for the level of asymmetric information. Lang and Lundholm (1993) documented how having number of analysts following a firm increases as corporate voluntary disclosure increases. In other words, the numbers of analysts following a firm should increase accordingly with the amount of information available about the firm. Furthermore, in the absence of information asymmetry, managers increase the level of voluntary disclosure so as to

make information available for analysts following a firm. A high number of analysts following a firm suggest, therefore, less information asymmetry in the firm.

Control variables

Profitability. Similar to Hutchinson and Gul (2002), we use return on equity (ROE) as a proxy for firms' profitability.

Liquidity. Liquidity ratio is considered in this paper because it reflects the ability of the firm to meet its short-term payments and it may influence a firm's decision to pay a cash dividend (Al-Najjar and Hussainey, 2009). Following prior research (i.e. Aivazian *et al.*, 2003b), current ratio is used as a measure for firms' liquidity.

Growth opportunities. Firms' dividend policies are highly likely to be influenced by growth or investment opportunities when firms are facing high-growth opportunity (Jensen, *et al.*, 1992). Consistent with the previous studies, we use price to book-value ratio as a proxy for growth opportunities.

Firm size. Following Al-Najjar and Hussainey (2009), we use the natural logarithm of total assets as a proxy for firm size.

Asset structure. Asset structure is defined as the tangible assets, namely, total assets minus current assets divided by total assets (Aivazian *et al.*, 2003a; Al-Najjar and Hussainey, 2009), and is calculated to assess long-term assets' proportion in the firm's asset structure (Aivazian *et al.* 2003a).

Debt level. Gearing or leverage ratio is the ratio that explains the level of debt in the firm compared with shareholders' funds. Following prior research, we define gearing ratio as a measure for firms' debt level (Al-Najjar and Hussainey, 2009).

Table II shows the definition and the measurement of dependent, independent, and the control variables.

6. Empirical results and analysis

Descriptive analysis

Table III shows the descriptive analysis. It shows that the total number of listed firms in the sample is 282 firms. The maximum number of analysts following a firm is 45, with an approximate mean of 11. However, the sample holds some firms that had no analysts following them in 2007. Similarly, the sample contains firms with zero dividends per share, while the highest firm with DPS in the sample is £2.58 being paid, with an average of £0.16. With respect to firm size, the maximum, minimum, and average firm's size is worth £132,426,000, £48, and £3,847,662, respectively. The least profitable firm shows a negative profitability with – £55.55 in return on shareholders' funds, with an average profitability of £36.76 and a maximum of £833.33.

Variables	Measurement	Definition
1. Dividend payments	Dividend per share	Dividend/total shares outstanding
2. Asymmetric information	Financial analyst following	Number of financial analysts following UK firms (2007)
3. Profitability	Return on equity	Net income/shareholders' equity
4. Liquidity	Current ratio	Current assets/current liabilities
5. Growth opportunity	Price to book-value ratio	Market price per share/book price per share
6. Size	Log of total asset	Log of firm's total assets
7. Asset structure	Tangibility	(Total assets – current assets)/total assets
8. Debt level	Gearing ratio	Total debt/shareholders' funds

Table II.
The measurement and definition of the present research variables

Table III.
Descriptive analysis

	<i>n</i>	Minimum	Maximum	Mean	SD
Analysts following a firm	282	0	45	11.30	7.737
Size	282	48	132,426,000	3,847,662	13,891,030
Tangibility	282	0.017	0.97	0.57	0.22
Price to book value	282	-370.11	246.18	3.59	27.42
Liquidity	282	0.27	45.14	1.64	2.81
Profitability	282	-55.56	833.33	36.76	73.42
Debt level	282	-5294.10	5168.09	115.11	5.43E-2
DPS	282	0.00	2.59	0.17	0.25
Valid <i>n</i> (listwise)	282				

Correlation analysis

Table IV shows the correlation analysis. It shows that the number of analyst following is positively correlated with DPS. The correlation between these variables is significant at the 1 per cent level. This suggests that the higher the number of analysts cover firms the lower the level of information asymmetry and hence the higher the dividends propensity. The table shows that the least significant correlation is the correlation between DPS and tangibility (0.141). The correlation is significant at the 5 per cent level suggesting that firms with greater size of tangibility pay higher level of dividends to their shareholders. Furthermore, the natural logarithm of total asset (size) is shown to be positively correlated with the dependent variable with correlation is ($r = 0.306, p = 0.000$), indicating that large firms pay more dividends than their smaller counterparts. Similarly, return on shareholders funds is positively (0.230) and strongly (p -value = 0.000) correlated with DPS. This suggests that more profitable firms disburse more dividends than do less profitable firms. On the other hand, there was no significant correlation between current ratio, price to book value, and gearing ratio with DPS. Finally, the table shows a high correlation between price to book value and gearing ratio. This high correlation between these variables equals to 87.5 per cent. This indicates that there is a multicollinearity problem between these variables, hence we decided to eliminate gearing ratio from our regression analysis[3].

Regression results

Table V shows the empirical findings. It shows that the coefficient of determination (R^2) between DPS and the independent variables is 0.189 (≈ 19 per cent). It indicates that 19 per cent of the variance in dividend policy can be predicted from asymmetric information, profitability, liquidity, size, growth opportunities, and asset structure. More importantly, the model specification ($F = 10.666$ and the associated p -value with $F = 0.000$) shows a significant relationship between dividend policy and the independent variables, suggesting that the explanatory variables can be used reliably to determine UK dividend policy.

Dividends and asymmetric information. Interestingly, Table V shows a significant positive relationship between dividend payments and the number of analysts following a firm ($t = 3.232, p$ -value = 0.001). In other words, as the number of analysts following a firm increases, so does the dividend payment. The coefficient (parameter estimate) for analysts following a firm is 0.007, predicting an increase of 0.007 in dividend payments for every the increase in the number of analysts following a firm. As discussed earlier, a positive relation between dividend payout and the number of

analysts suggests a negative association between dividend policy and information asymmetry. The regression output indicates, therefore, a strong significant negative relationship between UK dividend policy and asymmetric information. Our findings suggest that UK firms that have lower levels of asymmetric information tend to disburse higher amount of dividends, whereas in the presence of high levels of information asymmetry, the likelihood of dividend payment decreases. This negative coefficient between dividend payments and information asymmetry is consistent with US literature (Deshmukh, 2003, 2005; Li and Zhao, 2008). Furthermore, this evidence is in line with agency and pecking order theories, but inconsistent with signalling theory. Given the above supporting empirical evidence on the determination of UK dividend policy by information asymmetry, the first hypothesis (*H1*) is accepted.

Dividends and profitability. Consistent with prior studies and dividends theories, firms' profitability has a significantly positive association with dividend policy ($t = 3.599$ and p -value = 0.000). This finding implies that highly profitable UK firms disburse a higher payment of dividends compared with less profitable firms. This empirical result provides supportive evidence for signalling theory, pecking order theory, and transaction-cost theory. Thus, the second hypothesis (*H2*) is accepted.

Dividends and liquidity. Table V also shows that there is no significant association between UK dividend policy and liquidity. The positive sign on the coefficient estimate

Independent variables	Correlation	p -value
Analyst following	0.355***	0.000
Return on shareholders funds	0.230***	0.000
Current ratio	-0.059	0.324
Price to book value	0.070	0.243
Log of total assets	0.306***	0.000
Tangibility	0.141**	0.018
Gearing ratio	0.104	0.082

Notes: **,***Significant at 5 per cent and 1 per cent levels (two-tailed), respectively

Table IV.
The correlation
analysis

Independent variables	Coefficients	T -statistic	p -value
Analyst following	0.007	3.232	0.001***
Profitability	0.001	3.599	0.000***
Liquidity	0.00001	0.004	0.997
Growth opportunities	0.001	1.689	0.092*
Size	0.043	2.653	0.008***
Asset structure	0.059	0.904	0.367

Notes: *,***Significant at 10 per cent and 1 per cent levels (two-tailed), respectively

Table V.
Empirical results

on liquidity variable suggests that firms with a healthy liquidity position pay out higher amounts of dividends. However, since this finding is not statistically significant, the third hypothesis (*H3*) is rejected.

Dividends and growth opportunities. Table V shows a marginally significant association between growth opportunities and UK dividend policy. More precisely, a weakly significant positive relationship between those two variables is found ($t = 1.689$, p -value = 0.092). The result reveals that firms with higher growth opportunities tend to disburse higher dividend payments. It can be plausibly argued that those firms are expected to be high and large in terms of profitability and size. Since a marginally significant positive relationship has been observed, the fourth hypothesis (*H4*) is accepted.

Dividends and firm size. Table V shows a significantly positive association between firm size and DPS. This suggests that large firms distribute more dividends to their shareholders than do their smaller counterparts. This result is in line with transaction-cost theory. Thus, the fifth hypothesis (*H5*) is accepted.

Dividends and asset structure. Table V shows that there is no significant relationship between asset structure and UK dividend policy. In addition, this insignificant positive association is inconsistent with the discussed explanation of agency-cost theory. Therefore, the sixth hypothesis (*H6*) is rejected.

Table VI shows a summary of the present's paper empirical findings on the association of dividend payments with other independent variables.

7. Conclusion

Using a sample of 282 UK non-financial/non-utilities listed firms in 2007, we use multiple regression model to examine the effect of information asymmetry on UK dividends propensity after considering other firm-specific characteristics (profitability, liquidity, growth opportunities, size, and asset structure). Consistent with prior literature, we find that asymmetric information is negatively associated with UK dividends propensity. Our findings are in line with agency-cost theory and pecking order theory, but inconsistent with signalling theory. With regard to firm characteristics, we find that profitability, size, and growth opportunities are the key firm-specific drivers of dividends propensity in the UK. The empirical finding on profitability provides further supportive evidence for signalling, pecking order, and transaction-cost theories. Similarly, firm size documents a supplementary empirical result for transaction-cost theory, whereas asset structure is inconsistent with the assumption of agency theory.

There are many reasons for undertaking this study. The most important is the fact that this type of research has potential implications. It helps to inform regulators about the benefits of improving firms' information environment to investors and firms.

Explanatory variables	Type of relationship	Significance
Asymmetric information	Negative	Significant
Profitability	Positive	Significant
Liquidity	Positive	Insignificant
Growth opportunities	Positive	Marginally significant
Firm size	Positive	Significant
Asset structure	Positive	Insignificant

Table VI.
Summary of
empirical findings

Our study provides evidence that firms with lower levels of asymmetric information are more likely to pay more dividends. This might help in attracting more investors to invest in these companies. The findings have also managerial implications. They show that for an effective financial communication with the stock market, managers should give high priority to develop appropriate and complete disclosure practices to reduce the information asymmetry. Then, dividends can be used to reward current investors and attract new investors to their firms. Finally, the findings of the study have important implications for small investors who may not have access to information through other sources in the same way that financial analysts or large institutional investors do. Our study suggests that is a good indicator of lower levels of information asymmetry and small hence investors can interpret this as a good signal about the firm's future performance when making their investment decision.

The present study suggests a number of other avenues for future research. First, it would be interesting to re-examine the association between dividend policy and asymmetric information by using different proxy for asymmetric information such as the quality and the quantity of corporate voluntary disclosure. Second, it would be interesting to extend the present study by testing the degree to which other corporate governance mechanisms (i.e. board and audit committee characteristics) affect the association between asymmetric information and corporate dividend policy. Finally additional research could be undertaken to examine the association between asymmetric information and other financing decisions (i.e. capital structure).

Notes

1. Information asymmetry suggests that firms' managers are more acquainted with the current situation of the firm and know more concerning the firm's realistic value than do investors, which will be transmitted to the market by different means, such as distributing dividends to firms' shareholders.
2. Lemon problem is a jargon used to discuss information asymmetry. This terminology was first introduced by Akerlof (1970). He explained that lemons problem is the problem of existing information asymmetry in a market which occurs when the seller knows more about a product than the buyer.
3. Multicollinearity problem exists when the correlation between two independent variables is equal to or greater than 70 per cent (Drury, 2008).

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