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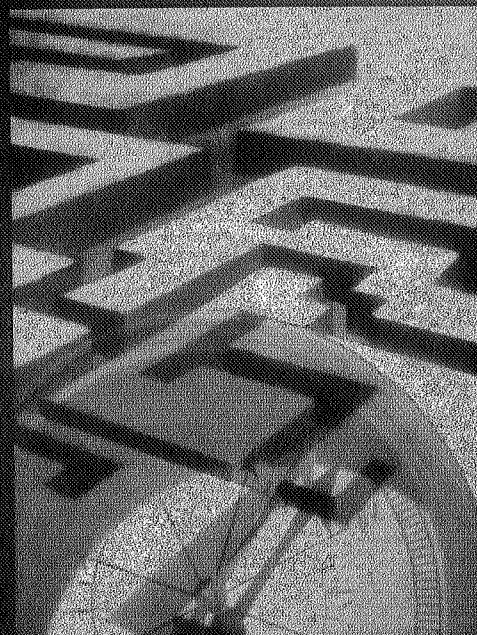
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Corporate Dividend Policy in Norway

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1. Introduction and Overview

The amount to be paid as dividends to the firm's owners is a primary decision faced by corporate managers. Still, little is known about what factors determine the level of dividends. Although researchers have collected some stylized facts from studies in the U.S.,¹ most questions about the potential determinants of real-life dividend policy decisions remain unanswered. This report addresses several of these unexplored issues through a comprehensive empirical analysis of Norwegian firms' payout policies over the last fifteen years.

Our study is interesting to both domestic and international readers for a number of reasons. On the data side, we collect firm-specific information from a variety of sources to amass a comprehensive data set on virtually all exchange-listed firms in Norway for the period 1980-1994. The data base includes complete dividend, accounting, stock price and market liquidity data for each firm plus all relevant information on their private and public equity offerings. We also collect data on the firms' ownership structure, including their intercorporate shareholdings, insider holdings and ownership concentration. To date, no international study has utilized such a broad set of relevant data to investigate dividend behavior.

In addition to the unique data set, regulatory and business practices in Norway create a rich experimental environment for studying corporate dividend policy. Dividend payments are, for example, made within a remarkably simple structure. Unlike in many other countries, Norwegian firms pay dividends only once a year, virtually all dividends are paid between March 1 and May 31 in year $t+1$ based on fiscal year t , and cash is the only admissible form of disbursement to shareholders (except in very rare cases, stock repurchases are forbidden). Furthermore, Norwegian corporate law sets an explicit, quantifiable ceiling on the amount of dividends a firm can pay. U.S. corporate law, for example, imposes no such clearly defined restriction. This upper bound permits us to construct a firm's feasible dividend limit as a function of both the legal requirement and the

¹ For instance, U.S. companies historically pay out a large proportion of earnings in the form of dividends (40-60%), rather than retain those resources for future investment. Companies also tend to smooth dividend payments over time, even when the variation in earnings is great. And despite the unfavorable treatment dividends receive relative to capital gains in some tax regimes, dividends still appear to be demanded by investors forced to face such taxes. For a current review of the academic literature on dividend policy, see Allen and Michaely (1995).

firm's liquid resources. A ratio of actual to maximum dividends is bounded between zero (no dividends paid) and one (maximum allowable dividend paid). By comparison, the conventional dividend-earnings ratio is both unbounded and unstable, since the denominator can easily be negative or close to zero. Finally, several tax reforms have changed the relative taxation of dividend income versus capital gains several times throughout the sample period. These institutional shifts allow us to study potential relationships between the tax system and corporate dividend policy.

We broaden the perspective on dividend policy by exploring new characteristics of the economic relationship between the firm and its stakeholders, such as net dividends (dividends paid less proceeds from equity issue proceeds), dividends relative to the change in the resource committed by the owners to the firm (retained earnings plus equity issue proceeds), and the role of dividends in the cash cost of both equity, debt and total assets. As our data set includes dividends paid between companies, we also study the extent to which a firm's dividend payment derive from dividends passed on from other firms.

The Oslo Stock Exchange (OSE) can be characterized as a relatively small market. Despite the fact that its shares often remain concentrated among a relatively few owners, the OSE is currently a liquid market with traded shares turning over at a rate similar to the average European country. In terms of market value, roughly 70% of the companies on the OSE are industrial firms (including companies in the oil industry), with the other 30% of the firms being evenly divided among companies in the shipping and financial sectors.

Overall, we find that Norwegian firms pay low dividends over the period 1980-1994. This judgement holds up relative to dividend payout ratios in other countries, the maximum amount allowed under Norwegian law, the firm's financial constraints and the amount of resources committed to the firm by shareholders.

For example, we find that, on average, 44% of the firms on the OSE pay no dividends in a given year. Compared to 22 countries for which we have data, OSE firms pay a dividend yield and earnings payout ratio that is roughly half the average international rate. For those firms that do pay dividends in a given year, the payout is less than one-third of the amount allowed by Norwegian law, even though the Norwegian tax system favors dividend payouts to retaining cash in the firm. The shareholders as owners pay in twice as much cash to the firm, through new equity issues, as they receive through dividends. If we include the resources kept in the firm through retained earnings, the amount committed by the owners to

the firm over the sample period rises to more than three times the amount paid as dividends. Furthermore, the relative amount of dividends paid by Norwegian firms appears to be falling through time.

We find no meaningful differences in the ownership concentration of firms that pay dividends versus those that do not pay dividends, nor do we find any relationship between the decision to pay a dividend and the market liquidity of a firm's shares. What we do find is that large firms pay dividends and issue new equity more often than small firms. Moreover, a firm's dividend policy appears to be tied to its desire to maintain a constant total cash cost of capital. That is, our results suggest that a Norwegian company determines its dividend payout by accounting for both its short-term cash cost of interest on debt and its dividend payment. Somewhat more strikingly, we observe firms making annual dividend payments that are roughly at the same level as their interest payments. This result holds both across firms in a given year and through time. Although further conclusions are difficult to draw without further research, our result of the relationship between dividend payments and the cash cost of capital is unique and unexplored in the dividend literature.

To aid in the exposition of the paper, we include a summary of our findings after the concluding section (page 32). The rest of the report is organized as follows. A description of the data and the sample selection techniques is provided in the next section, along with a broad characterization of the OSE firms according to their size, ownership structure, growth potential and stock market liquidity. Section 3 presents findings on the proportion of sample firms which pay dividends and the kroner value of dividends paid, along with the number and kroner value of equity offerings and net dividends. In section 4 we alternatively relate dividends to the share price, the earnings, the share's par (face) value and the maximum possible dividend. The ownership structures of dividend payers and non-payers are compared in section 5, while section 6 makes a corresponding comparison based on the market liquidity of the underlying share. Section 7 analyses the net tax benefit of dividend payments vs. retained earnings in the Norwegian tax system and explores whether biases in the tax system seem to influence our sample firms' dividend policy. We broaden the perspective further in section 8 by annually comparing the resources which the owners invest in the firm (equity issue proceeds plus retained earnings) to what they take out as dividends. A further extension is provided by section 9, where we relate dividend policy to

the cost cash of capital for equity, debt and total assets. A summary and concluding comments complete this report in section 10.

2. Data Sources, Sample Selection, and Overall Sample Characteristics

Our data set contains annual information on virtually all Oslo Stock Exchange (OSE) firms for the period 1980-1994. The starting year of the sample represents the first year that stock market data was recorded by the OSE subsidiary, Oslo Børs Informasjon (OBI). All stock prices, stock trading volume, dividend and most of the financial statement data comes from OBI. The OBI Annual Reports provide aggregate market characteristics for the Norwegian equity market, and in recent years some international comparative statistics.

We incorporate three other databases. First, to obtain complete information on all equity offerings by our sample firms, we use the data base on public equity rights offerings constructed by Bøhren, Eckbo and Michalsen (1996), along with data we collect on private equity issues. Second, we use the data on intercorporate shareholdings by listed firms from Bøhren and Norli (1996). Finally, we hand-collect information on ownership structure from company annual reports and Kierulf's Annual Handbook (1980-1994).

Table 1 reports the number and proportion of Oslo Stock Exchange (OSE) firms included in our sample, by year and by three broad industry groups. The *financial* category includes all commercial banks, financial companies and insurance companies. *Shipping* firms are separated from other industrial firms both because of their prominence in the Norwegian economy and their unique industry characteristics. For example, shipping firms are reputed to be closely held, to have faced stiffer international competition, and to have relied more heavily on international capital sources. In fact unlike industrials and financials, shipping firms have been exempt from many previous national restrictions on international capital movements. The *industrial* group consists of all firms that are not related to the shipping or the financial categories. For instance, it includes all petroleum-related activities such as offshore oil drilling and the production of oil platforms.

As seen from Table 1, an average of 120 firms per year are listed on the Oslo Stock Exchange (OSE), and there are 122 companies listed in 1994. Our sample constitutes on average 96% of all OSE firms. Except for the early 1980s, the sample contains practically the entire population. Industrials constitute on average roughly 60% of the sample, financial firms 15% and shipping the remaining 25%.

Table 2 summarizes some general characteristics of the sample firms over the period 1980-1994. Panel I reports the market capitalization (value of equity), measured in constant

1994 kroner². As a measure of ownership concentration, Panel II shows the average proportion of equity held by the ten largest shareholders. Panel III reports the ratio of the annual market value of stock trades to the market value of equity. This turnover ratio proxies for the average stock market liquidity of the sample firms. Finally, panel IV relates the firm's market value (equity plus debt) to its book value. This ratio may indicate the market's assessment of the firm's future growth potential.

The aggregate *market capitalization* of the OSE in 1994 is NOK 247 billion, making the OSE the twelfth largest stock exchange in terms of market value of equity among the seventeen European countries for which comparable market data is available (FIBV, 1995). The market value of the OSE constitutes 14% of the total share value in Scandinavia (Denmark, Norway and Sweden) and is 1/100 the size of the London Stock Exchange. Nonetheless, the size of the OSE increases quite rapidly over our sample period, a time period marked by significant deregulation of the financial markets, including a move to market-determined interest rates, the institution of first and second generation insider trading laws (Eckbo, 1995), and expansion of the ability for foreigners to own Norwegian equity. By 1994, the real value of the exchange is six times larger than its 1980 level. During this period of growth, the proportion of market value contributed by the shipping and financial sectors remains relatively small. Shipping firms represent an average of 16% and financial companies 12% of the value of the OSE, with the rest being represented by industrial firms.

Ownership of the OSE firms, as measured by the proportion of shares owned by the ten largest shareholders, becomes increasingly concentrated during our sample period. The shipping industry has the highest average concentration of 62%, whereas the ten largest shareholders in the two other sectors hold close to 50% of the average firm's shares. These findings cannot be directly compared to existing international evidence, which mostly deals with the holdings of the three largest owners. However, Bøhren, Haug and Michalsen (1996), who analyze a subsample of our sample over the period 1984-1994, find that the three largest owners hold on average 41% of the stock. According to Prowse (1995), the

² The market capitalization of each firm is calculated by multiplying the beginning-of-year price by the number of shares outstanding at the beginning of the year. All totals are subsequently inflated by the consumer price index (CPI) to obtain the capitalization in 1994 kroner.

corresponding fraction is 21% in the U.K., 25% in the U.S., 33% in Japan and 42% in Germany³. Thus, it seems fair to conclude that OSE firms are typically closely held.

Despite the relatively high concentration of equity ownership on the OSE, by 1994 the average proportion of the value of the firm to change ownership is also high, indicating that the *market liquidity* of the OSE increases markedly as the absolute size of the market grew. Nearly 42% of the average equity value of a firm in our dataset is traded in 1994, compared to only 1.2% in 1980. We also notice a remarkably low liquidity in shipping shares in the first half of the sample period and a correspondingly high turnover of shares in both financials and shipping after 1990. If we include all share classes in the liquidity measure⁴, the 1994 OSE turnover ratio is 54%, which is somewhat below the corresponding European average of 65% and almost identical to the NYSE turnover ratio of 57% (FIBV, 1995)⁵.

Furthermore, the *growth potential* of the OSE, as measured by the market to book value of equity, increases over the sample period⁶. The average market value of equity is 34% greater than the average book value of equity during the period 1988-1994, compared with 18% larger in the earlier half of the sample period.

Summarizing section 2, our sample of almost every listed Norwegian firm in 1980-94 reflects corporate dividend policy in one of Europe's smaller capital markets. On average, the ten largest owners in a OSE firm hold 56% of the shares, an individual share is held for four years, and a firm's market value exceeds its book value by 25%. Market size and market liquidity are increasing over time. In financials and shipping firms, which both account for about 15% of total OSE market capitalization, the ownership structure becomes increasingly concentrated. By international standards, most OSE firms are closely held.

³ Timely, comparable international data on ownership structure are not easily obtained. To illustrate, the above concentration ratios from Prowse (1995) are based on respectively 457 US non-financials in 1980, 85 UK manufacturing firms in 1970, 143 Japanese mining and manufacturing firms in 1984, and on 41 German non-financials in 1990.

⁴ Due to restricted voting rights and limits on foreign ownership, a firm may issue up to three classes of shares (A, B, and F shares).

⁵ Some European exchanges have much higher average liquidity than Norway in 1994, such as Paris (137%), Frankfurt (135%), London (88%), and Italy (76%). Relatively low turnover is found in Amsterdam (42%), Vienna (31%) and Barcelona (5%).

⁶ The ratio cannot be computed for financial firms due to lack of data.

3. The Frequency and Size of Dividend Payments and Equity Issues

A firm's dividend decision may be regarded as being separate from its financing (capital structure) choice. For instance, dividend policy decisions are usually characterized as long term and relatively consistent through time, while equity issues are more sporadic and may arise as a response to changing cash needs. However, we can also think of the dividend and the equity issue policies as *joint* decisions: a dividend involves a payout from the firm to the owners, an equity issue reverses this flow. What matters for both the firm and its owners is therefore the difference between the two components, i.e., the net dividend or the net cashflow to stockholders.

With this thinking in mind, this section takes a first look at the cash flowing to and from shareholders, as measured respectively by dividends paid out and cash paid in by public and private equity issues⁷. Table 3 focuses on the proportion of firms paying dividends and issuing equity in a given year, while Table 4 reports the kroner value of these cash flows and the difference between them.

3.1 Proportion of Firms Paying Dividends and Issuing Equity

Panel I of Table 3 reports the fraction of firms paying *dividends* in each year of the sample period. During the average year, 56% of exchange-listed firms pay a dividend. With the exception of the years of the Norwegian banking crisis (1990-1992), the financial industry tends to have the largest proportion of dividend-payers (61% on average), while the shipping industry has the lowest (52%).

The average sample-period payout of 56% masks substantial variation in the dividend payout propensity over time. Although 77% of all firms pay dividends in 1980, the proportion declines continuously through 1991, when only 37% of the firms make a dividend payment. In 1992, the year of a comprehensive tax reform, the proportion starts increasing again so that by 1994, 71% of all firms pay dividends⁸. This pattern is especially apparent in the financial industry, where 3/4 of all firms pay a dividend in 1980, only 1/3 of them do so in 1991, whereas all financials are dividend payers in 1994. Moreover, the cohort

⁷ Whereas a public stock issue raises cash by offering new shares to the general public, a private issue involves just a pre-selected group of investors (less than fifty individuals). See Bøhren, Eckbo and Michalsen (1996) for a detailed analysis of public stock offerings in Norway.

⁸ This pattern continues in 1995, when 77% of all OSE firms pay dividends.

of firms paying dividends through time remains stable. We find that 86% of dividend-paying firms in a given year continue paying dividends next year, while 17% of the non-paying are likely to pay dividends in the next year.

Panel II of Table 3 reports the proportion of sample firms that privately or publicly *issue equity*. The average proportion of firms that sell new shares in a given year is 17%, with financial firms issuing more often (30%) and shipping firms less often (11%). Thus, whereas the average financial issues equity about every third year, shipping firms do so at intervals of almost ten years. The time-series pattern in issuance behavior tends to be erratic. In four of the sample years, no shipping firm issues equity, while in two other years, roughly 30% of them are issuing. The financial industry experiences periods where almost half the firms receive a capital infusion from their owners.

What we may call *equity recycling* is when firms pay dividends with one hand and simultaneously issue equity with the other. From the underlying data, we find that 17% of the dividend-paying firms also issue equity in the same year. The recycling effect is small for shipping (7%), approximately equal to the overall average for the industrials, while more than every third financial both issues equity and pays dividends within the same year.

3.2 Total Dividends, Equity Issue Proceeds and Net Dividends

Proceeding from the frequency of dividend payments and equity issues to the amounts involved in these transactions, panel I of Table 4 reports total annual dividend payments, expressed in constant 1994 kroner. Panel II shows corresponding figures for equity issues, while panel III contains the the *net dividend*, i.e., the difference between the two.

Although the number of firms issuing equity in an average year is much lower than the number of firms paying dividends (Table 3), the aggregate value of equity issued is nearly twice the amount of dividends paid to shareholders: over the sample period, the firms collect a total of NOK 60 billion from equity issue proceeds and pay NOK 32 billion in dividends. However, the resulting negative net dividend in panel III does not necessarily reflect a surprising or value-destroying corporate policy, since cash obtained from the equity issues could be used to fund future growth opportunities and thus pay dividends after 1994. In fact, the increase in the kroner value of equity issues relative to dividend payments in the latter part of our sample period may explain the increase in market to book ratios reported in Table 2.

Two other features are noteworthy in Table 4. First, substantial variation exists across the three industries: Shipping firms tend to pay out only one fourth of the proceeds collected from equity issues. Financials pay back about half of what they collect, whereas industrials return almost two thirds. Second, the amount collected in equity issues varies greatly relative to the stable dividend payout. Still, as is evident from panel III, aggregate dividends seldom exceed aggregate issue proceeds: the net dividend is positive in only three of the fourteen years, and then only marginally so, generally varying between a net cash transfer from stockholders to firms of one to seven billion kroner.

3.3 Firm Size and Dividend Payments

Table 5 reports the average size of a firm according to whether or not it pays dividends (panels I and II), issues equity (III and IV), does both (V), or neither (VI). We define average size as the total kroner value (in 1994 NOK) of the firms' equity in a given category (e.g. , dividend-paying shipping firms) divided by the number of firms in that category.

In general, it is the largest firms that pay dividends and issue equity. Dividend-payers are on average about four times larger than non-payers. Moreover, if the dividend-paying firm also issues equity, its average size increases further by roughly 50%. By comparison, companies that pay no dividends and issue no equity are on average just 16% the size of the dividend-paying equity issuer.

There are two notable patterns behind the large average differences. First, the relative size of dividend-payers grows over the sample period. For instance, whereas the average dividend-paying firm is twice the size of a non-payer in 1980, it is almost four times larger in 1994. Second, the differences are primarily driven by industrial firms, where for example, the average firm that both pays dividends and issues equity is twelve times larger than a firm which does neither. By comparison, a financial or shipping firm that both pays a dividend and issues equity is roughly twice the size of a firm that refrains from either activity. Moreover, the non-paying industrials are relatively small. They are not only 1/10th the size of dividend-paying firms in their category. They are also smaller than their counterparts in finance and shipping.

Summarizing, section 3 reveals that on average about half the OSE firms pay dividends. The fraction paying is lower in the middle of the sample period (35%) and higher in the beginning and in the end (above 70%). The total dividend amount paid to stockholders

per year is on average NOK 2.3 billion (in 1994 kroner), whereas the corresponding amount paid from the owners to the firm in new equity issues is NOK 4.3 billion. The corresponding negative net dividend adds up over the years to a total net cash transfer from owners to the firm of almost NOK 30 billion.

Large firms pay dividends and also issue new equity much more frequently than small firms. This size effect is particularly pronounced for industrials. Financials tend to be both the most active dividend payers and also go more often to the issue market than others. Shipping companies issue new shares at fairly long intervals, and only a relatively small portion of the issue proceeds is repaid to stockholders.

4. Dividend Payout Ratios

So far, we have studied the firms' propensity to pay dividends, to issue new equity and also the total amounts involved in these transactions. This section goes one step further by relating dividend payments to several firm characteristics. In particular, we measure dividends relative to five normalizing variables: the share price, after-tax earnings, par value of common stock, and two measures of the maximum dividend.

Each payout ratio represents the kroner dividend payout per unit of the normalizing variable. The variables used to normalize the dividends are not randomly chosen, but are all potential determinants of a firm's dividend behavior. For instance, the ratio of dividends to maximum dividends may reflect a conjecture that by increasing the payout, owners may reduce excessive, value-destroying investments by managers of cash-rich firms. Moreover, if the relationship between the dividend and some determinant is stable, we would expect the payout ratio to be fairly constant. Thus, each ratio may be considered a rough indicator of the univariate relationship between dividend payout and the determinant in question.

Our findings are reported in Tables 6A-G and 7A-G.

4.1 Definitions

The *dividend yield* is calculated by dividing the annual per share dividend payment by the share price at the end of the calendar year prior to the dividend payment. As a proxy for the *classic payout ratio*, we divide dividends by earnings after taxes.

We include *the par value* of common stock as a normalizing variable because some financial managers in Norway report dividend payout as a percentage of par (face) value. Par value also influences the maximum legal dividend discussed below. When adjusted for stock dividends and stock splits, this ratio of dividends-to-par value also captures the dividend-per-share approach to dividend policy, i.e. dividends paid as a kroner amount per share. Thus, a stable ratio of dividends-to-par value would also reflect a policy of paying a constant dividend per share.

The dividend yield, the classic payout ratio, and the dividend per par value or per share collectively cover the set of dividend ratios that are often reported by firms or used by financial analysts and researchers. However, both the institutional framework and financial

theory suggest that dividend policy may depend on several additional factors. The ratio of dividends paid to maximum dividends captures at least two such determinants:

Norwegian *corporate law* puts a ceiling on the amount of dividends a firm can pay in any given year. We explore the proportion of this legal dividend, which we term *Max1*, that firms actually pay out. The calculation of *Max1* is described in Appendix 1⁹. The amount of dividends the firm can pay is also bounded by the available amount of *liquid resources*. Assuming a company does not use the sale of long-term assets to fund dividends, a company cannot pay out more than the sum of its liquid assets, unused debt capacity and proceeds from security issues, minus its outlays for new investment projects. Therefore, we create a second definition of the maximum dividend a firm can pay, *Max2*, which is defined as the minimum of *Max1* (the legal constraint) and the firm's liquidity constraint:¹⁰

$$Max2_t = \min\{Max1_t, LA_{t-1} + DC_t + E_t(S) - E_t(I)\}.$$

To implement the *Max2* measure, we define liquid assets, LA_{t-1} , to be the sum of cash, bank deposits, marketable securities and accounts receivable at the beginning of period t . The expected proceeds from securities issues $E_t(S)$, net of expected positive NPV investments $E_t(I)$, is proxied for by the actual sum of public and private equity issues in year t minus the actual year t investment. We set the unused debt capacity DC_t to zero, implicitly assuming that the firm has already exercised its short-term borrowing option. To the extent that increased borrowing is a financing source for dividend payments, our assumption underestimates *Max2* and hence biases Dividends/*Max2* upward.

4.2 Reporting Techniques

Ratios are in general sensitive to extreme values in the denominator. For instance, a denominator close to zero may drive the ratio towards extreme positive or negative numbers. Therefore, in Tables 6A-6G we introduce the system of reporting two different measures of central tendency: the *equally-weighted mean (EWM)* is the mean of the firm-specific ratios in a certain category, while the *aggregate mean (AGM)* is the ratio of the total dividends in a given category (i.e., summed across all firms in the category) to the total value of the

⁹ As discussed in appendix 1, the standard legal rules for maximum dividends may be circumvented by writing down the share capital. We disregard this way of increasing the maximum legal dividend, as we are unaware of any listed firm having exercised this option in the sample period.

¹⁰ The underlying logic and the details of deriving *Max2* may be found in Appendix 2.

normalizing variable (also summed over all category firms). The AGM payout is equivalent to a weighted average of firm payout ratios, with weights given by the value of a firm's normalizing variable relative to the aggregate value of the normalizing variable. For instance, the AGM of the classic payout ratio uses weights equal to the fraction of a particular firm's earnings to aggregate earnings in the category. As the AGM tends to be less sensitive to extreme observations than EWM, most of the analysis below will be based on the AGM¹¹.

In addition to reporting two measures of central tendency, tables 6A-6G also introduce the system of letting *the A table* summarize the grand sample averages across all the years for both measures of central tendency (EWM and AGM) and for three sample categories (all firms, dividend payers, and dividend-paying issuers/non-issuers). *Tables B-G* report year-by-year averages for one central tendency measure and one sample category. For example, all E tables present the annual aggregate mean for dividend-paying firms.

Thus, in tables 6A-6G, which all deal with the dividend yield and the classic payout ratio, Table 6A summarizes much of the information in Tables 6B-G by reporting grand sample averages of the annual EGM and AGM. Tables 6B-G differ from each other either by the grouping of the data or in the computation of central tendency. Tables 6B and 6C report the EWM and AGM, respectively, by industry and year for the total sample. Tables 6D and 6E are similar to 6B and 6C, except they focus only on dividend-paying firms. Tables 6F and 6G report the annual values of EWM and AGM for dividend-payers by grouping them by equity issue behavior (issuing vs. non-issuing).

A corresponding logic is used in Tables 7-9 and 11-13. Moreover, we focus on dividend-paying firms, since the total sample includes the influence of firms that pay no dividends. Still, we report the total sample averages, primarily for international comparisons.

4.3 The Dividend Yield

Panel I of Table 6A reveals that the average dividend-paying firm provides its shareholders with a price-weighted dividend yield of 3.2%. The equally-weighted mean is roughly the same, suggesting that the ratio is not influenced by firm size or by outliers. With an average dividend yield of 6.9%, financials pay out the largest portion of their equity market value, while the average shipping firm pays only 2.2%. Firms that both issue new equity and pay

¹¹ We do not report the median, as it is mostly very similar to the AGM.

dividends in the same year have a higher average dividend yield than non-issuing dividend-payers (4.0% vs. 3.1%).

Tables 6B-G reveal that the average dividend yield declines over time up to 1990. The dividend yield is 4.0% for the full sample in 1980 (Table 6C), falls to a low of 1.6% in 1990, but subsequently increases to 2.3% by 1994. Since a similar pattern appears in Tables 6E and 6G, this finding is not strongly influenced by changes in the relative number of firms paying zero dividends or by whether a firm issues equity.

Table A3.1 in Appendix 3 contains dividend yields from the 22 countries for which complete data is available over the period 1990-1994 (FIBV, 1991-1995). The 1994 average Norwegian dividend yield of 2.7% is close to the international mean of 2.8%¹². However, over the five year period ending in 1994, the average dividend yield in Norway is 1.9%, making it *one of the lowest* dividend-paying countries in terms of yield. Norway's nearest geographical neighbour, Sweden, pays 2.6% over the same period, while listed firms in London and New York pay 4.6% and 3.0%, respectively.

4.4 The Classic Payout Ratio

This ratio is intuitively appealing because it tells what part of the year's earnings is leaving the firm in terms of a cash transfer to owners. According to panel II of Table 6A, the AGM of earnings paid out is 31% for dividend payers. Just like the cross-sectional pattern we found for dividend yields, financials have the highest average payout (39%) and shipping the lowest (24%). Non-issuing firms pay out a larger fraction of their earnings than issuers (34% vs 28%).

The sample firms pay out roughly the same proportion of earnings every year during the period 1980-1990. However, they almost double their payout thereafter. Table 6E

¹² The international mean is of the AGM type and includes both dividend-payers and non-payers. The sample size relative to the number of listed firms may vary between different countries.

¹³ The equally-weighted dividend/earnings ratio is highly sensitive to low or negative after-tax earnings numbers and therefore tends to differ from the other central tendency measure. In fact, the EWM of the classic payout ratio may often become negative, caused by a relatively small number of dividend-paying firms with slightly negative earnings.

¹⁴ The negative payout ratios in Tables 6A-G are caused by firms with negative earnings. Moreover, negative earnings reduce the denominator value of the AGM-based ratio. This average tends to be higher in the total sample than for dividend-paying firms, as non-dividend-paying firms are more likely to have negative earnings.

indicates that dividend-paying firms pay out 26% of their earnings between 1980 and 1990, compared to 44% from 1991 to 1994.

If we include the non-payers in the aggregate numbers (Table 6C), we find that the average Norwegian firm pays 32% of its earnings as dividends in 1994. By international standards, this payout is low. Appendix 3 (Table A3.2) contains payout ratios for 22 FIBV countries. In 1994, the average ratio across these countries is 52%. This average includes a 59% payout on the New York Stock Exchange, 75% payout on the London Stock Exchange and 28% in Stockholm.

4.5 Dividend/Par Value of Common Stock

According to Table 7A, dividend-paying firms pay on average 15% of their stock's par value as dividends. In contrast to the ordering with respect to the dividend yield and the classic payout ratio, shipping firms have the highest par value payout while financials have the lowest.

Although the magnitude of the par value payout is increasing through time (Panel I, Table 7E), it is clearly more stable than the dividend yield and the classic payout ratio. For instance, the standard deviation per unit of mean payout of the par-value measure is much lower than the measures of dividend yield and classic payout. The par-value payout typically deviates 19% from the mean compared with 41% and 33% for the dividend yield and classic payout ratios.

This evidence suggests that a model of dividends relative to either par value or number of shares outstanding may capture essential features of corporate dividend behavior through time, at least at the aggregate level. Whether this conclusion holds at the firm level can be analyzed by means of a firm-specific time-series model of dividends, which is well-known in the dividend policy literature (Allen and Michaely, 1995).

4.6 Dividend/Maximum Dividend

The two maximum dividend ratios are unique and interesting for several reasons. First, they represent either a legally imposed or cash constrained upper bound on the dividends a firm can pay. Second, if this ratio appears to often be binding (near 1.0), one can argue that firms

¹⁵ The very small grand mean of 8% is heavily influenced by the atypical years of 1991 and 1992, when the average payout is strongly negative. Disregarding these two years, the average is 32%.

are prevented from paying an otherwise optimal level of dividends. This is especially relevant in Norway, where firms are sometimes targeted by public opinion for paying excessively high dividends. Third, the maximum dividend ratio is bounded between zero and one and is insensitive to outliers caused by negative and low earnings or cash flows. Finally, Max2 also captures actual dividends relative to free cashflow, as our firm liquidity measure is basically an operationalization of the free cashflow concept. Although the Max1 figure is of vital interest to the regulator, Max2 reflects the firm's actual ceiling on payable dividends.

As seen from panels II and III of Table 7A, the average dividend-paying firm in our sample of industrial and shipping firms distributes 30% of its Max2 amount as dividends or 28% of the payout allowed by law (Max1). Thus, the average non-financial firm does not appear to face binding financial or legal constraints when making a dividend decision. Not even the traditionally high dividend-paying financial firms face legal constraints that are in any sense restrictive (41%), although the proportion is higher than for industrials (31%) and shipping firms (11%). Years in which firms issue equity appear to tighten the restriction on the amount of dividend allowed, since the average equity-issuing firm has a higher Max1 and Max2 payout than non-issuing firms. This may simply reflect the notion that firms issue new equity not only when they expect high future cash needs, but also when their present liquidity is low relative to present activities.

The Max1 and Max2 fluctuate over the sample period, and both tend to decline over time. For instance, according to Max2, the average dividend-paying firm pays 42% of its maximum dividend in 1984 and only 22% ten years later. With a ratio of standard deviation-to-mean of 38%, the instability of the Max2 ratio corresponds to that of the dividend yield. Moreover, there is no point in time where Max2 exceeds 44% in any industry, suggesting that on average, neither the maximum dividend regulation nor the financial constraint is binding.

In sum, section 4 documents that Norwegian listed firms pay remarkably low dividends compared to firms in other countries, measured relative to both earnings (average payout of 31% for dividend-payers) and stock price (average yield of 1.9% in the nineties). The payout is also low compared to both legal and liquidity constraints, as firms typically

¹⁶ The free cashflow is the liquid resources available after the firm has financed all its value-increasing investments (Jensen and Meckling, 1976).

¹⁷ Max2 is not computed for financial firms due to the problems of measuring their liquid assets.

pay less than one third of what they may. The payout decreases over time relative to the stock price and the maximum dividend, increases relative to earnings after 1990, and stays fairly constant per krone par value over the entire period. We also find that financials pay relatively more dividends and shipping firms less than the average OSE firm.

5. Ownership Structure and Dividend Policy

According to the corporate governance literature initiated by Jensen and Meckling (1976) and recently summarized by Shleifer and Vishny (1995), ownership structure is a key to understanding potential conflicts of interest between a firm's owners, creditors and managers. The firm's dividend decision may influence the agency costs of this inherent conflict. First, it may increase the external monitoring of managerial actions, as higher dividends force the firm more often to the equity issue market. Second, a high payout may reduce the agency costs caused by a high free cashflow, as a high dividend limits the corporate resources available for managerial discretion.

Given the magnitude of the free cashflow, the managerial incentive to pay low dividends and instead spend the money on value-destroying investments is smaller the more the manager's utility depends on the firm's market value. Moreover, the incentives for outside owners to actively monitor managerial actions are stronger the more the ownership structure is dominated by large owners. Therefore, the principal-agent logic posits a relationship between the ownership structure of the firm and its dividend payout policy. For instance, one possible conjecture is that compared to firms which do not pay dividends, high free cashflow firms which pay dividends have relatively high managerial shareholdings and/or a concentrated ownership structure.

Tables 8A-G proxy for managerial shareownership by *insider holdings*, which we define as the fraction of all shares held by the firm's management and board of directors (panel I). *Ownership concentration* is alternatively measured as the number of owners holding more than 20% of the shares (panel II), the ownership fraction held by the ten largest stockholders (panel III), and by the market value of equity per shareholders (panel IV)¹⁸.

Disregarding for a moment the distinction between payers and non-payers of dividends, our finding based on all firms is that on average, insiders hold 6% of the shares, 0.65 owners per firm hold more than one fifth of the firm's shares, the ten largest owners control 56% of the equity, and the value of one stockholder's shares in a firm (in 1994 kroner) is NOK 154.500. Both insider holdings and the number of owners holding more than

¹⁸ We do not distinguish between private and public owners. For instance, a holding above 20% is treated the same way regardless of whether the shares are owned by the government or by a private investor.

20% are relatively stable over time, whereas ownership concentration increases according to the fraction held by the ten largest owners and the share value per stockholder. For instance, the fraction held by the ten largest owners grows from 39% in 1980 to 60% in 1994, and the average market value of a stockholder's claim to a firm's equity rises from NOK 77.000 in 1980 to NOK 352.000 in 1994 (Table 8C).

Financials are seen to be characterized by small insider holdings (0.4%) and also low ownership concentration as measured by the number of shareholders owning more than 20% (0.26). At the opposite end, shipping firms have much higher insider holdings (19%) and ownership concentration (0.91). Thus, the owners of Norwegian financials are generally absent from their firm's management and board, whereas the opposite is true in shipping, where most firms are still heavily influenced by the founding family¹⁹.

Turning next to the relationship between ownership structure and dividend policy, the averages for the full sample and the dividend-paying firms reveal that payers and non-payers of dividends have roughly the same insider holdings, the same number of shareholders owning more than 20%, and also about the same fraction held by the ten largest owners. The only notable difference is in panel IV, where the average market value of holdings per stockholder in dividend-paying firms is almost 50% larger than in non-payers. Finally, comparing dividend-paying issuers of equity to non-issuers, the only difference is in panel IV, which reveals that big shareholders (>20%) are less frequent in firms which issue new shares.

Summarizing section 5, our major finding on ownership structure is that whereas financials tend to be widely held and to have owners who are neither on the management team nor on the board of directors, shipping firms have both relatively high insider holdings and a concentrated ownership structure. However, neither insider holdings nor ownership concentration seems to differ systematically between payers and non-payers of dividends and between the dividend-payers which issue equity and those that do not.

¹⁹ This is at least partially due to the fact that except for the government, no single owner can control more than 10% of the voting stocks in financials. Notice also that according to the number of shareholders owning more than 20%, ownership concentration in shipping is decreasing over time.

6. The Market Liquidity of Dividend-Paying Stocks

A stock's market liquidity reflects its trading activity in the secondary market. The more often the stock is bought and sold, the more liquid it is. Reduced liquidity may increase transaction costs, as traders may have to postpone their desired transactions and also be faced with less favorable prices

In a perfect capital markets, with frictionless trading opportunities for everybody at any point in time, liquidity is not an issue. In such a setting, the dividend policy is irrelevant, since any investor can costlessly construct the personally preferred mix between retained earnings and cash payout by reinvesting received dividends when the payout is undesirably high and selling shares to get cash if the the payout is too low. In addition, as new shares can be floated at zero transaction costs, it is costless to recùcle equity by paying it out with one hand and taking it back with the other through an equity issue. Thus, both the dividend and the equity issue decisions are irrelevant.

In the real world, transaction costs are positive for both investors and firms. Moreover, since we found the payout in our sample firms to be low, investors who dislike the average firm's payout policy may mostly be those who prefer higher dividends, i.e., more cash on hand rather than capital gains. If so, we expect the dividend to be higher the less liquid the share, as selling these shares to indirectly increase the payout is more expensive than for more liquid shares. One possible relationship between dividend policy and market liquidity is therefore that dividend-paying shares are less liquid than non-paying shares.

Tables 9A-G report two measures of market liquidity. Panel I shows *the turnover ratio*, which was defined in section 2 as the market value of trade divided by the average market value of equity. In Panel II we report *the trading frequency ratio*, which is the average number of days each share is traded per year relative to the total number of trading days per year.

The tables confirm the impression from section 2 that the average liquidity of OSE stocks increases greatly in the eighties. By 1994, the average holding period per share is approximately 2.5 years, and the average firm is traded on almost 70% of all trading days. There are presently no major differences between the three industry groups.

As is also evident from the tables, the average market liquidity differs very little between dividend-paying and non-paying shares, suggesting that on average, market liquidity is unimportant for the pay/no-pay decision. However, among the dividend-paying firms, the shares of those which also issue new equity in the dividend-payment year are more liquid than for non-issuers. This may possibly reflect an attempt by the firm at timing the equity issue to periods of relatively high pricing in the secondary market. High prices may be positively correlated with trading activity and hence liquidity.

7. Dividends and Taxes

The decision of whether to retain resources in the firm or to pay dividends to stockholders will normally have tax consequences. Therefore, the tax system is potentially relevant for the firm's dividend policy. In order to determine whether and to what extent the Norwegian tax system favors dividends rather than retained earnings, this section quantifies the full tax consequences of dividends versus retained earnings over the period 1980-1994. We do the analysis by starting out with a krone of firm cashflow before taxes, successively accounting for the tax payments made both by the firm and the owner for alternatively retaining the krone in the firm, or paying it out as dividends.

In the first case, when the krone is kept in the firm, it is taxed as retained earnings at the firm level and as capital gains for the owner. If the krone is alternatively paid out as dividends, the firm pays the tax rate applicable to dividend payments, whereas the owner pays the dividend income tax rate on personal account.

Table 10 applies this logic of tracking the full tax consequences at both the firm and the investor levels to the Norwegian tax system in our sample period 1980-1994. The more positive the tax factor reported in the table, the more the tax system favors dividends relative to retained earnings. If the factor is zero, the system is perfectly neutral with respect to dividend policy, whereas taxation increasingly favors retained earnings as the factor becomes more negative.

Given a particular tax regime at a given point in time, the tax consequences will depend on the actual tax positions of the firm and the owners. If, for instance, the firm is not in a tax position and the owners pay the top marginal tax rate on dividend income, the tax benefit to dividends (i.e., the tax factor) will typically differ from the case of a firm in full tax position and tax-exempt investors. In calculating the dividend tax benefit in Table 10, we assume that the firm is always in a full tax position, i.e., pays the nominal corporate tax rate. We make three alternative assumptions about the owners' tax status.

In the middle column of table 10 (Net tax benefit at nominal rates), investors are assumed to pay the full tax rates on both dividend income and capital gains. In the minimum benefit column, owners pay no taxes on capital gains, but the full nominal rate on dividend income. This combination of owner tax rates produces the smallest possible tax benefit to dividends, i.e., the maximum benefit to retained earnings. Conversely, the maximum benefit

column reflects the case of investors who pay no taxes on dividend income, but the full nominal rate on capital gains. This combination maximizes the relative tax benefit of dividend payments.

Judging from the nominal rates in the middle column, the first major impression is that the Norwegian tax system favors dividends to retained earnings over the entire sample period, and increasingly so over time. For instance, in 1980, there is a tax benefit of dividends of 0.08 kroner per krone pre-tax firm cashflow. In 1994, the benefit is 2.5 times higher (0.20 kroner).

The second impression is provided by the minimum benefit column, which reveals that even with the most beneficial combination of tax rates, retained earnings can only give a very small net tax benefit. In fact, after 1988, no combination of investor tax rates produces a tax benefit to retained earnings. Third, although the maximum tax benefit in the column furthest to the right is sizeable, it falls steadily over time, from 0.44 kroner in the beginning to 0.20 kroner at the end of the sample period.

Thus, the Norwegian tax system generally favors dividends over the entire sample period. If owners are in a full tax position with respect to both dividends and capital gains, there is a gradually increasing tax benefit to dividend payments over time, starting in 1986 and reinforced by the comprehensive tax reform in 1992. The difference between the minimum and the maximum tax benefit declines considerably over time. For instance, whereas the difference is 0.60 krone in 1980, it is only 0.20 in 1994.

Given these findings, one cannot use the tax system to explain why Norwegian firms' dividend payout is so low by international standards (see section 4). For instance, according to the classic payout ratio, U.S. firms on average pay almost twice as much dividends, despite the fact that the U.S. tax system generally discriminates against dividends.

Even though the Norwegian level of dividend payments is hard to justify by the tax system, the changes in payout over time may still be tax-related. Table 10 documents a general increase in the net tax benefit of dividends from 1987 onward. A tax-based motivation for dividend policy would therefore imply an increasing payout over that period. Judging from our earlier findings in table 3, the fraction of firms paying dividends does indeed increase from 1987, and there is a big jump upward around the 1992 tax reform. Moreover, according to table 6E, the classic payout increases over the 1988-1992 interval. However, this ratio falls around the tax reform, and the ratio of dividends to maximum

dividends in table 7E is in fact declining over the entire 1988-1994 period. Thus, neither the level nor the change in average dividend payout seems fully consistent with the relative taxation of dividends and retained earnings.

The overall *conclusion* is that the Norwegian tax system favors dividends over the entire sample period, and that the bias towards dividends is growing over time. Still, observed dividend payments suggests that Norwegian firms' dividend policy is not strongly influenced by their net tax consequences.

8. The Resource Commitment of the Owners

In this and the following section, we will broaden the perspective on dividend policy by studying not just dividends and net dividends, but also a wider set of resource flows between the firm, the owners, and the creditors. This section presents a more comprehensive view of the resource commitment made by the owners to the firm, whereas the next section also includes transactions between the firm and its creditors. The overall objective of both sections is to improve our insight by viewing the dividend decision as one of several integrated components, which have not been related in the literature before.

A more specific rationale for studying the resource commitment of the owners arises from the public criticism that the paying of large dividends both expropriates wealth from creditors and makes the employees' jobs more insecure by transforming the firm into a "resource-drained shell". Such arguments are sometimes made for regulating corporate dividend policy, both by imposing a ceiling on maximum payout (as investigated in section 4.6) and by tougher taxation of dividends relative to retained earnings.

As we argued in section 3.2, the cash payments between the firm and its owners concern the net dividend (the dividend paid less proceeds from equity issues) rather than just the dividend²⁰. However, we can extend this definition of net cashflow to shareholders to include the annual amount of resources the owners decide to keep in the firm. The annual *resource commitment of the owners*, RCO, is the sum of the year's retained earnings and equity issue proceeds. Panels I, II and III of table 11 show the total amounts involved (in billion 1994 NOK) for respectively retained earnings, new equity and RCO.

The table shows that over the sample period, the owners of Norwegian listed firms increase the resources left under managerial control by more than 100 billion NOK; i.e., by about NOK 7 billion per year. Sixty percent of these new corporate resources are obtained from issuing new shares, while the rest arises from retained earnings²¹.

²⁰ Table 4 showed that whereas total dividends over the sample period is NOK 32 billion (in 1994 kroner), proceeds from the sale of new shares are almost twice as large. Hence, the net cash drain from the owners to the firm is almost 30 billion NOK. As shown by Bøhren, Eckbo and Michalsen (1996), current (old) shareholders on average buy about 90% of the shares in Norwegian equity offerings, suggesting that it is in fact the same shareholders who receive dividends with one hand and repay twice as much with the other.

²¹ As we noticed in section 4.6, the retained earnings are three times larger than what the minimum retention provision dictates.

Panel I of Tables 12A-G basically recasts the net dividend story of Table 4 by showing the ratio of issue proceeds to dividends. Panel II, which reports RCO per dividend krone paid, shows that the resources the owners invest in terms of equity issue proceeds and retained earnings is on average 3.6 times larger than what receive through dividends. This holds regardless of whether or not the firm pays a dividend, and the time-series average for dividend-payers firms is very consistent across the industries.

Somewhat related to the owner resource commitment issue analyzed so far, one may also ask whether the dividend paid is generated by the firm's production process or just reflects the *recycling of dividends* received from other firms. This phenomenon will be more important the more the firms' cashflows are integrated through intercorporate shareholdings (Bøhren and Norli, 1996).

According to panel III of Table 12, the typical firm in our sample receives 15% of its own dividends payment as a dividend income from other firms. Shipping firms are particularly active recyclers, as every third krone paid out is financed by an intercorporate dividend²².

In summary, we argue in section 8 that the owners of our sample firms on average transfer much more resources to the firm than what they take out as dividends. Compared to the dividend, proceeds from equity issues is almost twice the amount, and the resources left in the firm as retained earnings is roughly 3.5 times the dividend or the legal minimum. Moreover, about 15% of a firm's dividend payout is a recycled dividend from intercorporate shareholdings in other firms.

²² Shipping firms may be more likely to list as a holding company and organize individual ships as separate firms with majority ownership by the holding company. This may account for the large amount of dividends received.

9. Cash Costs of Capital

Most firms are financed with both equity and debt, and we can think of both financing sources in terms of the total cost of raising and maintaining the sources of cash to the firm. We term this *the cost of capital*. Both the cost of debt and the cost of equity is comprised of two components, reflecting the compensation investors demand for providing financing to the firm. The first component, which we term the *cash cost* component, reflects the cash payments promised by the firm to the investors in a given period. The second component, sometimes referred to as the *capital gains* component, arises from expected future changes in the value of the amount borrowed or the security issued. The dividend payment per share of stock is the cash cost of equity, since it is the periodic cash flow demanded by the shareholders of the firm, while the interest payment is the cash cost of debt.

Investors (both shareholders and creditors) may have a preference for a policy that favors a constant cash cost-of-capital component. For example, shareholders may prefer promised liquidity obtained from an annual dividend payment, much in the same way that creditors are typically promised period interest payments. This preference may arise because the capital gains component of a non-liquid share is costly to realize. Alternatively, to reduce potential agency costs of the stockholder-manager relationship, commitment to an interest-rate dependent dividend payout may serve as a credible bonding mechanism.

We consider three measures of the cash costs of capital. First, dividends (as a proportion of market value of equity) are compared to interest payments (as a proportion of face value of debt). This is the ratio of *dividend yield to interest yield*. A ratio greater than one indicates that cash payments from the firm to stockholders is relatively larger than what is paid to creditors. Our second measure is similar, except that dividends are measured relative to *the par value* of common stock, rather than its market price. Recall that the par value of common stock is relevant, since it is used to compute the maximum legal dividend, is commonly used as a dividend payout measure in Norway, and is found in our study to be more stable over time than other dividend ratios (Tables 6 and 7). The third measure is *the total cash cost of capital*, which is defined as dividends plus interest payments over market value of assets (market value of equity plus face value of debt). This ratio represents the proportion of assets which is committed to servicing both owners and creditors.

The findings are reported in Tables 13A-G²³. Panel I reveals that the average dividend-paying firm's dividend yield is 42% of its interest yield, reflecting that relative to the value of the underlying claim, creditors require larger periodic cash payments than the owners of the firm. The ratio is very similar across industrials and shipping firms, whereas non-issuing firms pay a slightly larger dividend yield relative to interest yield than issuers. The value-weighted average for industrials is fairly stable over time and quite unstable in shipping.

Panel II shows that when dividends are measured relative to the face value of a stock rather than its price, the average ratio of the cash cost of equity to the cash cost of debt is very close to unity (1.03). This is true for both industry groups (1.06 for industrials and 0.89 for shipping), for issuers and non-issuers (0.81 and 1.09) and over most of the sample period. This pattern may suggest that two mechanisms are at work when dividend decisions are made. First, the stable relationship between dividends per face value of equity and interest payments per face value of debt may indicate that managers treat the cost of equity as a cash cost of dividend²⁴. In particular, there is a possibility that managers relate the dividend payout decision to the cost of servicing debt, letting the dividend payout move with the level of interest rates. Second, as the ratio is close to one (rather than, say, two), it suggests that managers not only relate the two cash payouts. They even choose a percentage dividend per share which is very close to the percentage interest rate (rather than twice the interest rate).

Panel III documents that at any point in time, the firm's total cash transfer to its capital sources is constant across all subsamples (all firms, payers/non-payers of dividends and issuing/non-issuing dividend payers). The average payout is always in the very narrow band of 4.1-4.5%. Over time, the constancy across the subsample remains, whereas the level declines from 5% in the beginning of the sample period to 3% towards the end.

Summarizing section 9, two notable patterns substantiate the importance of relating the dividend payout to interest payments on debt. First, the ratio of dividends per face value

²³ Due to difficulties of interpreting debt data for financials, we exclude these firms from Table 13.

²⁴ If managers primarily focused on the sum of dividends and the required return on retained earnings, a stable relationship between dividend yield and debt yield would not follow. Of course, stable dividends may be observed for other reasons, e.g. as a signalling mechanism. However, the point here is that whereas the payout is unstable relative to earnings, price or maximum dividends, it is remarkably stable relative to interest payments. This finding suggests that the cash cost of capital idea is potentially useful for understanding how dividend decisions are made.

of equity to interest per face value of debt is close to unity across all subsamples in most of the sample period. Second, total cash payout (dividends plus interest) per asset krone is virtually identical across subsamples. The total cash cost of capital drops gradually from about 5% in the beginning of the sample period to 3% towards the end.

10. Summary and Concluding Comments

Existing empirical research offers quite limited insight into the characteristics of corporate dividend decisions. This is true for any country, not only for small economies like Norway, but also for large ones like the U.S., where most of the previous studies have been made. The purpose of this report is to contribute to a better understanding of dividend decisions by analyzing the payout policy of Norwegian firms.

A unique feature of our study is the characterization of corporate dividend decisions by a wide set of factors, including a firm's earnings, its equity issues, a measure of a firm's liquid resources, legally imposed dividend ceilings, firm size, the ownership structure of a firm, the trading activity of the shares of firm, the cash cost of debt, the cash cost of assets, and the tax system. Once we leave the idealized world of perfect capital markets, where the dividend decision is irrelevant, any of the above factors is a potential determinant of dividend policy. To date, no international study has utilized such a broad set of relevant data to investigate dividend behavior.

Our major findings are organized under ten headings and summarized in a table which appears on the two pages immediately following this section. When interpreting the findings, a few precautions should be kept in mind. First, we consistently base our conclusions on some measure of average dividend payment behavior. For instance, the mean ownership concentration in the sub-sample of dividend-payers is compared to the mean ownership concentration of non-payers. Similarly, we contrast the average classic payout ratio of equity-issuing dividend-payers to that of non-issuing dividend-payers. By first aggregating and then comparing, firm-specific peculiarities may be concealed, simply because they are washed out through aggregation.

Second, our analysis to date is univariate in nature. That is, we successively relate dividend policy to just one or sometimes two potential determinants at a time, implicitly assuming that the remaining factors do not change in systematic ways. To draw strong conclusions about the determinants of dividend policy requires a multivariate investigation, where we simultaneously control for a variety of determinants. However, existing theories of corporate dividend policy are also partial, as they all deal with just one or a few of the determinants. For instance, the tax-based dividend theory says nothing about the relevance of free cashflow, while the free cashflow hypothesis offers no prediction about the impact of

tax changes on dividend payout. Therefore, simply asking for a full-scale, multivariate analysis of dividend policy will not necessarily solve the problem of a partial approach, as no current theory can specify a full multivariate model. Moreover, many of our results are independent of this partiality problem, as they only answer questions which are univariate by nature.

We think the unique data base and the extensive empirical insights gained from this study is a good starting point for further research on dividend policy. The next step of analysis will concentrate on a more formal approach and will attempt to address at least some of the complexities caused by the fact that corporate dividend policy seems to be influenced by the simultaneous impact of several, possibly interrelated factors.

Summary of Findings on Corporate Dividend Policy in Norway

1. Sample size, data base and institutional environment

- Sample includes data on almost every listed firm from 1980-1994 on the Oslo Stock Exchange (OSE), which is among the smaller European equity markets
- Data includes dividend payments, equity issues, accounting statements, stock prices, market liquidity, ownership structure, and tax system
- Cash dividends paid once a year, share repurchases practically forbidden by regulation, legal maximum on dividends, several tax system changes

2. Overall sample characteristics

- Industrial firms constitute 70% of the sample. Financials and shipping are both 15%
- The average firm's ten largest owners hold 56% of its equity. Ownership concentration increases over time in shipping and financial firms
- The stock market liquidity increases rapidly over the sample period. Only 2% of the firms' stock is traded in 1980, compared to 42% in 1994. The market liquidity currently corresponds to the typical European level
- The average firm's market value exceeds its book value by one fourth

3. The propensity to pay dividends and issue equity

- Approximately every second OSE firm pays a dividend. The proportion of firms paying dividends varies considerably over time
- Less than one fifth of the firms issue equity in a given year
- About 20% of the dividend-payers also issue new shares in the same year
- Large firms pay dividends and issue equity considerably more often than small firms
- Shipping firms pay dividends and issue equity more seldom than others. Financials are at the opposite end

4. The total kroner value of dividends, equity issue proceeds and net dividends

- Total dividends paid over the sample period is NOK 32 billion (1994 kroner)
- Equity issue proceeds is roughly twice the dividend amount, producing a negative net dividend to stockholders of almost NOK 30 bill.

5. Dividend payout ratios

- Examine five dividend ratios by alternatively normalizing dividends by the share price, earnings, the share's par value, the legal maximum, and the financial or legal maximum
- Dividend-payers distribute about one third of their earnings as dividends. This is less than one third of the maximum dividend allowed
- The dividend payout is decreasing over time relative to both the legal and the financial maximum
- Dividend per krone par value, is much more stable than the dividend yield (dividend/price) and the classic payout ratio (dividend/earnings)
- Financials pay more dividends and shipping firms less than the OSE average
- Norwegian firms pay low dividends compared to firms in other countries, typically half the international level

continued

Summary of findings, ctd.

6. Ownership structure and dividend policy

- Insiders (management plus board members) hold on average 6.4% of their firm's equity
- A firm's ten largest owners hold on average 56% of the firm's shares. There are 0.65 individual owners per firm holding more than one fifth of the shares, and each stockholder owns shares in the firm for about NOK 150.000
- The holdings of the ten largest owners and the share value per owner increase over time
- Unlike shipping firms, financials tend to be widely held and have owners who are neither on the management team nor on the board
- The ownership structures of dividend paying and non-dividend paying firms are quite similar

7. The market liquidity of dividend-paying stocks

- By 1994, the average holding period per share is about 2.5 years, and the average share of stock is traded on approximately 70% of the available trading days
- Whether or not the average firm pays dividends is unrelated to the market liquidity of the share

8. Dividends and taxes

- The Norwegian tax system favors dividends relative to retained earnings over the entire sample period
- The tax bias against retained earnings grows over time
- The low dividend and the somewhat unclear dividend response to tax system changes may suggest that corporate dividend policy is not strongly influenced by taxes

9. The owners' resource commitment

- Owners invest about 3.5 times more resources in the firm (retained earnings plus equity issue proceeds) than what they take out (dividends)
- About 15% of a firm's dividend payout is actually a recycled dividend which is received from other firms by way of intercorporate shareholdings

10. The cash costs of capital

- The cash cost of equity per krone face value is close to the firm's borrowing rate in most of the sample period, regardless of the firm's dividend and equity issue policy
- The total cash cost of capital (dividend plus interest payments per asset krone) is independent of dividend and issue policy. It declines from 5% in the beginning of the sample period towards 3% at the end

References

Allen, Franklin and Roni Michaely, 1995. "Dividend policy", in Robert Jarrow, Vojislav Maksimovic and William T. Ziemba (eds.), *Handbooks in Operations Research and Management Science*, Volume 9, Finance, North-Holland.

Bøhren, Øyvind, B. Espen Eckbo and Dag Michalsen, 1996. "Why underwrite equity offerings? Some new evidence", Working Paper, Norwegian School of Management and Stockholm School of Economics, September.

Bøhren, Øyvind and Øyvind Norli, 1996. "The nature of intercorporate shareholdings: Lessons from the Oslo Stock Exchange", Working Paper, Norwegian School of Management, December.

Bøhren, Øyvind, Jørgen Haug and Dag Michalsen, 1997. "Consolidation Policy and Managerial Discretion: Accounting for Intercorporate Shareholdings", Research Report, Norwegian School of Management, January.

Eckbo, B. Espen, 1995. "Innsidehandel på Oslo Børs", Forskning om økonomisk kriminalitet, Rapport nr. 30, Norges Forskningsråd.

FIBV (International Federation of Stock Exchanges). *Annual Report and Statistics*, 1991-1995.

Jensen, Michael C. and William H. Meckling, 1976. "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics* 3(4), 305-360.

Kierulfs' Handbook, 1981-1995, Oslo Børs Informasjon A/S.

Oslo Stock Exchange, *Annual Report*, 1981-1994.

Prowse, Stephen, 1995. "Corporate governance in an international perspective: A survey of corporate control mechanisms among large firms in the U.S., U.K., Japan and Germany", *Financial Markets, Institutions & Instruments* 4, no. 1, 1-63.

Shleifer, Andrei and Robert W. Vishny, 1995. "A survey of corporate governance", Paper prepared for the Nobel Symposium on Law and Finance, Stockholm.

Appendix 1: The Legally Maximum Dividend (Max1)

A: Notation

- ER* = Equity Reserves ("reservfond")
EAT = Earnings after Taxes
RE = Restricted Equity ("bundet egenkapital
 = aksjekapital+reservfond+oppskrivingsfond")
*D** = Maximum Dividend payable from Earnings
TAFE = Tax Adjusted Free Equity
s_s = Corporate tax rate (50.8% prior to 1992; 28% from 1992)
Max1 = Dividend Capacity (the maximum amount of dividend)
EBT = Earnings Before Taxes = *EAT* + Taxes
EBTD = Taxable Earnings, before adjustment for Dividends. *EBTD* may differ from *EBT*, e.g. dividends received are not taxable.
L = Accumulated Losses
TLFE = Tax Liabe Free Equity
TFE = Taxed Free Equity

B: Rules for Compulsory Retainment to ER (Equity Reserves)"

- 1) 10% of *EAT* to *ER*
 (note: prior to 1992 dividend paid was deductible against government tax. Dividend payments reduced taxes by 27,8% of dividend paid, in turn increasing *EAT* and retainment to *ER*)
- 2) If dividend paid exceeds 10% of *RE* at the beginning of the year, there is a compulsory retainment to *ER*. This is the amount by which the dividend exceeds 10% of *RE* (the note on the dividend tax effect described in 1) above also applies to the dividend exceeding 10% of *RE*)
- 3) No retainment to *ER* is required if both of the following criteria are met (measured at year-end):
 - (a) $ER \geq 20\%$ of share capital
 - (b) $RE \geq$ total debt

C: *D** Prior to 1992 Tax Reform

- 1) D_t^* when retainment to *ER* is required:

$$D_t^* = \frac{1}{1,7498} \{0.9[(EBT_t - L_{t-1})s_s \times (EBTD_t - L_{t-1})] + 0.1RE_{t-1}\}$$

Note: s_s is 0.508 up to and including 1991.

In this and following cases of maximum dividends, all negative D^* 's are set to zero. Negative D^* 's may occur in various combinations of large accumulated losses and negative earnings.

- 2) D_t^* when retainment to ER is not required:

$$D_t^* = \frac{1}{0.722} [(EBT_t - L_{t-1}) - s_s \times (EBTD_t - L_{t-1})]$$

Note: For our calculations we have defined $EBT=EBTD$ in (1) and (2), because listed companies' annual reports do not report taxable income. The only item distinguishing EBT and $EBTD$ which we can identify in annual reports is dividends received.

D: D^ After 1992 Tax Reform*

- 1) D_t^* with retainment to ER :

$$D_t^* = 0.5\{0.9[EAT_t - (1 - s_s)L_{t-1}] + 0.1RE_{t-1}\}$$

Note: s_s is 0.28 from 1992 onwards.

- 2) D_t^* when retainment to ER is not required:

$$D_t^* = EAT_t - (1 - s_s)L_{t-1}$$

E: Dividend Capacity (Max1)

In addition to dividends from earnings as described in sections B, C, and D, Norwegian corporate law allows firms to distribute as dividends any free equity, i.e. all equity above paid-in share capital and equity reserves. In order to establish a measure of a firm's true capacity for paying dividends we therefore need to consider not just the earnings, but also the tax-adjusted free equity.

Norwegian firms may also write down its share capital and distribute an equivalent amount as dividends like in a pro rata stock repurchase. If this makes the equity reserves exceed the new required minimum, the equity reserve may also be written down, and a corresponding amount can be paid as dividends. To our knowledge this write-down approach to dividend maximization has never been done by any listed firm in our sample period. We therefore ignore this option when deriving a measure for dividend capacity.

$Max1_t$ is the sum of maximum dividends from earnings and the tax adjusted free equity. Tax adjusted free equity consists of Taxed Free Equity (TFE) and Tax Liab Free Equity ($TLFE$). However, if $TLFE$ is used for dividends, tax liability prevails, and $TLFE$

must therefore be adjusted for tax. Furthermore, the rules for compulsory retainment to Equity Reserves (*ER*) apply to both *TFE* and *TLFE*. Note in particular that "konsolideringsfond" cannot be used for dividends.

The dividend capacity corresponding to the four situations described in C and D above are given respectively in F and G below.

F: Dividend Capacity Prior to 1992 Tax Reform

1) *Max I_t* with retainment to *ER*:

$$Max I_t = \frac{1}{1.7498} \{0.9[EBT_t - s_s \times EBD_t + (1 - s_s)(TLFT_{t-1} - L_{t-1}) + TFE_{t-1}] + 0.1RE_{t-1}\}$$

2) *Max I_t* without retainment to *ER*:

$$Max I_t = \frac{1}{0.722} [EBT_t - s_s \times EBD_t + (1 - s_s)(TLFT_{t-1} - L_{t-1})] + TFE_{t-1}$$

G: Dividend Capacity After 1992 Tax Reform

1) *Max I_t* with retainment to *ER*:

$$Max I_t = 0.5 \{0.9[EAT_t + TFE_{t-1} + (1 - s_s)(TLFT_{t-1} - L_{t-1})] + 0.1RE_{t-1}\}$$

2) *Max I_t* without retainment to *ER*:

$$Max I_t = EAT_t + TFE_{t-1} + (1 - s_s)(TLFT_{t-1} - L_{t-1})$$

Appendix 2: The Liquidity Constrained Maximum Dividend (Max2)

Consider a company which is just about to make its dividend decision. It may well be the case that the maximum legal dividend, $Max1$, exceeds the financial slack (FS), or liquidity, available for dividend payment. Assuming that an on-going firm will not sell long-term assets to finance dividend payments, the legal and liquidity constrained maximum dividend ($Max2$) will be:

$$Max2_t = \min[Max1_t, FS_t]$$

An estimate of (FS), must include liquid assets (LA). Assuming all cash flows are generated evenly over the year, including proceeds from new security issues and outflows for investments, liquid assets at the time of dividend payment may be expressed as:

$$LA_{t_d} = LA_{t-1} + [EAT_t + DEP_t + S_t - I_t] \times \hat{t}_d$$

where: LA_{t_d} = Liquid Assets when the dividend is paid in year t
 LA_{t-1} = Liquid Assets at beginning of year t
 EAT_t = Earnings After Taxes in year t
 DEP_t = Depreciation in year t
 S_t = Security issue proceeds in year t
 I_t = Investments in year t
 \hat{t}_d = Fraction of year t until the dividend is paid.

Financial slack may also be maintained to partially finance future investment projects. Thus, FS should also reflect planned investments and security issues as well as unused debt capacity. If $E_t(I)$ denotes an estimate of the amount of today's FS that will be needed to fund tomorrow's investments I (i.e. the internal financing of new investments), and $E_t(S)$ is the expected net proceeds from issuing new securities, we have:

$$FS_t = LA_{t_d} + DC_t + E_t(S) - E_t(I)$$

In order to specify FS_t , we would need to know the exact time of the dividend payment for each firm and year in our sample (to determine \hat{t}_d in LA_{t_d}). Moreover, we need to estimate future investments and security issues in year t and also the unused debt capacity (DC).

Due to limited data availability, we operationalize FS_t by assuming zero unused debt capacity. LA_{t-1} is measured as liquid assets at the end of the prior year, defined to include cash account, marketable securities, and accounts receivables. Similarly, we use actual security issues and investments in year t as our estimates of $E_t(S)$ and $E_t(I)$. Consequently, we estimate the liquidity constrained maximum dividend as,

$$Max2_t = \min\{Max1_t, [LA_{t-1} + E_t(S) - E_t(I)]\}$$

By excluding any attempt to estimate net cash flow from operations from the start of year t until the time of dividend payment, financial slack is underestimated to the extent that this cash flow is positive. Counteracting this effect is the use of actual security issues and

investments in the full year t as our estimate of future issues and investments up to the dividend payment date. Thus, the net biasing effect on FS_t is unclear.

Appendix 3: International Data on Dividend Payments

Table A3.1: International Evidence on Dividend Yields 1990 - 1994

<i>Exchange</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>Mean</i>	<i>Median</i>
Santiago	7.9	7.9	4.5	5.2	3.5	5.79	5.20
Madrid	5.6	4.9	5.5	5.5	4.1	5.12	5.50
New Zealand	7.6	5.4	4.9	3.1	4.2	5.04	4.90
London	5.7	5.0	4.3	3.9	4.3	4.63	4.30
Australia	6.8	3.8	3.8	3.0	4.0	4.28	3.80
Brussels	3.6	3.5	5.4	4.0	4.2	4.14	4.00
Hong Kong	5.3	4.2	4.1	2.3	4.1	4.00	4.10
Amsterdam	5.0	4.5	3.8	2.9	3.7	3.98	3.80
Barcelona	2.5	4.1	3.7	4.9	4.0	3.84	4.00
Rio de Janeiro	5.6	5.5	1.8	2.5	2.5	3.58	2.50
Germany	3.8	3.8	4.0	2.9	3.3	3.56	3.78
Paris	4.0	3.8	3.8	2.7	3.2	3.49	3.80
NYSE	3.7	2.4	3.0	2.5	2.9	2.90	2.90
Thailand	3.6	3.5	2.9	2.0	1.9	2.79	2.90
Stockholm	3.6	3.2	2.7	1.4	2.0	2.58	2.70
Taiwan	1.1	2.6	4.3	2.2	2.3	2.49	2.30
Kuala Lumpur	2.6	2.6	2.0	1.2	1.6	2.00	2.00
Korea	2.4	2.8	2.0	1.2	1.0	1.88	2.00
Mexico	3.7	1.4	1.3	1.4	1.5	1.86	1.40
Vienna	1.5	2.0	2.2	1.4	1.5	1.72	1.51
Osaka	0.7	0.7	1.0	0.9	0.8	0.82	0.80
Tokyo	0.6	0.7	0.9	0.8	0.8	0.76	0.80
<i>Mean</i>	3.9	3.6	3.3	2.6	2.8	3.24	3.14

Source: FIBV (1991-1995)

Table A3.2: International Evidence on Dividend Payout Ratios 1990 - 1994

<i>Exchange</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>Mean</i>	<i>Median</i>
Santiago	0.51	1.16	0.64	1.12	0.72	0.83	0.72
Taiwan	0.33	0.83	0.98	0.87	0.77	0.76	0.83
London	0.60	0.71	0.75	0.97	0.75	0.76	0.75
Stockholm	0.40	0.70	1.62	0.43	0.28	0.69	0.43
Germany	0.44	0.54	0.88	0.71	0.83	0.68	0.71
Australia	0.75	0.60	0.71	0.65	0.59	0.66	0.65
New Zealand	0.53	0.70	0.67	0.73	0.55	0.64	0.67
Madrid	0.49	0.48	0.48	1.11	0.52	0.62	0.49
Brussels	0.35	0.40	0.75	0.68	0.78	0.59	0.68
NYSE	0.55	0.62	0.68	0.59	0.53	0.59	0.59
Kuala Lumpur	0.66	0.63	0.46	0.58	0.46	0.56	0.58
Hong Kong	0.52	0.55	0.54	0.50	0.44	0.51	0.52
Paris	0.40	0.52	0.59	0.51	0.45	0.50	0.51
Amsterdam	0.51	0.51	0.41	0.49	0.52	0.49	0.51
Thailand	0.50	0.55	0.47	0.52	0.37	0.48	0.50
Barcelona	0.27	0.41	0.38	0.86	0.50	0.48	0.41
Osaka	0.27	0.26	0.37	0.58	0.64	0.42	0.37
Tokyo	0.25	0.26	0.33	0.52	0.64	0.40	0.33
Vienna	0.30	0.36	0.35	0.38	0.28	0.33	0.35
Rio de Janeiro	0.14	0.69	0.15	0.23	0.29	0.30	0.23
Mexico	0.41	0.18	0.18	0.26	0.28	0.26	0.26
Korea	0.29	0.29	0.22	0.03	0.22	0.21	0.22
<i>Mean</i>	0.43	0.54	0.57	0.61	0.52	0.53	0.51

Source: FIBV (1991-1995)

Tables 1-13

Table 1
 Number of firms in sample by industry.
 Sample's proportion of all listed firms is in parenthesis.

<i>Year</i>	Number of Firms in Sample			<i>Total</i>
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	
1980	16 (84)	49 (91)	30 (68)	95 (81)
1981	16 (84)	52 (95)	32 (91)	100 (92)
1982	17 (89)	57 (98)	32 (91)	106 (95)
1983	17 (89)	60 (100)	32 (91)	109 (96)
1984	20 (100)	79 (96)	38 (100)	137 (98)
1985	20 (100)	96 (97)	36 (97)	152 (97)
1986	22 (100)	89 (97)	35 (100)	146 (98)
1987	19 (100)	88 (100)	32 (100)	139 (100)
1988	17 (100)	79 (99)	30 (97)	126 (98)
1989	16 (94)	74 (100)	29 (94)	119 (98)
1990	13 (93)	60 (98)	35 (95)	108 (96)
1991	12 (100)	58 (100)	33 (100)	103 (100)
1992	13 (100)	63 (100)	38 (100)	114 (100)
1993	13 (100)	69 (100)	38 (100)	120 (100)
1994	11 (100)	75 (97)	36 (100)	122 (98)
<i>Sum</i>	242 (95)	1048 (98)	506 (95)	1796 (97)
<i>Mean</i>	16 (96)	70 (98)	34 (95)	120 (96)
<i>Std.d.</i>	3.25	14.4	3.06	17.3

Table 2

The sample firms' market value of equity, ownership concentration, stock liquidity, and market to book value.

Year	I: Market Value of Equity in Real 1994 NOK (billions)				II: Proportion of Equity owned by 10 largest ¹			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	6.33	30.25	2.64	39.21	-	0.367	0.517	0.387
1981	7.19	26.05	4.85	38.08	0.544	0.428	0.459	0.433
1982	6.88	21.15	2.29	30.32	0.346	0.424	0.539	0.429
1983	10.71	46.61	4.11	61.43	0.325	0.511	0.503	0.502
1984	14.34	62.63	8.35	85.32	0.313	0.562	0.550	0.535
1985	18.81	87.75	11.62	118.18	0.488	0.648	0.693	0.639
1986	19.39	76.63	12.17	108.19	0.290	0.647	0.696	0.568
1987	15.20	67.79	12.42	95.41	0.348	0.634	0.625	0.573
1988	12.34	86.16	23.71	122.21	0.362	0.595	0.691	0.588
1989	19.25	125.60	40.02	184.87	0.413	0.630	0.642	0.614
1990	13.68	121.69	35.46	170.84	0.588	0.623	0.656	0.628
1991	7.90	105.07	28.03	140.99	0.567	0.581	0.654	0.599
1992	6.68	105.42	17.69	129.79	0.602	0.620	0.706	0.635
1993	25.41	151.46	33.04	209.91	0.630	0.584	0.670	0.608
1994	30.94	173.47	42.85	247.25	0.703	0.574	0.658	0.603
<i>SUM</i>	215.04	1287.72	279.24	1782.01				
<i>Mean</i>	14.34	85.85	18.62	118.80	0.466	0.562	0.617	0.556
<i>St.dev.</i>	7.35	45.47	14.16	64.50	0.139	0.089	0.081	0.082

Year	III: <u>MV of Trade</u> Avg. MV of Equity ²				IV: <u>MV of Firm</u> BV of Firm ^{1,3}			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	0.020	0.017	0.002	0.017	-	1.102	1.059	1.096
1981	0.019	0.021	0.011	0.020	-	1.068	1.106	1.076
1982	0.018	0.025	0.005	0.022	-	1.017	1.024	1.018
1983	0.060	0.088	0.038	0.080	-	1.210	1.079	1.184
1984	0.142	0.209	0.184	0.194	-	1.266	1.179	1.250
1985	0.149	0.186	0.138	0.174	-	1.355	1.212	1.331
1986	0.144	0.142	0.094	0.137	-	1.255	1.215	1.249
1987	0.357	0.264	0.322	0.286	-	1.229	1.215	1.226
1988	0.250	0.256	0.315	0.266	-	1.297	1.507	1.328
1989	0.790	0.440	0.428	0.473	-	1.481	1.928	1.547
1990	0.661	0.390	0.608	0.463	-	1.440	1.421	1.436
1991	0.505	0.337	0.709	0.433	-	1.413	1.348	1.402
1992	0.290	0.359	0.592	0.394	-	1.143	0.915	1.093
1993	0.696	0.391	0.631	0.454	-	1.299	1.120	1.258
1994	0.635	0.391	0.448	0.416	-	1.300	1.239	1.288
<i>SUM</i>								
<i>Mean</i>	0.316	0.234	0.302	0.255	-	1.258	1.238	1.252
<i>St.dev.</i>	0.274	0.149	0.254	0.175	-	0.135	0.245	0.146

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Only class A-shares, i.e. shares with full voting and dividend rights

³ Market value of assets / Book value of assets

Table 3

Proportion of sample firms paying dividends and issuing new equity.

<i>Year</i>	I: Firms paying Dividends (%)				II: Firms issuing Equity (%)¹			
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>
1980	75	84	67	77	19	4	0	5
1981	75	79	69	75	19	12	0	9
1982	71	75	56	69	41	26	0	21
1983	71	75	50	67	47	20	6	20
1984	70	62	47	59	45	24	13	24
1985	70	50	50	53	40	15	8	16
1986	73	45	40	48	27	17	9	16
1987	58	42	47	45	21	13	9	13
1988	24	43	53	43	18	18	17	17
1989	69	51	52	54	44	23	28	27
1990	31	47	37	42	0	22	31	22
1991	33	41	30	37	50	12	15	17
1992	38	51	42	46	23	16	0	11
1993	62	58	63	60	23	23	18	22
1994	100	65	75	71	36	17	14	18
<i>Mean</i>	61	58	52	56	30	17	11	17

Notes¹ Both public and private equity issues for cash

Table 4

Total dividend payments, new equity issues, and net dividends. Amounts in billion 1994 NOK.

Year	I: Dividends				II: Equity Issues¹			
	Financial	Industrial	Shipping	Total	Financial	Industrial	Shipping	Total
1981	0.50	0.82	0.08	1.40	0.15	0.32	0.00	0.48
1982	0.52	0.80	0.11	1.44	0.75	1.72	0.00	2.47
1983	0.57	0.88	0.09	1.54	1.31	1.07	0.16	2.53
1984	0.68	1.17	0.08	1.93	1.28	2.53	0.12	3.93
1985	0.88	1.54	0.13	2.55	1.67	1.84	0.62	4.13
1986	0.98	1.66	0.16	2.80	0.89	3.21	0.37	4.47
1987	0.75	1.33	0.17	2.25	0.61	0.58	0.29	1.48
1988	0.42	1.50	0.15	2.07	0.60	4.85	0.24	5.70
1989	0.39	1.73	0.08	2.20	2.14	2.53	1.62	6.30
1990	0.89	2.09	0.13	3.11	0.00	3.88	2.43	6.31
1991	0.26	2.19	0.15	2.60	1.24	0.51	0.66	2.40
1992	0.35	1.80	0.18	2.33	3.16	1.76	0.00	4.92
1993	0.27	2.13	0.28	2.68	0.34	2.77	1.30	4.41
1994	0.44	2.68	0.43	3.54	1.41	8.12	0.98	10.51
<i>Sum</i>	7.90	22.32	2.21	32.43	15.57	35.69	8.77	60.03

Year	III: Net Dividends²			
	Financial	Industrial	Shipping	Total
1981	0.34	0.50	0.08	0.92
1982	-0.23	-0.92	0.11	-1.03
1983	-0.74	-0.18	-0.07	-1.00
1984	-0.59	-1.36	-0.04	-2.00
1985	-0.79	-0.30	-0.48	-1.58
1986	0.08	-1.55	-0.21	-1.67
1987	0.13	0.75	-0.12	0.76
1988	-0.18	-3.35	-0.09	-3.63
1989	-1.75	-0.80	-1.54	-4.10
1990	0.89	-1.78	-2.30	-3.19
1991	-0.97	1.68	-0.51	0.20
1992	-2.81	0.05	0.18	-2.59
1993	-0.07	-0.64	-1.02	-1.73
1994	-0.97	-5.45	-0.55	-6.97
<i>Sum</i>	-7.67	-13.37	-6.56	-27.60

Notes¹ Both public and private equity issues for cash² Dividends - New equity issues

Table 5

Firm size, dividend behavior, and equity issues. All amounts in 1994 million NOK.

<i>Year</i>	I: Dividend paying Firms				II: Non-Dividend paying Firms			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	474.75	639.32	102.81	465.28	157.03	504.25	57.89	238.23
1981	533.60	542.61	193.19	438.67	196.08	345.45	59.85	207.31
1982	507.22	429.70	102.29	361.71	159.57	190.77	31.80	118.60
1983	794.56	940.93	190.14	752.32	235.45	284.60	66.70	180.93
1984	916.89	1101.16	338.39	899.80	251.42	289.00	113.11	222.16
1985	1177.41	1376.97	454.22	1134.43	388.38	451.13	191.45	380.98
1986	810.22	1475.81	579.95	1144.50	1071.13	359.08	193.01	369.41
1987	720.96	1470.71	520.81	1113.63	908.09	262.19	271.24	332.20
1988	1362.53	2108.75	793.49	1663.77	530.12	321.33	786.51	449.48
1989	1484.76	3071.28	1869.68	2516.97	583.28	261.55	997.57	466.27
1990	1654.00	3941.15	1193.30	2944.03	784.59	354.42	906.88	608.80
1991	1569.25	3996.80	1528.29	3091.66	202.29	277.28	554.02	367.36
1992	841.92	3074.46	817.75	2182.57	308.89	227.15	209.15	231.38
1993	903.86	3441.63	1057.15	2364.83	3635.60	475.74	590.12	843.53
1994	3093.54	3340.08	1085.98	2603.73	-	377.08	1691.02	686.25
<i>Mean</i>	1123.03	2063.42	721.83	1578.53	672.28	332.07	448.02	380.19
<i>Std.dev.</i>	667.56	1287.21	538.38	957.70	902.70	91.01	474.83	203.66

<i>Year</i>	III: Equity issuing Firms				IV: Non-Equity issuing Firms			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	457.40	1898.61	-	1033.89	380.99	562.74	87.84	378.19
1981	619.85	585.16	-	596.72	409.84	489.92	151.52	359.48
1982	618.14	935.60	-	834.59	255.75	169.38	71.46	142.36
1983	1024.32	604.01	373.94	735.93	279.72	820.06	112.05	520.02
1984	914.93	1044.32	94.76	865.16	555.51	713.07	238.77	545.91
1985	1174.05	1026.63	1280.39	1104.26	785.13	894.83	235.79	713.21
1986	921.53	677.81	232.64	683.09	866.32	898.11	358.58	752.42
1987	763.58	297.06	263.91	395.21	809.40	837.93	401.09	729.69
1988	1074.91	2610.08	408.25	1900.32	651.21	763.33	866.63	773.07
1989	2002.81	1327.41	842.08	1353.82	581.00	1873.37	1751.55	1705.34
1990	-	2802.59	661.28	1821.16	1052.10	1814.04	1174.59	1513.42
1991	1061.26	2429.48	232.52	1363.14	254.63	1761.34	959.39	1386.40
1992	697.87	2267.46	-	1905.24	458.71	1561.32	465.41	1039.82
1993	336.92	846.54	841.39	784.15	2439.81	2602.21	903.06	2024.57
1994	4829.33	5813.09	1134.80	4570.98	1936.34	1579.00	1239.19	1496.85
<i>Mean</i>	1233.81	1661.95	578.72	1350.98	781.10	1156.04	601.13	938.72
<i>Std.dev.</i>	1150.71	1456.74	398.83	1052.11	625.74	666.39	515.26	559.94

<i>Year</i>	V: Dividend paying and Equity issuing Firms				VI: Non-Dividend paying and Non-Equity issuing Firms			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	457.40	671.75	-	510.99	157.03	129.79	57.89	100.74
1981	763.21	516.56	-	587.03	150.40	287.18	59.85	170.50
1982	705.98	935.60	-	870.00	176.69	190.77	31.80	119.46
1983	1432.35	502.91	720.85	806.98	72.24	157.69	69.35	107.82
1984	1138.59	1096.30	219.66	1072.11	311.07	235.88	125.51	204.70
1985	1612.99	1189.70	3175.61	1446.10	334.28	435.87	173.78	364.47
1986	987.32	856.03	115.99	849.06	1166.84	314.10	182.70	341.71
1987	993.92	1048.67	-	1015.82	1027.46	290.51	272.81	368.46
1988	671.45	8608.75	179.54	5066.51	394.39	352.96	848.09	456.51
1989	2324.82	3355.51	1412.49	2483.24	711.41	280.85	1360.52	576.84
1990	-	4928.37	222.80	3882.69	784.59	361.78	1009.46	616.47
1991	1883.42	7903.74	-	4291.55	180.21	283.98	643.33	400.64
1992	-	5524.29	-	5524.29	75.50	258.57	209.15	220.06
1993	399.28	959.68	436.52	638.34	4491.45	240.62	397.21	825.80
1994	4829.33	11750.18	1100.15	7162.99	-	249.22	1859.10	635.59
<i>Mean</i>	1400.01	3323.20	842.62	2413.85	759.73	281.43	517.33	386.36
<i>Std.dev.</i>	1176.40	3608.27	984.48	2190.40	1178.62	70.95	560.03	216.34

Table 6A

Sample period averages for dividend yield and classic payout ratio.
Table reports averages across the years of the equally-weighted
mean (EWM) and the aggregate mean (AGM)¹.

	I: Dividend Yield²		II: Payout Ratio³	
	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>				
Financial	0.041	0.052	0.208	0.121
Industrial	0.022	0.024	-0.051	0.561
Shipping	0.016	0.016	-0.140	0.124
Total	0.023	0.027	-0.019	0.084
<i>Sub-sample of dividend-paying firms by industry</i>				
Financial	0.065	0.069	0.353	0.394
Industrial	0.035	0.028	0.033	0.314
Shipping	0.029	0.022	-0.300	0.241
Total	0.038	0.032	0.009	0.311
<i>Sub-sample of dividend-paying firms by issuance behavior</i>				
Issuing	0.043	0.040	0.168	0.279
Non-Issuing	0.037	0.031	-0.041	0.342

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividend/Last Rights-on Price (per 31 Dec. at t-1)

³ Dividend/(Earnings before extraordinary Items - Tax)

Table 6B
 Dividend yield and classic payout ratio by industry.
 All means are equally-weighted.

<i>Year</i>	I: Dividend Yield¹				II: Payout Ratio²			
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>
1980	0.068	0.071	0.031	0.058	0.242	-2.805	0.164	-1.354
1981	0.066	0.045	0.029	0.043	0.197	0.226	0.083	0.175
1982	0.067	0.047	0.034	0.046	0.238	0.278	0.068	0.208
1983	0.053	0.025	0.016	0.027	0.197	0.230	-0.051	0.142
1984	0.045	0.017	0.012	0.019	0.188	-1.165	-0.112	-0.675
1985	0.037	0.011	0.009	0.014	0.254	0.141	-2.486	-0.467
1986	0.037	0.011	0.008	0.014	0.260	0.191	-0.318	0.079
1987	0.033	0.011	0.008	0.013	0.067	0.132	0.124	0.121
1988	0.016	0.011	0.007	0.011	0.161	0.117	-0.406	-0.001
1989	0.044	0.009	0.005	0.013	0.260	0.096	0.199	0.143
1990	0.013	0.012	0.005	0.010	0.142	0.168	-0.016	0.105
1991	0.018	0.012	0.007	0.011	0.123	0.139	0.122	0.132
1992	0.025	0.024	0.020	0.023	0.111	0.238	0.117	0.183
1993	0.038	0.014	0.023	0.019	0.200	1.083	0.362	0.762
1994	0.058	0.017	0.030	0.024	0.476	0.169	0.046	0.160
<i>Mean</i>	0.041	0.022	0.016	0.023	0.208	-0.051	-0.140	-0.019
<i>Std.dev.</i>	0.019	0.018	0.011	0.015	0.095	0.877	0.677	0.486

Notes

¹ Dividend/Last Rights-on Price (per 31 Dec. at t-1)

² Dividend/(Earnings before extraordinary Items - Tax)

Table 6C

Dividend yield and classic payout ratio by industry.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividend Yield¹				II: Payout Ratio²			
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>
1980	0.090	0.031	0.034	0.040	0.239	0.259	0.238	0.250
1981	0.081	0.034	0.026	0.042	0.248	0.349	0.493	0.310
1982	0.090	0.045	0.040	0.055	0.274	0.652	-0.199	0.512
1983	0.068	0.027	0.020	0.033	0.215	0.189	-0.121	0.221
1984	0.065	0.026	0.017	0.032	0.241	0.190	-0.138	0.237
1985	0.056	0.020	0.015	0.025	0.295	0.187	0.245	0.218
1986	0.042	0.019	0.015	0.023	0.259	0.356	0.200	0.301
1987	0.029	0.024	0.013	0.023	-0.195	0.298	0.120	0.500
1988	0.033	0.021	0.004	0.019	-0.254	0.210	0.055	0.270
1989	0.048	0.017	0.003	0.018	0.434	0.243	0.087	0.256
1990	0.020	0.019	0.004	0.016	-0.075	0.263	0.178	0.461
1991	0.045	0.018	0.007	0.017	-0.107	2.425	0.446	-1.117
1992	0.041	0.021	0.016	0.021	-0.157	2.002	-0.336	-1.837
1993	0.017	0.018	0.013	0.017	0.087	0.499	-0.647	0.364
1994	0.056	0.019	0.014	0.023	0.317	0.286	1.247	0.321
<i>Mean</i>	0.052	0.024	0.016	0.027	0.121	0.561	0.124	0.084
<i>Std.dev.</i>	0.023	0.008	0.011	0.011	0.219	0.687	0.430	0.656

Notes¹ Dividend/Last Rights-on Price (per 31 Dec. at t-1)² Dividend/(Earnings before extraordinary Items - Tax)

Table 6D
 Dividend yield and classic payout ratio by industry for dividend-paying firms.
 All means are equally-weighted.

<i>Year</i>	I: Dividend Yield¹				II: Payout Ratio²			
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>
1980	0.091	0.084	0.046	0.075	0.323	-3.353	0.246	-1.763
1981	0.088	0.057	0.043	0.057	0.263	0.286	0.121	0.234
1982	0.094	0.062	0.060	0.067	0.337	0.369	0.122	0.302
1983	0.075	0.033	0.033	0.040	0.279	0.306	-0.102	0.212
1984	0.065	0.027	0.025	0.033	0.269	-1.878	-0.236	-1.142
1985	0.052	0.023	0.018	0.027	0.362	0.281	-4.972	-0.886
1986	0.051	0.024	0.019	0.029	0.357	0.424	-0.795	0.165
1987	0.056	0.025	0.017	0.029	0.116	0.314	0.264	0.268
1988	0.066	0.026	0.014	0.025	0.683	0.273	-0.762	-0.003
1989	0.063	0.017	0.008	0.023	0.379	0.182	0.359	0.257
1990	0.042	0.026	0.014	0.024	0.460	0.359	-0.043	0.252
1991	0.053	0.029	0.022	0.029	0.370	0.330	0.404	0.354
1992	0.064	0.047	0.049	0.049	0.290	0.469	0.277	0.394
1993	0.062	0.024	0.035	0.032	0.325	1.868	0.557	1.260
1994	0.058	0.026	0.039	0.034	0.476	0.258	0.061	0.225
<i>Mean</i>	0.065	0.035	0.029	0.038	0.353	0.033	-0.300	0.009
<i>Std.dev.</i>	0.015	0.019	0.015	0.016	0.125	1.181	1.349	0.734

Notes

¹ Dividend/Last Rights-on Price (per 31 Dec. at t-1)

² Dividend/(Earnings before extraordinary Items - Tax)

Table 6E

Dividend yield and classic payout ratio by industry for dividend-paying firms.
 All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividend Yield¹				II: Payout Ratio²			
	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>	<i>Financial</i>	<i>Industrial</i>	<i>Shipping</i>	<i>Total</i>
1980	0.099	0.035	0.043	0.047	0.259	0.230	0.169	0.235
1981	0.091	0.040	0.030	0.049	0.278	0.266	0.268	0.270
1982	0.101	0.052	0.050	0.063	0.306	0.343	-0.398	0.365
1983	0.076	0.029	0.027	0.037	0.236	0.181	-0.329	0.212
1984	0.072	0.030	0.023	0.037	0.263	0.190	-1.547	0.225
1985	0.063	0.027	0.021	0.033	0.326	0.217	0.350	0.252
1986	0.063	0.025	0.023	0.030	0.291	0.322	0.365	0.314
1987	0.056	0.029	0.021	0.032	1.152	0.286	0.234	0.331
1988	0.076	0.025	0.007	0.026	0.729	0.186	0.084	0.204
1989	0.057	0.019	0.005	0.020	0.379	0.217	0.149	0.242
1990	0.041	0.021	0.010	0.020	0.527	0.233	0.184	0.243
1991	0.057	0.019	0.012	0.020	0.420	0.681	0.158	0.504
1992	0.065	0.022	0.022	0.024	0.235	0.586	0.592	0.511
1993	0.061	0.020	0.017	0.021	0.192	0.477	2.596	0.440
1994	0.056	0.020	0.020	0.025	0.317	0.292	0.748	0.320
<i>Mean</i>	0.069	0.028	0.022	0.032	0.394	0.314	0.241	0.311
<i>Std.dev.</i>	0.017	0.009	0.012	0.013	0.250	0.151	0.842	0.102

Notes

¹ Dividend/Last Rights-on Price (per 31 Dec. at t-1)

² Dividend/(Earnings before extraordinary Items - Tax)

Table 6F

Dividend yield and classic payout ratio by issuance behavior for dividend-paying firms.

All means are equally-weighted.

<i>Year</i>	I: Dividend Yield¹			II: Payout Ratio²		
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Total</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Total</i>
1980	0.082	0.075	0.075	0.168	-1.875	-1.763
1981	0.051	0.058	0.057	0.281	0.229	0.234
1982	0.068	0.067	0.067	0.395	0.265	0.302
1983	0.043	0.039	0.040	0.247	0.203	0.212
1984	0.043	0.029	0.033	0.288	-1.745	-1.142
1985	0.029	0.026	0.027	0.259	-1.173	-0.886
1986	0.041	0.026	0.029	0.306	0.136	0.165
1987	0.053	0.027	0.029	0.323	0.263	0.268
1988	0.026	0.025	0.025	-1.724	0.253	-0.003
1989	0.032	0.020	0.023	0.322	0.235	0.257
1990	0.018	0.025	0.024	0.359	0.225	0.252
1991	0.051	0.026	0.029	0.252	0.369	0.354
1992	0.041	0.050	0.049	0.256	0.405	0.394
1993	0.035	0.032	0.032	0.438	1.392	1.260
1994	0.028	0.035	0.034	0.349	0.203	0.225
<i>Mean</i>	0.043	0.037	0.038	0.168	-0.041	0.009
<i>Std.dev.</i>	0.017	0.017	0.016	0.528	0.871	0.734

Notes¹ Dividend/Last Rights-on Price (per 31 Dec. at t-1)² Dividend/(Earnings before extraordinary Items - Tax)

Table 6G

Dividend yield and classic payout ratio by issuance behavior for dividend-paying firms.
 All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividend Yield¹			II: Payout Ratio²		
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Total</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Total</i>
1980	0.078	0.045	0.047	0.139	0.254	0.235
1981	0.040	0.050	0.049	0.264	0.271	0.270
1982	0.062	0.066	0.063	0.324	0.495	0.365
1983	0.054	0.032	0.037	0.236	0.201	0.212
1984	0.040	0.036	0.037	0.254	0.210	0.225
1985	0.037	0.032	0.033	0.342	0.228	0.252
1986	0.051	0.027	0.030	0.285	0.323	0.314
1987	0.066	0.029	0.032	0.359	0.327	0.331
1988	0.032	0.021	0.026	0.179	0.237	0.204
1989	0.026	0.018	0.020	0.305	0.221	0.242
1990	0.019	0.021	0.020	0.261	0.238	0.243
1991	0.023	0.020	0.020	0.281	0.640	0.504
1992	0.021	0.024	0.024	0.226	0.686	0.511
1993	0.030	0.021	0.021	0.457	0.439	0.440
1994	0.022	0.027	0.025	0.268	0.360	0.320
<i>Mean</i>	0.040	0.031	0.032	0.279	0.342	0.311
<i>Std.dev.</i>	0.018	0.013	0.013	0.076	0.156	0.102

Notes

¹ Dividend/Last Rights-on Price(per 31 Dec. at t-1)

² Dividend/(Earnings before extraordinary Items - Tax)

Table 7A

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity.

Table reports averages across the years of the equally-weighted mean (EWM) and the aggregate mean (AGM).¹

	I: Dividends PVCS²		II: Dividends Max1³		III: Dividends Max2⁴	
	EWM	AGM	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>						
Financial	0.085	0.080	0.328	0.220	-	-
Industrial	0.114	0.119	0.210	0.268	0.223	0.283
Shipping	0.130	0.080	0.321	0.084	0.352	0.098
Total	0.116	0.100	0.266	0.221	0.274	0.243
<i>Sub-sample of dividend-paying firms by industry</i>						
Financial	0.137	0.123	0.559	0.407	-	-
Industrial	0.202	0.162	0.316	0.317	0.344	0.351
Shipping	0.242	0.205	0.467	0.114	0.166	0.115
Total	0.205	0.152	0.395	0.276	0.300	0.301
<i>Sub-sample of dividend-paying firms by issuance behavior</i>						
Issuing	0.163	0.161	0.608	0.422	0.544	0.395
Non-Issuing	0.198	0.151	0.363	0.266	0.267	0.283

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7B

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by industry.

All means are equally-weighted.

<i>Year</i>	I: Dividends PVCS¹				II: Dividends Max1²				III: Dividends Max2³		
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.092	0.097	0.106	0.099	-	-	-	-	-	-	-
1981	0.109	0.092	0.158	0.116	0.493	0.279	2.824	1.089	0.279	2.921	1.233
1982	0.101	0.089	0.101	0.094	0.500	0.285	0.131	0.279	0.291	0.133	0.237
1983	0.111	0.102	0.130	0.112	0.485	0.285	0.218	0.301	0.285	0.226	0.265
1984	0.110	0.092	0.136	0.107	0.414	0.301	0.186	0.291	0.303	0.239	0.286
1985	0.127	0.076	0.088	0.085	0.349	0.213	0.097	0.211	0.219	0.090	0.184
1986	0.134	0.074	0.062	0.080	0.401	0.191	0.059	0.199	0.179	0.066	0.150
1987	0.059	0.065	0.072	0.066	0.247	0.162	0.063	0.153	0.185	0.065	0.154
1988	0.027	0.063	0.076	0.061	0.059	0.143	0.130	0.127	0.146	0.147	0.147
1989	0.090	0.093	0.081	0.090	0.421	0.172	0.114	0.195	0.202	0.156	0.190
1990	0.042	0.098	0.073	0.083	0.193	0.161	0.111	0.153	0.139	0.120	0.133
1991	0.042	0.096	0.104	0.092	0.294	0.089	0.054	0.103	0.106	0.062	0.090
1992	0.041	0.180	0.135	0.149	0.246	0.318	0.124	0.247	0.378	0.162	0.304
1993	0.080	0.241	0.246	0.225	0.219	0.167	0.127	0.159	0.189	0.184	0.187
1994	0.116	0.260	0.374	0.281	0.277	0.181	0.260	0.216	-	-	-
<i>Mean</i>	0.085	0.114	0.130	0.116	0.328	0.210	0.321	0.266	0.223	0.352	0.274
<i>Std.dev.</i>	0.035	0.062	0.082	0.060	0.131	0.070	0.723	0.245	0.078	0.774	0.295

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7C

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by industry.
All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividends PVCS¹				II: Dividends Max1²				III: Dividends Max2³		
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.108	0.094	0.107	0.099	-	-	-	-	-	-	-
1981	0.115	0.087	0.151	0.099	0.405	0.306	0.120	0.305	0.306	0.121	0.266
1982	0.110	0.087	0.114	0.096	0.254	0.336	0.101	0.268	0.338	0.103	0.280
1983	0.111	0.105	0.099	0.107	0.401	0.386	0.126	0.360	0.386	0.131	0.342
1984	0.119	0.118	0.091	0.116	0.296	0.407	0.178	0.340	0.421	0.274	0.404
1985	0.114	0.118	0.063	0.111	0.380	0.328	0.114	0.310	0.359	0.109	0.309
1986	0.083	0.088	0.094	0.087	0.310	0.236	0.072	0.228	0.226	0.081	0.197
1987	0.044	0.101	0.079	0.079	0.103	0.235	0.088	0.170	0.245	0.114	0.221
1988	0.042	0.102	0.050	0.079	0.067	0.257	0.041	0.153	0.276	0.043	0.228
1989	0.089	0.126	0.062	0.109	0.206	0.302	0.052	0.226	0.328	0.071	0.271
1990	0.029	0.129	0.026	0.081	0.040	0.240	0.052	0.147	0.244	0.049	0.196
1991	0.045	0.110	0.032	0.078	0.085	0.148	0.042	0.117	0.160	0.044	0.132
1992	0.036	0.144	0.052	0.097	0.155	0.177	0.046	0.134	0.179	0.051	0.137
1993	0.036	0.174	0.080	0.107	0.157	0.188	0.062	0.148	0.212	0.084	0.175
1994	0.113	0.199	0.101	0.149	0.228	0.206	0.085	0.184	-	-	-
<i>Mean</i>	0.080	0.119	0.080	0.100	0.220	0.268	0.084	0.221	0.283	0.098	0.243
<i>Std.dev.</i>	0.036	0.032	0.033	0.019	0.125	0.078	0.040	0.083	0.081	0.061	0.080

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7D

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by industry for dividend-paying firms.
All means are equally-weighted.

<i>Year</i>	I: Dividends PVCS¹				II: Dividends Max1²				III: Dividends Max2³		
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.123	0.115	0.160	0.129	-	-	-	-	-	-	-
1981	0.145	0.117	0.230	0.155	0.657	0.329	3.813	1.366	0.337	0.209	0.300
1982	0.143	0.117	0.180	0.137	0.667	0.350	0.190	0.364	0.378	0.143	0.312
1983	0.158	0.137	0.260	0.167	0.687	0.359	0.367	0.417	0.363	0.179	0.317
1984	0.158	0.148	0.287	0.181	0.587	0.375	0.291	0.391	0.395	0.179	0.343
1985	0.181	0.152	0.176	0.162	0.499	0.327	0.148	0.319	0.356	0.169	0.314
1986	0.184	0.163	0.156	0.167	0.535	0.333	0.123	0.341	0.315	0.142	0.275
1987	0.101	0.154	0.154	0.145	0.382	0.297	0.100	0.264	0.294	0.061	0.244
1988	0.115	0.146	0.142	0.143	0.220	0.255	0.225	0.243	0.265	0.066	0.208
1989	0.132	0.176	0.146	0.162	0.589	0.265	0.187	0.300	0.323	0.084	0.284
1990	0.135	0.210	0.197	0.200	0.706	0.303	0.171	0.292	0.278	0.153	0.247
1991	0.127	0.228	0.342	0.247	0.979	0.185	0.157	0.248	0.224	0.200	0.218
1992	0.106	0.355	0.321	0.321	0.739	0.535	0.271	0.476	0.675	0.342	0.576
1993	0.131	0.416	0.379	0.372	0.301	0.245	0.179	0.229	0.270	0.232	0.256
1994	0.116	0.399	0.499	0.394	0.277	0.270	0.309	0.284	-	-	-
<i>Mean</i>	0.137	0.202	0.242	0.205	0.559	0.316	0.467	0.395	0.344	0.166	0.300
<i>Std.dev.</i>	0.025	0.103	0.105	0.087	0.209	0.081	0.966	0.288	0.111	0.075	0.093

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7E

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by industry for dividend-paying firms.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividends PVCS¹				II: Dividends Max1²				III: Dividends Max2³		
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.119	0.120	0.146	0.121	-	-	-	-	-	-	-
1981	0.130	0.126	0.184	0.131	0.446	0.399	0.125	0.364	0.399	0.109	0.328
1982	0.121	0.123	0.161	0.124	0.269	0.406	0.109	0.302	0.422	0.120	0.353
1983	0.125	0.139	0.170	0.134	0.475	0.405	0.216	0.413	0.415	0.209	0.389
1984	0.134	0.151	0.235	0.147	0.317	0.428	0.267	0.371	0.441	0.252	0.421
1985	0.130	0.174	0.186	0.156	0.419	0.380	0.170	0.366	0.424	0.187	0.388
1986	0.135	0.152	0.213	0.149	0.446	0.314	0.117	0.319	0.301	0.144	0.276
1987	0.108	0.169	0.203	0.153	0.303	0.294	0.113	0.265	0.297	0.069	0.256
1988	0.111	0.148	0.180	0.140	0.105	0.344	0.065	0.222	0.408	0.063	0.331
1989	0.133	0.160	0.152	0.151	0.333	0.338	0.063	0.285	0.430	0.069	0.346
1990	0.151	0.183	0.198	0.179	0.589	0.290	0.064	0.249	0.304	0.056	0.245
1991	0.137	0.160	0.295	0.162	1.293	0.178	0.065	0.171	0.218	0.066	0.186
1992	0.086	0.185	0.323	0.173	0.282	0.231	0.060	0.179	0.224	0.065	0.180
1993	0.114	0.214	0.225	0.194	0.189	0.219	0.071	0.173	0.276	0.086	0.220
1994	0.113	0.222	0.208	0.170	0.228	0.218	0.091	0.192	-	-	-
<i>Mean</i>	0.123	0.162	0.205	0.152	0.407	0.317	0.114	0.276	0.351	0.115	0.301
<i>Std.dev.</i>	0.015	0.031	0.049	0.021	0.285	0.082	0.063	0.082	0.082	0.064	0.080

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7F

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by issuance behavior for dividend-paying firms. All means are equally-weighted.

<i>Year</i>	I: Dividends PVCS¹		II: Dividends Max1²		III: Dividends Max2³	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	0.115	0.130	-	-	-	-
1981	0.109	0.159	0.507	1.445	0.292	0.301
1982	0.112	0.147	0.612	0.262	0.504	0.251
1983	0.124	0.179	0.348	0.438	0.240	0.340
1984	0.130	0.202	0.562	0.318	0.521	0.281
1985	0.146	0.166	0.428	0.290	0.393	0.288
1986	0.126	0.175	0.572	0.289	0.193	0.280
1987	0.127	0.146	0.306	0.261	0.301	0.240
1988	0.117	0.147	0.616	0.185	0.537	0.183
1989	0.176	0.157	0.437	0.251	0.289	0.284
1990	0.161	0.209	0.386	0.267	0.452	0.179
1991	0.200	0.255	0.928	0.182	0.650	0.199
1992	0.313	0.322	1.936	0.309	2.153	0.379
1993	0.321	0.380	0.265	0.222	0.111	0.268
1994	0.153	0.436	0.310	0.279	-	-
<i>Mean</i>	0.163	0.198	0.608	0.363	0.544	0.267
<i>Std.dev.</i>	0.068	0.094	0.425	0.319	0.517	0.058

Notes

- ¹ Ratio of aggregate numerator value to aggregate denominator value
- ² Dividends paid / Par Value of Common Stock
- ³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)
- ⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 7G

Sample period averages for dividends relative to the par value of common stock, the legal maximum, and the maximum according to law or firm liquidity by issuance behavior for dividend-paying firms.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividends PVCS¹		II: Dividends Max1²		III: Dividends Max2³	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	0.118	0.121	-	-	-	-
1981	0.122	0.132	0.497	0.353	0.301	0.329
1982	0.123	0.125	0.591	0.144	0.560	0.195
1983	0.123	0.141	0.360	0.448	0.233	0.435
1984	0.128	0.162	0.302	0.432	0.444	0.413
1985	0.142	0.163	0.375	0.363	0.417	0.383
1986	0.128	0.155	0.390	0.303	0.200	0.280
1987	0.145	0.155	0.287	0.261	0.374	0.253
1988	0.174	0.118	0.606	0.136	0.697	0.171
1989	0.141	0.156	0.261	0.298	0.201	0.379
1990	0.186	0.177	0.282	0.239	0.286	0.229
1991	0.178	0.158	0.930	0.147	0.650	0.174
1992	0.401	0.155	0.387	0.160	0.383	0.157
1993	0.142	0.198	0.219	0.170	0.162	0.222
1994	0.142	0.191	0.254	0.169	-	-
<i>Mean</i>	0.161	0.151	0.422	0.266	0.395	0.283
<i>Std.dev.</i>	0.070	0.024	0.192	0.110	0.173	0.099

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Dividends paid / Par Value of Common Stock

³ Dividends paid / Maximum Dividend 1, i.e., maximum dividend according to corporate law (see appendix 1)

⁴ Dividends paid / Maximum Dividend 2, i.e., maximum dividend according to corporate law and firm liquidity (see appendix 2)

Table 8A

Sample period averages for ownership structure.

Table reports averages across the years of the equally-weighted mean (EWM) and the aggregate mean (AGM).¹

	I: Insiders²		II: #>20%³		III: 10 largest		IV: MV of Equity⁴ #shareholders	
	EWM	AGM	EWM	AGM	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>								
Financial	0.016	0.004	0.312	0.255	0.507	0.466	216.089	73.152
Industrial	0.108	0.055	0.668	0.672	0.615	0.562	369.080	198.876
Shipping	0.222	0.189	1.003	0.908	0.647	0.617	357.616	158.695
Total	0.126	0.064	0.721	0.653	0.610	0.556	344.140	154.489
<i>Sub-sample of dividend-paying firms by industry</i>								
Financial	0.015	0.004	0.317	0.229	0.508	0.476	289.103	116.935
Industrial	0.096	0.048	0.569	0.630	0.592	0.557	500.404	288.081
Shipping	0.220	0.199	1.069	0.892	0.614	0.590	420.255	324.265
Total	0.114	0.058	0.666	0.613	0.585	0.551	441.896	228.900
<i>Sub-sample of dividend-paying firms by issuance behavior</i>								
Issuing	0.074	0.057	0.397	0.358	0.543	0.509	337.844	226.440
Non-Issuing	0.120	0.062	0.723	0.653	0.596	0.565	461.498	242.245

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Board & CEO

³ Number of shareholders holding more than 20% of the company's stock

⁴ Market value of equity in 1994 NOK

Table 8B
 Four measures of ownership structure by industry.
 All means are equally-weighted.

Year	I: Insiders ¹				II: #>20% ²			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	0.007	0.077	0.242	0.123	0.500	0.595	1.130	0.773
1981	0.008	0.071	0.244	0.113	0.500	0.585	1.115	0.760
1982	0.010	0.065	0.274	0.107	0.308	0.578	1.125	0.695
1983	0.010	0.083	0.194	0.098	0.308	0.489	1.107	0.659
1984	0.012	0.104	0.199	0.115	0.308	0.551	1.030	0.661
1985	0.010	0.131	0.184	0.126	0.333	0.717	1.125	0.770
1986	0.012	0.123	0.245	0.133	0.353	0.704	1.138	0.756
1987	0.026	0.125	0.273	0.147	0.200	0.736	1.143	0.765
1988	0.012	0.141	0.322	0.166	0.143	0.792	1.111	0.788
1989	0.013	0.138	0.230	0.141	0.200	0.735	0.962	0.716
1990	0.030	0.101	0.207	0.127	0.333	0.754	0.735	0.699
1991	0.029	0.105	0.213	0.131	0.273	0.750	0.844	0.727
1992	0.037	0.123	0.165	0.127	0.250	0.831	0.892	0.787
1993	0.012	0.078	0.162	0.095	0.308	0.615	0.788	0.631
1994	0.008	0.148	0.176	0.143	0.364	0.581	0.800	0.625
<i>Mean</i>	0.016	0.108	0.222	0.126	0.312	0.668	1.003	0.721
<i>Std.dev.</i>	0.010	0.028	0.045	0.019	0.098	0.102	0.151	0.056

Year	III: 10 largest				IV: MV of Equity ³ #shareholders			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	-	0.458	0.610	0.501	45.123	84.077	116.997	87.912
1981	0.544	0.436	0.503	0.455	52.269	119.939	229.012	144.015
1982	0.410	0.435	0.595	0.469	48.349	98.727	104.554	92.406
1983	0.440	0.500	0.599	0.518	61.007	171.087	148.843	147.388
1984	0.393	0.558	0.594	0.555	91.128	221.111	204.457	197.342
1985	0.524	0.652	0.680	0.644	138.731	442.290	298.836	367.386
1986	0.435	0.671	0.628	0.636	145.510	288.485	300.030	269.448
1987	0.487	0.679	0.668	0.649	125.432	268.476	222.022	237.100
1988	0.503	0.678	0.729	0.664	83.308	230.125	391.636	249.227
1989	0.560	0.724	0.674	0.692	114.226	393.432	802.956	456.219
1990	0.570	0.707	0.684	0.683	410.597	334.461	617.491	436.291
1991	0.599	0.698	0.687	0.683	321.135	438.235	392.435	409.918
1992	0.591	0.712	0.722	0.702	538.796	661.172	192.724	491.067
1993	0.517	0.649	0.682	0.643	576.375	867.740	427.085	698.900
1994	0.519	0.675	0.645	0.653	489.344	916.843	915.163	877.479
<i>Mean</i>	0.507	0.615	0.647	0.610	216.089	369.080	357.616	344.140
<i>Std.dev.</i>	0.066	0.107	0.059	0.085	194.301	261.775	245.209	225.704

Notes

¹ Board & CEO

² Number of shareholders holding more than 20% of the company's stock

³ Market value of equity in 1994 NOK

Table 8C

Four measures of ownership structure by industry.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

Year	I: Insiders ¹				II: # >20% ²			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	0.002	0.009	0.195	0.021	0.085	0.953	0.756	0.909
1981	0.002	0.033	0.207	0.043	0.117	0.860	1.247	0.864
1982	0.003	0.046	0.302	0.050	0.047	0.715	1.206	0.617
1983	0.003	0.062	0.222	0.060	0.034	0.668	1.182	0.608
1984	0.004	0.072	0.109	0.063	0.048	0.600	0.989	0.578
1985	0.004	0.088	0.088	0.074	0.158	0.725	1.127	0.690
1986	0.004	0.076	0.164	0.070	0.115	0.676	1.091	0.624
1987	0.007	0.082	0.175	0.082	0.085	0.715	1.040	0.655
1988	0.003	0.074	0.171	0.086	0.014	0.684	1.053	0.687
1989	0.003	0.060	0.224	0.088	0.019	0.644	0.682	0.586
1990	0.005	0.036	0.204	0.067	0.228	0.581	0.652	0.567
1991	0.009	0.041	0.195	0.070	0.606	0.513	0.745	0.564
1992	0.013	0.048	0.166	0.062	0.414	0.603	0.745	0.614
1993	0.003	0.046	0.201	0.065	0.857	0.561	0.563	0.597
1994	0.002	0.045	0.205	0.063	1.003	0.581	0.535	0.629
Mean	0.004	0.055	0.189	0.064	0.255	0.672	0.908	0.653
Std.dev.	0.003	0.021	0.050	0.017	0.319	0.115	0.247	0.103

Year	III: 10 largest				IV: MV of Equity ³ #shareholders			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	-	0.367	0.517	0.387	35.685	108.104	50.325	76.966
1981	0.544	0.428	0.459	0.433	39.937	73.936	90.582	65.013
1982	0.346	0.424	0.539	0.429	34.850	57.723	44.494	49.275
1983	0.325	0.511	0.503	0.502	46.578	95.967	76.696	79.859
1984	0.313	0.562	0.550	0.535	54.302	117.142	107.154	97.294
1985	0.488	0.648	0.693	0.639	69.178	177.556	149.483	140.002
1986	0.290	0.647	0.696	0.568	71.244	159.140	129.055	127.547
1987	0.348	0.634	0.625	0.573	56.760	162.869	119.851	120.709
1988	0.362	0.595	0.691	0.588	48.204	211.225	207.336	156.990
1989	0.413	0.630	0.642	0.614	67.331	304.545	319.708	224.496
1990	0.588	0.623	0.656	0.628	44.046	362.396	252.260	216.875
1991	0.567	0.581	0.654	0.599	33.530	214.929	158.034	156.367
1992	0.602	0.620	0.706	0.635	55.290	211.078	95.188	161.014
1993	0.630	0.584	0.670	0.608	193.661	319.784	295.170	292.848
1994	0.703	0.574	0.658	0.603	246.688	406.751	285.090	352.081
Mean	0.466	0.562	0.617	0.556	73.152	198.876	158.695	154.489
Std.dev.	0.139	0.089	0.081	0.082	61.733	107.128	91.401	85.788

Notes

¹ Board & CEO

² Number of shareholders holding more than 20% of the company's stock

³ Market value of equity in 1994 NOK

Table 8D

Four measures of ownership structure by industry for dividend-paying firms.
All means are equally-weighted.

Year	I: Insiders ¹				II: # >20% ²			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	0.007	0.080	0.206	0.108	0.500	0.520	1.071	0.673
1981	0.010	0.080	0.202	0.104	0.571	0.570	1.176	0.759
1982	0.013	0.070	0.250	0.096	0.364	0.470	1.167	0.600
1983	0.012	0.060	0.220	0.081	0.364	0.340	1.231	0.554
1984	0.012	0.070	0.214	0.087	0.400	0.410	1.118	0.588
1985	0.009	0.080	0.173	0.081	0.417	0.580	1.167	0.693
1986	0.010	0.100	0.256	0.104	0.273	0.670	1.091	0.672
1987	0.028	0.090	0.182	0.103	0.250	0.550	1.133	0.667
1988	0.010	0.110	0.346	0.167	0	0.640	1.143	0.725
1989	0.014	0.130	0.251	0.135	0.182	0.760	1.071	0.726
1990	0.007	0.080	0.253	0.121	0.500	0.640	1.083	0.750
1991	0.034	0.110	0.171	0.115	0.250	0.610	1.100	0.703
1992	0.029	0.130	0.175	0.134	0.200	0.710	0.875	0.712
1993	0.018	0.090	0.198	0.121	0.125	0.500	0.750	0.542
1994	0.008	0.160	0.196	0.149	0.364	0.570	0.852	0.632
<i>Mean</i>	0.015	0.096	0.220	0.114	0.317	0.569	1.069	0.666
<i>Std.dev.</i>	0.009	0.027	0.046	0.025	0.155	0.111	0.135	0.069

Year	III: 10 largest				IV: MV of Equity ³ #shareholders			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	-	0.440	0.599	0.485	47.577	93.602	141.984	99.289
1981	0.544	0.430	0.454	0.437	56.497	143.034	282.862	170.201
1982	0.410	0.430	0.505	0.441	48.265	120.261	114.433	106.987
1983	0.440	0.460	0.511	0.465	63.453	201.939	213.342	181.673
1984	0.393	0.505	0.550	0.502	96.527	272.065	334.766	255.656
1985	0.551	0.629	0.603	0.616	145.504	596.296	454.072	484.000
1986	0.460	0.690	0.552	0.627	179.167	365.952	365.622	323.190
1987	0.536	0.670	0.586	0.634	150.703	373.268	322.606	322.346
1988	0.473	0.613	0.674	0.611	150.472	298.848	470.625	338.757
1989	0.553	0.692	0.685	0.666	147.862	570.564	944.519	585.560
1990	0.782	0.678	0.721	0.700	1019.918	488.730	554.494	554.947
1991	0.517	0.660	0.707	0.657	430.281	782.290	646.458	709.493
1992	0.488	0.668	0.712	0.662	708.731	1089.172	333.214	825.068
1993	0.440	0.636	0.665	0.621	602.237	1055.151	568.810	842.712
1994	0.519	0.674	0.682	0.657	489.344	1054.890	556.014	828.560
<i>Mean</i>	0.508	0.592	0.614	0.585	289.103	500.404	420.255	441.896
<i>Std.dev.</i>	0.095	0.105	0.086	0.091	294.925	349.424	215.187	268.404

Notes

¹ Board & CEO

² Number of shareholders holding more than 20% of the company's stock

³ Market value of equity in 1994 NOK

Table 8E

Four measures of ownership structure by industry for dividend-paying firms.
All means are based on the ratio of aggregate numerator value to aggregate denominator value.

Year	I: Insiders ¹				II: # >20% ²			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	0.002	0.009	0.198	0.020	0.085	0.848	0.632	0.804
1981	0.002	0.038	0.203	0.046	0.130	0.843	1.252	0.853
1982	0.003	0.051	0.342	0.054	0.050	0.701	1.240	0.595
1983	0.003	0.057	0.305	0.057	0.036	0.596	1.325	0.547
1984	0.003	0.059	0.098	0.051	0.051	0.477	1.068	0.477
1985	0.003	0.070	0.059	0.057	0.172	0.628	1.163	0.608
1986	0.003	0.066	0.071	0.056	0.094	0.652	1.036	0.604
1987	0.008	0.062	0.183	0.070	0.140	0.621	1.032	0.615
1988	0.003	0.058	0.236	0.079	0	0.701	1.087	0.713
1989	0.003	0.055	0.223	0.079	0.018	0.637	0.565	0.562
1990	0.002	0.029	0.211	0.049	0.427	0.562	0.608	0.560
1991	0.005	0.039	0.216	0.060	0.650	0.491	0.627	0.517
1992	0.013	0.042	0.164	0.055	0.287	0.592	0.626	0.584
1993	0.010	0.047	0.238	0.074	0.299	0.529	0.541	0.521
1994	0.002	0.041	0.238	0.061	1.003	0.577	0.583	0.637
Mean	0.004	0.048	0.199	0.058	0.229	0.630	0.892	0.613
Std.dev.	0.003	0.016	0.078	0.015	0.278	0.109	0.297	0.104

Year	III: 10 largest				IV: MV of Equity ³ #shareholders			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1980	-	0.424	0.508	0.442	38.107	130.260	78.850	90.141
1981	0.544	0.486	0.450	0.481	42.916	117.425	150.099	89.652
1982	0.346	0.436	0.511	0.437	36.896	92.321	74.112	67.714
1983	0.325	0.494	0.469	0.484	49.605	152.540	160.752	112.374
1984	0.313	0.538	0.535	0.510	59.585	128.747	210.337	109.850
1985	0.494	0.610	0.613	0.596	74.247	289.901	262.178	188.525
1986	0.333	0.656	0.639	0.575	80.106	316.022	289.788	212.707
1987	0.427	0.610	0.577	0.576	78.710	273.750	242.672	211.493
1988	0.340	0.559	0.631	0.552	59.160	313.815	557.737	261.660
1989	0.410	0.618	0.623	0.599	79.954	402.810	837.769	305.386
1990	0.880	0.609	0.657	0.637	58.006	520.058	563.124	374.456
1991	0.537	0.562	0.607	0.568	51.345	334.807	408.600	263.323
1992	0.541	0.611	0.692	0.620	496.651	361.092	233.731	343.340
1993	0.465	0.572	0.673	0.586	302.053	365.568	409.774	368.199
1994	0.703	0.563	0.663	0.596	246.688	522.107	384.453	434.680
Mean	0.476	0.557	0.590	0.551	116.935	288.081	324.265	228.900
Std.dev.	0.162	0.069	0.077	0.064	130.475	139.649	208.061	119.137

Notes

¹ Board & CEO

² Number of shareholders holding more than 20% of the company's stock

³ Market value of equity in 1994 NOK

Table 8F

Four measures of ownership structure by issuance behavior for dividend-paying firms.

All means are equally-weighted.

<i>Year</i>	I: Insiders¹		II: # >20%²	
	Issuing	Non-Issuing	Issuing	Non-Issuing
1980	0.008	0.114	0	0.717
1981	0.091	0.105	0.714	0.766
1982	0.052	0.115	0.450	0.686
1983	0.030	0.096	0.143	0.690
1984	0.057	0.101	0.261	0.756
1985	0.050	0.090	0.500	0.746
1986	0.083	0.109	0.700	0.667
1987	0.024	0.110	0.250	0.700
1988	0.105	0.175	0.714	0.727
1989	0.181	0.119	0.438	0.826
1990	0.078	0.131	0.444	0.829
1991	0.058	0.124	0.250	0.758
1992	0.054	0.140	0.250	0.750
1993	0.110	0.123	0.300	0.581
1994	0.128	0.153	0.538	0.649
<i>Mean</i>	0.074	0.120	0.397	0.723
<i>Std.dev.</i>	0.045	0.022	0.215	0.065

<i>Year</i>	III: 10 largest		IV: MV of Equity³ #shareholders	
	Issuing	Non-Issuing	Issuing	Non-Issuing
1980	-	0.485	65.292	101.259
1981	0.552	0.399	244.869	162.515
1982	0.466	0.431	103.217	108.508
1983	0.375	0.500	110.464	201.662
1984	0.426	0.541	192.938	282.064
1985	0.594	0.624	334.001	522.095
1986	0.645	0.621	162.590	356.416
1987	0.524	0.645	88.838	342.476
1988	0.654	0.604	347.937	337.390
1989	0.598	0.688	404.207	646.012
1990	0.568	0.736	512.480	565.565
1991	0.518	0.679	650.833	718.380
1992	0.607	0.667	569.479	845.932
1993	0.510	0.642	305.516	929.356
1994	0.568	0.673	975.006	802.833
<i>Mean</i>	0.543	0.596	337.844	461.498
<i>Std.dev.</i>	0.080	0.101	253.131	277.979

Notes¹ Board & CEO² Number of shareholders holding more than 20% of the co³ Market value of equity in 1994 NOK

Table 8G

Four measures of ownership structure by issuance behavior for dividend-paying firms.
All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Insiders¹		II: # >20%²	
	Issuing	Non-Issuing	Issuing	Non-Issuing
1980	0.010	0.021	0	0.853
1981	0.160	0.028	0.900	0.844
1982	0.044	0.079	0.619	0.514
1983	0.012	0.071	0.159	0.679
1984	0.087	0.031	0.121	0.705
1985	0.059	0.056	0.351	0.701
1986	0.027	0.060	0.741	0.584
1987	0.004	0.075	0.028	0.662
1988	0.002	0.129	0.900	0.587
1989	0.148	0.056	0.130	0.704
1990	0.055	0.047	0.184	0.696
1991	0.102	0.051	0.191	0.590
1992	0.073	0.050	0.003	0.722
1993	0.060	0.074	0.089	0.538
1994	0.015	0.095	0.948	0.416
<i>Mean</i>	0.057	0.062	0.358	0.653
<i>Std.dev.</i>	0.050	0.028	0.358	0.117

<i>Year</i>	III: 10 largest		IV: MV of Equity³ #shareholders	
	Issuing	Non-Issuing	Issuing	Non-Issuing
1980	-	0.442	61.205	92.954
1981	0.679	0.394	179.559	83.673
1982	0.460	0.410	65.500	73.280
1983	0.400	0.521	67.058	141.834
1984	0.419	0.564	101.008	115.361
1985	0.576	0.607	139.752	214.140
1986	0.551	0.582	106.290	249.037
1987	0.386	0.599	72.889	248.349
1988	0.566	0.550	541.459	195.703
1989	0.504	0.639	164.524	424.335
1990	0.522	0.707	450.317	353.143
1991	0.497	0.592	163.608	304.838
1992	0.537	0.650	708.652	306.083
1993	0.483	0.592	76.440	432.497
1994	0.546	0.631	498.335	398.447
<i>Mean</i>	0.509	0.565	226.440	242.245
<i>Std.dev.</i>	0.078	0.090	211.822	125.142

Notes¹ Board & CEO² Number of shareholders holding more than 20% of the³ Market value of equity in 1994 NOK

Table 9A

Sample period averages for two measures of stock liquidity.¹
 Table reports averages across the years of the
 equally-weighted mean (EWM) and the aggregate mean (AGM)².

	I:		II:	
	MV of trade		#trading days	
	Average MVE³		total # trading days	
	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>				
Financial	0.27	0.32	0.54	0.55
Industrial	0.22	0.23	0.57	0.58
Shipping	0.23	0.30	0.46	0.46
Total	0.23	0.26	0.53	0.54
<i>Sub-sample of dividend-paying firms by industry</i>				
Financial	0.23	0.30	0.59	0.60
Industrial	0.21	0.23	0.60	0.60
Shipping	0.18	0.28	0.47	0.48
Total	0.20	0.24	0.56	0.57
<i>Sub-sample of dividend-paying firms by issuance behavior</i>				
Issuing	0.29	0.30	0.71	0.72
Non-Issuing	0.19	0.23	0.53	0.54

Notes

¹ Only class A shares

² Ratio of aggregate numerator value to aggregate denominator value

³ Average market value of equity

Table 9BSample period averages for two measures of stock liquidity by industry.¹

All means are equally-weighted.

<i>Year</i>	I: MV of trade				II: #trading days			
	Average MVE²				total # trading days			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.008	0.010	0.001	0.007	0.257	0.263	0.093	0.210
1981	0.007	0.012	0.009	0.010	0.270	0.278	0.146	0.235
1982	0.009	0.016	0.004	0.011	0.285	0.304	0.080	0.233
1983	0.028	0.080	0.023	0.055	0.498	0.666	0.305	0.534
1984	0.070	0.203	0.098	0.153	0.472	0.706	0.401	0.585
1985	0.077	0.207	0.091	0.161	0.530	0.742	0.449	0.643
1986	0.094	0.180	0.088	0.144	0.564	0.706	0.446	0.620
1987	0.192	0.320	0.152	0.262	0.616	0.682	0.457	0.620
1988	0.172	0.209	0.157	0.191	0.584	0.587	0.496	0.565
1989	0.422	0.335	0.330	0.346	0.683	0.634	0.706	0.659
1990	0.582	0.363	0.513	0.440	0.680	0.619	0.697	0.653
1991	0.867	0.241	0.598	0.434	0.626	0.529	0.690	0.594
1992	0.231	0.245	0.479	0.324	0.488	0.477	0.541	0.500
1993	0.783	0.462	0.501	0.505	0.711	0.662	0.702	0.680
1994	0.572	0.480	0.388	0.459	0.797	0.639	0.650	0.654
<i>Mean</i>	0.274	0.224	0.229	0.234	0.537	0.566	0.457	0.532
<i>Std.dev.</i>	0.295	0.152	0.215	0.176	0.164	0.162	0.220	0.166

Notes¹ Only class A shares² Average market value of equity

Table 9C

Sample period averages for two measures of stock liquidity by industry.¹
 All means are based on the ratio of aggregate numerator to aggregate denominator value.

<i>Year</i>	I: MV of trade Average MVE²				II: #trading days total # trading days			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
	1980	0.020	0.017	0.002	0.017	0.317	0.284	0.076
1981	0.019	0.021	0.011	0.020	0.322	0.334	0.165	0.283
1982	0.018	0.025	0.005	0.022	0.287	0.305	0.080	0.233
1983	0.060	0.088	0.038	0.080	0.498	0.653	0.308	0.525
1984	0.142	0.209	0.184	0.194	0.461	0.694	0.376	0.570
1985	0.149	0.186	0.138	0.174	0.530	0.733	0.447	0.633
1986	0.144	0.142	0.094	0.137	0.580	0.703	0.425	0.618
1987	0.357	0.264	0.322	0.286	0.601	0.676	0.447	0.611
1988	0.250	0.256	0.315	0.266	0.591	0.596	0.505	0.574
1989	0.790	0.440	0.428	0.473	0.685	0.640	0.693	0.659
1990	0.661	0.390	0.608	0.463	0.691	0.631	0.687	0.657
1991	0.505	0.337	0.709	0.433	0.613	0.543	0.689	0.600
1992	0.290	0.359	0.592	0.394	0.538	0.504	0.599	0.540
1993	0.696	0.391	0.631	0.454	0.716	0.678	0.725	0.698
1994	0.635	0.391	0.448	0.416	0.797	0.653	0.674	0.672
<i>Mean</i>	0.316	0.234	0.302	0.255	0.549	0.575	0.460	0.540
<i>Std.dev.</i>	0.274	0.149	0.254	0.175	0.152	0.151	0.225	0.158

Notes¹ Only class A shares² Average market value of equity

Table 9D

Sample period averages for two measures of stock liquidity by industry for dividend-paying firms.¹ All means are equally-weighted.

<i>Year</i>	I: MV of trade Average MVE²				II: #trading days total # trading days			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
	1980	0.010	0.009	0.001	0.007	0.316	0.261	0.053
1981	0.010	0.012	0.009	0.011	0.338	0.268	0.158	0.249
1982	0.011	0.017	0.004	0.013	0.356	0.298	0.109	0.263
1983	0.037	0.082	0.021	0.061	0.550	0.698	0.379	0.604
1984	0.075	0.190	0.108	0.152	0.503	0.721	0.488	0.632
1985	0.086	0.183	0.082	0.143	0.552	0.732	0.450	0.637
1986	0.069	0.107	0.073	0.092	0.507	0.690	0.504	0.611
1987	0.231	0.193	0.158	0.191	0.631	0.694	0.447	0.624
1988	0.152	0.219	0.110	0.183	0.696	0.607	0.456	0.571
1989	0.461	0.411	0.350	0.405	0.698	0.683	0.727	0.696
1990	0.334	0.363	0.482	0.396	0.699	0.692	0.676	0.688
1991	0.271	0.290	0.454	0.332	0.818	0.648	0.740	0.691
1992	0.158	0.256	0.261	0.248	0.575	0.577	0.571	0.575
1993	1.006	0.405	0.356	0.456	0.824	0.727	0.687	0.724
1994	0.572	0.353	0.265	0.348	0.797	0.630	0.628	0.648
<i>Mean</i>	0.232	0.206	0.182	0.203	0.591	0.595	0.472	0.562
<i>Std.dev.</i>	0.274	0.140	0.167	0.154	0.168	0.171	0.220	0.171

Notes

¹ Only class A shares

² Average market value of equity

Table 9E

Sample period averages for two measures of stock liquidity by industry
for dividend-paying firms.¹

All means are based on the ratio of aggregate numerator to aggregate denominator value.

<i>Year</i>	I: MV of trade Average MVE²				II: #trading days total # trading days			
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.022	0.018	0.002	0.018	0.405	0.274	0.073	0.253
1981	0.021	0.019	0.010	0.018	0.415	0.319	0.183	0.302
1982	0.020	0.024	0.004	0.022	0.356	0.301	0.109	0.265
1983	0.066	0.088	0.025	0.080	0.550	0.684	0.379	0.592
1984	0.153	0.215	0.199	0.202	0.505	0.721	0.471	0.631
1985	0.163	0.182	0.166	0.177	0.552	0.728	0.449	0.634
1986	0.127	0.118	0.107	0.118	0.528	0.687	0.471	0.610
1987	0.388	0.218	0.317	0.248	0.631	0.687	0.447	0.620
1988	0.205	0.268	0.257	0.262	0.702	0.616	0.468	0.581
1989	0.818	0.450	0.417	0.482	0.702	0.690	0.732	0.702
1990	0.423	0.382	0.687	0.423	0.700	0.698	0.679	0.693
1991	0.319	0.342	0.694	0.393	0.801	0.660	0.727	0.692
1992	0.252	0.335	0.528	0.358	0.593	0.589	0.638	0.605
1993	0.944	0.342	0.478	0.389	0.825	0.750	0.689	0.739
1994	0.635	0.380	0.367	0.395	0.797	0.646	0.637	0.660
<i>Mean</i>	0.304	0.225	0.284	0.239	0.604	0.603	0.477	0.572
<i>Std.dev.</i>	0.291	0.146	0.240	0.162	0.149	0.163	0.217	0.161

Notes

¹ Only class A shares

² Average market value of equity

Table 9F

Sample period averages for two measures of stock liquidity by
issuance behavior for dividend-paying firms.¹

All means are equally-weighted.

<i>Year</i>	I:		II:	
	MV of trade		#trading days	
	Average MVE²		total # trading days	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	0.027	0.006	0.480	0.198
1981	0.018	0.010	0.417	0.231
1982	0.022	0.009	0.458	0.183
1983	0.075	0.057	0.766	0.558
1984	0.193	0.135	0.761	0.577
1985	0.161	0.139	0.717	0.617
1986	0.117	0.086	0.675	0.598
1987	0.325	0.180	0.768	0.612
1988	0.322	0.161	0.770	0.541
1989	0.544	0.359	0.768	0.672
1990	0.544	0.357	0.874	0.640
1991	0.313	0.334	0.886	0.668
1992	0.435	0.233	0.737	0.561
1993	0.769	0.405	0.807	0.711
1994	0.427	0.336	0.813	0.622
<i>Mean</i>	0.286	0.187	0.713	0.533
<i>Std.dev.</i>	0.226	0.142	0.146	0.176

Notes

¹ Only class A shares

² Average market value of equity

Table 9G

Sample period averages for two measures of stock liquidity by
issuance behavior for dividend-paying firms.¹

All means are based on the ratio of aggregate numerator to
aggregate denominator value.

<i>Year</i>	I:		II:	
	MV of trade		#trading days	
	Average MVE²		total # trading days	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	0.036	0.017	0.480	0.232
1981	0.019	0.018	0.461	0.283
1982	0.026	0.013	0.458	0.183
1983	0.085	0.079	0.766	0.542
1984	0.227	0.190	0.761	0.575
1985	0.201	0.168	0.717	0.613
1986	0.130	0.116	0.675	0.596
1987	0.339	0.240	0.768	0.607
1988	0.227	0.291	0.771	0.551
1989	0.740	0.414	0.771	0.679
1990	0.560	0.388	0.875	0.645
1991	0.351	0.400	0.876	0.671
1992	0.521	0.336	0.739	0.592
1993	0.731	0.375	0.810	0.726
1994	0.322	0.458	0.813	0.635
<i>Mean</i>	0.301	0.233	0.716	0.542
<i>Std.dev.</i>	0.242	0.159	0.139	0.168

Notes

¹ Only class A shares

² Average market value of equity

Table 10

Net tax benefits to dividends relative to retained earnings per krone
pre-tax firm cash flow in the Norwegian tax system 1980-1994.

<i>Year</i>	Net Tax Benefit		
	<i>Minimum</i>	<i>At nominal rates</i>	<i>Maximum</i>
1980	-0.1676	0.0784	0.4354
1981	-0.0995	0.0481	0.3370
1982	-0.1122	0.0118	0.2831
1983	-0.0959	0.0221	0.2696
1984	-0.0909	0.0242	0.2629
1985	-0.0871	0.0266	0.2595
1986	-0.0871	0.0455	0.2121
1987	-0.0325	0.1190	0.2482
1988	-0.0064	0.1471	0.2542
1989	0	0.1515	0.2482
1990	0	0.1515	0.2482
1991	0	0.1515	0.2482
1992	0.0014	0.0014	0.2016
1993	0	0.2016	0.2016
1994	0	0.2016	0.2016

Table 11
 Total retained earnings, proceeds from equity issues, and change in resource commitment of owners.
 Amounts in 1994 billion NOK.

Year	I: Retained Earnings ¹				II: Equity Issues				III: RCO ²			
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.
1981	0.79	1.16	0.12	2.07	0.15	0.32	0.00	0.48	0.94	1.48	0.12	2.55
1982	0.88	0.82	0.06	1.77	0.75	1.72	0.00	2.47	1.63	2.54	0.06	4.24
1983	0.90	0.28	-0.31	0.88	1.31	1.07	0.16	2.53	2.22	1.35	-0.15	3.41
1984	1.59	3.19	-0.45	4.33	1.28	2.53	0.12	3.93	2.87	5.72	-0.33	8.26
1985	1.87	4.39	-0.74	5.52	1.67	1.84	0.62	4.13	3.54	6.23	-0.13	9.64
1986	1.69	5.21	0.35	7.25	0.89	3.21	0.37	4.47	2.58	8.42	0.72	11.72
1987	1.68	1.89	0.53	4.10	0.61	0.58	0.29	1.48	2.29	2.47	0.82	5.58
1988	-2.15	2.96	0.92	1.73	0.60	4.85	0.24	5.70	-1.55	7.82	1.16	7.43
1989	-1.70	5.69	1.23	5.22	2.14	2.53	1.62	6.30	0.44	8.22	2.86	11.52
1990	1.06	5.93	1.25	8.24	0.00	3.88	2.43	6.31	1.06	9.81	3.68	14.55
1991	-3.57	5.79	0.66	2.87	1.24	0.51	0.66	2.40	-2.34	6.29	1.31	5.27
1992	-3.45	-1.02	0.22	-4.26	3.16	1.76	0.00	4.92	-0.29	0.74	0.22	0.66
1993	-1.93	-1.05	-1.09	-4.08	0.34	2.77	1.30	4.41	-1.60	1.72	0.21	0.33
1994	4.57	2.69	-1.08	6.18	1.41	8.12	0.98	10.51	5.98	10.81	-0.11	16.69
<i>Sum</i>	2.21	37.93	1.67	41.81	15.57	35.69	8.77	60.03	17.77	73.63	10.44	101.84
<i>Std.dev.</i>	2.35	2.46	0.78	3.73	0.84	2.07	0.72	2.51	2.26	3.47	1.19	5.05

Notes

¹ Earnings before Extraordinary Items - Taxes_t - Dividends_t

² Resource Commitment of Owners = Retained earnings + equity issues

Table 12A

Sample period averages for equity issues, change in resource commitment of owners, and dividends received relative to the firms' dividend payment.

Table reports averages across the years of the equally-weighted mean (EWM) and the aggregate mean (AGM)¹.

	I: New equity Dividends		II: RCO² Dividends		III: Dividends Received Dividends	
	EWM	AGM	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>						
Financial	1.75	2.48	-16.87	2.47	-	-
Industrial	1.47	1.54	0.80	3.90	0.18	0.14
Shipping	2.52	4.54	-0.16	5.56	0.38	0.40
Total	1.79	1.78	-3.21	3.61	0.24	0.16
<i>Sub-sample of dividend-paying firms by industry</i>						
Financial	1.59	1.52	-16.87	3.36	-	-
Industrial	1.56	1.09	0.80	3.84	0.18	0.13
Shipping	2.50	1.62	-0.16	3.30	0.38	0.33
Total	1.84	1.16	-3.21	3.61	0.24	0.15
<i>Sub-sample of dividend-paying firms by issuance behavior</i>						
Issuing	11.69	7.68	7.98	3.36	0.11	0.06
Non-Issuing	0	0	-5.58	3.84	0.23	0.13

Notes

¹ Ratio of aggregate numerator value to aggregate denominator value

² Resource Commitment of Owners = Retained earnings + equity issues

Table 12B

Sample period averages for new equity, change in resource commitment of owners,
and dividends received relative to the firms dividend payment by industry.
All means are equally-weighted.

<i>Year</i>	I: New equity Dividends				II: RCO¹ Dividends				III: Dividends Received Dividends		
	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Fin.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	-	-	-	-	-	-	-	-	-	-	-
1981	0.34	0.63	0	0.41	3.79	4.85	11.68	6.55	0.14	0.40	0.23
1982	1.35	2.15	0	1.39	4.50	4.43	2.22	3.80	0.16	0.33	0.22
1983	1.03	1.34	0.35	1.04	3.72	4.63	-6.09	1.84	0.15	0.62	0.29
1984	2.13	2.42	0.73	2.00	5.30	6.12	-3.89	3.81	0.15	0.54	0.25
1985	3.02	1.67	0.22	1.58	6.36	5.03	3.04	4.82	0.13	0.48	0.23
1986	2.05	1.07	2.08	1.47	4.43	5.25	4.06	4.84	0.11	0.67	0.26
1987	1.43	1.00	0	0.89	2.75	4.14	-1.10	2.86	0.09	0.46	0.18
1988	1.20	0.37	0	0.44	-293.48	2.82	1.15	-53.78	0.07	0.40	0.17
1989	3.15	3.45	17.34	7.11	3.91	8.28	22.26	11.63	0.13	0.41	0.21
1990	0	1.82	7.85	3.09	2.33	7.36	-6.99	3.34	0.09	0.88	0.33
1991	0.72	0.02	0	0.08	2.23	-51.06	-1.17	-32.61	0.50	0.50	0.50
1992	7.29	0.48	0	0.90	9.52	3.38	2.39	3.61	0.11	0.32	0.17
1993	0	0.45	5.44	2.07	4.53	2.31	-11.47	-2.25	0.09	0.35	0.19
1994	0.74	3.80	1.31	2.64	3.95	3.68	-18.33	-3.34	0.07	0.36	0.18
<i>Mean</i>	1.75	1.47	2.52	1.79	-16.87	0.80	-0.16	-3.21	0.14	0.48	0.24
<i>Std.dev.</i>	1.88	1.15	4.88	1.75	79.64	15.02	9.77	17.80	0.11	0.16	0.09

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 12C

Sample period averages for new equity, change in resource commitment of owners,
and dividends received relative to the firms dividend payment by industry.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

Year	I: New equity Dividends				II: RCO ¹ Dividends				III: Dividends Received Dividends		
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.	Ind.	Ship.	Tot.
1980	-	-	-	-	-	-	-	-	-	-	-
1981	0.31	0.39	0	0.34	3.50	3.24	3.20	3.56	0.23	0.56	0.26
1982	1.43	2.15	0	1.72	4.43	4.02	1.03	4.40	0.23	0.47	0.26
1983	2.31	1.21	1.82	1.65	4.96	1.93	-4.20	2.82	0.19	0.64	0.23
1984	1.87	2.17	1.59	2.04	5.51	6.37	-8.35	5.34	0.20	0.71	0.23
1985	1.90	1.20	4.59	1.62	5.05	5.35	-3.26	4.68	0.15	0.39	0.17
1986	0.91	1.93	2.31	1.60	3.31	6.39	7.86	3.77	0.16	0.58	0.19
1987	0.82	0.44	1.68	0.66	4.17	2.39	5.64	2.66	0.20	0.39	0.23
1988	1.44	3.23	1.61	2.75	-4.10	5.67	8.30	3.75	0.12	0.48	0.16
1989	5.45	1.47	20.01	2.86	0.15	5.11	35.82	5.42	0.15	0.71	0.17
1990	0	1.85	18.66	2.03	1.68	5.71	20.64	4.71	0.15	0.61	0.18
1991	4.67	0.23	4.35	0.92	1.91	3.83	9.28	3.90	0.12	0.59	0.15
1992	9.09	0.97	0	2.11	-6.56	0.35	1.46	1.78	0.18	0.35	0.19
1993	1.27	1.30	4.66	1.65	-6.39	0.62	0.43	0.90	0.14	0.31	0.16
1994	3.23	3.03	2.29	2.97	16.97	3.62	-0.07	2.89	0.12	0.23	0.13
Mean	2.48	1.54	4.54	1.78	2.47	3.90	5.56	3.61	0.17	0.50	0.19
Std.dev.	2.45	.92	6.47	.78	5.89	2.01	11.22	1.30	0.04	0.15	0.04

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 12D

Sample period averages for new equity, change in resource commitment of owners, and dividends received relative to the firms dividend payment by industry for dividend-paying firms.

All means are equally-weighted.

Year	I: New equity Dividends				II: RCO ¹ Dividends				III: Dividends Received Dividends		
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.	Ind.	Ship.	Tot.
1980	-	-	-	-	-	-	-	-	-	-	-
1981	0.34	0.63	0	0.41	3.79	4.85	11.68	6.55	0.15	0.44	0.24
1982	1.35	2.32	0	1.53	4.50	4.43	2.22	3.80	0.16	0.41	0.24
1983	1.03	1.27	0.45	1.04	3.72	4.63	-6.09	1.84	0.16	0.74	0.31
1984	2.13	2.49	0.83	2.09	5.30	6.12	-3.89	3.81	0.16	0.61	0.27
1985	3.02	1.91	0.25	1.75	6.36	5.03	3.04	4.82	0.15	0.49	0.24
1986	2.70	1.31	2.60	1.81	4.43	5.25	4.06	4.84	0.13	0.79	0.30
1987	1.90	0.62	0	0.73	2.75	4.14	-1.10	2.86	0.11	0.52	0.21
1988	4.39	0.51	0	0.67	-293.48	2.82	1.15	-53.78	0.09	0.44	0.20
1989	3.15	3.49	13.77	6.03	3.91	8.28	22.26	11.63	0.14	0.48	0.23
1990	0	2.40	9.99	4.36	2.33	7.36	-6.99	3.34	0.12	1.12	0.43
1991	1.43	0.02	0	0.10	2.23	-51.06	-1.17	-32.61	0.54	0.65	0.57
1992	0	0.57	0	0.38	9.52	3.38	2.39	3.61	0.13	0.40	0.21
1993	0	0.46	5.78	2.15	4.53	2.31	-11.47	-2.25	0.09	0.38	0.19
1994	0.74	3.90	1.31	2.67	3.95	3.68	-18.33	-3.34	0.07	0.36	0.18
<i>Mean</i>	1.59	1.56	2.50	1.84	-16.87	0.80	-0.16	-3.21	0.16	0.56	0.27
<i>Std.dev.</i>	1.36	1.21	4.34	1.65	79.64	15.02	9.77	17.80	0.11	0.21	0.11

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 12E

Sample period averages for new equity, change in resource commitment of owners, and dividends received relative to the firms dividend payment by industry for dividend-paying firms.

All means are based on the ratio of aggregate numerator value to aggregate denominator value.

Year	I: New equity Dividends				II: RCO ¹ Dividends				III: Dividends Received Dividends		
	Fin.	Ind.	Ship.	Tot.	Fin.	Ind.	Ship.	Tot.	Ind.	Ship.	Tot.
1980	-	-	-	-	-	-	-	-	-	-	-
1981	0.21	0.21	0	0.20	3.07	3.74	4.92	3.56	0.25	0.54	0.28
1982	1.41	2.15	0	1.71	4.00	4.90	2.73	4.40	0.22	0.53	0.25
1983	1.94	0.43	1.76	1.06	4.21	2.38	-1.75	2.82	0.19	0.58	0.22
1984	1.83	1.83	0.26	1.77	5.09	6.10	-3.78	5.34	0.19	0.68	0.22
1985	1.59	0.99	1.66	1.23	4.39	5.25	0.02	4.68	0.16	0.31	0.17
1986	0.82	0.80	0.20	0.78	2.70	4.53	2.36	3.77	0.17	0.58	0.20
1987	0.81	0.21	0	0.39	3.65	2.26	1.79	2.66	0.18	0.34	0.20
1988	0.34	2.58	0.91	2.00	0.21	4.81	3.16	3.75	0.14	0.39	0.15
1989	5.37	0.97	12.63	2.18	3.91	5.07	20.41	5.42	0.15	0.71	0.17
1990	0	1.53	1.25	1.08	1.60	5.70	6.70	4.71	0.17	0.67	0.20
1991	2.75	0.02	0	0.30	2.74	4.06	3.36	3.90	0.12	0.62	0.15
1992	0	0.80	0	0.62	3.51	1.27	5.34	1.78	0.18	0.36	0.20
1993	0.98	0.10	2.84	0.47	3.25	0.67	0.43	0.90	0.14	0.35	0.17
1994	3.23	2.59	1.18	2.50	4.69	2.99	0.56	2.89	0.12	0.22	0.13
Mean	1.52	1.09	1.62	1.16	3.36	3.84	3.30	3.61	0.17	0.49	0.19
Std.dev.	1.48	.90	3.29	.76	1.28	1.68	5.66	1.30	0.04	0.16	0.04

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 12F

Sample period averages for new equity, change in resource commitment of owners, and dividends received relative to the firms dividend payment by issuance behavior for dividend-paying firms.
All means are equally-weighted.

<i>Year</i>	I: New equity Dividends			II: RCO ¹ Dividends		II Dividends Received Dividends	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Total</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	-	-	-	-	-	-	-
1981	4.70	0	0.41	9.61	6.22	0.00	0.22
1982	5.49	0	1.53	8.88	2.07	0.03	0.26
1983	4.17	0	1.04	7.41	0.14	0.12	0.30
1984	6.76	0	2.09	10.84	0.64	0.11	0.28
1985	7.90	0	1.75	10.95	3.19	0.18	0.20
1986	14.49	0	1.81	13.61	3.75	0.63	0.20
1987	7.27	0	0.73	10.04	1.79	0.07	0.18
1988	8.45	0	0.67	12.64	-57.40	0.04	0.20
1989	24.12	0	6.03	31.70	4.38	0.08	0.26
1990	21.23	0	4.36	18.59	-0.88	0.21	0.44
1991	1.62	0	0.10	5.11	-39.75	0.01	0.57
1992	3.82	0	0.38	14.74	2.26	0.05	0.21
1993	35.16	0	2.15	-51.28	1.84	0.34	0.16
1994	18.46	0	2.67	8.91	-6.40	0.05	0.18
<i>Mean</i>	11.69	0	1.84	7.98	-5.58	0.14	0.26
<i>Std.dev.</i>	9.71	0	1.65	18.23	18.77	0.17	0.11

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 12G

Sample period averages for new equity, change in resource commitment of owners, and dividends received relative to the firms dividend payment by issuance behavior for dividend-paying firms. All means are based on the ratio of aggregate numerator value to aggregate denominator value.

Year	I: New equity Dividends			II: RCO ¹ Dividends		III: Dividends Received Dividends	
	Issuing	Non-Issuing	Total	Issuing	Non-Issuing	Issuing	Non-Issuing
1980	-	-	-	-	-	-	-
1981	1.94	0	0.20	9.61	6.22	0.01	0.19
1982	16.47	0	1.71	8.88	2.07	0.11	0.26
1983	1.57	0	1.06	7.41	0.14	0.05	0.18
1984	5.21	0	1.77	10.84	0.64	0.09	0.17
1985	3.25	0	1.23	10.95	3.19	0.13	0.10
1986	2.69	0	0.78	13.61	3.75	0.12	0.15
1987	1.83	0	0.39	10.04	1.79	0.05	0.18
1988	13.24	0	2.00	12.64	-57.40	0.11	0.13
1989	4.38	0	2.18	31.70	4.38	0.15	0.14
1990	3.37	0	1.08	18.59	-0.88	0.32	0.14
1991	1.20	0	0.30	5.11	-39.75	0.01	0.16
1992	2.93	0	0.62	14.74	2.26	0.06	0.20
1993	2.81	0	0.47	-51.28	1.84	0.14	0.15
1994	46.61	0	2.50	8.91	-6.40	0.12	0.12
Mean	7.68	0	1.16	7.98	-5.58	0.10	0.16
Std.dev.	12.08	0	0.76	18.23	18.77	0.08	0.04

Notes

¹ Resource Commitment of Owners = Retained earnings + equity issues

Table 13A

Sample period averages for three measures of cash costs of capital. Table reports averages across the years of of the equally-weighted mean (EWM) and the aggregate mean (AGM)¹.

	I:		II:		III:	
	<u>Dividend/Price</u>		<u>Dividend/PVCS³</u>		<u>Dividend+Interest</u>	
	<u>Interest/Face²</u>		<u>Interest/Face²</u>		<u>Total Assets</u>	
	EWM	AGM	EWM	AGM	EWM	AGM
<i>All firms in sample by industry</i>						
Financial	-	-	-	-	-	-
Industrial	0.619	0.364	1.090	0.855	0.047	0.044
Shipping	1.131	0.266	3.179	0.583	0.051	0.049
Total	0.810	0.341	1.826	0.786	0.049	0.045
<i>Sub-sample of dividend-paying firms by industry</i>						
Financial	-	-	-	-	-	-
Industrial	1.093	0.428	1.947	1.060	0.046	0.045
Shipping	1.956	0.389	5.773	0.887	0.048	0.045
Total	1.399	0.418	3.169	1.025	0.047	0.045
<i>Sub-sample of dividend-paying firms by issuance behavior</i>						
Issuing	0.423	0.324	0.883	0.809	0.042	0.041
Non-Issuing	1.512	0.437	3.578	1.088	0.047	0.045

Notes

¹ Ratio of Aggregate Numerator Value to Aggregate Denominator Value

² Face Value of Debt

³ Par Value of Common Stock

Table 13B

Three measures of cash costs of capital by industry.

All means are equally-weighted.

<i>Year</i>	I: <u>Dividend/Price</u> <u>Interest/Face¹</u>			II: <u>Dividend/PVCS²</u> <u>Interest/Face¹</u>			III: <u>Dividend+Interest</u> <u>Total Assets</u>		
	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	1.192	0.815	1.029	0.894	1.153	1.002	0.054	0.066	0.059
1981	0.861	0.581	0.741	0.767	1.059	0.892	0.060	0.071	0.065
1982	0.782	0.628	0.721	0.687	0.710	0.696	0.058	0.085	0.069
1983	0.476	4.248	1.877	1.113	11.071	4.584	0.048	0.061	0.053
1984	0.285	1.364	0.653	0.881	6.537	2.789	0.039	0.060	0.046
1985	0.184	1.669	0.664	0.714	9.545	3.658	0.035	0.047	0.039
1986	0.215	0.347	0.260	0.762	0.991	0.840	0.043	0.048	0.045
1987	2.973	0.196	2.047	5.451	0.915	3.883	0.050	0.041	0.047
1988	0.168	0.249	0.196	0.466	0.776	0.570	0.060	0.040	0.053
1989	0.156	0.070	0.129	0.483	0.369	0.448	0.047	0.030	0.042
1990	0.204	0.152	0.183	0.611	0.508	0.574	0.048	0.034	0.042
1991	0.226	0.767	0.439	0.570	5.698	2.442	0.047	0.048	0.048
1992	0.466	0.895	0.653	0.600	0.995	0.772	0.051	0.050	0.050
1993	0.465	3.029	1.451	0.971	4.337	2.266	0.035	0.040	0.037
1994	0.636	1.949	1.106	1.386	3.016	1.969	0.030	0.040	0.033
<i>Mean</i>	0.619	1.131	0.810	1.090	3.179	1.826	0.047	0.051	0.049
<i>Std.dev.</i>	0.719	1.181	0.596	1.231	3.505	1.380	0.009	0.015	0.010

Notes¹ Face Value of Debt² Par Value of Common Stock

Table 13C

Three measures of cash costs of capital by industry.

All means are based on aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: <u>Dividend/Price</u> <u>Interest/Face¹</u>			II: <u>Dividend/PVCS²</u> <u>Interest/Face¹</u>			III: <u>Dividend+Interest</u> <u>Total Assets</u>		
	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.353	0.632	0.384	0.696	1.215	0.758	0.050	0.051	0.050
1981	0.467	0.412	0.464	0.711	1.233	0.777	0.054	0.057	0.055
1982	0.595	0.600	0.604	0.681	0.934	0.714	0.058	0.064	0.059
1983	0.382	0.345	0.380	0.792	0.816	0.799	0.046	0.057	0.048
1984	0.403	0.281	0.371	0.942	0.891	0.902	0.042	0.064	0.047
1985	0.377	0.208	0.330	1.231	0.545	1.040	0.035	0.057	0.039
1986	0.332	0.205	0.301	0.987	0.575	0.885	0.039	0.055	0.042
1987	0.340	0.181	0.309	0.990	0.495	0.889	0.053	0.055	0.053
1988	0.283	0.044	0.230	0.920	0.229	0.817	0.054	0.043	0.052
1989	0.240	0.040	0.189	0.918	0.241	0.799	0.046	0.035	0.043
1990	0.249	0.058	0.212	0.838	0.182	0.701	0.045	0.039	0.044
1991	0.279	0.102	0.239	1.000	0.277	0.829	0.040	0.045	0.041
1992	0.363	0.330	0.360	0.561	0.249	0.484	0.038	0.041	0.039
1993	0.371	0.296	0.357	0.736	0.419	0.662	0.032	0.034	0.032
1994	0.433	0.255	0.390	0.823	0.444	0.728	0.029	0.034	0.030
<i>Mean</i>	0.364	0.266	0.341	0.855	0.583	0.786	0.044	0.049	0.045
<i>Std.dev.</i>	0.091	0.182	0.106	0.168	0.354	0.127	0.009	0.011	0.008

Notes

¹ Face Value of Debt

² Par Value of Common Stock

Table 13D

Three measures of cash costs of capital by industry for dividend-paying firms.

All means are equally-weighted.

<i>Year</i>	I: Dividend/Price Interest/Face¹			II: Dividend/PVCS² Interest/Face¹			III: Dividend+Interest Total Assets		
	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	1.457	1.273	1.388	1.059	1.658	1.282	0.058	0.056	0.057
1981	1.138	0.856	1.024	0.986	1.505	1.196	0.059	0.071	0.064
1982	1.106	1.131	1.114	0.924	1.136	0.996	0.058	0.076	0.064
1983	0.675	7.364	2.856	1.544	16.976	6.576	0.049	0.059	0.052
1984	0.472	2.408	1.105	1.385	10.767	4.452	0.040	0.052	0.044
1985	0.372	3.239	1.328	1.387	18.529	7.101	0.037	0.040	0.038
1986	0.486	0.828	0.597	1.664	2.362	1.891	0.039	0.036	0.038
1987	6.632	0.407	4.453	11.555	1.830	8.064	0.045	0.046	0.045
1988	0.364	0.518	0.418	0.972	1.492	1.154	0.049	0.034	0.044
1989	0.260	0.133	0.223	0.786	0.701	0.763	0.046	0.039	0.044
1990	0.351	0.426	0.372	1.050	1.354	1.131	0.048	0.038	0.045
1991	0.442	2.147	0.975	1.036	16.382	5.128	0.046	0.042	0.045
1992	0.892	2.028	1.341	1.122	2.189	1.543	0.045	0.048	0.046
1993	0.770	4.131	2.220	1.608	5.914	3.465	0.036	0.040	0.037
1994	0.973	2.457	1.572	2.120	3.802	2.799	0.033	0.040	0.036
<i>Mean</i>	1.093	1.956	1.399	1.947	5.773	3.169	0.046	0.048	0.047
<i>Std.dev.</i>	1.573	1.888	1.092	2.682	6.491	2.496	0.008	0.013	0.009

Notes¹ Face Value of Debt² Par Value of Common Stock

Table 13E

Three measures of cash costs of capital by industry for dividend-paying firms.
 All means are based on the ratio of aggregate numerator value to aggregate denominator value.

<i>Year</i>	I: Dividend/Price Interest/Face¹			II: Dividend/PVCS² Interest/Face¹			III: Dividend+Interest Total Assets		
	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>	<i>Ind.</i>	<i>Ship.</i>	<i>Tot.</i>
1980	0.404	1.016	0.459	0.769	1.851	0.869	0.055	0.043	0.053
1981	0.556	0.484	0.554	0.831	1.350	0.906	0.056	0.056	0.056
1982	0.679	0.785	0.706	0.791	1.130	0.839	0.060	0.062	0.060
1983	0.444	0.447	0.452	0.981	1.051	1.003	0.045	0.054	0.047
1984	0.473	0.331	0.443	1.098	1.020	1.063	0.044	0.060	0.047
1985	0.533	0.287	0.478	1.790	0.799	1.559	0.037	0.053	0.040
1986	0.436	0.317	0.413	1.482	0.883	1.357	0.040	0.054	0.042
1987	0.414	0.282	0.393	1.328	0.961	1.273	0.055	0.056	0.055
1988	0.335	0.096	0.300	1.153	0.676	1.120	0.052	0.034	0.050
1989	0.258	0.052	0.215	1.029	0.437	0.959	0.046	0.034	0.044
1990	0.273	0.134	0.258	0.989	0.661	0.965	0.045	0.038	0.044
1991	0.310	0.177	0.291	1.220	0.638	1.141	0.039	0.037	0.039
1992	0.422	0.508	0.433	0.727	0.484	0.678	0.036	0.035	0.036
1993	0.413	0.448	0.419	0.826	0.657	0.790	0.032	0.028	0.031
1994	0.461	0.467	0.463	0.885	0.705	0.851	0.029	0.031	0.029
<i>Mean</i>	0.428	0.389	0.418	1.060	0.887	1.025	0.045	0.045	0.045
<i>Std.dev.</i>	0.110	0.257	0.122	0.297	0.365	0.234	0.009	0.012	0.009

Notes¹ Face Value of Debt² Par Value of Common Stock

Table 13F

Three measures of cash costs of capital by issuance behavior for dividend-paying firms.
All means are equally-weighted.

<i>Year</i>	I:		II:		III:	
	<u>Dividend/Price</u>		<u>Dividend/PVCS²</u>		<u>Dividend+Interest</u>	
	<u>Interest/Face¹</u>		<u>Interest/Face¹</u>		<u>Total Assets</u>	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	-	1.388	-	1.282	-	0.057
1981	0.264	1.076	0.799	1.223	0.049	0.065
1982	0.649	1.234	0.829	1.039	0.056	0.066
1983	0.444	3.364	0.741	7.805	0.048	0.053
1984	0.415	1.312	0.902	5.517	0.041	0.045
1985	0.281	1.616	1.100	8.751	0.037	0.039
1986	0.575	0.599	1.041	1.985	0.037	0.038
1987	0.257	4.674	0.503	8.473	0.047	0.045
1988	0.357	0.428	0.965	1.184	0.050	0.043
1989	0.153	0.245	0.421	0.873	0.039	0.045
1990	0.443	0.351	1.120	1.134	0.043	0.046
1991	0.442	1.010	0.936	5.428	0.045	0.045
1992	0.403	1.421	0.583	1.626	0.038	0.047
1993	0.813	2.444	1.537	3.772	0.032	0.038
1994	0.436	1.757	0.777	3.129	0.029	0.037
<i>Mean</i>	0.423	1.512	0.883	3.578	0.042	0.047
<i>Std.dev.</i>	0.171	1.192	0.285	2.911	0.008	0.009

Notes¹ Face Value of Debt² Par Value of Common Stock

Table 13G

Three measures of cash costs of capital by issuance behavior for dividend-paying firms.
 All means are based on aggregate numerator value to aggregate denominator value.

<i>Year</i>	I:		II:		III:	
	<u>Dividend/Price</u>		<u>Dividend/PVCS²</u>		<u>Dividend+Interest</u>	
	<u>Interest/Face¹</u>		<u>Interest/Face¹</u>		<u>Total Assets</u>	
	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>	<i>Issuing</i>	<i>Non-Issuing</i>
1980	-	0.459	-	0.869	-	0.053
1981	0.151	0.597	0.755	0.908	0.040	0.057
1982	0.655	0.804	0.800	0.896	0.060	0.060
1983	0.401	0.461	0.726	1.065	0.047	0.047
1984	0.210	0.518	0.669	1.148	0.035	0.050
1985	0.267	0.590	0.819	1.969	0.050	0.036
1986	0.336	0.416	0.568	1.440	0.039	0.042
1987	0.283	0.397	0.631	1.314	0.046	0.056
1988	0.406	0.206	1.346	0.860	0.056	0.043
1989	0.115	0.242	0.525	1.073	0.039	0.045
1990	0.225	0.271	0.641	1.127	0.051	0.042
1991	0.163	0.312	1.289	1.128	0.025	0.040
1992	0.437	0.434	0.783	0.657	0.033	0.036
1993	0.564	0.414	0.969	0.784	0.031	0.031
1994	0.373	0.527	0.772	0.897	0.026	0.032
<i>Mean</i>	0.324	0.437	0.809	1.088	0.041	0.045
<i>Std.dev.</i>	0.157	0.155	0.244	0.321	0.011	0.009

Notes¹ Face Value of Debt² Par Value of Common Stock