14

WHAT PAY-OUTS SHOULD WE MAKE TO SHAREHOLDERS?

'Dividend policy is often reported to shareholders, but seldom explained. A company will say something like, "Our goal is to pay out 40% to 50% of earnings and to increase dividends at a rate at least equal to the rise in the CPI."[1] And that's it – no analysis will be supplied as to why that particular policy is best for the owners of the business. Yet, allocation of capital is crucial to businesses and investment management. Because it is, we believe managers and owners should think hard about the circumstances under which earnings should be retained and under which they should be distributed.'

Managers and owners should think hard about the circumstances under which earnings should be retained and under which they should be distributed.

Source: Warren Buffett, a letter to shareholders attached to the *Annual Report of Berkshire Hathaway Inc* (1984). © Warren Buffett.

Introduction

After 50 years of observing managers Warren Buffett's comments may be viewed as a sad indictment of the quality of managerial thought on the issue of dividend policy. On the central issue of whether to retain profits, or distribute them to shareholders to use elsewhere, there appears to be vagueness and confusion. He has suggested that the issue is addressed at a superficial level with the employment of simple rules of thumb and no analysis. This conclusion may or may not be unfair – this chapter is not designed to highlight managerial failings in the depth of thought department. What it can do, however, is point out the major influences on the level of the dividend decision in any one year. Some of these are fully 'rational' in the sense of the economist's model, others are less quantifiable, and stem more from the field of psychology.

The conclusion reached is that managers have to weigh up a range of forces – some pulling them in the direction of paying out either a high proportion of earnings or a low one; other forces pulling them to provide a stable and consistent dividend, and yet others pulling them to vary the dividend from year to year.

These are, of course, merely the range of forces influencing managers who are fully committed to shareholder wealth maximization and thinking 'hard about the circumstances under which earnings should be retained'. If we admit the possibility that managers have other goals, or that they make little intellectual effort, the possible outcomes of the annual or semi-annual boardroom discussion on the dividend level can range widely.

Defining the problem

Dividend policy is the determination of the proportion of profits paid out to shareholders – usually periodically. The issue to be addressed is whether shareholder wealth can be enhanced by altering the *pattern* of dividends not the size of dividends overall. Naturally, if dividends over the lifetime of a firm are larger, value will be greater. So in the forthcoming analysis we will assume that:

- the underlying investment opportunities and returns on business investment are constant; and
- the extra value that may be created by changing the capital structure (debt–equity ratio) is constant.

Therefore only the pattern of dividend payments may add or subtract value. For example, perhaps a pattern of high pay-outs in the immediate future, with a consequential reduction in dividend growth thereafter, may be superior to a policy of zero or small dividends now followed by more rapid growth over time.

Another aspect of the pattern question is whether a steady, stable dividend growth rate is better than a volatile one which varies from year to year depending on the firm's internal need for funds.

Some background

UK-quoted companies usually pay dividends every six months. In each financial year there is an *interim* dividend related to the first half year's trading, followed by the final dividend after the financial year-end. The board of directors are empowered to recommend the *final* dividend level but it is a right of shareholders as a body to vote at the annual general meeting whether or not it should be paid. Not all companies follow the typical cycle of two dividends per year: a few pay dividends quarterly and others choose not to pay a dividend at all.

Dividends may only be paid out of accumulated profits and not out of capital. This means that companies which have loss-making years may still pay dividends, but only up to the point that they have retained profits from previous years. This rule is designed to provide some protection to creditors by putting a barrier in the way of shareholders looking to remove funds from the firm, and thereby withdrawing the cushion of capital originally provided by shareholders. Further restrictions may be placed on the firm's freedom of action with regard to dividend levels by constraints contained in bond, preference share and bank-loan agreements.

Theorists in their hypothetical world

According to an important 1961 paper by Miller and Modigliani (MM), if a few assumptions can be made, dividend policy is irrelevant to share value. The determinant of value is the availability of projects with positive NPVs and the pattern of dividends makes no difference to the acceptance of these. The share price would not move if the firm declared either a zero dividend policy or a policy of high near-term dividends. The conditions under which this was held to be true included:

- There are no taxes.
- There are no transaction costs, for example:
  - investors face no brokerage costs when buying or selling shares,
  - companies can issue shares with no transaction costs.

- All investors can borrow and lend at the same interest rate.
- All investors have free access to all relevant information.

Given these assumptions, dividend policy can become irrelevant. For example, a firm which had plentiful positive NPV projects but nevertheless paid all profits each year as dividends would not necessarily be destroying shareholder wealth because in this ideal world any money paid out could quickly be replaced by having a new issue of shares.[2] The investors in these shares would willingly pay a fair price because of their access to all relevant information. The shares can be issued by the firm without costs of underwriting or merchant banks' fees, etc., and bought by the shareholders without brokers' fees or costs associated with the time spent filling in forms, etc. That is, there are no transaction costs.

If a company chose not to pay any dividends at all and shareholders required a regular income then this could be achieved while leaving the firm's value intact. 'Homemade dividends' can be created by shareholders selling a portion of their shares to other investors – again, as there are no costs of transactions and no taxation the effect is identical to the receipt of cash in the form of an ordinary dividend from the firm.

Take the example of Belvoir plc, an all-equity company which has a policy of paying out all profit as dividend. The company is expected to generate a profit of £1m to an infinite horizon. Given the cost of equity capital is 12 percent we can calculate the value of this firm using the dividend valuation model (with zero growth – see Chapter 13 for details).

$$P_0 = d_0 + \frac{d_1}{k_E} = £1m + \frac{£1m}{0.12} = £9.333m$$

This includes £1m of dividend due to be paid immediately, plus the £1m perpetuity.

Now suppose that the management have identified a new investment opportunity. This will produce additional cash flows of £180,000 per year starting in one year. However the company will be required to invest £1m now. There are two ways in which this money for investment could be found. First, the managers could skip the present dividend and retain £1m. Second, the company could maintain its dividend policy for this year and pay out £1m, but simultaneously launch a new issue of shares, say a rights issue, to gain the necessary £1m.

It will now be demonstrated that in this perfect world, with no transaction costs, shareholder value will be the same whichever dividend policy is adopted. What *will* increase shareholder value is the NPV of the project.

$$NPV = -£1m + \frac{£180,000}{0.12} = £500,000$$

The value of the firm is raised by £500,000, by the acceptance of the project and not because of the dividend policy. If the project is financed through the sacrifice of the present dividend the effect on shareholder wealth is:

Year	0	1	2	3 etc.
Cash flow to shareholders	0	1,180,000	1,180,000	1,180,000

$$\text{Shareholders' wealth} = \frac{1{,}180{,}000}{0.12} = £9.833\text{m}$$

Shareholders' wealth is increased by £500,000.

If the project is financed through a rights issue (selling more shares to existing shareholders – see Chapter 17) while leaving the dividend pattern intact the effect on shareholder wealth is the same – an increase of £500,000.

Year	0	1	2	3
Cash flow to shareholders:				
Receipt of dividend	+£1,000,000			
Rights issue	–£1,000,000			
	0	1,180,000	1,180,000	1,180,000

$$\text{Shareholders' wealth} = \frac{1{,}180{,}000}{0.12} = £9.833\text{m}$$

Shareholders' wealth is enhanced because £1m of shareholders' money is invested in a project which yields more than 12 percent. If the incremental cash inflows amounted to only £100,000 then the wealth of shareholders would fall, because a 10 percent return is insufficient given the opportunity cost of shareholders' money:

$$\frac{£1{,}100{,}000}{0.12} = £9.167\text{m}$$

If the new investment produces a 12 percent return shareholders will experience no loss or gain in wealth. The critical point is that in this hypothetical, perfect world the pattern of dividend makes no difference to shareholders' wealth. This is determined purely by the investment returns. If a firm chose to miss a dividend for a year, because it had numerous high-yielding projects to invest in, this would not decrease share values, because the perfectly well-informed investors are aware that any cash retained will be going into positive NPV projects which will generate future dividend increases for shareholders.

The other extreme – dividends as a residual

Now we take another extreme position. Imagine that the raising of external finance (for example rights issues) is so expensive that to all intents and purposes it is impossible. The only source of finance for additional investment is earnings. Returning to the example of Belvoir, it is obvious that under these circumstances, to pay this year's dividend will reduce potential shareholder value by £500,000 because the new project will have to be abandoned.

In this world dividends should only be paid when the firm has financed all its positive NPV projects. Once the firm has provided funds for all the projects which more than cover the minimum required return, investors should be given the residual. They should receive this cash because they can use it to invest in other firms of the same risk class, which provide an expected return at least as great as the required return on equity capital, k_E. If the firm kept all the cash flows and continued adding to its range of projects the marginal returns would be likely to decrease, because the project with the highest return would be undertaken first, followed by the one with the next highest return, and so on, until returns became very low.

In these circumstances dividend policy becomes an important determinant of shareholder wealth:

1 If cash flow is retained and invested within the firm at less than k_E, shareholder wealth is destroyed; therefore it is better to raise the dividend payout rate.
2 If retained earnings are insufficient to fund all positive NPV projects shareholder value is lost, and it would be beneficial to lower the dividend.

What about the world in which we live?

We have discussed two extreme positions so far and have reached opposing conclusions. In a perfect world the dividend pattern is irrelevant because the firm can always fund itself costlessly if it has positive NPV projects, and shareholders can costlessly generate 'homemade dividends' by selling some of their shares. In a world with no external finance the pattern of dividends becomes crucial to shareholder wealth, as an excessive pay-out reduces the take-up of positive NPV projects; and an unduly low pay-out means value destruction because investors miss out on investment opportunities elsewhere in the financial securities market.

In our world there are transaction costs to contend with. If a firm pays a dividend to keep to its avowed dividend pattern and then, in order to fund projects, takes money from shareholders through a rights issue, this is not frictionless: there are costs. The expense for the firm includes the legal and administrative cost of organizing a rights issue or some other issue of shares; it may be necessary to prepare a prospectus and to incur advertising costs; underwriting fees alone can be as much as 2 percent of the amount raised. The expense for the

shareholder of receiving money with one hand only to give it back with the other might include brokerage costs and the time and hassle involved. Taxes further complicate the issue by imposing additional costs.

It is plain that there is a powerful reason why dividend policy might make some difference to shareholder wealth: the investment opportunities within the firm obviously have some effect. This may help to explain why we witness many young rapidly growing firms with a need for investment finance having a very low dividend (or zero) pay-outs, whereas mature 'cash cow' type firms choose a high payout rate.

The relationship between investment opportunity and dividend policy is a far from perfect one and there are a number of other forces pulling on management to select a particular policy. These will be considered after some more down-to-earth arguments from Warren Buffett (*see* Exhibit 14.1).

Arc is a company that has been criticized for holding on to cash that it cannot use for value creating investments (see Exhibit 14.2).

Berkshire Hathaway Inc

'Earnings should be retained only when there is a reasonable prospect – backed preferably by historical evidence or, when appropriate by a thoughtful analysis of the future – *that for every dollar retained by the corporation, at least one dollar of market value will be created for owners* [italics in original]. This will happen only if the capital retained produces incremental earnings equal to, or above, those generally available to investors.'

Warren Buffett says that many managers think like owners when it comes to demanding high returns from subordinates but fail to apply the same principles to the dividend payout decision:

'The CEO of multi-divisional company will instruct Subsidiary A, whose earnings on incremental capital may be expected to average 5%, to distribute all available earnings in order that they may be invested in Subsidiary B, whose earnings on incremental capital are expected to be 15%. The CEO's business school oath will allow no lesser behavior. But if his own long-term record with incremental capital is 5% – and market rates are 10% – he is likely to impose a dividend policy on shareholders of the parent company that merely follows some historic or industry-wide payout pattern. Furthermore, he will expect managers of subsidiaries to give him a full account as to why it makes sense for earnings to be retained in their operations rather than distributed to the parent-owner. But seldom will he supply his owners with a similar analysis pertaining to the whole company … shareholders would be far better off if earnings were retained only to expand the high-return business, with the balance paid in dividends or used to repurchase stock [shares].'

EXHIBIT 14.1 Buffett on dividends

Source: Letter to shareholders, *Annual Report of Berkshire Hathaway Inc* (1984). Reproduced by kind permission of Warren Buffett. © Warren Buffett.

Arc agrees to hand back £50m

Astrid Wendlandt

Arc International has agreed to hand back $50m excess cash after arm-twisting by some of its largest shareholders.

The lossmaking chip designer yesterday announced plans to return to investors 17p a share in the first half of next year.

The move came after at least one institutional shareholder threatened to call an extraordinary meeting to remove management if their cash demands for a return of the cash were not heeded.

Mike Gulett, Arc chief executive said: 'We decided that we had more cash than we needed and decided to give some of it back to increase shareholder value.'

However, some shareholders had been hoping to see Arc, which has $100m of cash, return at least $75m, or 25p a share. Yesterday, the shares closed up $\frac{3}{4}$p at 21p.

One of the company's largest shareholders said: 'It's been a battle to get 17p but they have not gone far enough. The board does not understand that shareholders would rather have the cash in their hands than sitting on the company's balance sheet.'

WestLB Panmure, appointed to conduct a review of the company's finances this autumn, estimating Arc needed only about $15m of cash to take it through to profitability, which it expects to reach by the end of 2003.

EXHIBIT 14.2 Arc agrees to hand back £50m

Source: *Financial Times* 23/24 November 2002

Some muddying factors

Clientele effects

Some shareholders prefer a dividend pattern that matches their desired consumption pattern. There may be natural clienteles for shares which pay out a high proportion of earnings, and another clientele for shares which have a low payout rate. For example, retired people, living off their private investments, may prefer a high and steady income, so they would tend to be attracted to firms with a high and stable dividend yield. Likewise, some pension funds need regular cash receipts to meet payments to pensioners.

Shareholders who need a steady flow of income, could, of course, generate a cash flow stream by selling off a proportion of their shares on a regular basis as an alternative to investing in firms with a high payout ratio. But this approach will result in transaction costs (brokerage, marketmakers' spread and loss of interest while waiting for cash after sale). Also it is time-consuming and inconvenient to regularly sell off blocks of shares; it is much easier to receive a series of dividend checks through the post.

It is time-consuming and inconvenient to regularly sell off blocks of shares; it is much easier to receive a series of dividend checks through the post.

Another type of clientele are people who are not interested in receiving high dividends in the near term. These people prefer to invest in companies with good growth potential – companies which pay low dividends and use the retained money to invest in projects with positive NPVs within the firm. The idea behind such practices is that capital gains (a rising share price) will be the main way in which the shareholder receives a return. An example of such a clientele group might be wealthy middle-aged people who have more than enough income from their paid employment for their consumption needs. If these people did receive large amounts of cash in dividends now they would probably only reinvest it in the stock market. A cycle of receiving dividends followed by reinvestment is very inefficient.

It seems reasonable to argue that a proportion of shareholders choose to purchase particular shares at least partially because the dividend policy suits them. This may place pressure on the management to produce a stable and consistent dividend policy because investors need to know that a particular investment is going to continue to suit their preferences. Inconsistency would result in a lack of popularity with any client group and would depress the share price. Management therefore, to some extent, target particular clienteles.[3]

The clientele force acting on dividend policy at first glance seems to be the opposite of the residual approach. With the clientele argument, stability and consistency are required to attract a particular type of clientele, whereas with the residual argument, dividends depend on the opportunities for reinvestment – the volume of which may vary in a random fashion from year to year, resulting in fluctuating retentions and dividends. Most firms seem to square this circle by having a consistent dividend policy based on a medium- or long-term view of earnings and investment capital needs. The shortfalls and surpluses in particular years are adjusted through other sources of finance: for example, borrowing or raising equity through a rights issue in years when retained earnings are insufficient; paying off debt or storing up cash when retentions are greater than investment needs. There are costs associated with such a policy, for example the costs of rights issues, and these have to be weighed against the benefit of stability.

The clientele effect is often reinforced by the next factor we will examine, taxation. The consistent dividend pattern policy is encouraged by the information aspect of dividends – discussed after that.

Taxation

The taxation of dividends and capital gains on shares is likely to influence the preference of shareholders for receiving cash either in the form of a regular payment from the company (a dividend) or by selling shares. If shareholders are taxed more heavily on dividends than on capital gains they are more likely to favor shares which pay lower dividends. In the past, UK and US dividends were taxed at a higher rate than that which applied to the capital gains made on the sale of shares for those shareholders subject to these taxes. However, in recent years, the difference has

been narrowed significantly. In the UK, for example, capital gains are now taxed at the individual's marginal tax rate. Capital gains still, however, have tax advantages. Investors are allowed to make annual capital gains of £8,200 (in 2004–5) tax free. Furthermore, they only pay tax on realized gains (when the shares are sold). This allows them to delay payment by continuing to hold the shares until they can, say, take advantage of a future year's capital allowance of £8,200. In addition, if shares are held for a few years the tax rate payable falls significantly.

Elton and Gruber (1970) found evidence that there was a statistical relationship between the dividend policy of firms and the tax bracket of their shareholders – shareholders with higher income tax rates were associated with low-dividend shares and those with lower income tax rates with high-dividend shares.

Gordon Brown, the Chancellor, changed the tax system explicitly to encourage lower dividends and greater investment within firms. He said:

> The present system of tax credits encourages companies to pay out dividends rather than reinvest their profits. This cannot be the best way of encouraging investment for the long term as was acknowledged by the last government. Many pension funds are in substantial surplus and at present many companies are enjoying pension holidays, so this is the right time to undertake long-needed reform. So, with immediate effect, I propose to abolish tax credits paid to pension funds and companies.[4]

Information conveyance

Dividends appear to act as important conveyors of information about companies. An unexpected change in the dividend is regarded as a sign of how the directors view the future prospects of the firm. An unusually large increase in the dividend is often taken to indicate an optimistic view about future profitability. A declining dividend often signals that the directors view the future with some pessimism.

Dividends appear to act as important conveyors of information about companies.

The importance of the dividend as an information-transferring device occurs because of a significant market imperfection – information asymmetry. That is, managers know far more about the firm's prospects than do the finance providers. Investors are continually trying to piece together scraps of information about a firm. Dividends are one source that the investor can draw upon. They are used as an indicator of a firm's sustainable level of income. It would seem that managers choose a target dividend payout ratio based on a long-term earnings trend.[5] It is risky for managers' career prospects for them to increase the dividend above the regular growth pattern if they are not expecting improved business prospects. This sends a false signal and eventually they will be found out when the income growth does not take place.

It is the increase or decrease over the *expected* level of dividends that leads to a rise or fall in share price. This phenomenon can be illustrated from the article on Hanson reproduced in Exhibit 14.3. Here, Hanson reported falling profits and yet the share price rose because the management signaled its optimism by raising the dividend.

Higher pay-out welcomed at Hanson

Lucy Smy

Shares in Hanson, the aggregates group, rose more than 6 per cent yesterday as investors chose to ignore falling full-year profits, focusing instead on a 10 per cent increase in the dividend.

Jonathan Nicholls, finance director, said: 'It is visible statement of our confidence. We have listened to our shareholders who say we have the cash-flow there to support it.'

EXHIBIT 14.3 Higher pay-out welcomed at Hanson

Source: *Financial Times* 21 February 2003

Generally company earnings fluctuate to a far greater extent than dividends. This smoothing of the dividend flow is illustrated in Table 14.1 where Cadbury Scheweppes has shown a rise and a fall in earnings per share but has a steadily rising dividend.

TABLE 14.1
Cadbury Schweppes earnings and dividend, eleven-year record (pence per share)

Year	Earnings	Dividends
1993	14.7	6.9
1994	16.1	7.5
1995	16.2	8.0
1996	16.9	8.5
1997	34.0	9.0
1998	17.1	9.5
1999	32.0	10.0
2000	24.8	10.5
2001	27.0	11.0
2002	27.4	11.5
2003	18.2	12.0

Source: Cadbury Schweppes Report and Accounts 2002 and 2003

A reduction in earnings is usually not followed by a reduction in dividends, unless the earnings fall is perceived as likely to persist for a long time. Ever since Lintner's (1956) survey on managers' attitudes to dividend policy in the 1950s, researchers have shown that directors are aware that the market reacts badly to dividend downturns and they make strenuous efforts to avoid a decline. Almost every day the financial press reports firms making losses and yet still

paying a dividend. By continuing the income stream to shareholders the management signal that the decline in earnings is temporary and that positive earnings are expected in the future.

When times are good and profits are bounding ahead directors tend to be cautious about large dividend rises. To double or treble dividends in good years increases the risk of having to reduce dividends should the profit growth tail off and losing the virtue of predictability and stability cherished by shareholders.

Signals are funny things. A number of the large US technology companies started paying dividends for the first time in 2000–2004. In many cases the share price fell. The reason: investors took the dividends as a signal that the companies have run out of growth opportunities.

Signals are funny things.

Resolution of uncertainty

Myron Gordon (1963) has argued that investors perceive that a company, by retaining and reinvesting a part of its current cash flow, is replacing a certain dividend flow to shareholders now with an uncertain more distant flow in the future. Because the returns from any reinvested funds will occur in the far future they are subject to more risk and investors apply a higher discount rate than they would to near-term dividends. The market places a greater value on shares offering higher near-term dividends. Investors are showing a preference for the early resolution of uncertainty. Under this model investors use a set of discount rates which rise through time to calculate share values; therefore the dividend valuation model becomes:

$$P_0 = \frac{d_1}{1 + k_{E1}} + \frac{d_2}{(1 + k_{E2})^2} + \ldots \frac{d_n}{(1 + k_{En})^n}$$

where:

d = dividend

k_{E1} = required return on equity capital by shareholder

significantly $k_{E1} < k_{E2} < k_{E3}$ ...

The dividends received in Years 2, 3 or 4 are of lower risk than those received seven, eight or nine years hence.

The crucial factor here may not be actual differences in risk between the near and far future, but *perceived risk*. It may be that immediate dividends are valued more highly because the investors' perception of risk is not perfect. They overestimate the riskiness of distant dividends and thus undervalue them. However, whether the extra risk attached to more distant dividends is real or not, the effect is the same – investors prefer a higher dividend in the near term than they otherwise would and shareholder value can be raised by altering the dividend policy to suit this preference – or so the argument goes.

There have been some impressive counter-attacks on what is described as the 'bird-in-the-hand fallacy'. The riskiness of a firm's dividend derives from the risk associated with the underlying business and this risk is already allowed for through the risk-adjusted discount rate, k_E. To discount future income even further would be excessive. Take a company expected to produce a dividend per share of £1 in two years and £2 in ten years. The discount rate of, say, 15 percent ensures that the £2 dividend is worth, in present value terms, less than the dividend received in two years, and much of this discount rate is a compensation for risk.

$$\text{Present value of £1 dividend} = \frac{£1}{(1.15)^2} = 75.6\text{p}$$

$$\text{Present value of £2 dividend} = \frac{£2}{(1.15)^{10}} = 49.4\text{p}$$

Alternatively, take a company that pays out all its earnings in the hope of raising its share price because shareholders have supposedly had resolution of uncertainty. Now, what is the next move? We have a company in need of investment finance and shareholders wishing to invest in company shares – as most do with dividend income. The firm has a rights issue. In the prospectus the firm explains what will happen to the funds raised: they will be used to generate dividends in the future. Thus shareholders buy shares on the promise of future dividends; they discount these dividends at a risk-adjusted discount rate determined by the rate of return available on alternative, equally risky investments, say, 15 percent (applicable to *all* the future years). To discount at a higher rate would be to undervalue the shares and pass up an opportunity of a good investment.

Agency effects

Many people take the view that UK firms pay out an excessive proportion of their earnings as dividends. The argument then runs that this stifles investment because of the lower retention rate. However, set alongside this concern should go the observation that many firms seem to have a policy of paying high dividends, and then, shortly afterwards, issuing new shares to raise cash for investment. This is a perplexing phenomenon. The cost of issuing shares can be burdensome and shareholders generally pay tax on the receipt of dividends. One possible answer is that it is the signaling (information) value of dividends that drives this policy. However, the costs are so high that it cannot always be explained by this. A second potential explanation lies with agency cost.

Managers (the agents) may not always act in the best interests of the owners (the principals). One way for the owners to regain some control over the use of their money is to insist on relatively high payout ratios. Then, if managers need funds for investment they have to ask. A firm that wishes to raise external capital will have its plans for investment scrutinized by a number of experts, including:

- investment bankers who advise on the issue;
- underwriters who, like investment bankers, will wish to examine the firm and its plans as they are attaching their good name to the issue;
- analysts at credit-rating agencies;
- analysts at stockbroking houses who advise shareholders and potential shareholders;
- shareholders.

In ordinary circumstances the firm's investors can only influence managerial action by voting at a general meeting (which is usually ineffective due to apathy and the use of proxy votes by the board), or by selling their shares. When a company has to ask for fresh capital investors can tease out more information and can examine managerial action and proposed actions. They can exercise some control over their savings by refusing to buy the firm's securities if they are at all suspicious of managerial behavior. Of particular concern is the problem of investment in projects with negative NPV for the sake of building a larger managerial empire.

Scrip dividends

A scrip dividend gives shareholders an opportunity to receive additional shares in proportion to their existing holding instead of the normal cash dividend. The shareholders can then either keep the shares or sell them for cash. From the company's point of view scrip dividends have the advantage that *cash does not leave the company*. This may be important for companies going through difficult trading periods or as a way of adjusting the gearing (debt to equity) ratio. Shareholders may welcome a scrip dividend because they can increase their holdings without brokerage costs and other dealing costs.

From the company's point of view scrip dividends have the advantage that *cash does not leave the company.*

An enhanced scrip dividend is one where the shares offered are worth substantially more than the alternative cash payout. Such an offer is designed to encourage the take-up of shares and is like a mini-rights issue.

Share buy-backs and special dividends

An alternative way to return money, held within the company, to the owners is to repurchase issued shares. In 2000 Shell was concerned that the retention of profits was causing the gearing level to become too low. The directors chose to return more cash by way of a buy-back scheme.

Buy-backs may also be a useful alternative when the company is unsure about the sustainability of a possible increase in the normal cash dividend. A stable policy may be pursued on dividends, then, as and when surplus cash arises, shares are repurchased. This two-track approach avoids sending an over-optimistic signal about future growth through underlying dividend levels.

This two-track approach avoids sending an over-optimistic signal.

A second possible approach to returning funds without signaling that all future dividends will be raised abnormally is to pay a special dividend. This is the same as a normal dividend but usually bigger and paid on a one-off basis.

Share repurchases have been permitted in the UK since the Companies Act 1981 came into force, subject to the requirement that the firm gain the permission of shareholders as well as warrant holders, option holders or convertible holders. The rules of the London Stock Exchange (and especially the Takeover Panel) must also be obeyed. These are generally aimed at avoiding the creation of an artificial market in the company's shares.

A special dividend has to be offered to all shareholders. However a share repurchase may not always be open to all shareholders as it can be accomplished in one of three ways:

- purchasing shares in the stock market;
- all shareholders are invited to tender some or all of their shares;
- an arrangement with particular shareholders.

Exhibit 14.4 discusses Cable and Wireless's decision to return cash to shareholders via both a special dividend and a share buy-back.

A round-up of the arguments

There are two questions at the core of the dividend policy debate.

Question 1 Can shareholder wealth be increased by changing the pattern of dividends over a period of years?

Question 2 Is a steady, stable dividend growth rate better than one which varies from year to year depending on the firm's internal need for funds?

The answer to the first question is 'yes'. The accumulated evidence suggests that shareholders for one reason or another value particular patterns of dividends across time. But there is no neat, simple, straightforward formula into which we can plug numbers to calculate the best pattern. It depends on numerous factors, many of which are unquantifiable, ranging from the type of clientele shareholder the firm is trying to attract to changes in the taxation system.

There is no neat, simple, straightforward formula into which we can plug numbers to calculate the best pattern.

C&W opts for buy-back and special dividend

Dan Roberts

Cable and Wireless said yesterday there were few attractive acquisition targets for its remaining cash pile after deciding to return £1.8bn to shareholders.

However, Graham Wallace, chief executive, dismissed suggestions that the shortage of opportunities was a sign that it was a mistake to re-focus the group on internet services.

C&W will maintain a net cash position of approximately £3bn and continue to invest in its existing internet division, Cable and Wireless Global.

'The strength of our balance sheet is a real competitive advantage in these turbulent times,' said Mr Wallace. 'It is important to our customers and allows us to invest selectively for future growth.'…

The money will be returned to investors with the purchase of 15 per cent of its shares through an already agreed buy-back facility.

A further £320m will be paid out in an 11.5p-per-share special dividend, although cuts in both the interim and final dividend will mean that the total paid out for this year will be in line with last year's figure.

'Having listened to our shareholders, some of whom have pretty different views of the world, we consider that a combination of a buy-back and special dividend was most appropriate,' said Mr Wallace.

EXHIBIT 14.4 C&W opts for buy-back and special dividend

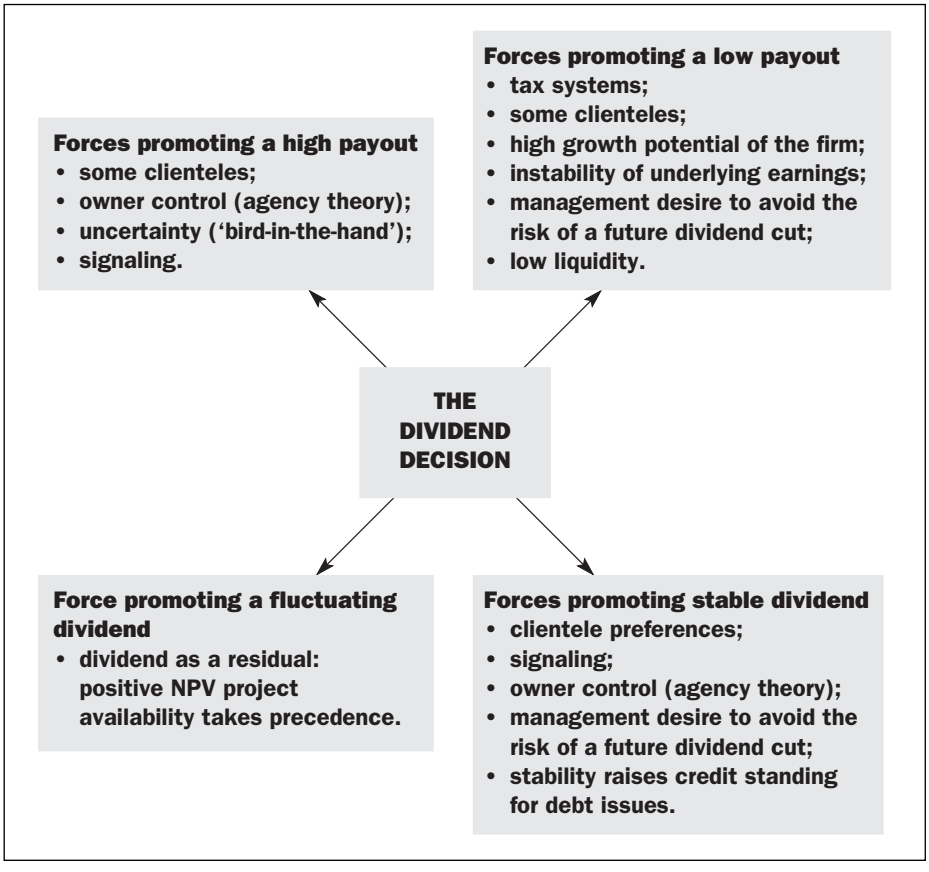
Source: *Financial Times* 15 November 2001

Taking the residual theory alone, the answer to Question 2 is that the dividend will vary from year to year because it is what is left over after the firm has retained funds for investment in all available projects with positive NPV. Dividends will be larger in years of high cash flow and few investment opportunities, and will be reduced when the need for reinvestment is high relative to internally generated cash flow. However, in practice, shareholders appear to prefer stable, consistent dividend growth rates. Many of them rely on a predictable stream of dividends to meet (or contribute to) their consumption needs. They would find an erratic dividend flow inconvenient. Investors also use dividend policy changes as an indication of a firm's prospects. A reduced dividend could send an incorrect signal and depress share prices.

So many factors influence dividend policy that it is very difficult to imagine that someone could develop a universally applicable model which would allow firms to identify an optimal payout ratio. Figure 14.1 shows the range of forces pulling managers towards a high payout rate, and other forces pulling towards a low payout rate. Simultaneously, their own forces encourage a fluctuating dividend and other factors promote a stable dividend.

Most of the factors in Figure 14.1 have already been explained, but there are two which need a comment here: liquidity and credit standing. Dividends

FIGURE 14.1
The forces pulling management in the dividend decision



require an outflow of cash from firms; therefore companies with plentiful liquid assets, such as cash and marketable securities, are more able to pay a dividend. Other firms, despite being highly profitable, may have very few liquid assets. For example, a rapidly growing firm may have a large proportion of its funds absorbed by fixed assets, inventory and debtors. Thus some firms may have greater difficulty paying cash dividends than others.

Lenders generally prefer to entrust their money to stable firms rather than ones that are erratic, as this reduces risk. It could be speculated that a consistent dividend flow helps to raise the credit standing of the firm and lowers the interest rates payable. Creditors suffer from information asymmetry as much as shareholders and may look to this dividend decision for an indication of managerial confidence about the firm's prospects.

Conclusion

This section considers a possible practical dividend policy, taking into account the various arguments presented in the chapter.

Most large firms forecast their financial position for a few years ahead. Their forecasts will include projections for fixed capital expenditure and additional investment in working capital as well as sales, profits, etc. This information, combined with a specified target debt to equity ratio, allows an estimation of medium- to long-term cash flows.

These companies can then determine a dividend level that will leave sufficient retained earnings to meet the financing needs of their investment projects without having to resort to selling shares. (Not only does issuing shares involve costs of issue but investors sometimes view share issues as a negative omen.) Thus a *maintainable regular dividend* on a growth path is generally established. This has the virtue of providing some certainty to a particular clientele group and provides a stable background, to avoid sending misleading signals. At the same time the residual theory conclusions have been recognized, and (over, say, a five-year period) dividends are intended to be roughly the same as surplus cash flows after financing all investment in projects with a positive NPV. Agency costs are alleviated to the extent that managers do not, over the long run, store up (and misapply) cash flows greater than those necessary to finance high-return projects.

The future is uncertain and so companies may consider their financial projections under various scenarios. They may focus particularly on the negative possibilities. Dividends may be set at a level low enough that, if poorer trading conditions do occur, the firm is not forced to cut the dividend. Thus a margin for error is introduced by lowering the payout rate.

Companies that are especially vulnerable to macroeconomic vicissitudes, such as those in cyclical industries, are likely to be tempted to set a relatively low maintainable regular dividend so as to avoid the dreaded consequences of a reduced dividend in a particularly bad year. In years of plenty directors can pay out surplus cash in the form of special dividends or share repurchases. This policy of low regular payouts supplemented with irregular bonuses allows shareholders to recognize that the payouts in good years might not be maintained at the extraordinary level. Therefore they do not interpret them as a signal that profits growth will persist at this high level.

If a change in dividend policy becomes necessary then firms are advised to make a gradual adjustment, as a sudden break with a trend can send an erroneous signal about the firms' prospects. And, of course, the more information shareholders are given concerning the reasons behind a change in policy, the less likelihood there is of a serious misinterpretation.

Firms in different circumstances are likely to exhibit different payout ratios. Those with plentiful investment opportunities will, in general, opt for a relatively low dividend rate as compared with that exhibited by companies with few such

opportunities. Each type of firm is likely to attract a clientele favoring its dividend policy. For example investors in fast-growth, high-investment firms are prepared to accept low dividends in return for the prospect of higher capital gains.

A suggested action plan

A suggested action plan for a dividend policy is as follows.

1 Forecast the 'surplus' cash flow resulting from the subtraction of the cash needed for investment projects from that generated by the firm's operations over the medium to long term.

2 Pay a maintainable regular dividend based on this forecast. This may be biased on the conservative side to allow for uncertainty about future cash flows.

3 If cash flows are greater than projected for a particular year, keep the maintainable regular dividend fairly constant (with constant growth, that is), but pay a special dividend or initiate a share repurchase program. If the change in cash flows is permanent, gradually shift the maintainable regular dividend while providing as much information to investors as possible about the reasons for the change in policy.

Notes

1 The CPI, consumer price index, is the main US measure of inflation.

2 The complicating effect of capital structure on firms' value is usually eliminated by concentrating on all-equity firms.

3 The following researchers present evidence on the clientele effect: Elton and Gruber (1970), Pettit (1977), Lewellen, Stanley, Lease and Schlarbaum (1978), Litzenberger and Ramaswamy (1982), Crossland, Dempsey and Moizer (1991).

4 Gordon Brown, Chancellor of the Exchequer, Budget Speech, 2 July 1997.

5 Lintner (1956) and 3i (1993) survey, in which 93 percent of finance directors agreed with the statement that 'dividend policy should follow a long-term trend in earnings'.