Reducing the impact of market imperfections

In the last of two articles, Dr Humphrey Shaw of the University of North London focuses on taxation, transaction costs and business information.

The problem for financial managers and investors is that the capital markets are not perfect. Taxes, transaction costs and the fact that information is not free and available to everyone are important and relevant market imperfections.

In 1963, Modigliani and Miller wrote a second paper which addressed the question of corporate taxation, as their original work ignored the effects of taxation. This put forward the view that, while the capital markets were sufficiently perfect to make capital structure irrelevant to a firm's value, the position was distorted because of the tax advantages enjoyed by the corporate sector if they financed part of their long-term capital finance with debt capital.

Companies are allowed to treat interest payments as a tax-deductible expense, thereby reducing the cost of debt capital. The higher the tax rate, the greater the saving. Modigliani and Miller's second article concluded that it was this tax advantage which created extra value for shareholders because the firm's value would rise linearly as management increased the amount of debt in the firm's capital structure.

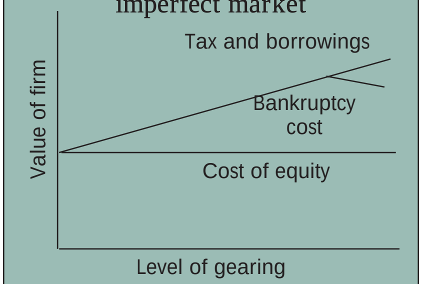
The second paper ignored personal tax, which was considered by Miller in 1977.

Tax liability

Companies pay corporation tax on their earnings before any payment is made to shareholders in the form of dividends. These dividend payments will generally incur a tax liability for their recipient just as interest payments do. The tax authorities, however, distinguish between income and capital for taxation purposes. Capital gains are usually only taxed when the gain is realised and a certain sum each year may be taken free of tax.

FIGURE 1

Level of gearing – imperfect market



Shareholders receive two possible financial gains from ownership. The first are dividend payments and the second are capital gains through share price appreciation. Shareholders will pay a lower rate of tax if they are able to take some of their income by way of treating it as a capital gain. Debt-holders, on the other hand, must pay tax on all of their investment income and so if the company is highly geared, they will incur a greater tax liability.

Miller's work showed that, at certain tax rates, the gain from corporate taxes is cancelled out by the extra liability incurred on personal taxes with the effect that a firm's value is unaffected by its capital structure.

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Although Modigliani and Miller showed that from a mathematical perspective a firm's value is maximised whenever it is financed entirely with debt capital, other factors explain why, in practice, this does not happen. Even management buyouts which are renowned for using high levels of debt finance rarely have a ratio of debt to equity above 80%.

One factor which explains why companies are reluctant to use such high levels of debt was addressed by Miller when he looked at the role of personal taxation and its effects on a firm's capital structure.

Level of gearing

While tax is an important market imperfection, it is not the only one. The generic term 'transaction costs', which covers such terms as agency costs and bankruptcy, also has an important impact on a firm's level of gearing.

Whenever, a company is highly geared, the shareholders stand to gain financially at the expense of the debtholders. Agency theory holds that managers, therefore, seek to employ a range of financial securities to balance the interests of those people such as shareholders, debtholders, managers and outside creditors who also have a claim over the firm's asset base.

The higher the level of debt, the more likely the firm may face financial disasters because of the large cash outflows needed to meet interest payments. Firms which are highly geared face a greater possibility of bankruptcy, thereby making it undesirable to employ large amounts of debt capital.

Finally, there is the important financial principle of the 'signalling effect', which also has a bearing on a firm's level of gearing. Actions are signals and the raising of additional capital sends a signal to the market which must be interpreted by investors. The signal may be positive in the sense that it shows that management has a range of projects which have a positive net present value, or that the firm is having to raise money to fund liquidity shortages brought about by unprofitable trading.

As a general rule, share buyback schemes have a positive impact on the share price, whereas raising more money by issuing additional shares reduces share values.

Capital structure decisions are very important because they have a bearing on the firm's market value. There is probably no such thing as an optimum structure in terms of a given percentage of debt to equity. This may explain why most companies in the UK are reluctant to increase the level of gearing beyond 50%.

Each company is different. Utilities such as the water authorities can afford to be more highly geared than construction companies which face large differences in earnings because of changes in economic business cycles.

No decision however, should be taken without considering the tax advantages and the signalling effect brought about by the decision to raise outside finance. Indeed, this may explain why many companies seek to raise money internally from their operations, thereby avoiding the rigorous scrutiny and appraisal of the business by the capital markets. ■

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Treasurers are the champions

The above headline in *Risk* magazine earlier this year summarised the excellent response to the Association's Business of Finance book 'The Management of Corporate Risk - a framework for directors'*. Below is a selection of more recent press cuttings demonstrating the impact the book has had on the risk management debate.

Putting risk into context

There is an interesting philosophical discussion to be had about whether the business world is a more or a less risky place. In particular, do modern corporate managers face more and/or different risks today when compared with their predecessors?

Risks today

The risks today are certainly different, whether there are more of them is uncertain and, frankly, not particularly relevant. One big risk may be just as damaging as several small ones.

However, well-run businesses recognise that risks need to be identified, measured and managed. The problem for most businesses is that they do not have a framework for this activity, despite those companies who manage risk well delivering better shareholder value. Those who fail to manage risk properly will see these problems affect their share prices adversely. On this basis equity fund managers may soon expect to evaluate companies' procedures for handling risk as part of their stock selection process.

Accountancy Age,
23 April

Damage limitation is important for buoyant shares, says Judith Harris-Jones

Running risks

The human appetite for risk is considerable. Sport, travel, gaming and investment reveal a propensity for risk that is almost absent in other species.

Although we take on different risks, they are still compartmentalised. Risks tend to be defined and assessed in a relatively specific context. The ability of game players to calculate risk is restricted to the action of the game. Investment risks are lengthier, but usually defined in purely financial terms. Where a single event risk may affect us, such as fire or accident, these are parcelled up and separately insured.

Businesses have tended to adopt a similar fragmented approach, which occasionally leads to problems. A classic example is Perrier in 1990 (see box overleaf) when a contamination incident led to a collapse in sales as a result of Perrier having no framework to deal with such a problem.

risk management is now being taken by UK businesses. This is partly driven by recent management developments in, for example, corporate governance and accounting standards. Ultimately, though, the need to deliver shareholder value should encourage the implementation of these ideas. Firms that perceive risk accurately and handle it well can expect this skill to reflect in the share price.

The evidence of this change has emerged as a result of a two-year research project by the Association of Corporate Treasurers. This concluded that: 'many UK companies recognise that their concept of risk, its definition, assessment of level and its subsequent management is currently inadequate and needs completely revising'.

Yet the difficulty that many firms face is the lack of a framework by which to mea-

Investment Week,
27 April

Risk controllers adopt a holistic approach

For corporate treasurers, risk management no longer only means financial exposure – they are also looking at other hazards. Rick Marsland reports

In recent years, the continuing debate over corporate governance and financial disclosure has put the issue of risk control at the top of the agenda. But while corporate treasurers traditionally see risk management in terms of financial exposure, an increasing number of companies are looking to address the issue of risk in its entirety – an approach that reflects the interrelated and interlocking relationship between financial risk and the other hazards now facing sizeable corporations of all types.

For managements, this shift is more than just a matter of how they decide to structure their internal controls. When the Hampel Report was published in January 1998, it

Financial News
4 May

MANAGEMENT RISK

Calculating the cost of catastrophe

Christopher Adams looks at the growing number of ways companies are assessing and preparing for the unexpected

When the issue of risk management hits the headlines it is

strophic loss from fire or flood. It encompasses legal, political and regulatory

can be easily communicated. Several big companies have begun to apply the methodology to other areas of business, says Ms Harris-Jones. Pepsi and EMI, for example, use it to monitor credit limits with their banking

Financial Times,
12 May

*copies are available from Claire Gwinnett, 0171 213 9728