Derivatives: not so scary

Study shows institutions comfortable with risk

While derivatives have been in existence for many years, the past decade has seen their variety and complexity increase substantially. Abdel Halabi and Kenta Kamiya point out that as more and more companies turn to derivatives to transfer or hedge risks, the investment markets must deal with new uncertainties.

Derivatives are financial contracts or agreements whose value depends on, or derives from, the worth of an underlying asset, reference rate or index. Traditionally derivatives have dual roles. First, they can be used by firms to defuse or hedge risk and, second, they allow opportunities for firms to generate income. These dual roles directly influence a firm's earnings, performance, dividends and capital gains.

Many studies have been conducted on the extent of and reasons for derivative use by firms. This paper focuses on derivative use by non-financial firms from the viewpoint of institutional investors - fund managers and analysts of bank trust departments, pension funds, mutual funds and insurance companies that professionally manage the pooled investments of individuals.

THE USE OF DERIVATIVES

Derivatives are used by many financial and non-financial firms, large and small, to address many issues. McMurtrie (1994) noted that the growth in derivatives could be attributed to a number of factors, including:

- the demand for risk-management products;
- growth in the number of players offering derivative products to clients;
- reductions in transactions costs; and
- advances in communication and information-processing technologies.

Maurich (1998) reported that derivatives trading in developed Asia-Pacific countries such as Australia, Hong Kong, Japan, New Zealand and Singapore had grown rapidly and accounted for one-third of the global derivatives market in 1995.

Derivatives enable firms to manage many types of risk including business and market, systemic, financial, interest-rate, exchange-rate, legal, and commodity-price risk. Further, derivatives can be used to:

- obtain funding for capital projects;
- ensure adequate internal funding is generated;
- permit firms to make value-enhancing investments;
- minimise fluctuations in cashflow;
- manage accounting earnings; and
- secure specific revenue levels; and
• assist in advancing the firm’s strategic goals and plans (see McMurtrie 1994; Phillips 1995; Bodnar, Hayt, Marston & Smithson 1995; Froot, Scharfstein & Stein 1994; Tufano, 1996).

Banks are the major users of derivatives because it is their core business activity to take and manage financial risk, and derivatives are important to their revenue and earnings. While derivatives are no doubt useful, they are also speculative instruments, as evidenced by the losses of organisations such as Metallgesellschaft, Procter and Gamble, Orange County, Barings Bank, Sumitomo and Daiwa (see Stout 1996; Bishop 1996; Karpiniski 1997).

These large losses resulting from speculative derivative use have raised questions about the nature, suitability and use of derivative instruments. Karpiniski (1997) noted that the recent string of derivative disasters has implications for the stability and efficiency of the capital markets.

INFORMATION NEEDS OF THE INVESTMENT PROFESSIONAL

Studies which have examined the information needs of investment professionals when assessing equity investments have found these people are interested in items that affect revenues, expenses and earning capability (see Bing 1971; Chandra 1975). Analysts try to predict earnings to aid in the selection and valuation of securities, and earnings items and past performances seem to provide the most valuable information (Bouwman, Frishkoff & Frishkoff 1987).

In terms of the relationship between institutional investors and derivative activity, Featherstone (1996) stated that institutional investors were using derivatives as a standard part of their portfolio strategies and were becoming more knowledgeable about how they work. This study sought to extend this finding into the Australian context, in the light of the growth of derivative use. The research concentrated on establishing the type of information analysed by institutional investors when they investigate non-financial firms. Specifically, is derivative information considered useful, and what other information is helpful? These inquiries sought to ascertain whether derivative activity increases the overall risk of non-financial firms from an institutional investor’s perspective.

This study differed from others in focusing on derivative use from the viewpoint of an interested party outside the firm (that is, the institutional investor) and not the firm itself. Non-financial firms were chosen because the use of derivatives is not one of their core activities, unlike banks, and derivative use in the non-financial sector has increased (see Bodnar, Hayt, Marston & Smithson 1995).

A questionnaire was developed which comprised closed and open-ended questions concerning the information needs of Australian institutional investors in relation to the derivative activities of non-financial firms. Participants in the study had to be a fund manager or an analyst of an institutional investment organisation, and to be involved in managing equities. A sampling frame was obtained from two lists provided by the Australian Investment Managers Association and the Investment Fund Association of Australia. Twenty organisations were randomly selected to participate, and ten questionnaires were distributed within each organisation. The total of 200 questionnaires achieved a response rate of 33% (66 responses) over a four-week period.

RESULTS

There were two aims in the study. The first tested whether derivative activity of non-financial firms is an important variable to consider when institutional investors analyse the firms. A closed question was specifically asked addressing this issue, and results showed that 84% of institutional investors regard derivative activity as important.

The second major objective was to establish whether institutional investors believe that a non-financial firm using derivatives increases the overall risk of the firm. Again, a closed question was asked, specifically addressing this issue, and results showed that 70% of institutional investors believe that derivative activity by a firm does not increase the risk.

Further information on specific types of risks and derivative activities was sought in the survey, with the aim of establishing whether the particular risks were viewed differently by institutional investors compared with firms. Results suggested that 70% of Australian institutional investors disagreed with the statement “Derivative activity by a firm increases the business risk of the firm”. A similar result was obtained for interest rate risk, as 74% of respondents disagreed with the statement “Derivative activity by a firm increases the interest rate risk of the firm”. In terms of whether “Derivative activity by a firm increases the financial risk of the firm”, 44% of institutional investors felt this to be the case, yet the same proportion (44%) disagreed. Finally, for the statement “Derivative activity by a firm increases the exchange-rate risk of the firm”, 48% disagreed and 33% agreed.

Answers to other questions concerning derivative activity showed that only 3% of institutional investors agreed with the statement “Most firms undertake speculative derivative activity”. For the statement “Derivative activity can increase the certainty of a firm’s income”, 91% agreed.

DISCUSSION

The results showed that Australian institutional investors regard derivative activity as important when analysing non-financial firms. Derivative usage is recognised as important from a firm’s perspective because it affects income and risk, and this is also the belief of Australian institutional investors.

Ninety-one per cent of institutional investors who responded agreed that derivatives can increase the certainty of a firm’s income. Early studies by Chandra (1975) also noted the interest
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investment professionals have in regard to information that affects the amount of income earned.

Generally, institutional investors believe derivative activity does not increase the risk of the firm. This finding is in line with the generally accepted purpose of derivative use by firms; that is, to insulate firms from uncertainty and stabilise performance (see Bodnar, Hayt, Marston & Smithson 1995; Phillips 1995; Tufano 1996; and Froot, Scharfstein & Stein 1994).

Additional inquiries into specific types of risk and derivative activity showed that most institutional investors disagreed that derivative activity increases business risk and interest-rate risk. However, for financial risk and exchange-rate risk, the responses were evenly distributed.

The findings for the specific risks suggest that institutional investors believe non-financial firms use derivatives to address these risks. The investors view the specific types of risks and derivative activity in much the same way as firms.

The study also found that only 3% of respondents believed that non-financial firms undertook speculative derivative activity. These findings agree with those of other studies which stated that derivatives are infrequently used to speculate on market movements.

The quantitative findings were consistent with the qualitative findings. A common theme can be summarised by the response of an investor who stated that “generally ... derivatives are used prudently to address the risk a firm faces”. Another respondent noted: “An investor expects firms to utilise derivatives, otherwise risk is increased.” However, another view was given by one respondent who said that “in some firms derivatives are poorly used”.

CONCLUSION
Past studies investigated the risk issues of derivative activity by surveying the users of the derivatives – the firms. This study shifted the focus from the firms themselves to an interested outside party. Further, this study was specific to the Australian environment and non-financial firms, and examined Australian institutional investors’ responses to specific risk types.

The quantitative and qualitative findings are that institutional investors generally believe derivatives are used judiciously by non-financial firms. Investors perceive the derivative activity as an important variable to consider when evaluating the firms. Little support was present for a belief that a non-financial firm using derivatives increases the overall risk.

An interesting follow-up investigation would be to determine whether other interested parties, such as private individual shareholders, believe that derivative activity does not increase risk, particularly as derivatives are an important part of the earning and risk function of firms.

This study concludes that Australian institutional investors analyse the derivative activity of non-financial firms and that they generally believe it does not increase the overall risk of the firms. Even though there is widespread acknowledgement that the purpose of derivatives is to decrease risk, the finding is important in presenting the views of an interested outside party in the issue of derivative usage. Despite the highly publicised losses in derivative trading, its practice is likely to become more widespread. More studies will be needed as it affects more users.

REFERENCES