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Derivatives: "Baring" the Financial Risk

Markets have become progressively more globalised; many buyers and sellers now increasingly have the entire world economic stage as their planning horizon. International transactions are increasingly important to companies. But such internationalisation has been forced to cope with increased risk arising from deregulated financial markets. **Exchange rates and interest rates are now much more volatile compared to earlier decades; they are now more like traditionally volatile outcomes such as share prices.** Companies and investment funds generally do not like this risk (they are risk averse in the technical parlance) and seek ways to avoid or limit it

Financial derivative products are means of avoiding or minimising this risk and uncertainty. They can be thought of as being **akin to insurance** in many ways in that they protect their users from undesired and unwanted economic outcomes by providing some financial advantage (e.g. extra income flows or cheaper asset availability) when these outcomes occur (or are expected to occur). Just as insurance provides special income flows or one-off payments in times of death, illness or injury, so derivatives provide advantages such as cheaper foreign exchange when the exchange rate devalues (through a forward exchange rate contract), or cheaper interest rates when general interest rates have risen substantially (through an interest rate swap), or the freedom to sell shares at an agreed

and advantageous price when their market is sagging (through a share price option). But these products come at a cost. Just as insurance requires premiums so derivatives have their price as well.

Concerns and Problems

Use of derivative products has shown explosive growth in the last several years. Several consequent concerns have arisen:

- Derivatives are still primarily risk management tools and thus tend to transfer risk from the derivatives user to the derivatives provider (banks, securities firms, etc); the price of the derivative will reflect the degree of risk as perceived by the provider. This accumulation of risk requires firstly that the shareholders of the provider be made fully aware of the risks their firm is taking upon itself so that they can make informed decisions about their own investment in the firm. There have been concerns that some financial intermediaries have not been diligent enough in monitoring and reporting the volume of their derivatives business and there have thus been calls for better information systems to be put in place.
- There is the issue of protecting the other customers of financial intermediaries from the risks involved in derivatives activity. Particularly in the case of banks there has been concern to **protect bank depositors from the possible dangers of derivatives activ-**

ity. The risk-weighted capital adequacy requirements for banks, now widely used in advanced countries, go some ways towards this goal of protection by requiring that derivatives obligations be converted into equivalent volumes to standard liabilities such as loans. In this way bank capital is required to be held to adequately cover default and trading risks to banks from their derivatives obligations.

- Recent financial losses by some large users of derivatives highlights the possibility that many users may not fully understand the operation and intricacies of financial derivatives and may thus be putting themselves in unnecessary danger from financial products which ironically have been designed to reduce risk.
- Derivatives can be used for speculative activity, **to bet on financial outcomes rather than to cope with risk**, as seen in the rise of numerous, ironically named "hedge funds" which use large volumes of derivatives to speculate on foreign exchange, bond and stock markets. It has been alleged that these funds have become so big that they now have the capacity to amplify fluctuations in crucial financial markets and thus generate unnecessary economic dislocation through their destabilising effects.

The Barings Bank Collapse

The recent Barings Bank fiasco seems to have arisen from at least two of these sources of concern. It was initially alleged that management controls were sufficiently lax to allow an employed trader, located in Singapore, to commit the bank to an enormous volume of futures contracts on Japanese share price indexes and interest rates without senior management, let alone shareholders, being aware of what he was doing. Information is now emerging that some senior Barings' managers knew of these deals but did not intervene until it was too late. As well, trading in these financial instruments was undertaken on a speculative basis in which the trader bet that, for example, the relevant share price index would stay within a certain range. The economic effects of the Kobe earthquake generated a substantial fall in share prices which left Barings the proud owner of financial "assets" which were now worth far less than what they had agreed to pay for them in the futures contract. These losses have wiped out the bank's capital. It is also possible, although very unlikely, that the trader himself did not fully understand the complex financial contracts he was entering into on behalf of Barings Bank.

Reforms

These concerns have generated several proposals for closer regulation of derivatives markets:

- **Requirements for greater disclosure of exposure to derivatives liabilities** by both users and providers have been called for to ensure that informed investment decisions by shareholders can be made.

Related to this are calls for greater explanation of the burdens and responsibilities which users of derivatives products have to bear in order to prevent them taking up inappropriate derivatives products or exposing themselves to excessive obligations.

- There have been arguments that **the capital requirements for financial intermediaries to cover default and trading risk over derivatives are inadequate in various ways.** Non-bank providers of derivatives products seem to have less onerous capital requirements than bank providers and there have been calls to eliminate this discrepancy by bringing all providers under the one standard regulatory regime. As well, levels of bank capital to cover derivatives exposure could themselves be raised under the weight of arguments that current formulae for calculating derivatives risk seriously underestimate the actual risks involved. The view of the Reserve Bank of Australia is that good internal risk assessment capacities in banks ensure that bank depositors can be protected without high bank capital requirements. This requires the regular rigorous monitoring of bank risk assessment performance as a policy alternative to extra levels of required bank capital.
- At the broadest level, arguments about the destabilising effects of derivatives use and hedge fund operations on the world economy link up with general critiques of financial

deregulation and lead to similar conclusions about the need to slow down the flows of "hot money" around the world. Proposals such as **small foreign exchange turnover taxes** address these issues directly; hedge funds relying on futures and options would probably be amongst the operators most affected by the imposition of such taxes. Turnover taxes on domestic financial transactions would complement such international tax schemes. Other alternatives involve direct specific restrictions on the operations of hedge funds through linked national regulation in the world's main financial centres. However, some observers do not support such taxes and/or restrictions; they argue that they are not administratively feasible and might not reduce volatility even if successfully implemented.

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