This situation is of concern to the Financial Services Authority, the financial regulator, especially as there have already been several cases where derivative trading has led to large losses. See Activity 6 below.

Q **ACTIVITY 4: QUESTION**

Match the descriptions to the types of derivative.

	Derivative	Description
A	Forwards	1. An agreement which gives the right but not the obligation to buy or sell an underlying item on or before a specified future date.
B	Futures	2. An agreement to exchange a stream of payments over a specified period of time.
C	Options	3. An agreement where the trading date is separated from the delivery date.
D	Swaps	4. Standardised exchange-traded forward contracts for the buying and selling of an underlying item.

A **ACTIVITY 4: ANSWER**

A : 3
B : 4
C : 1
D : 2

Derivatives are used in many cases to hedge against risk but they themselves involve risk, which can be highly leveraged so that one or more parties stands to lose a large amount.

It might be argued that there is no risk to the whole system, since the loss of one party is balanced out by the gain of another. But the risk lies in one party being put into a position where he cannot pay his debt and thus becomes insolvent. This might not matter to the whole system if the party is an individual trader but it would matter very much if the party were a major bank. A default by such an institution would have a domino effect on other institutions, as they in turn would be unable to fulfil their own obligations. A crisis of confidence could be created in this way which would threaten the integrity of the whole financial system.

Q **ACTIVITY 5: QUESTION**

Visit the website of the Financial Services Authority www.fsa.gov.uk and find the Financial Risk Outlook for 2006; it is a pdf file which you can download. Search the file for references to the risks inherent in derivative contracts. What risks is the FSA concerned about?

A ACTIVITY 5: ANSWER

The FSA is concerned that derivatives are not very liquid and are more difficult to put a price on and to trade. There are potential operational risks in relation to the valuation of illiquid assets and a failure to value them properly has implications for profit margins, capital, collateral, hedging and reporting. Uncertainty about the valuation of illiquid assets may increase conflicts of interest and fraud. Hedge fund managers, for example, receive fees which are linked to asset valuations and this may cause an incentive to overvalue assets. In addition, credit derivatives have grown tremendously but the market may not have kept up with this growth. If a credit event occurs but a credit derivative has not been confirmed, there is doubt over its legal validity and this could accelerate a financial crisis. The greater the complexity of financial transactions, the greater the scope for fraud.

Q ACTIVITY 6: QUESTION

Use Buckle and Thompson and visit websites to find out the background to the following cases:

a. Metalgesellschaft
b. Barings Bank
c. Long-Term Capital Management

The BBC Front Page News website has an archive where you will find references to the background to these cases http://news.bbc.co.uk but you can find others by using a search engine.

A ACTIVITY 6: ANSWER

The answers to this activity can be found on relevant websites.

Financial Exchanges

All financial securities which are traded on an exchange-traded basis are done through a financial exchange. The London Stock Exchange is probably the best-known of these and it facilitates the primary and secondary markets in the trade of equities. (See Activity 1 above). The London International Financial Futures Exchange (LIFFE) has now been merged into an international exchange called Euronet.

Q **ACTIVITY 7: QUESTION**

Find information on the work done by the following exchanges by visiting their websites:

- London Stock Exchange www.londonstockexchange.com
- Euronext www.euronext.com
- London Clearing House www.lchclearnet.com
- Crest www.crestco.co.uk

A **ACTIVITY 7: ANSWER**

The answers to this activity can be found on the relevant websites.

The Foreign Exchange Markets

Foreign exchange markets are where different currencies are bought and sold. Each currency has an exchange rate with every other currency and this rate is determined in the free market by the interaction of demand for and supply of each currency.

Let us take as an example the exchange rate between sterling (£) and the euro (↔). Every day many traders buy and sell these currencies. If demand for sterling is higher than that for the euro, then the price of sterling will tend to rise against the euro. If the supply of sterling is lower than that of the euro, again there will be a tendency for the price of sterling against the euro to rise. If the exact opposite happens, the euro will rise against sterling.

The demand for and supply of a currency come from three main sources:

a. Businesses which need to buy and sell currencies in the course of their normal trading. For example, a UK company importing flowers from the Netherlands needs to sell sterling to buy euro in order to pay for its purchases; and a Slovenian company buying machinery from a UK company will exchange euro for sterling. If the UK balance of payments shows a surplus, this means that there is a higher demand for sterling to buy UK exports than there is a demand for the euro and so the price of sterling against the euro will rise, other things being equal.

b. Companies which invest in other countries by opening branches, or investors who buy shares in foreign companies, also trade one currency for the other. If a Korean company invests in the UK it buys sterling in order to make its investment and this creates a higher demand for the currency.

c. Speculators who buy and sell currencies on a short-term basis in order to make quick profits also affect the price of those currencies. Most of the trades in currencies are done for this reason and currency trading is also the basis for a lot of derivatives, e.g. currency futures.

Two main prices are quoted for each currency – the spot price and the forward price. The spot price is the price of making the trade today so it is the current price for the immediate transaction. The forward price is the price of making the trade at some point in the future, e.g. in 3 months' time. The price is settled today but will not be paid until the future date. The difference between the spot and forward prices of a currency is the spot price adjusted for the difference in the interest rates prevailing in the two countries concerned.

Q ACTIVITY 8: QUESTION

What effect would you expect the following to have on the value of sterling against the US dollar in the foreign exchange markets?

a. A rise in UK interest rates
b. A rise in the international price of oil
c. Increased economic growth in the USA leading to higher consumption
d. A political crisis in the USA

A ACTIVITY 8: ANSWER

Other things being equal:

a. A rise in UK interest rates will cause the price of sterling to rise against the US dollar as long as US interest rates do not rise by the same amount. A higher interest rate will mean a higher return for short-term investors who switch from dollars to sterling, so the demand for sterling will rise and the demand for the dollar will fall.

b. A rise in the international price of oil will mean that the UK will have to pay more dollars for its oil imports (the UK now imports a large percentage of its oil and oil is priced in US dollars). To the extent that the demand for oil is relatively inelastic and does not fall by the same proportion as the price increase, there will be a higher demand for dollars in order to pay the increased prices and so the dollar will rise and sterling will fall.

c. Increased growth in the USA will cause consumers to spend more money and to import more. Some of these imports will come from the UK and so the demand for sterling will rise and the demand for dollars will fall. Sterling will rise as a result. In time, this trend may cause inflation in the USA and the Federal Reserve may need to raise interest rates, thus reversing the trend.

d. A political crisis in the USA will lead to a lack of confidence in US stock markets and will spill over into demand for the currency, i.e. demand and the price of dollars will fall, meaning that sterling will rise.

Financial Instruments

In section 2 we have looked at the most important wholesale financial markets and we have seen how financial institutions are involved in these markets. In each case they use financial instruments, which are the contracts traded.

A financial instrument is a legal contract made between two parties to make a financial transaction. It may exist in paper form or be virtual. There are several ways of classifying financial instruments:

a. According to whether they are cash instruments or derivative instruments. As we have already seen, cash instruments are the actual underlying assets, e.g. a loan or a bank deposit. Derivatives are based on these but are virtual instruments.

b. According to whether or not they confer ownership of an asset. They may be equity-based instruments, debt-based instruments or foreign currency instruments.

   Equity-based instruments are those where the investor owns an asset. For example, if an investor buys ordinary shares in a limited company, he becomes a shareholder and owns a part of that company in exchange for his investment. If the company uses the cash to buy equipment, then the shareholder owns a proportion of that equipment.

   Debt-based instruments are those where the investor has made a loan to the owner of an asset. For example, if an investor buys a company's bonds, the company becomes his debtor but it retains full ownership of its own assets, including the assets purchased with the proceeds of the bonds. Debt-based instruments can be further subdivided into short-term and long-term.