Derivative securities

Financial derivatives are so effective in reducing risk because they enable financial institutions to hedge; that is, engage in a financial transaction that reduces or eliminates risk. When a financial institution has bought an asset, it is said to have taken a long position, and this exposes the institution to risk if the returns on the asset are uncertain. On the other hand, if it has sold an asset that it has agreed to deliver to another party at a future date, it is said to have taken a short position, and this can also expose the institution to risk. Financial derivatives can be used to reduce risk by invoking the following basic principle of hedging: Hedging risk involves engaging in a financial transaction that offsets a long position by taking an additional short position, or offsets a short position by taking an additional long position.

Equity-derivative securities are securities that have a claim on the common stock of a firm. This would include:

* Options

This refers to rights (but not obligation) to buy or sell common stock at a specified price for a stated period of time. The two kinds of option instruments are

(1) Warrants and

(2) Puts and calls.

Warrants

A warrant is an option issued by a corporation that gives the holder the right to acquire a firm’s common stock from the company at a specified price within a designated time period. The warrant does not constitute ownership of the stock, only the option to buy the stock.

Puts and Calls

A call option is similar to a warrant because it is an option to buy the common stock of a company within a certain period at a specified price called the striking price. A call option differs from a warrant because it is not issued by the company but by another investor who is willing to assume the other side of the transaction. Options also are typically valid for a shorter time period than warrants. The holder of a put option has the right to sell a given stock at a specified price during a designated time period. Puts are useful to investors who expect a stock price to decline during the specified period or to investors who own the stock and want protection from a price decline.

* Forward and Futures Contracts

Forward contracts are negotiated in the over-the-counter market. This means that forward contracts are agreements between two private parties—one of which is often a derivatives intermediary, such as a commercial or an investment bank—rather than traded through a formal security or commodity exchange. One advantage of this private arrangement is that the terms of the contract are completely flexible; they can be whatever any two mutually consenting counterparties agree to. Another desirable feature to many counterparties is that these arrangements may not require collateral; instead, the long and short positions sometimes trust each other to honor their respective commitments at Date T. This lack of collateral means that forward contracts involve credit (or default) risk, which is one reason why commercial banks are often market makers in these instruments.

One disadvantage of a forward contract is that it is quite often illiquid, meaning that it might be difficult or costly for a counterparty to exit the contract before it matures. Illiquidity is really a by-product of the contract’s flexibility because the more specifically tailored an agreement is to the needs of a particular individual, the less marketable it will be to someone else. Futures contracts solve this problem by standardizing the terms of the agreement (e.g., expiration date, identity and amount of the underlying asset) to the extent that it can be exchange traded. In contrast to the forward market, both parties in a futures contract trade through a centralized market, called a futures exchange. Although the standardization of contracts reduces the ability of the ultimate end users to select the most desirable terms, it does create contract homogeneity, whereby the counterparties can always unwind a previous commitment prior to expiration by simply trading their existing position back to the exchange at the prevailing market price.