DERIVATIVES: A device for Risk Management

[1]Deepak Ranjan Sahoo
Assistant Professor,
Department of Commerce,
MIT Arts Commerce & Science College, Alandi (D)

[2]Vaishali Kisan Jagatp
Assistant Professor,
Department of Commerce,
Savitribai Phule Pune University, Pune

Abstract:

Deregulation of Markets of national economies, growth in the international trade, and ever growing technological changes has revolutionized the financial markets during the past four decade's world over. The resultant of this revolution is increased market volatility, which has led to a corresponding increase in demand for risk management products. This demand is reflected in the growth of financial derivatives from the standardized futures and options products of the 1970s to the wide spectrum of over-the-counter (OTC) products offered and sold in the 1990s. One of the leading investors in the world, Warren Buffet claimed that economic derivatives are so unsafe that they can even be origin for financial disasters by arguing that numerous persons turn to the economic derivatives market to direct them on future funding rather than of observing at the genuine market. Financial derivatives are instrumental in the hedging method because through them, groups can exchange risk. The Business is learning to cope with a rapidly changing environment with hedging strategies which provide buffers to the bottom line. The present study deals with the conceptual issues and critics of Derivatives.

Key Words: Derivatives, Financial Risk and Risk Management.

Introduction: The increasing pace of change, customer demands and market globalization all put risk management high on the agenda for forward-thinking companies. It is necessary to have a comprehensive risk management strategy to survive in today's market place. In addition, the Cadbury Committee's Report on Corporate Governance (1992) states that having a process in place to identify major business risks as one of the key procedures of an effective control system is paramount. This has since been extended in the Guide for Directors on the Combined Code, published by the Institute of Chartered Accountants (1999). This guide is referred to as the 'Turnbull Report' (1999) for the purposes of this book. The Cadbury Report on Corporate Governance Committee Working Party (1992) on how to implement the Cadbury Code requirement for directors to report on the effectiveness of their system of internal control.

Objectives of the Study:

1. To Study the concepts of Derivatives.
2. To study the importance of derivatives in risk management
3. To study the implications and criticism of financial derivatives in a competitive market.

Discussion: In today's climate of rapid change people are less likely to recognize the unusual, the decision-making time frame is often smaller, and scarce resources often aggravate the effect of unmanaged risk. The pace of change also means that the risks facing an organization change constantly (time related). Therefore the management of risk is not a static process but a dynamic process of identification and mitigation that should be regularly reviewed. Risk is a condition in which there is a possibility of an adverse deviation from desired outcome that is expected or hoped for." In most of the risky situations, two elements are commonly found;

- The outcome is uncertain i.e. there is a possibility that one or other(s) may occur. Therefore, logically there are at least two possible outcomes for a given situation.
- Out of the possible outcomes, one is unfavorable or not liked by the individual or the analyst.

Deregulation of Markets of national economies, growth in the international trade, and ever growing technological changes has revolutionized the financial markets during the past four decade's world over. The resultant of this revolution is increased market volatility, which has led to a corresponding increase in demand for risk management products. This demand is reflected in the growth of financial derivatives from the standardized futures and options products of the 1970s to the wide spectrum of over-the-counter (OTC) products offered and sold in the 1990s.

Derivatives: "Derivatives are financial contracts whose value is derived from some underlying asset. These assets can include equities and equity indices, bonds, loans, interest rates, exchange rates, commodities, residential and commercial mortgages, and even catastrophes like earthquakes and hurricanes". The contracts come in many forms, but the more common ones include options, forwards/futures and swaps. Companies are exposed to different hazards in their normal day to day operations and when borrowing the capital. For some of the hazards, management can achieve security from an insurance corporation. For instance, management can assure a plant against devastation through fire by getting a fire insurance plan from a casualty and property insurance corporation. But Capital market products which are available to management to secure against different hazards are not insurable through an insurance corporation. These hazards include hazards connected with changes in the price of an input, a reduction in price of a commodity the company sells, an increase in the cost of borrowing investments, and an unfavorable movement of exchange rate (Jana, 2010). The tools that can be applied to present these securities are identified as derivative tools, so called because they obtain their importance from whatever the agreement is based on. These tools comprise futures agreements, forward agreements, alternative agreements, swap contracts, and floor and cap contracts. It is not an exaggeration to state that a considerable portion of financial innovation over the last 40 years has come from the emergence of derivative markets. EXCHANGE TRADED derivatives are dominated by equity derivatives and commodity derivatives. OTC derivatives are mainly in fixed income and currencies. The benefits of derivatives are threefold: Such as

a. Risk management,
b. Price discovery
c. Enhancement of liquidity.

Trend in volumes in equity cash segment and equity derivative segment at BSE and NSE:

Financial Year(FY)	Market Capitalisation of the Exchange (BSE)	Turnover in Equity cash segment (Rs. Crores)	Turnover in Equity Derivatives segment (Notional Values) (Rs. Crores)	Ratio: Turnover in Equity derivatives / Equity cash
2010-11	68,39,084	46,82,439	2,92,48,375	6.25
2011-12	62,14,9112	34,78,391	3,21,58,208	9.25
2012-13	63,87,887	32,57,053	3,86,96,523	11.88
2013-14	74,15,296	33,30,152	4,74,30,842	14.24
2014-15	1,01,49,290	51,84,500	7,59,69,194	14.65
2015-16	94,75,328	49,77,072	6,93,00,842	13.92
2016-17	1,21,54,525	60,54,174	9,43,77,241	15.59

Source: *BSE & NSE*

The primary use of derivatives is to hedge one's positions i.e., to reduce or eliminate the risk inherent in commodities, foreign currencies and financial assets. Farmers who want to guarantee the prices of their future crop can sell them at any time in the futures or forward market. Another important benefit is the information that can be extracted from various derivatives. Price discovery is one aspect of it. An additional positive advantage is the enhancement of liquidity. Adding derivatives to an underlying market has two effects;

I. It brings to the market additional players who use the derivatives as a leveraged substitute to trading the underlying.
II. Derivatives provide a hedge to market makers allowing a reduction in transactions costs through a lower bid-ask rate. By and large, spot markets with derivatives have more liquidity and thus lower transaction costs than markets without derivatives.

Given the above seemingly important benefits, why are derivatives, and especially credit derivatives, viewed so negatively in the financial crisis The problem is not with the derivatives as an instrument, but with, the way they were traded and cleared, and how they were used by some financial institutions to increase their exposure to certain asset classes.

Financial Risk: Risk is a possibility in finance, that returns of investment will not be same as anticipated. This shows the probability of losing some or the entire real assets. It is normally estimated through measuring the deviations from the historical returns or normal returns of a particular investment. An important view in economics is the relation between return and risk. The bigger the amount of hazard that a financier is eager to take on, the larger the possible return. The motive for this is that financers must be rewarded for taking on extra hazard (Patrick and Martin, 2005). Financial risk is normally described as the unanticipated volatility or variability of returns, and therefore contains both possible worse than anticipated with excellent than anticipated returns. An enquiry into the reason for major losses would show that the losses were not due to derivatives, but the improper use of them by management that was either ignorant about the risks associated with using derivative instruments or management that sought to use them in a speculative manner rather than a means for managing risk.

Another term for speculative purposes is trading purposes. The important reason of these devices is to provide firm promises to charges for futures charges for future date for giving protection against the harmful events in future charges, to reduce the quantum of economic hazards. Not only this, they further provide more opportunities to get profit from earnings for those entrepreneurs who are prepared to take higher risks. In other words, these devices really help to move the risk from those who desire to bypass it to those who are ready to accept the similar. Currently, the economic derivatives have become progressively well liked and most routinely utilised in the world of economics. This has developed with so phenomenal pace all over the world that currently it is identified as the derivatives rebellion.

Financial Derivatives: Financial derivatives are devices that permit value swaps founded on pre-existing actions. Normally, the proprietor of the genuine supply goes into an affirmation with somebody who will be eager to purchase that supply at an established cost at some time in the future. The last cited is the most widespread pattern of preparation. Though, other affirmations in the market manage exist. The reason of an economic derivative is to give proprietor or buyer influence power of a large supply utilising negligible investment (Robert and James, 2009). On the other hand, occasionally, the asserted allowance selected for the economic derivative can be incorrect i.e. the future can work contrary to the supply owner. In these situations, it would have been sensible to manage with payments other than through the implementation of derivatives.

Criticism of Financial Derivatives: Financial derivatives permit financers to invest in large allowances of securities with negligible investment. Whereas this environment can be regarded as a benefit, in certain examples it can become a gigantic loss. For example, it gives a large estimated worth imitating a situation where the respective shareholder will not be adept to reimburse for loses. One of the leading investors in the world, Warren Buffet claimed that economic derivatives are so unsafe that they can even be origin for financial disasters (Stephen, 2007). He clarified this claim by saying that numerous persons turn to the economic derivatives market to direct them on future funding rather than of observing at the genuine market. This can finally lead to market distortions and can be extended to other parties connecting in investments thus financial position of a country can be harshly obstructed.

Financial derivatives can furthermore be awkward in that they give enormous risk to financers who manage them are not understand their way in this pattern of investment. The similar features which they were presumed to eradicate can become even more additional risk. Normally, inexperienced enterprise individuals can be attracted to economic derivatives because they provide them the opening to get heavy returns for little investments (Robert and James, 2009). As a result, this feature can appeal to large number of financers even when those financers have negligible know-how in that pattern of business. The end result of this is that need of market information and little knowledge can lead to bad economic decisions.

How managers of economic risk can apply futures and choices to hedge economic risks? Futures can be characterized as types of economic derivatives which need one party to buy a granted protection at a particular designated day in the future. One more style of observing at it is through recounting futures as economic devices that need one party to deal their product to another group at a certain repaired cost throughout a set designated day in the future. With this pattern of fee, one can be adept to hedge their enterprises contrary to certain hazards (Gary. et al, 2001). Possibilities conversely mention to economic derivatives that present holders the alternative of buying a repaired allowance of protection or supply at a certain cost throughout a particular designated day in the future. Moreover, choices can permit financers to deal an identified amount of supply at a particular cost at an exact time in the future. Generally, choices need a pre-existing allowance of supply generally identified the choice premium. Possibilities are helpful as an entails of hedging enterprises contrary to hazard because they influence resources.

Conclusion: Business is all about taking risk. What matters is how the risk is handled. Often, there are so many permutations of risks that can affect the business that it will take away most of the profits if one were to reduce/eliminate all of them. Ultimately, it is the organizational cultural and its appetite for risks that will determine risk management policies. Risk management is an important part of corporate planning; it envisages a systematic approach for identification, measurement and control of a variety of risks faced by an organization. The top management is also becoming more cost conscious and more aware of how should risk management helps to minimize expenses. The organizations are learning to cope with a rapidly changing environment with hedging strategies which provide buffers to the bottom line. Thus the organizations are having many strategies to focus on the managing on the risk that are facing in every way of its business life.

References:

- Jana, Schönborn. (2010) *Financial Risk Management*. Diplomica Verlag. 162-164
- Charles W. Smithson. (2003) *Managing Financial Risk*. McGraw-Hill Professional. 216-218
- Gupta (2008). *Financial Instruments Standards*. Tata McGraw-Hill. 171-174
- Christopher L. Culp. (2004) *Risk Transfer: Derivatives in Theory and Practice*. John Wiley and Sons.193-197.
- Barry J. Eichengreen, Donald J. Mathieson, Bankim Chadha. (2003) *Hedge Funds and Financial Market Dynamics. International Monetary Fund*. 161-163.
- Verma (2008). *Derivatives and Risk Management*. Tata McGraw-Hill. 169-173.
- Viral Acharia and Matt Richardson (2009). *Restoring Financial Stability: How to Repair a Failed System*. John Wiley and Sons. Ch.X.
- Merna, Tony, and Faisal F. Al-Thani. *Corporate Risk Management*, John Wiley & Sons, Incorporated, 2008.