Financial Derivatives: Myths and Realities

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INTRODUCTION

The Indian financial market has undergone paradigm changes in the last two decades. One of the significant changes is the introduction of derivatives in the year 2000. In March 1998, the L. C. Gupta Committee (LCGC) submitted its report recommending the introduction of the derivatives markets. The Committee strongly favours the introduction of financial derivatives in order to provide the facility for hedging in the most cost-efficient way against market risk. Even after seven years, from introduction of derivatives, market participants especially small-retail individual investors are not familiar with the concept of derivatives. Still they have misconceptions about derivatives. They strongly believe in the myths of derivatives. Indeed, they feared derivatives due to lack of knowledge about them and their use. Access to risk-management instruments should not be feared but, should be embraced with caution to help investors manage the circumstances of the market. In this paper, a small attempt is made to demystify the myths of derivatives.

Ten common misconceptions about financial derivatives are explored. Believing just one or two of the myths could lead one to avoid or totally ignore the use of derivatives. A careful review of the risks and rewards derivatives offer, however, suggests that investors should learn the use of derivatives in order to enjoy its benefits.

In the recent past, many MNCs such as Orange County, California, and the Barings Bank etc became bankrupt due to poor investments in financial derivatives. At that time, many policymakers feared more collapsed banks, counties, and countries. Those fears proved unfounded; prudent use, not government regulation, of derivatives headed off further problems. To blame failures solely on derivatives is to miss the point. A better answer lies in greater reliance on market forces to control derivative-related risk taking.

THE PROBLEM OF THE STUDY

The tremendous growth of the financial derivatives market and reports of major losses associated with derivative products have resulted in a great deal of confusion about those complex instruments. Are derivatives a cancerous growth that is slowly but surely destroying global financial markets? Are people who use derivative products irresponsible because they use financial derivatives as part of their overall risk-management strategy?

OBJECTIVES

To study myths and realities related to Financial Derivatives, particularly Futures and Options from the point of view of retail investors.

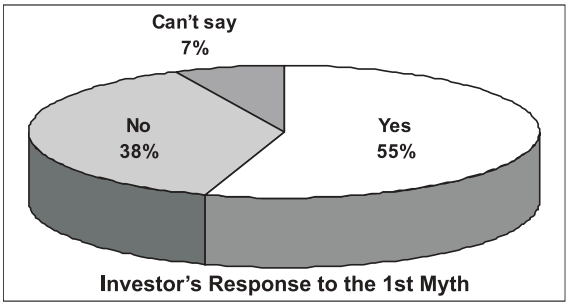
To try to demystify myths about derivates and to highlight realities of derivatives.

METHODOLOGY

A small survey had been conducted to collect opinions of the ordinary retail investors about myths of derivatives from different parts of Karnataka. The sample size for this study is only 500 respondents. Questionnaire method has been used to collect primary data from the respondents. Secondary data has been collected from different sources such as internet, news papers, journals etc.

ANALYSIS AND INTERPRETATION

Myth Number 1: DERIVATIVES ARE NEW, COMPLEX, HIGH-TECH FINANCIAL PRODUCTS



It is found that 55% of the small investors (respondents) are of the opinion that derivatives are new, complex, and high-tech products. 38% of the respondents, who are familiar with derivatives, said derivatives are not new, complex, and high-tech

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products. And the remaining 7% of the investors could not answer the question.This shows that a large number of investors are not familiar with derivatives.

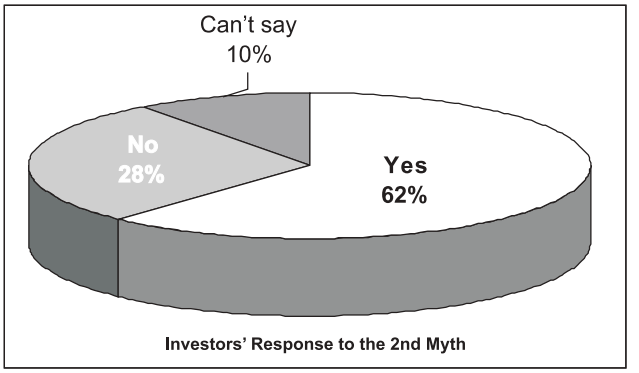
The Survey indicates that a big number of investors are not much familiar with derivatives and they think that derivatives are not easily understandable. Some respondents can't say that whether derivatives are new or old. It clearly indicates their awareness level about derivatives. Of course, derivatives are newly introduced in Indian market. But, derivatives are not new to the world. They have been around for years. A description of the first known options contract can be found in Aristotle's writings. He showed the world that philosophers can easily be rich if they like, but their ambition is of another sort. The first known options contracts was exercised some 2,500 years ago. Options are just one type of derivative instruments. Derivatives, as their name implies, are contracts that are based on or derived from some underlying asset, reference rate, or index etc. Most common financial derivatives can be classified as one, or as a combination of four types: forwards, futures, swaps and options that are based on interest rates or currencies etc.

There is the common impression that derivatives are very difficult to understand and that it is not possible to invest in them unless one has a Ph.D. in this area. There is certainly a huge terminological vocabulary that can be discouraging. But, in the majority of cases, these are investments like any other that one can buy at one price and sell at another. Some traders (technical investors) are completely unconcerned about the identity of their investments; all they need to follow is the price. Perhaps, they *are* complex rather than simple shares. But shares themselves are by no means simple, and the forces that move the equity markets are so complex that no-one yet understands them.

Most financial derivatives traded today are the "plain vanilla" variety - the simplest form of a financial instrument. But variants on the basic structures have given way to more sophisticated and complex financial derivatives that are much more difficult to measure, manage and understand. For those instruments, the measurement and control of risks can be far more complicated, creating the increased possibility of unforeseen losses.

Most of the newest innovations are designed to hedge complex risks in an effort to reduce future uncertainties and manage risks more effectively. But the newest innovations require a firm understanding of the trade-off of risks and rewards. To that end, derivatives users should establish a guiding set of principles to provide a framework for effectively managing and controlling financial derivative activities.

Myth Number 2: DERIVATIVES ARE PURELY SPECULATIVE AND HIGHLY LEVERAGED INSTRUMENTS



Investors' Response to the 2nd Myth

The survey found that 62% of the small investors are of the opinion that derivatives are purely speculative and highly leveraged instruments. 28% of the respondents are of the opinion that derivatives are not purely speculative and highly leveraged instruments. And the remaining 10% of the investors answered that they couldn't say. This shows that even those who are familiar with derivatives also believed that derivatives are speculative and highly leveraged instruments. Majority of investors misunderstand that derivatives are mainly used for speculative purpose. Investors ignore that the very important use of derivatives is in Hedging. Derivatives are mainly used for hedging and to avoid the risk involved in the underlying asset.

Put another way, the myth is that "derivatives" is a fancy name for gambling. Has speculative trading of derivative products fuelled the rapid growth in their use? Are derivatives used only to speculate on the direction of market price or interest rates or currency exchange rates etc? Of course not, indeed, the explosive use of financial derivative products in recent years was brought about by three primary forces: more volatile markets, deregulation, and new technologies.

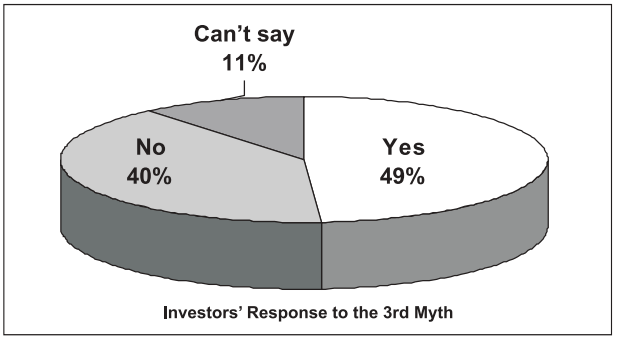
Take the simple foreign-exchange forward contract that obligates one counterparty to buy, and the other to sell, a fixed amount of currency at an agreed date in the future. By entering into a foreign-exchange forward contract, customers can balance the risk large movements in foreign-exchange rates that destroy, for example, the economic viability of their overseas projects. Similarly, both institutional and individual investors can protect their position by entering derivatives markets. Thus, derivatives were originally intended to be used to effectively hedge certain risks; and, in fact, that was the key that unlocked their explosive development.

Deregulation of financial markets and the arrival of powerful but inexpensive personal computers directed analysis of information and breaking down of risk into parts in new ways. To serve customers better, financial intermediaries offered an ever-increasing number of novel products designed to manage and control financial risks more effectively. New technologies quickened the pace of innovation and provided with superior methods for tracking and simulating their own derivatives portfolios.

Financial futures contracts were developed from simple forward agreements. Futures are similar to forwards, except that futures are standardized by exchange clearinghouses, and this facilitates anonymous trading in a more competitive and liquid market. In addition, futures contracts are marked to market daily, which greatly decreases counterparty risk, the risk that the other party to a transaction will be unable to meet its obligations on the maturity date.

Leverage is, simply, the ability of derivatives to soar 100% in a few days, when the underlying security has only risen by a far smaller amount (say 10%). There is nothing magical in gearing. Anyone who has a mortgage is geared to the property market. Let's take the property owner with a mortgage as an example. A person buys a house for $100,000; he puts up $10,000 and borrows $90,000 from the bank. Six months later, the house is sold for $150,000. He pays back $90,000 to the bank (let us ignore interest etc.) and keeps $60,000 - not bad for an original investment of just $10,000. The principle is exactly the same in many derivatives investments - big bang for a little buck.

Myth Number 3: ONLY LARGE ORGANIZATIONS/INVESTORS HAVE A PURPOSE FOR USING DERIVATIVES



According to the survey, 49% of the small investors are of the opinion that only large organizations/investors have a purpose for using derivatives. 40% of the respondents are of the opinion that not only large organizations/investors have a purpose for using derivatives. The remaining 11% of the investors couldn't answer the question.

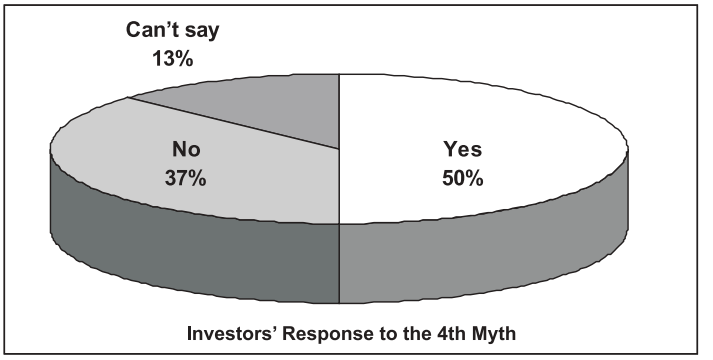
Of course, very large organizations/investors are the biggest users of derivative instruments. However, firms/investors of all sizes can benefit from them. By entering into derivatives contracts, one can lock in a guaranteed rate of return on investment portfolio and not be as concerned about market volatility.

The economic benefits of derivatives are not dependent on the size of the institution/investor trading them. The decision about whether to use derivatives should be driven, not by the company's size, but by its strategic objectives. The role of any risk-management strategy should be to ensure that the necessary funds are available to pursue value-enhancing investment opportunities. However, it is important that all users of derivatives, regardless of size, understand how their contracts are structured, the unique price and risk characteristics of those instruments, and how they will perform under stressful and volatile economic conditions. A prudent risk-management strategy that conforms to investment objectives and is complete with market simulations and stress tests is the most crucial prerequisite for using financial derivative products.

Securities and Exchange Board of India (SEBI) introduced on December 27, 2007 mini-contracts in the derivatives markets based on the Sensex and the Nifty indices to improve liquidity and increase investor participation for the index-based products. Mini-contracts are a fraction of normal derivatives contracts, and will help individual investors to hedge risks of a smaller portfolio. The small size of the contract would be attractive for retail investors as there would be comparatively lower capital outlay, lower trading costs, more precise hedging and flexible trading. NSE introduced futures and options contracts CNX NIFTY JUNIOR and CNX 100 indices for trading in F&O segment on June 1, 2007. The Bombay Stock Exchange (BSE) also launched the mini-contracts on the Sensex from January 2008.

Myth Number 4: FINANCIAL DERIVATIVES ARE SIMPLY THE LATEST RISK-MANAGEMENT FAD

According to the survey, 50% of the small investors are of the opinion that Financial Derivatives are simply the latest risk-management fad. 37% of the respondents are of the opinion that Financial Derivatives are not simply the latest risk-management fad. The remaining 13% of the investors were unable to answer the question.



Investors' Response to the 4th Myth

Trading on Financial derivatives is not the latest fashion; it is the latest innovation in the field of financial engineering. Financial derivatives are important tools that can help organizations/investors to meet their specific risk-management objectives. As is the case with all tools, it is important that the user understands the tool's intended function and that the necessary safety precautions be taken before the tool is put to use.

Financial derivatives can be useful tools in helping corporations/investors become more efficient and effective in meeting their risk-management objectives. But they can be dangerous when not used correctly or when used blindly. When financial derivatives are used improperly or without a plan, they can inflict pain by causing serious losses or by propelling the organization in the wrong direction where it is ill prepared for the future.

When used properly, financial derivatives can help organizations/investors to meet their risk-management objectives so that funds are available for making worthwhile investments. Again, a firm's decision to use derivatives should be driven by a risk-management strategy that is based on broader corporate objectives.

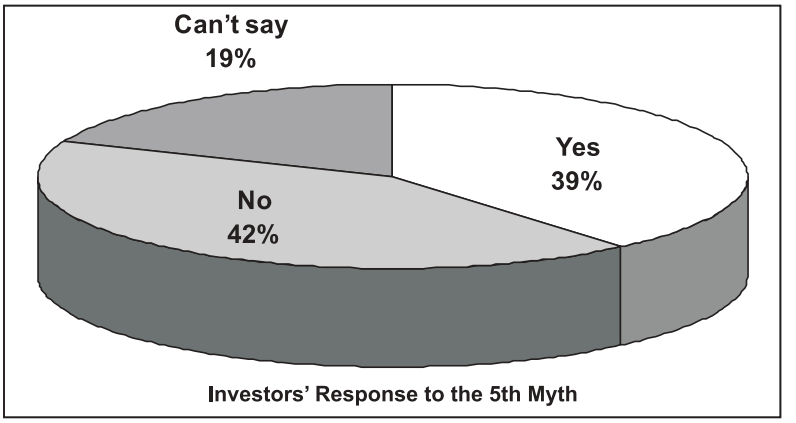
The most basic questions about a firm's risk-management strategy should be addressed: Which risks should be hedged and which should remain unhedged? What kinds of derivative instruments and trading strategies are most appropriate? How will those instruments perform if there is a large increase or decrease in price? How will those instruments perform if there are wild fluctuations in price?

Without a clearly defined risk-management strategy, use of financial derivatives can be dangerous. It can threaten the accomplishment of a firm's objectives and result in unsafe and unsound practices that could lead to the organization's insolvency. But when used wisely, financial derivatives can increase shareholder value by providing a means to better control a firm's risk exposures and cash flows.

Clearly, derivatives are here to stay. We are well on our way to truly global financial markets that will continue to develop new financial innovations to improve risk-management practices. Financial derivatives are not the latest risk-management fad; they are important tools for helping organizations/investors to better manage their risk exposures.

Myth Number 5: DERIVATIVES TAKE MONEY OUT OF PRODUCTIVE PROCESSES AND NEVER PUT BACK ANYTHING

According to the survey, 39% of the small investors are of the opinion that Financial Derivatives take money out of productive processes and never put anything back. 42% of the respondents are of the opinion that Financial Derivatives do not take money out of productive processes. The remaining 19% of the investors left the question unanswered. It is good to see that majority of the investors do not believe in this myth. It depicts that investors believe that if derivatives are used properly, it will be definitely beneficial for the user.



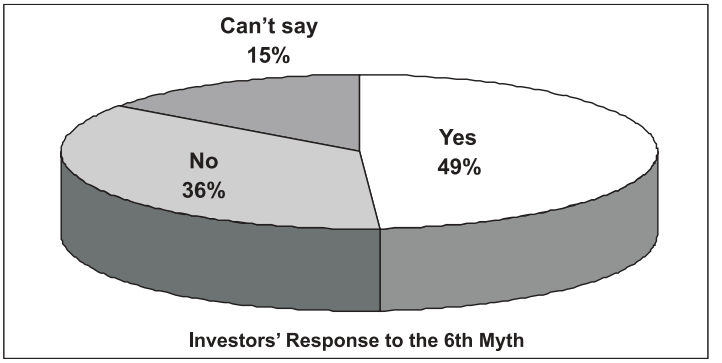
Investors' Response to the 5th Myth

Financial derivatives, by reducing uncertainties, make it possible for corporations to initiate productive activities that might not otherwise be pursued. For example, an Indian company may want to build a manufacturing facility in the United States but is concerned about the project's overall cost because of exchange-rate volatility between the Rupee and the Dollar. To ensure that the company will have the necessary cash available when it is needed for investment, the Indian manufacturer should devise a prudent risk-management strategy that is in harmony with its objective of building a manufacturing facility in the United States. As part of that strategy, the Indian firm should use financial derivatives to hedge against foreign-exchange risk. Derivatives used as a hedge can improve the management of cash flows at the individual firm level.

To ensure that productive activities are pursued, corporate finance and treasury groups should transform their operations from simply bean counting to activist financial risk management. They should integrate a clear set of risk-management goals and objectives into the organization's overall corporate strategy. The ultimate goal is to ensure that the organization has the necessary funds at its disposal to pursue investments that maximize shareholder value. Used properly, financial derivatives can help corporations to reduce uncertainties and promote more productive activities.

Myth Number 6: ONLY RISK-SEEKING ORGANIZATIONS/INVESTORS SHOULD USE DERIVATIVES

According to the survey, 49% of the small investors are of the opinion that only risk-seeking organizations/investors should use derivatives. 36% of the respondents are of the opinion that not only risk-seeking organizations/investors should use derivatives. The remaining 15% of the investors answered that they couldn't say. It is again sad to say that majority of investors believed that derivatives are only for risk seekers. In fact, derivatives are not for risk seekers but for risk avoiders. Those who have fear about price changes in future of their underlying asset will go for derivatives.

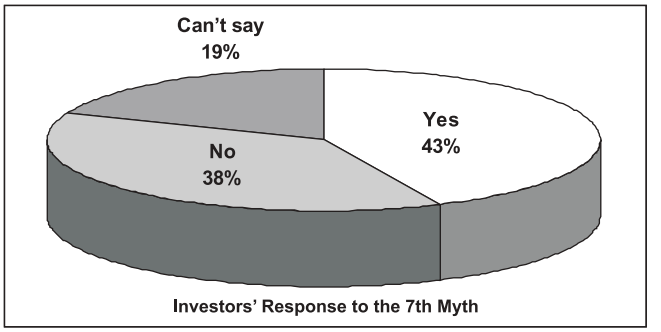


Investors' Response to the 6th Myth

Financial derivatives can be used in two ways: to hedge against unwanted risks or to *speculate* by taking a position in anticipation of a market movement. Organizations/Investors today can use financial derivatives to actively seek out specific risks and speculate on the direction of market price movements, or they can use derivatives to hedge against unwanted risks. Hence, it is not true that only risk-seeking institutions use derivatives. Indeed, organizations should use derivatives as part of their overall risk-management strategy for keeping those risks that they are comfortable managing and selling those that they do not want to others who are more willing to accept them. Even conservatively managed institutions can use derivatives to improve their cash-flow management to ensure that necessary funds are available to meet objectives. One could argue that organizations that refuse to use financial derivatives are at greater risk than those who use them.

When using financial derivatives, however, organizations/investors should be careful to use only those instruments that they understand and that fit best with their risk-management objective. It may be prudent to stay away from the more exotic instruments, unless the risk/reward tradeoffs are clearly understood by the firm's senior management/investor. Exotic contracts should not be used unless there is some obvious reason for doing so.

Myth Number 7: THE RISKS ASSOCIATED WITH FINANCIAL DERIVATIVES ARE NEW AND UNKNOWN



Investors' Response to the 7th Myth

The survey found that 43% of the small investors are of the opinion that the risks associated with Financial Derivatives are new and unknown. 38% of the respondents are of the opinion that the risks associated with Financial Derivatives are not new and unknown. And the remaining 19% of the investors did not answer the question.

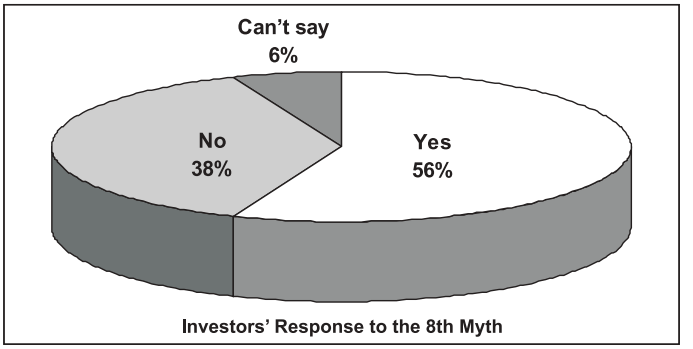
Derivatives are similar to other security options and have the same risks. The kinds of risks associated with derivatives are no different from those associated with traditional financial instruments, although they can be far more complex. There are credit risks, operating risks, market risks, and so on. Risks from derivatives originate with the customer/counterparty. With few exceptions, the risks are man-made, that is, they do not readily appear in nature. Many risks associated with derivatives are actually created by the dealers' customers or by their customers' customers. Those risks have been inherent in our nation's financial system since its inception.

Investors should view themselves as risk managers—blending their knowledge of financial markets with their needs to help themselves anticipate change and have the flexibility to pursue opportunities that maximize their success. They must be able to understand, measure and manage financial risks effectively.

The types of risks faced by corporations/investors today have not changed; rather, they have become more complex and interrelated. The increased complexity and volatility of the financial markets have paved the way for the growth of numerous financial innovations that can enhance returns relative to risk. But a thorough understanding of the new financial-engineering tools and their proper integration into their overall risk-management strategy and corporate philosophy can help turn volatility into profitability.

Risk management is not about the elimination of risk; it is about the management of risk: selectively choosing those risks an organization/investor is comfortable with and minimizing those that it does not want. Financial derivatives serve a useful purpose in fulfilling risk-management objectives. Through derivatives, risks from traditional instruments can be efficiently unbundled and managed independently. Used correctly, derivatives can save costs and increase returns.

Myth Number 8: DERIVATIVES TRADING IS UNSAFE AND RISKY



According to the survey, 56% of the small investors are of the opinion that derivatives' trading is an unsafe and risky. 38% of the respondents are of the opinion that derivatives' trading is not unsafe and risky. And remaining 6% of the investors answered can't say. This shows that a large number of investors were intimidated about derivatives trading. It clearly indicates that majority of the investors have fear of derivatives use and they feel derivatives themselves involved risk.

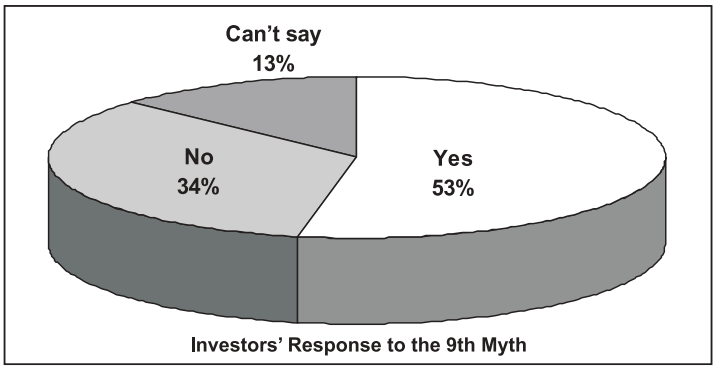
In general, every investment is risky. There is no strategy which is 100% risk-free, whether you invest on spot or derivatives market. It is not that derivatives are risky, but the strategy used for them might be risky; just as many share strategies are risky. For example, car driving can be either safe or risky, depending on who is driving. The majority of accidents are caused by drivers and not by the cars themselves. The danger comes from how a driver drives the car. It is the same with derivatives; intrinsically, derivatives are neither unsafe nor risky.

But in reality, derivatives also help to improve market efficiencies because risks can be isolated and sold to those who are willing to accept them at the least cost. Using derivatives breaks risk into pieces that can be managed independently. Investors can keep the risks they are most comfortable managing and transfer those they do not want to others who are more willing to accept them. From a market-oriented perspective, derivatives offer free trading of financial risks.

The viability of financial derivatives rests on the principle of comparative advantage, that is, the relative cost of holding specific risks. Whenever comparative advantages exist, trade can benefit all parties involved. Financial derivatives allow for the free trading of individual risk components.

Myth Number 9: DERIVATIVES TRADING INCREASES SYSTEMATIC RISKS

The survey found that 53% of the small investors are of the opinion that Derivatives trading increases Systemic Risks. *34%* of the respondents are of the opinion that Derivatives trading doesn't increase Systemic Risks. And remaining 13% of investors left the question unanswered.

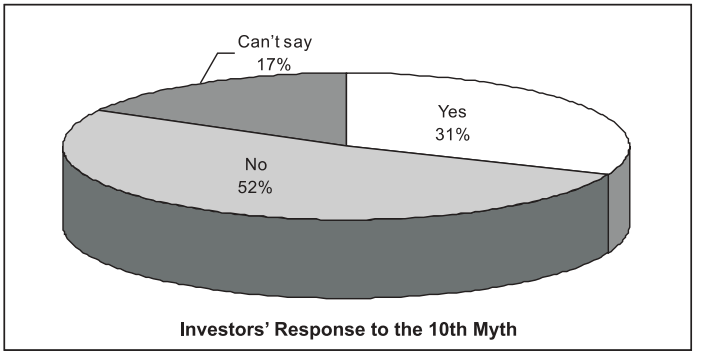


Investors' Response to the 9th Myth

Financial derivatives do not increase or cause increase in market risk. In fact, derivatives provide protection against unwanted risks though hedging mechanism. Furthermore, a major shock that would shake financial markets in the absence of derivatives would also affect financial markets in which the use of derivatives was widespread. But because the holders of various risks would be different, the impact would be different and presumably not as great because the holders of the risks should be better able to absorb potential losses.

There is no strong evidence that derivatives trading causes increase in market risk. In fact, there is no perfect reason for rise in market risk. Market itself is multifaceted and an indicator of multiple factors that prevail. Moreover, some of the studies proved that derivatives trading have no significant impact on the underlying market volatility from a larger perspective. Derivatives do not have any stabilising (or destabilising) effect by decreasing (or increasing) the volatility in any spot in the market.

Myth Number 10: BECAUSE OF THE RISKS ASSOCIATED WITH DERIVATIVES, REGULATORS SHOULD BAN THEIR USE



Investors' Response to the 10th Myth

The survey found that 25% of the small investors are of the opinion that because of the risks associated with derivatives, regulators should ban their use. 55% of the respondents are of the opinion that because of the risks associated with derivatives, regulators should not ban their use. The remaining 20% of investors answered that they could not say. It is good to see that more than 50% respondents did not believe in this myth and opposed the ban of derivatives. Even though most of the investors are not familiar with the use of derivatives, and think that derivatives are complex and risky, they oppose a ban on derivatives.

The problem is not derivatives but, it is the responsibility of a user to ensure that risks are effectively controlled and limited to levels that do not pose a serious threat to their investment position. Regulation is an ineffective substitute for sound risk management at the individual firm/user level. However, it is likely that derivatives have become so enmeshed in modern life that it is impossible to go back and remove them. The ban on any derivatives is unreasonable, ignorant of realities of the futures market, and possibly disastrous for the futures trade.

Regulators should emphasize more disclosure of derivatives positions in financial statements and be certain that institutions trading huge derivatives portfolios have adequate capital. In addition, because derivatives could have implications for the stability of the financial system, it is important that users maintain sound risk-management practices. Regulators should educate the investors to overcome their misconception on derivatives. SEBI has taken steps to create awareness, but it is not reaching the small retail investors effectively. It should issue guidelines that firms with substantial trading or derivatives activity should follow.

SUGGESTIONS & CONCLUSION

Believing the 10 myths presented here or believing just one or two of them could lead one to advocate legislative and

regulatory measures to restrict the use of derivatives. Derivatives-related disasters, such as the Orange County bankruptcy and the collapse of Barings have led to questions about the ability of individual derivatives participants to internally manage their trading operations. In addition, concerns have surfaced about the regulators' ability to detect and control potential derivatives losses.

But regulatory and legislative restrictions on derivatives activities are not the answer, primarily because standardized rules most likely would only impair one's ability to manage risk effectively. A better answer lies in greater reliance on market forces to control derivatives-related risk taking, together with more emphasis on government supervision, as opposed to regulation. The best regulations are those that guard against the misuse of derivatives, as opposed to those that severely restrict, or even ban, their use. Derivatives-related losses can typically be traced to one or more of the following causes: an overly speculative investment strategy, a misunderstanding of how derivatives reallocate risk, an ineffective internal risk-management audit function, and the absence of systems that simulate adverse market movements and help develop contingency solutions. To address those concerns, supervisory reforms should focus on increasing disclosure of derivatives holdings and the strategies underlying their use, appropriate capital adequacy standards, and sound risk-management guidelines.

For the most part, however, policymakers should leave derivatives alone. The development of derivatives was brought about by a need to isolate and hedge against specific risks. Derivatives offer a proven method of breaking risk into component pieces and managing those components independently. Almost every investor has a unique risk profile inherent in his investment portfolio and marketplace that can be better managed through derivatives trading. The freedom to manage risks effectively must not be taken away.

Ultimately, financial derivatives should be considered part of any investor's risk-management strategy to ensure that value-enhancing investment opportunities are pursued. Derivatives allow for the efficient transfer of financial risks and can help to ensure that value-enhancing opportunities will not be ignored. It is important that derivatives players fully understand the complexity of financial derivatives contracts and the accompanying risks. Users should be certain that they do not take unnecessary risks.

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