RESEARCH ARTICLE OPEN ACCESS

Exploring the Importance of Financial Risk Management in Derivatives Market

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Abstract-

The Paper "Exploring the importance of Financial Risk Management in Derivatives Market" focuses on theconceptofderivatives,their importance,andtheroleoffinancialriskanalysisin thederivativesmarket. Derivativesarefinancialinstrumentswhosevaluedependsonunderlyingvariables, oftenlinkedtotradedassets.With the rise of globalization and liberalization, the demand for international currencies and financialinstruments has surged, leading to increased financial risks. Financial derivatives, including futures, optionsswaps, and more, are created to manage these risks. They serve purposes like hedging, speculation, and risktransfer.Riskanalysis iscrucialduetothecomplexity,leverage, andvolatilityofderivatives.

The discussion highlights the complexity of derivatives, including their diverse forms and purposes. The risksassociated with derivatives include market risk, counterparty risk, liquidity risk, interconnection risk, strategicrisk,reputationrisk, interestraterisk,transactionrisk,socio-politicalrisk, andcountryrisk

Keywords–Derivatives,RiskAnalysis,Types ofrisks

Objectives-

1. TostudytheImportanceofriskmanagementinDerivativesmarket
2. TostudytheriskassociatedwithDerivativesmarket
3. TostudydifferenttypesofrisksinDerivativesmarket
4. Tostudytheawarenessamonginvestors.

ResearchDesign:

Sr.no	Particular	Specification
1	Topic	Exploring the importance of Financial Risk Management inDerivativesMarket
2	Objectives	1. TostudytheImportanceofriskmanagementinDerivativesmarket 2. TostudytheriskassociatedwithDerivativesmarket 3. TostudydifferenttypesofrisksinDerivativesmarket
3	Hypothesis	Ifwedonot dotheriskmanagement thenwemay facefinanciallosses
4	Populationofstudy	15000
5	Samplingarea	Nashik
6	Sample unit	Students
7	Samplesize	42
8	Samplingmethod	Survey
9	Typeofresearch	Descriptive
10	Periodconsideredfor dataanalysis	5days
11	Contactmethod	SnowballMethod
12	Data analysismethod	Survey
13	Hypothesistestingtool	
14	Statisticaltooltobeused	Pie chart

Introduction:

Derivatives

The Securities Contracts (Regulation) Act 1956 defines ‘derivative’ as under; “Derivative” includes Securityderived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract fordifferencesoranyotherformofsecurity.

A derivative can be defined as a financial instrument whose value depends on (or derives from) the values ofother,morebasic,underlyingvariables.Veryoftenthevariablesunderlyingderivativesarethepricesoftradedassets.

In the past decade, the volume of international trade and trade has increased exponentially with the effect of thewave of globalization and liberalization. As a result, the global demand for international currencies and financialinstruments has increased significantly. In this case, changes in interest rates, exchange rates and market pricesin different financial markets increase the financial risk of the business world. Therefore, to manage these risks;Newfinancialinstruments, oftencalledfinancialderivatives,arecreatedinthefinancial market.
Derivativesmaybeusedforhedging,speculationor discussion.
Theyplayan importantrolein transferringvariousbusinessrisksfromoneorganizationtoanother.
Derivatives are special instruments that benefit from the performance of the underlying assets over time; such asproducts,contracts,products. Derivativesaretradedbetweentwoparties (calledcounterparties)

Financialderivativesarefinancialinstrumentsthatarelinkedtoaparticularfinancialinstrument orindicatororcommoditythroughaparticularrisk. Financialluckcanchangefinancially.thelawofthe market itself. Transactions in financial derivatives should be considered separately, not ascomponents of the price of changes they may affect. The value of financial derivatives is derivedfrom the value of the underlying asset, such as an asset or index. Unlike debt instruments, theseinstrumentsrequirenoupfrontpayment anddonotgeneratecapital gains.
Financial derivatives are used for many purposes, including risk management, hedging, competitivetradingandspeculation.
Financial derivatives expose trading parties to financial risk (including interest rate risk, currency risk, commodityandcommodityriskandcreditrisk,etc.).Yes, thereisnoneedtoexchangeimportant items oritems.
The risk inherent in a derivative contract can be changed by trading on the contract itself (such as an option) or bycreatinganewcontract thatiscalculatedwithriskfactorstooffsettheassociatedriskfactors.

FinancialRiskAnalysis

Financial Risk Analysis is the process of using data analysis, statistical methods and various methods in order toevaluateandmanagevarious types offinancialrisks facedbyindividuals, companiesandorganizations.
These risks arise from market uncertainty, financial fluctuations, changes and other factors that can affectfinancial stability and profitability. Financial risk analysis involves identifying, measuring, modelling andmitigating these risks to make informed decisions and optimize risk products. Risk management plays animportantrole ininvestmentstrategyandoverallfinancialdecisionmaking.

RiksManagement–
Risk Management is "the use of management methods, rules, procedures and practices for content creation,definition, analysis, measurement, operation, maintenance and communication". It is an iterative process andwith each cycle management develops a deeper understanding of risks and their impact, leading to furtherimprovementintheorganization.
Risk management should be applied at all levels of the University, including specific tasks, decisions and riskrecognition areas in the context of strategies and operations. Risk is "the probability that something will occurthat will affect the target". That's why it's important to understand the purpose of your school, workplace, programorjobbefore attemptingtoassessrisk.

Financial derivatives can take many forms and forms, including futures, futures, swaps, options, debt models and deposits, and many other combinations out there. Some are traded on the stock exchange, whereas others areprivatelynegotiatedtransactions.

Derivatives have become an important part of the financial market as they serve various commercial purposes.Derivatives can be used to reduce business risk, expand product offerings to customers, trade for profit, managecapitalandfinances,andshifttherisk-pricebalance ofaprojectortheentire balancesheet.
Themost commonderivativesincludefutures,options,contractsfordifference(CFDs)andswaps.

Thesearethemain risksassociatedwithderivatives:

MarketRisk

Market Risk refers to investment risk. Investors begin to make decisions and work on thinking, analysis or otherthingsthatwillenablethemtodrawsomeconclusionsabouttheeffectiveness ofinvestments.
While it's not a perfect way to hedge against business risk as everyone is at risk from changes in the market, understanding how derivatives are affected by market volatility will help investors make decisions. In fact, animportant part of investment analysis is determining the probability that an investment will be profitable and evaluatingtheinvestment lossrelative tothenatural increase intherisk/returnratiooftheinvestment opportunity.

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Counterparty Risk

Counterpartyrisk,orcounterpartycreditrisk,ariseswhenapartyinvolvedinderivatives(suchasabuyer,seller,orsupplier)defaults. Thisriskishigherwithover-the counter (OTC)trading,whichislessregulatedthantraditionalexchanges.

A regular trading exchange helps grease contract performance by taking periphery deposits that are acclimateddaily through the mark- to- request process. the mark- to- request process makes pricing derivations more likelyto directly reflect current value. dealers can manage counterparty threat by only using dealers they know andconsidersecure.

Liquidityrisk

Liquidityriskisused

forinvestorswhoplantoclosetheirderivativeproductsbeforematurity.Ingeneral,liquidityriskreferstoacompany'sabilitytomeeti

tsdebtswithoutgoingthroughmajorbankruptcy.

Tomeasureriskexposure,investorscompareshort-termassetswith thecompany'scurrentassets.

Lowrisk
companies are able to mobilize resources quickly to avoid losses. Liquidity risk is also important for investors who want to learn about stocks. These investors should consider whether it is difficult to clean up the business or ifthe competitive demandisalreadysogreat thatit meansahugeprice.

InterconnectionRisk

Interconnection Risk refers to how the interaction between various instruments and investors can affect the traders' trading in certain instruments. Some analysts worry that a problem with one party in the derivatives market, suchasalargebankbeingatrader,could leadtoavolatilityor snowballeffectthatwouldaffectthestabilityof allfinancialtransactions.

StrategicRisk

Strategic Risk is income or capital risk resulting from poor business decisions or misapplication of those decisions. This risk is a function of the relationship between the organization's business goals, the business strategies designed to achieve these goals, the resources used to achieve these goals, and optimization. Resources required for business strategy include productive and intangible resources. They include communications, operations, supply chain, management and capacity. Business risk can arise when the bank's business is poorly designed or optimized for the following reasons: inability to respond to changes in the business, changes in management priorities,lack of coordination and communication to support outputs, or inability to do so appropriately. finance, peopleandsystemsinfrastructure.

Proper strategic planning and a consistent approach to business are crucial to the success of a product or business.

ReputationRisk

Reputation Risk Reputation risk is income or capital risk arising from negative public opinion. This affects the organization's ability to create new relationships or services or continue to provide services to existing relationships. This risk could expose the company to lawsuits, bankruptcy or damage to its reputation. Brand risk existsthroughouttheorganizationandincludes adutyofcareindealingwithcustomersandcommunities. Thisriskispresentinactivities suchasassetmanagementand commercialorganisations.

Interestraterisk

Interest rate risk is the risk to income or capital due to changes in interest rates. The economic (capital) perspective focuses on the value of banks in today's interest rate environment and the sensitivity of this value to changes in interest rates. Interest rate risk arises from the difference between the interest period and the cash flow period (recurrencerisk);changesintherelationships betweendifferentcurrenciesaffectingthebankingsector(keyrisk) ;andbychangingsocial interestaccordingtothedifference.horizons(yieldcurverisks);andinterest-linked options embedded in bank products (option risk). The assessment of the interest rate should consider the revenue potential useful for changes in interest rates, as well as the impact of illiquid hedging strategies or products. When theeconomyisself-regulating,theimpactison thebusinesssector ratherthan thebusinesssector.

TransactionRisk

Transaction Risk is income or capital risk arising from problems with the delivery of services or products. This risk is a function of internal control, information systems, employee integrity and business processes. Marketingrisks exist in all products and services. Derivatives can be risky due to their complexity and continued volatility.Thefunctionsdiscussedinthenextsectionrelatetosupportingobjects andrelatedprocesses.

Socio-PoliticalRisk:

It refers to the impact of the economy on political and social events such as protest, war, epidemic or election. Such events, real or expected, affect the attitude of investors towards the market and therefore the system. Stock prices fluctuate wildly. In addition, certain events may cause significant distortions in financial markets, exposinginvestmentstoadditional risks.

CountryRisk:

May be related to foreign countries that have invested. For example, it may reflect a change in government, changes inpolicy(suchas theeconomy,health, retirement),conflict,orwar.
Any of these events can hinder investment in the country. For example, a country's economy may develop or a companymayfinditselfinanationwidestruggle.

Financialriskassessment playsanimportant roleinthederivativesmarketforthefollowing reasons:

1. **Risk Assessment:** Financial instruments are complex financial instruments whose value depends on the assetor measurement. Financial risk assessment helps assess the risks associated with these instruments. Using a varietyofmodels andtechniques,analystscanidentifyrisksarisingfromchanges inprices,changesininterestrates ,orothereconomicfactorsthatmayaffectthecostofgoods.

2. **Knowledgemanagement**:

Many investors and financial institutions use tools to manage their portfolios and prevent investment losses. Riskanalysisprovidesinsightintohowderivativesperformindifferentmarketconditions,allowingbusinessmana gers to make informed decisions about the risk they are exposed to and create strategies that balance risk and return.

3. RegulatoryCompliance:

Thederivativesmarketissubjecttovariousregulationsdesignedtoensurefinancialstabilityandtransparency.Financialriskanalysishelpsmeet these requirementsbyprovidingtoolstoaccuratelymeasureandreportrisk.

4. **StressAnalysis**:

Financial markets may experience serious or stressful situations. Risk analysis allows business participants to simulate and analyze how profits and resources will perform in adverse situations. This will help to evaluate the datacollectedandmake thenecessaryarrangementstocontrolinvestment losses.

5. Counterpartyrisk:

In thederivatives market, counterpartyriskrefers totheriskofdefaultbyoneparty.Riskanalysis helpsassess thecredibilityofpartners,allowingparticipantstomanageandmitigaterisks.

6. **Valuation**:

Accuratevaluationofderivatives isimportantforpricing,tradingandreportingpurposes.
Risk analysis provides tools for calculating fair value and modeling potential changes in value based on differentmarket conditions.

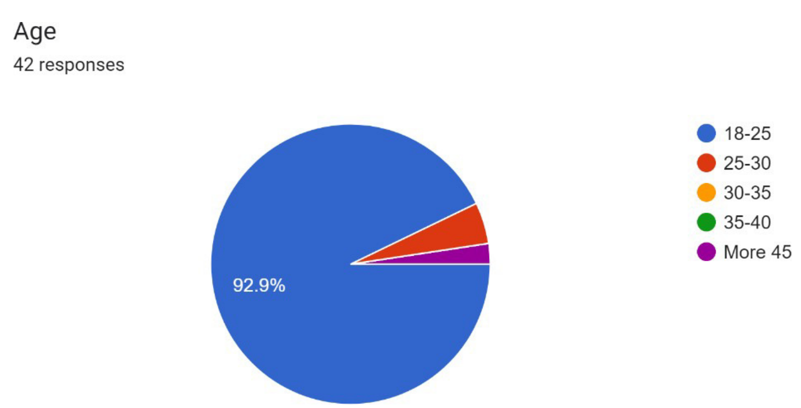
7. **Decisions**:

Investors, investors and risk managers use financial risk when making decisions about entering or exiting a derivativeposition. Thesestatisticsgiveanideaofthepotentialgainsandlossesofdifferenttradingstrategies.

8. **UnderstandingtheMarket**:Thederivativesmarketcanbevolatileand complex.
Risk analysis helps market participants understand the dynamics of these markets by analyzing historical data andidentifyingtrends,patternsandrelationships.

Insummary,financialriskanalysisisessentialformanagingandreducingriskinderivativesmarkets,complyingwithregulations, makinginformeddecisions,ensuringsecurityandfinancialperformance.

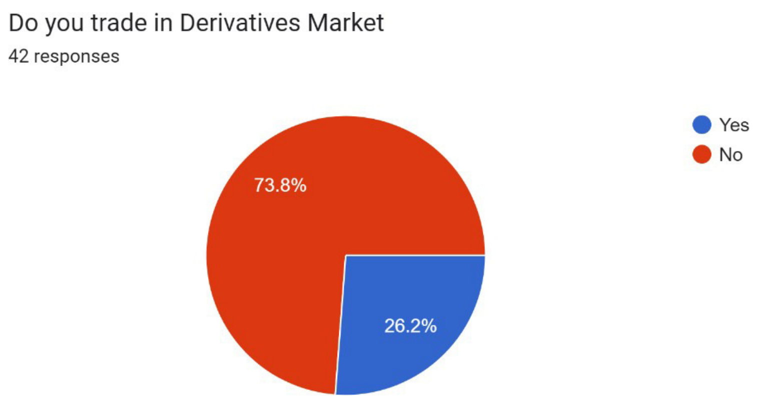
Analysis:



42Responses(Self-Research)Interpretation:

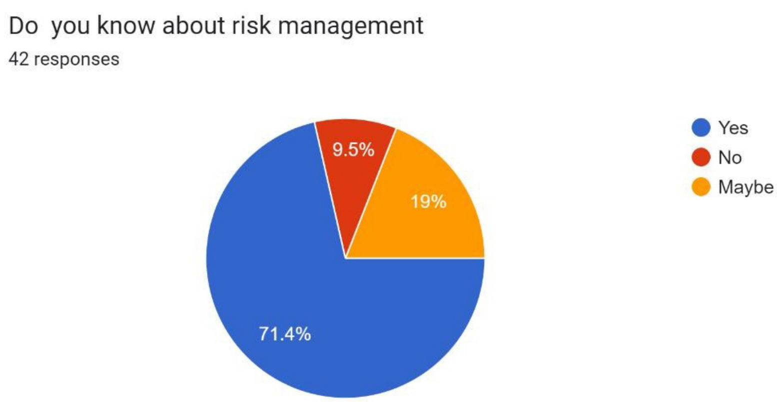
92.9%respondsarefromagegroupbetween18-25 years,whichistheidealtargetedareaofourresearch.
4.8% responds are from age group between 25-30

years2.4%respondsarefromagegroupabove45years



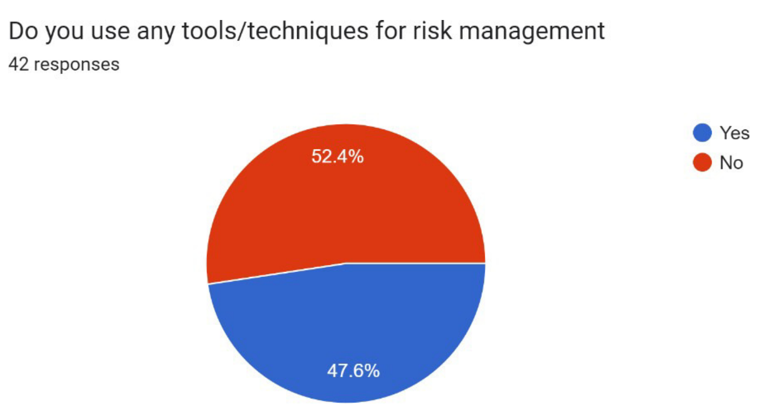
42Responses(Self-Research)Interpretation:

Outof42responses73.8%peopletradein thederivativesmarketand26.2%peopledonottradein derivativesmarket



42Responses(Self-Research)Interpretation:

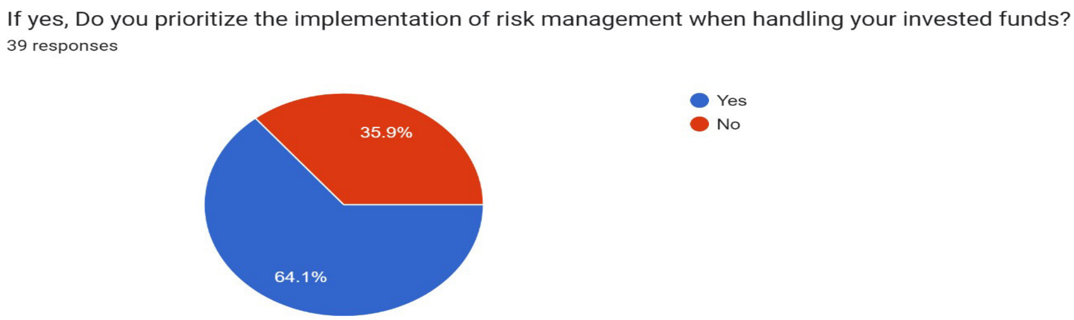
Outof42responses71.4%peopleknowabouttheriskmanagementinthederivativesmarket
Also 19% people out of 42 people may know about the risk management and rest of the people do not knowabouttheriskmanagement.



42Responses(Self-Research)Interpretation:

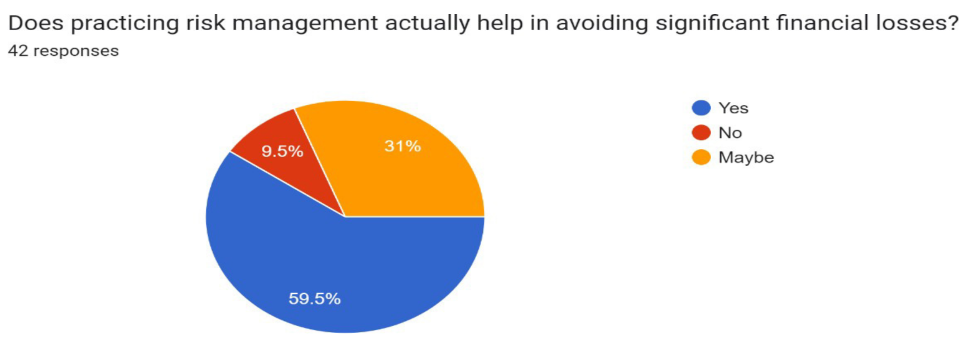
Out of all the responses 52.4% people do not use any tools or techniques for risk management and the remaining47.6%peopleusethetools ortechniques forriskmanagement

Itisseen thatmostofthepeopledonotusethetoolsortechniquesfor riskmanagement



39 Responses(Self-Research)Interpretation:

It is seen that out of all the responses 64.1% prioritize the implementation of risk management at the time ofhandlingtheinvestedfundsandtherestpeopledonotfeeltoprioritizetheimplementationofriskmanagement.



42Responses(Self-Research)Interpretation:

It is seen that most of the people i.e., 59.5% of the total responses have actually avoided significant financiallosses bypracticingtheriskmanagement.

Use ofriskmanagementtechniquesareindependentoftheirage but

Age	Yes	No
18-25	15	5
25-30	5	1
30-35	6	2
35-40	6	1
More45	0	1

Conclusion:

In conclusion, the paper titled "Exploring the Importance of Financial Risk Management in theDerivatives Market" highlights the role of derivatives and their significance, along with the criticalfunction of financial risk analysis in this market. Financial derivatives serve to manage risks arisingfrom globalization, offering tools like futures, options, and swaps. The complexity and volatility ofderivatives underscore the need for risk analysis. This analysis aids in risk assessment, decision-making,compliance,stresstesting,andcounterpartyevaluation.Ultimately,financialriskanalysisispivotal in navigating the complexities of the derivatives market, ensuring prudent risk managementandregulatoryadherence.

Findings:

- **Byusingriskmanagementtechniques,59.5%ofallrespondershave greatlyreducedfinanciallosses.**
- **When handling the invested funds, risk management implementation is prioritized by 64.1% ofrespondents outofallresponses.**
- **Outof42responses, 71.4%ofrespondentsareawareofthederivativesmarket'sriskmanagement.**
- **73.8% of respondents—outof42—saidtheytradeinthederivativesmarket.**
- **Intheend,financialriskanalysisisessentialfornavigating thederivativesmarket'scomplexity andguaranteeingresponsiblerisk managementand regulatorycompliance.**
- **Market risk, counterparty risk, liquidity risk, connectivity risk, strategic risk, reputation risk,interestraterisk,transactionrisk,socio-politicalrisk,andnationriskarethekey hazardsconnectedwith derivatives markets.**

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