

# THE EVOLUTION OF PROJECT FINANCE IN EMERGING MARKETS: OPPORTUNITIES AND RISK MITIGATION TECHNIQUES AT KESORAM INDUSTRIES LIMITED

<sup>1</sup> S. Priyanka, <sup>2</sup> Komalla Manisha

<sup>1</sup> Associate Professor, <sup>2</sup> MBA Student

Department of MBA

Sree Chaitanya College of Engineering, Karimnagar

## ABSTRACT

Project finance has emerged as a vital mechanism for funding large-scale infrastructure, energy, transportation, telecommunications, and industrial projects in emerging markets. Over the past few decades, the evolution of project finance has been driven by increasing economic development, globalization, privatization initiatives, and the growing need for infrastructure investment. Unlike traditional corporate finance, project finance relies primarily on the cash flows generated by the project itself, making it an attractive financing option for governments and private investors seeking to undertake capital-intensive ventures while limiting financial exposure.

Emerging markets offer significant opportunities for project finance due to rapid urbanization, industrial expansion, rising energy demand, and supportive government policies. Public-Private Partnerships (PPPs), foreign direct investment (FDI), and multilateral financial institutions have played a crucial role in facilitating project financing activities in these regions. Sectors such as renewable energy, transportation infrastructure, smart cities, and digital connectivity have become key areas attracting substantial investments.

However, project finance in emerging markets is accompanied by numerous risks, including political instability, regulatory uncertainty, currency fluctuations, construction delays, environmental concerns, and credit risks. To address these challenges, investors and financial institutions employ various risk mitigation techniques such as political risk insurance, contractual safeguards, hedging instruments, guarantees from multilateral agencies, comprehensive due diligence, and diversified funding structures. Effective risk allocation among stakeholders is also essential for ensuring project success and financial sustainability.

## I. INTRODUCTION PROJECT FINANCE

**Project finance** is the long term financing of infrastructure and industrial projects based upon the projected cash flows of the project rather than the balance sheets of the project sponsors. Usually, a project financing structure involves a number of equity investors, known as **sponsors**, as well as a **syndicate** of banks that provide loans to the operation. The loans are most commonly **non-recourse loans**, which are secured by the project assets and paid entirely from project cash flow, rather than from the general assets or creditworthiness of the project sponsors, a decision in part supported by financial modeling. The financing is typically secured by all of the project assets, including the revenue-producing contracts. Project lenders are given a lien on all of these assets, and are able to assume control of a project

if the project company has difficulties complying with the loan terms.

Generally, a special purpose entity is created for each project, thereby shielding other assets owned by a project sponsor from the detrimental effects of a project failure. As a special purpose entity, the project company has no assets other than the project. Capital contribution commitments by the owners of the project company are sometimes necessary to ensure that the project is financially sound. Project finance is often more complicated than alternative financing methods. Traditionally, project financing has been most commonly used in the mining, transportation, telecommunication and public utility industries. More recently, particularly in Europe, project financing principles have been applied to public infrastructure under public-private partnerships (PPP) or, in the UK, Private Finance Initiative (PFI) transactions.



Risk identification and allocation is a key component of project finance. A project may be subject to a number of technical, environmental, economic and political risks, particularly in developing countries and emerging markets. Financial institutions and project sponsors may conclude that the risks inherent in project development and operation are unacceptable (unfinanceable). To cope with these risks, project sponsors in these industries (such as power plants or railway lines) are generally completed by a number of specialist companies operating in a contractual network with each other that allocates risk in a way that allows financing to take place. The various patterns of implementation are sometimes referred to as "project delivery methods." The financing of these projects must also be distributed among multiple parties, so as to distribute the risk associated with the project while simultaneously ensuring profits for each party involved.

A riskier or more expensive project may require **limited recourse financing** secured by a surety from sponsors. A complex project finance structure may incorporate corporate finance, securitization, options, insurance provisions or other types of collateral enhancement to mitigate unallocated risk.

Project finance shares many characteristics with maritime finance and aircraft finance; however, the latter two are more specialized fields.

#### **NEED FOR STUDY**

The study on "The Evolution of Project Finance in Emerging Markets: Opportunities and Risk Mitigation Techniques" is essential because project finance has become a key driver of infrastructure development and economic growth in emerging economies. Rapid urbanization, industrialization, and increasing demand for public services require substantial investments, which often exceed the financial capacity of governments alone. Project finance provides an effective mechanism to mobilize private and public capital for large-scale development projects.

Emerging markets present significant investment opportunities due to their expanding economies and growing infrastructure needs. However, these markets are often characterized by political

uncertainty, regulatory changes, currency volatility, and operational challenges that can affect project success. Understanding these risks and the methods used to mitigate them is crucial for investors, lenders, project sponsors, and policymakers.

The study is needed to evaluate how project finance has evolved over time, identify emerging trends and opportunities, and examine the effectiveness of various risk management techniques. It also helps in understanding the role of Public-Private Partnerships (PPPs), international financial institutions, and government policies in facilitating successful project implementation.

#### **Objectives of Project financial management:**

- To examine the concept and evolution of project finance and its growing importance in emerging market economies.
- To analyze the role of project finance in infrastructure and economic development across emerging markets.
- To identify the major sectors attracting project finance investments, such as energy, transportation, telecommunications, and urban infrastructure.
- To assess the opportunities available in emerging markets for project sponsors, investors, financial institutions, and governments.
- To evaluate the various risks associated with project finance projects, including political, financial, operational, legal, and environmental risks.
- To study the impact of regulatory and institutional frameworks on the success of project finance initiatives in emerging economies.
- To examine the risk mitigation techniques employed in project finance, such as insurance, guarantees, hedging instruments, and contractual agreements.
- To analyze the role of Public-Private Partnerships (PPPs) in promoting project finance and infrastructure development.



- To evaluate the contribution of multilateral financial institutions and foreign direct investment (FDI) in supporting project financing activities.
- To provide recommendations for improving project finance practices and strengthening risk management strategies in emerging markets.
- To assess the effectiveness of current project finance structures in ensuring project viability and long-term sustainability.
- To understand the relationship between project finance and sustainable economic growth in developing and emerging economies.

## II. RESEARCH METHODOLOGY

### RESEARCH DESIGN

This is a systematic way to solve the research problem and it is important component for the study without which researches may not be able to obtain the format. A research design is the arrangement of conditions for collection and analysis of data in a manager that aims to combine for collection and analysis of data relevance to the research purpose with economy in procedure.

### MEANING OF RESEARCH DESIGN

The formidable problem that follows the task of defining the research problem is the preparation of design of the research project, popularly known as the research design, decision regarding what, where, when, how much, by what means concerning an inquiry of a research study constitute a research design. A research design is the arrangement of conditions for collection and analysis of data in a manager that aims to combine for collection and analysis of data relevance to the research purpose with economy in procedure.

### SOURCES OF DATA

Data we collected based on two sources.

- Primary data.
- Secondary data.

#### Primary data

The Primary data are those information's, which are collected afresh and for the first time, and thus happen to be original in character.

#### Secondary Data:

The Secondary data are those which have already been collected by some other agency and which have already been processed. The sources of Secondary data are Annual Reports, browsing Internet, through magazines.

1. It includes data gathered from the annual reports of Kesoram.
2. Articles are collected from official website of Kesoram.

### LIMITATIONS OF FINANCIAL STATEMENT:

1. Limited availability of comprehensive project finance data.
2. Dependence on secondary sources such as reports, journals, and publications.
3. Study restricted mainly to emerging market economies.
4. Differences in economic and regulatory environments across countries.
5. Limited access to confidential project agreements and financial information.
6. Time constraints affecting the depth of analysis.
7. Findings may not be applicable to all industries and sectors.
8. Frequent changes in government policies and regulations.
9. Political and economic uncertainties may influence project outcomes.
10. Limited scope for primary data collection through surveys or interviews.
11. Currency fluctuations and inflation may affect project finance performance.
12. Rapid technological and environmental changes are not fully covered.
13. Variations in legal and institutional frameworks among emerging markets.
14. Risk assessment may differ from project to project.
15. The study focuses on general trends and may not capture all project-specific factors.

## III. LITERATURE REVIEW

### INTRODUCTION

Project financing is an innovative and timely financing technique that has been used on many high-profile corporate projects, including Euro Disneyland and the Eurotunnel. Employing a

Carefully engineered financing mix, it has long been used to fund large-scale natural resource projects, from pipelines and refineries to electric-generating facilities and hydro-electric projects. Increasingly, project financing is emerging as the preferred alternative to conventional methods of financing infrastructure and other large-scale projects worldwide.

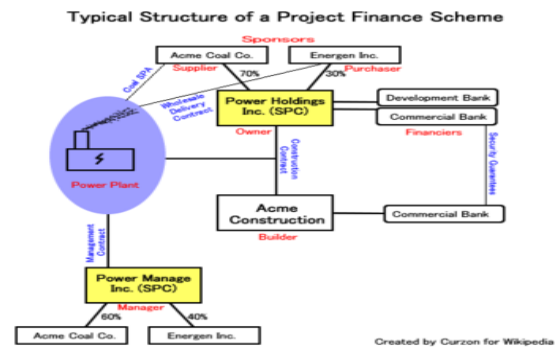
Project Financing discipline includes understanding the rationale for project financing, how to prepare the financial plan, assess the risks, design the financing mix, and raise the funds. In addition, one must understand the cogent analyses of why some project financing plans have succeeded while others have failed. A knowledge-base is required regarding the design of contractual arrangements to support project financing; issues for the host government legislative provisions, public/private infrastructure partnerships, public/private financing structures; credit requirements of lenders, and how to determine the project's borrowing capacity; how to prepare cash flow projections and use them to measure expected rates of return; tax and accounting considerations; and analytical techniques to validate the project's feasibility

Project finance is finance for a particular project, such as a mine, toll road, railway, pipeline, power station, ship, hospital or prison, which is repaid from the cash-flow of that project. Project finance is different from traditional forms of finance because the financier principally looks to the assets and revenue of the project in order to secure and service the loan. In contrast to an ordinary borrowing situation, in a project financing the financier usually has little or no recourse to the non-project assets of the borrower or the sponsors of the project. In this situation, the credit risk associated with the borrower is not as important as in an ordinary loan transaction; what is most important is the identification, analysis, allocation and management of every risk associated with the project.

The purpose of this paper is to explain, in a brief and general way, the manner in which risks are approached by financiers in a project finance transaction. Such risk minimization lies at the heart of project finance.

In a no recourse or limited recourse project financing, the risks for a financier are great. Since the loan can only be repaid when the project is operational, if a major part of the project fails, the financiers are likely to lose a substantial amount of money. The assets that remain are usually highly specialized and possibly in a remote location. If saleable, they may have little value outside the project. Therefore, it is not surprising that financiers, and their advisers, go to substantial efforts to ensure that the risks associated with the project are reduced or eliminated as far as possible. It is also not surprising that because of the risks involved, the cost of such finance is generally higher and it is more time consuming for such finance to be provided.

**Basic scheme**



**Hypothetical project finance scheme**

Acme Coal Co. imports coal. Energem Inc. supplies energy to consumers. The two companies agree to build a power plant to accomplish their respective goals. Typically, the first step would be to sign a memorandum of understanding to set out the intentions of the two parties. This would be followed by an agreement to form a joint venture.

Acme Coal and Energem form an SPC (Special Purpose Corporation) called Power Holdings Inc. and divide the shares between them according to their contributions. Acme Coal, being more established, contributes more capital and takes 70% of the shares. Energem is a smaller company and takes the remaining 30%. The new company has no assets.

Power Holdings then signs a construction contract with Acme Construction to build a power plant. Acme Construction is an affiliate of Acme Coal and the only company with the know-how to construct a power plant in accordance with Acme's delivery specification.



A power plant can cost hundreds of millions of dollars. To pay Acme Construction, Power Holdings receives financing from a development bank and a commercial bank. These banks provide a guarantee to Acme Construction's financier that the company can pay for the completion of construction. Payment for construction is generally paid as such: 10% up front, 10% midway through construction, 10% shortly before completion, and 70% upon transfer of title to Power Holdings, which becomes the owner of the power plant.

Acme Coal and Energen form Power Manage Inc., another SPC, to manage the facility. The ultimate purpose of the two SPCs (Power Holding and Power Manage) is primarily to protect Acme Coal and Energen. If a disaster happens at the plant, prospective plaintiffs cannot sue Acme Coal or Energen and target their assets because neither company owns or operates the plant.

A Sale and Purchase Agreement (SPA) between Power Manage and Acme Coal supplies raw materials to the power plant. Electricity is then delivered to Energen using a wholesale delivery contract. The cashflow of both Acme Coal and Energen from this transaction will be used to repay the financiers.

### **Complicating factors**

The above is a simple explanation which does not cover the mining, shipping, and delivery contracts involved in importing the coal (which in itself could be more complex than the financing scheme), nor the contracts for delivering the power to consumers. In developing countries, it is not unusual for one or more government entities to be the primary consumers of the project, undertaking the "last mile distribution" to the consuming population. The relevant purchase agreements between the government agencies and the project may contain clauses guaranteeing a minimum offtake and thereby guarantee a certain level of revenues. In other sectors including road transportation, the government may toll the roads and collect the revenues, while providing a guaranteed annual sum (along with clearly specified upside and downside conditions) to the project. This serves to minimise or eliminate the

risks associated with traffic demand for the project investors and the lenders.

Minority owners of a project may wish to use "off-balance-sheet" financing, in which they disclose their participation in the project as an investment, and excludes the debt from financial statements by disclosing it as a footnote related to the investment. In the United States, this eligibility is determined by the Financial Accounting Standards Board. Many projects in developing countries must also be covered with war risk insurance, which covers acts of hostile attack, derelict mines and torpedoes, and civil unrest which are not generally included in "standard" insurance policies. Today, some altered policies that include terrorism are called *Terrorism Insurance* or *Political Risk Insurance*. In many cases, an outside insurer will issue a performance bond to guarantee timely completion of the project by the contractor.

Publicly-funded projects may also use additional financing methods such as tax increment financing or Private Finance Initiative (PFI). Such projects are often governed by a Capital Improvement Plan which adds certain auditing capabilities and restrictions to the process.

### **Types of risks**

Of course, every project is different and it is not possible to compile an exhaustive list of risks or to rank them in order of priority. What is a major risk for one project may be quite minor for another. In a vacuum, one can just discuss the risks that are common to most projects and possible avenues for minimising them. However, it is helpful to categorise the risks according to the phases of the project within which they may arise: (1) the design and construction phase; (2) the operation phase; or (3) either phase. It is useful to divide the project in this way when looking at risks because the nature and the allocation of risks usually change between the construction phase and the operation phase.

#### **1. Construction phase risk - Completion risk**

Completion risk allocation is a vital part of the risk allocation of any project. This phase carries the greatest risk for the financier. Construction carries the danger that the project will not be completed on time, on budget or at all



because of technical, labour, and other construction difficulties. Such delays or cost increases may delay loan repayments and cause interest and debt to accumulate. They may also jeopardise contracts for the sale of the project's output and supply contracts for raw materials.

## **2. Operation phase risk - Resource / reserve risk**

Such resource risks are usually minimised by: (a) experts' reports as to the existence of the inputs (e.g. detailed reservoir and engineering reports which classify and quantify the reserves for a mining project) or estimates of public users of the project based on surveys and other empirical evidence (e.g. the number of passengers who will use a railway); (b) requiring long term supply contracts for inputs to be entered into as protection against shortages or price fluctuations (e.g. fuel supply agreements for a power station); (c) obtaining guarantees that there will be a minimum level of inputs (e.g. from a government that a certain number of vehicles will use a toll road); and (d) "take or pay" off-take contracts which require the purchaser to make minimum payments even if the product cannot be delivered.

### **Operating risk**

These are general risks that may affect the cash-flow of the project by increasing the operating costs or affecting the project's capacity to continue to generate the quantity and quality of the planned output over the life of the project. Operating risks include, for example, the level of experience and resources of the operator, inefficiencies in operations or shortages in the supply of skilled labour. The usual way for minimising operating risks before lending takes place is to require the project to be operated by a reputable and financially sound operator whose performance is secured by performance bonds. Operating risks are managed during the loan period by requiring the provision of detailed reports on the operations of the project and by controlling cash-flows by requiring the proceeds of the sale of product to be paid into a tightly regulated proceeds account to ensure that funds are used for approved operating costs only.

### **Market / off-take risk**

Obviously, the loan can only be repaid if the product that is generated can be turned into cash. Market risk is the risk that a buyer cannot be found for the product at a price sufficient to provide adequate cash-flow to service the debt. The best mechanism for minimizing market risk before lending takes place is an acceptable forward sales contract entered into with a financially sound purchaser.

## **3. Risks common to construction and operational phases**

### **Participant / credit risk**

These are the risks associated with the sponsors or the borrowers themselves. The question is whether they have sufficient resources to manage the construction and operation of the project and to efficiently resolve any problems which may arise. Of course, credit risk is also important for the sponsors' completion guarantees. To minimize these risks, the financiers need to satisfy themselves that the participants in the project have the necessary human resources, experience in past projects of this nature and are financially strong (e.g. so that they can inject funds into an ailing project to save it).

### **Technical risk**

This is the risk of technical difficulties in the construction and operation of the project's plant and equipment, including latent defects. Financiers usually minimise this risk by preferring tried and tested technologies to new unproven technologies. Technical risk is also minimised before lending takes place by obtaining experts reports as to the proposed technology. Technical risks are managed during the loan period by requiring a maintenance retention account to be maintained to receive a proportion of cash-flows to cover future maintenance expenditure.

### **Currency risk**

Currency risks include the risks that: (a) a depreciation in loan currencies may increase the costs of construction where significant construction items are sourced offshore; or (b) a depreciation in the revenue currencies may cause a cash-flow problem in the operating phase. Mechanisms for minimising resource include: (a) matching the currencies of the sales contracts with the currencies of supply contracts as far as

possible; (b) denominating the loan in the most relevant foreign currency; and (c) requiring suitable foreign currency hedging contracts to be entered into.

### **Regulatory / approvals risk**

These are risks that government licenses and approvals required to construct or operate the project will not be issued (or will only be issued subject to onerous conditions), or that the project will be subject to excessive taxation, royalty payments, or rigid requirements as to local supply or distribution. Such risks may be reduced by obtaining legal opinions confirming compliance with applicable laws and ensuring that any necessary approvals are a condition precedent to the drawdown of funds.

### **Political risk**

This is the danger of political or financial instability in the host country caused by events such as insurrections, strikes, suspension of foreign exchange, creeping expropriation and outright nationalisation. It also includes the risk that a government may be able to avoid its contractual obligations through sovereign immunity doctrines. Common mechanisms for minimizing political risk include: (a) requiring host country agreements and assurances that project will not be interfered with; (b) obtaining legal opinions as to the applicable laws and the enforceability of contracts with government entities; (c) requiring political risk insurance to be obtained from bodies which provide such insurance (traditionally government agencies); (d) involving financiers from a number of different countries, national export credit agencies and multilateral lending institutions such as a development bank; and (e) establishing accounts in stable countries for the receipt of sale proceeds from purchasers.

### **CREDITORS MANAGEMENT**

- Creditors are the businesses or people who provide goods and services in credit terms. That is, they allow us time to pay rather than paying in cash.
- There are good reasons why we allow people to pay on credit even though literally it doesn't make sense! If we allow people time to pay their bills, they are

more likely to buy from your business than from another business that doesn't give credit. The length of credit period allowed is also a factor that can help a potential customer deciding whether to buy from a company or not: the longer the better.

- Creditors will need to optimize their credit control policies in exactly the same way as the debtors' turnover ratio.

### **DEBTORS MANAGEMENT**

The objective of debtor management is to minimize the time-lapse between completion of sales and receipt of payment. The costs of having debtors are:

- Opportunity costs (cash is not available for other purposes);
- Bad debts.

Debtor management includes both pre-sale and debt collection strategies.

### **Debt Control and Debt Collection Period**

Debt control is an important part of business activity because although a debt is an asset, it is not as liquid an asset as cash in the bank. Firms have to ensure they collect their debts as efficiently as possible within the terms they have set for the debt.

The only way we can consider how efficient the firm's debt control has been is to use a ratio. This ratio is known as the **debt collection period**.

The figure measures (in number of days) how long on average it has taken the firm to collect its debts. The higher the figure the longer it has taken. However, the normal period for collecting debts will differ between industries. For example, a figure of 10 days may sound very impressive, but if this was the figure for a chain of supermarkets it would be high. Therefore no debt is incurred and retail firms will tend to have very few debtors and a low debt collection period. Firms who do a lot of business on credit though will have much higher debt collection periods.

### **Debtors' Turnover**

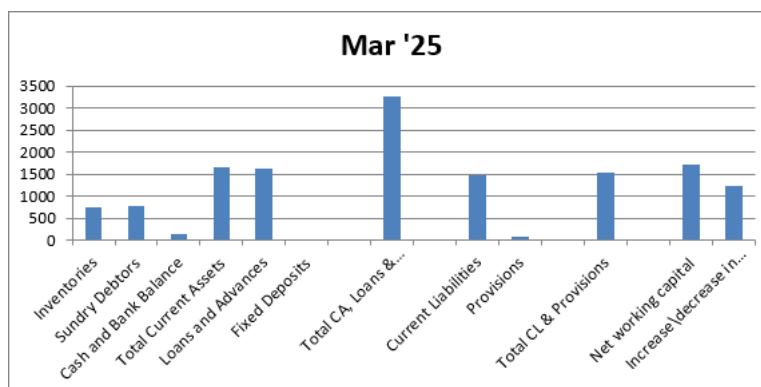
Debtors control is a vital aspect of working capital management. Many businesses need to sell their goods on credit, otherwise they might find it difficult to survive if their

competitors provide such credit facilities; this could mean losing customers to the opposition.

#### IV. DATA ANALYSIS AND INTERPRETATION

##### STATEMENT OF CHANGES IN WORKING CAPITAL 2024-25

Particulars	Mar '25	Mar '24
Inventories	734.06	894.13
Sundry Debtors	766.72	904.00
Cash and Bank Balance	140.27	77.21
Total Current Assets	1,641.05	1,875.34
Loans and Advances	1,626.12	332.74
Fixed Deposits	0.00	0.00
Total CA, Loans & Advances	3,267.17	2,208.08
Current Liabilities	1,475.24	1,644.47
Provisions	69.42	73.23
Total CL & Provisions	1,544.66	1,717.70
Net working capital	<b>1,722.51</b>	<b>490.38</b>
Increase\decrease in net working capital	<b>1232.13</b>	



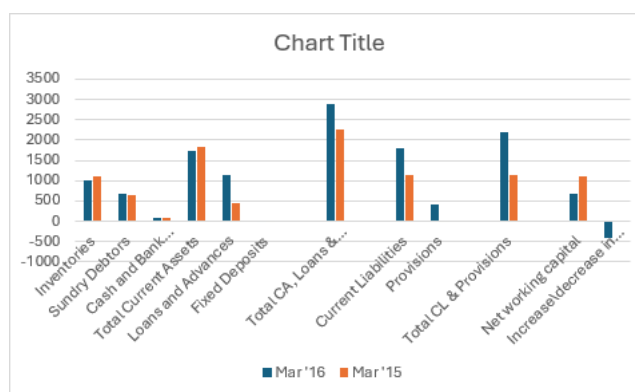
#### Interpretation:

The networking capital of Kesoram has been increased to 1232.13 the financial position i.e. the performance of kesoram has increased and the current assets defects its current liability.

##### STATEMENT OF CHANGES IN WORKING CAPITAL 2023-24

Particulars	Mar '24	Mar '23
Inventories	894.13	912.75
Sundry Debtors	904.00	835.67
Cash and Bank Balance	77.21	83.66
Total Current Assets	1,875.34	1,832.08
Loans and Advances	332.74	424.20

Fixed Deposits	0.00	0.00
Total CA, Loans & Advances	2,208.08	2256.28
Current Liabilities	1,644.47	1,408.72
Provisions	73.23	79.75
Total CL & Provisions	1,717.70	1,488.47
Net working capital	490.38	767.81
Increase\decrease in net working capital	-277.43	



**Interpretation:**

The networking capital of Kesoram has been decreased to -277.43 the financial position i.e. the performance of kesoram has decreased and the current assets defects its current liability.

**V. FINDNGS**

1. I found that every year the sales are increases in increased manner. It shows good sign for the organization. It fluctuates only one year due to competition and heavy expenditure in fixed assets.
2. The gross profit was decreased every year. This was happened due to increasing of cost of goods sold every year
3. In the year 2021, they spend more money towards raw material sealing and distribution transportation and administration expenses and debtors also increased. The shows results in reduction of operating profit in 2021.
4. On overall ever year cash & bank balance were increased fixed deposits receipts are decreased inventories on average are in good position.
5. In the year 2019 they minimized the exp .of stores maintenance. But other expensed like

packing materials and transportation charges increased rapidly

**VI. CONCLUSION**

The financial position of Kesoram is quite comfortable with a judicious mix of debt and equity. The overall assessment of Project financial statement (AFC) signifies efficient utilization of the investments, loans and advances. The profitability of the company appears to be impressive, as judged by increase in reserves and surplus.

The management discussions and analysis by Director’s report and opinions expressed by Auditor’s report through financial statements is true and fair view in accordance with the provisions of the companies Acts, and Accounting standards.

The overall financial position of the company appears to be more than satisfactory. The



Project financing is properly maintained By the Kesoram Organization and the overall financial overview of the common risks and methods of risk minimization employed by financiers in project finance transactions. As stated previously, each project financing is different. Each project gives rise to its own unique risks and hence poses its own unique challenges. In every case, the parties - and those advising them - need to act creatively to meet those challenges and to effectively and efficiently minimize the risks embodied in the project in order to ensure that the project financing will be a success.

2. [www.moneycontrol.com](http://www.moneycontrol.com)
3. [www.googlefinance.com](http://www.googlefinance.com)

### VII. SUGGESTIONS

- The company should provide notes to explain items not tallying with the profit and loss and balance sheet in the Annual report.
- Instead of disclosing the combined flows of debtors and loans advances as decrease/(increase) in trade and other receivables, their separate disclosure will be more meaningful.
- Globalization of economies and the requirement of shares from investors in capital market, diverse and demanding audience to the company, need a clear and in-depth in information about the company's financial position in Annual report.
- Comparison of basic and diluted EPS to be included in Annual report to predict the EPS sustainable in future.

### BIBLIOGRAPHY

SL. No.	BOOKS:	AUTHOUR NAME
1.	Financial Management	Kahan & JAIN
2.	Financial Management	I.M.Pandey
3.	Management Accounting	R.P.Trivedi

### NEWS-PAPERS & JOURNALS:

1. BUSINESS TODAY
2. THE ECONOMIC TIMES

### WEBSITES & SEARCH ENGINES

1. [www.kesoram.com](http://www.kesoram.com)