

# Economic crisis management in construction projects - A Review

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**Abstract.** You Many of the construction industries have accepted increasing importance of economic crisis management to control risks. Economic crisis and their management have been critical issues which are related with projects, the construction company and their customers are related with higher chances of risk. The reason for their higher risk is their construction process and activities, their background and their organization. This study is related to economic crisis which immediately taken part in the construction project. The risk in the construction projects is usually identified as an event that highlights objectives of manpower, material and money. The ideas at various levels of construction industries have been collected through literature survey and their results have been analyzed in this paper. From this literature study, the situations influencing economic crisis were studied and recommendation has been expressed to devastate those economic crisis situations.

*Keywords:* Risk management, economic crisis, contractors, risk perception, contractors.

## 1 Introduction

The development of economy in the country depends on the construction industry of the country. This is an action research project from the literature survey and by direct interviews with field persons. It has been identified and concluded that there are many issues pertaining to economic crisis. Importance of the construction project is to reduce the economic crisis in construction industry. It involves the conformation of the scope of work through the literatures and by direct interviews with contractors, engineers and site engineers. The problems and issues pertaining to economic crisis were identified. It involves formation of questionnaires from the analysis, given by the various people in

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construction industry and from review literature. We need to analyse the data and find out the major risks that lead to economic crisis in construction industry. The financial problems will always lead to economic crisis. It requires framing the suggestions and recommendations for the effective solutions in order to reduce the economic crisis situations in the construction projects.

## 2 Literature review

Kolhatkar and Amit Bijon Dutta conducted study about the eight common types of economic crisis. The economic crisis is one of the major risks faced by construction industry due to the negligence of the finances. It may lead to severe losses and the closure of the company and legal suits. The type of exposer and law of exposure change the risk technique. When the construction project become huge and much complex, the risks related with them also become more complex and worst. The last of account can increase frequently and dramatically [8].

Captions should be typed in 9-point Times. They should be centred above the tables and flush left beneath the figures. Augustin and Bodeab study deals with the cost and quality performance of the project connected with the economic crisis management of construction projects. The economic crisis in construction industry should address this issue. According to this paper, environmental risk is a major risk. Many companies have adopted risk management to reduce the risk. Risk in construction has been happening regularly due to time and cost over-runs, which are connected with construction project. The questionnaire finished by top management in the construction and all of them had 10 years of construction experience [2].

Shahid and Rafiq in their paper describes the management of risk as a major field of construction industry. The construction industries are facing number of risk such as time, cost and quality. Out of thirty-seven risks observed in the questionnaires, top ten risks have been quoted and debated in detail. From this journal, we gathered information about planning risk. This study explained about the issues faced from the financial aspects of the projects. The site accidents and imperfective design are the significant risk affecting most of the construction projects. Analysis of the risk is the major part in the process of decision making in construction management. The evaluation of risk in the projects have been pertained from project by using many risk analysis models to access the project risk, concerning the results of data and the success of risk management procedure [32].

Ranjani, et al. in their study, they discussed about the several risks combined with the construction industry. The standard questionnaire at various level of management has been collected and the results were analysed. The questionnaire has been designed to identify the labour demand and the problem in the construction management. The conclusion of the journal is to reduce the labour shortage in construction industry. The site engineer, contractor, and labour should observe the accurate system of relationship and control among them. The survey judgement was done by using relative important index method and the upper most factors, which lead to the labours shortage of construction management was found. The members have to go and confirm any construction site at any time with their checklist and should keep the records. This study highlights the difficulty of the construction labours in and around which paves the way to demand of labour [28].

Martin Schieg – According to their study, the expenses can be realized in construction industry by adopting risk management. The risk management process is worthwhile for the

project manager as well as real estate developer .The qualified service, specialized employers are important for the market success. To function and to process the project, it must have effective risk management. It should also use the strategic decision for the risk taken and could control, if it occurs. Construction projects have been protected because of the risk at the time of reality. The cost for risk is not allowed in advance and thus it reduces its gain margin. Construction project changes with the course of development, planning, awareness and operating of the project. Risk management consist of the summation of primary principles such as the development of the risk consciousness and the organization combination. Responsibility for completing the job and risk management is carried by the project manager [21].

Renuka, Umaram – The infrastructure growth will rise the growth of the country economy. The review recommended that an easy and systematic tool would be evolved. They are done for every project duty to evaluate the risk quickly and easily. The risk judgement helps us to append the budget and arrange for the triumphant project completion. The construction management is usually regarded as a risk task because of its complicated and strategic nature. The project risk and their management is the process worried with recognizing, analyzing and responding to the risk. Many variables are required for construction and they are difficult to determine their cause and outcomes, correlations and their weakness. Risk is subjected to the import of uncertainty. Risk assessment is usually said a skill that focuses to recognize and risk evaluation embedded on a project. This paper talks about the literature reviews for the past three decades on recognition and evaluation of risk factor in projects of construction industries. A huge survey of literature divulges that researches have quoted a brilliant contribution as regards to risk, their identification and their estimation [30].

Xneginchenga and Shenghmaliaa – In their paper, big data machinery has a notable impact on new work and financial services. The fight against economic crisis in the era of big data needs breaking the boundaries of conventional data, their algorithms and systems. We quote the effectiveness of such methods in the real world. The finance has become a composite field highly and they are no longer restricted to conventional banking and trading systems, stocks and market. They also comprise of evolving currencies of technology. Online shopping, payment systems extend over with the internet and social media, political crusade and a variety of smart system, comprising the internet of things. The paper shows the outlook review on the researches that quotes on emerging financial task in the era of big data, which has conduct us provocation in terms of using big and computing data; analyzing with long-scope and diverse dependent, dynamic and opponent of financial fraud [46].

Burtonshaw - This paper describes about the risk and management of finances in the construction. They show the relationship between the project manager’s skill of the time, cost and quality balancing. In addition, the also need to satisfy the requirements of the client in an efficient, effective and in executive manner. They should also increase the contractor’s future sustainability. In this paper they include risk management by mentioning about the tools and methods, which helps in reducing the circumstance, effect of risk caused and the financial management of construction projects from raising funding , to contract tricks and through to estimating , budgeting and cost control [6].

Yousif salamsaeed –This paper deals with identifying and appraisal for economic crisis management in construction industries. The main aim of this journal is to control and minimize the economic risks. In multiple construction sites, an online questionnaire was conducted to skilled professional workings. They are done to compare the diverse thoughts

collected between them. The questionnaire developed the research and collected more accurate and valid data pertaining to construction economic crisis management. This paper concluded that poor financial performance can be remarkably reduced by providing sufficient construction planning at the beginning of the project, exact in estimation, avert changes in projects during construction, reduced by giving sufficient construction planning at the beginning of the project, improving contract management and improving communication between construction parties [48].

Ermias – described construction industry as a risk industry and they require proper application of financial practices and management. The main objective of this research is to acquire the knowledge of main risk factors in the construction projects of buildings. It also inspects about the moderate method and effectiveness of risk deterrent. The research was attained through a comparative study of questionnaire the results after looking over the maximum questionnaire, it was found that the building contractor survey was conducted. The key risk factors are failure of the finances of the contractor, accrual, termination, faulty/imperfect design. The payments were also delayed on contract, legal disputes during the construction base, which occur among the contracts partier. Lastly, the results suggested that there is an urge for productive forms of contract and more standardization [10].

Seungh, Young Lee and Joung – Their findings describes about the increase of opportunities in the international construction. As they increase, the risks involved with international construction projects are growing remarkably. But due to the various risks, it is very difficult to determine the stage of risk variables at the conflict level and to look for the key success factors in an attempt for larger a resistant value under the demanding global financial environment. This paper aims on a management of crisis in the economy for the international projects to merge the risk ranking of both individual projects and at the corporate level. This ensures to maximize the total value of forms by using a multi criteria decision making method [31].

Lakshya kumar, Apurvajindal, nagendra R. Velaga – This study highlights the economic crisis associated with infrastructure of highway projects by examining parameters such as traffic flow and project cost and more further models the risk by identifying real-world highway projects in India. The objective of this project is to identify critical risks and discuss mitigation strategies. It also helps in analysing which source of unpredictability has the most impact on the projects financial returns. Such analysis seem to be worthy in assisting the authorities and officials engaged in government sectors in factor identification and thereby alleviating them. [18].

Agnieszka, Andrzej and Kaplinski – Risk as a factor unsympathetically influencing the works is considered in the initial phases of the contracts. The examination of risk level for a specific construction contract is a serious factor impacting the decision about contract acceptance. The prime objective is identification of the risks associated with the contract. The goal of this study is to exhibit the result of the studies focussed on separating and determining the prevalence of economic crisis factors in construction projects and their influence on project execution. The motive of this research is to investigate the presence of the correlation among the kind of structure, the size of contract and the scope and degree of economic risks [1].

Anthony Mills– Expecting the unexpected is systematic risk management. It is a key in controlling and minimizing risks in projects of construction industry. The aim is to find a practical and easy technique of monitoring, assessing, and managing risk in an informed

and structural way. It issues the strategy of controlling risks that affiliates to control at every levels of construction projects. This paper analyzed the systematic approach of risk and also about the risk allocation. It recommends that risk has to be recognized and controlled early in the procurement process. The study has been attached to manifest the effectiveness of systematic risk management. Their study described about a small project that was affected by very worst and difficult economic circumstances [3].

### 3 Conclusion

The research's conclusion and its final recommendation is to minimize the economic crisis at early stages in commencement of projects by construction companies. The entire Indian construction industry is prone to face the economic crisis in various aspects. This study analysed the problems of economic crisis at various levels of construction industry and their aftermath that led to loss of money and reputation in construction industry. From this literature research, it has been concluded that the low and middle order personnel involved in the construction projects viz., engineers, site supervisors, contractors and labours do not know about the systematic way to maintain the economic crisis that could arise in construction companies. The prime objective of any construction company is to avoid and overcome any crisis situation to trigger in the projects. This can be achieved by having proper planning of the various tasks involved in the project with well defined financial policies and ensuring proper credit management system so as to avoid uncertainties to a greater extent. Dealing with crisis is always unexpected and it can be managed in its initial stage by identifying miscommunication between the labours and various authorities of management involved in the project and to find an effective methodology for reducing those factors that lead to economic crisis situations.

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