

Project Risk Management and Economic Efficiency in Bangladesh: Exploring the Link Between Risk Control and Efficient Project Delivery

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Abstract

This paper discusses how project risk management will affect the efficiency of the economy in Bangladesh. The research is founded on the qualitative desk-based research with secondary data based on journal articles, institutional reports, and project-related documents. It explains the impact of those risks that are common in projects such as procurement delay, ineffective contract management, poor coordination, financial pressure as well as administrative inefficiency on project performance and lower economic efficiency. The analysis indicates that poor risk management is likely to cause cost overruns, slow implementation, poor use of resources and low value of money. Conversely, identification, assessment, mitigation, and monitoring of risk can be made stronger to enhance the project control and greater utilization of time, money, and company resources. The Contingency Theory is also used in the study to support the premise that risk responses need to be modified to suit the project conditions and not uniformly used. On the whole, the paper has found that context-sensitive and systematic project risk management is necessary to enhance the project performance and economic effectiveness in Bangladesh.

Keywords

Project Risk Management, Economic Efficiency, Project Performance, Bangladesh.

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INTRODUCTION

Project risk management is the core constituent of a good project governance as it helps managers to discover the presence of uncertainty, determine its possible impact, and take measures before the risks interfere with project goals. These practices are important in projects since performance is often measured based on the ability of the project to be completed on time, on budget, of the quality needed, and by using the resources efficiently. Previous studies indicate that an increased project management effort is correlated positively with project profitability particularly on complex projects implying that systematic risk management can enhance the overall project efficiency (Kaufmann *et al.*, 2022).

When the risk management is not robust, the problem becomes more critical. Risk identification, poor mitigation and poor monitoring may lead to procurement bottleneck, delays during implementation, cost overruns and wastage of resources. These issues are especially evident in the public and development projects in Bangladesh, where the management of contracts, approval procedures, procurement procedure, and institutional coordination tend

to influence the performance of the implementation. World Bank (2020) also documented that in the reviewed projects in Bangladesh approximately 70 percent of the contracts were not delivered (as scheduled), with the average contract delivery increasing by 150 days (or 41 percent) relative to the scheduled contract delivery. It also observed that increasing the approval levels also contributed to decreasing the efficiency of implementation as it slows down the procurement decisions (World Bank, 2020).

It is on this background that this paper discusses how project risk management affects economic efficiency in Bangladesh. It dwells on how risk management in a better way can cut down delay, control the cost and resource utilization improvement in order to enhance the overall project performance and enhanced value to money in Bangladeshi scenario.

Problem Statement

Project risk management is recognized to be important, but this has not been reflected in the implementation process since many projects in Bangladesh are still affected by implementation issues that lower their economic

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efficiency. In reality, timely and cost-effective delivery of the project is usually jeopardized by risks associated with the delay in procurement, poor contract management, slow approvals, institutional coordination loopholes, and external shocks (Asian Development Bank [ADB], 2024). As it was demonstrated in Bangladesh, these weak points are not peripheral. According to a review conducted by the World Bank, a high proportion of contracts in government projects suffered serious delays, which is evidence of the inability to control the implementation process and make decisions (World Bank, 2020). On the same note, the latest evaluation of the project environment in Bangladesh has identified risks associated with capacity limits, climate risk, and sustainable business, which may lower the value of money when not executed in a systematic manner (World Bank, 2025).

The crux of the matter is that, despite the fact that projects are supposed to help in the development and economic growth, a poor risk management may make them sources of delay, wastes and inefficiency. This establishes a research gap that requires the investigation of the influence of project risk management on economic efficiency in Bangladesh and why there is a need to have stronger and context sensitive risk practices that can help enhance the outcome of projects.

LITERATURE REVIEW

Concept of Project Risk Management

Project risk management is a process that involves the methodical identification of uncertainties that can impact on project objectives, assessment, response to uncertainties, and monitoring of the uncertainties. Risk in a project setting is not confined to negative events alone but also consists of uncertain conditions that can affect the cost, time, quality, scope, and the expectations of the stakeholders. Due to the nature of projects that are undertaken on limited resources and with time constraints, the uncontrolled uncertainty may soon result in operational as well as financial inefficiency. Good risk management hence facilitates informed decision-making, ranking of threats, and early correctional action. It was observed that formal risk management practices have a positive impact on the project success in this paper thus indicating that rigorous approach to uncertainty treatment directly leads to better project performance. Correspondingly, it has been stressed that risk management can generate value when done in a holistic manner and when it is connected to project decision processes instead of a simply administrative practice (Testorelli *et al.*, 2024).

Concept of Economic Efficiency

The economic efficiency in the project environments is the degree to which the project resources are maximized to yield useful outputs at the lowest level of waste. Factually,

a project is cost efficient when it attains anticipated benefits at a limited cost, time schedule, and productive consumption of labor, materials, and funds. This concept extends beyond mere compliance with the budget since a project may still meet the budget and still do a poor job even when delays, ineffective sequencing, ineffective procurement, or quality flaws cause the actual value to be diminished. The paper reveals that the labor invested in project management has a positive relationship with project profitability, particularly in the more complex projects, which demonstrates that managerial discipline and control mechanisms are strictly interconnected with the efficiency results. In this research, economic efficiency is conceptualized based on four measures, including cost efficiency, time efficiency, usage of resources, and value of money (Kaufmann *et al.*, 2022).

Relationship Between Project Risk Management and Economic Efficiency

A positive relationship between the project risk management and the performance related outcomes is mostly supported in the literature. Late identification and ignoring of risks make projects more susceptible to scope, increased budget, schedule, and ineffective coordination. These impacts cut efficiency as the resources are channeled towards corrective action instead of productive implementation. The authors have shown that organizations with stronger risk management practices were found to have higher project success, and other studies concerning construction and sectoral project reported risk tools to have better cost, time, and quality performance. In terms of efficiency, it implies that risk management is also involved in the project survival besides the quality of resource allocation during the entire project life cycle (Junior & Carvalho, 2013). Conversely, poor risk management raises the uncertainty premiums, wastage, friction in the contract and rework, which reduce money value. Thus, the literature indicates that project risk management ought to be regarded as an economic control mechanism more than a technical management role (Ackah *et al.*, 2025).

Theoretical Basis: Contingency Theory

The Contingency Theory would be an effective approach in understanding why project risk management has different impacts on efficiency in different situations. The theory states that management has no single optimal way of managing the situation, but rather what is suitable in one situation may be inappropriate in another situation due to the level of uncertainty, complexity and environmental factors that are involved in the project. Howell *et al.* (2010) use this reasoning to apply to projects by demonstrating that project management strategies are to be different depending on uncertainty and its ramifications. The given theory can be applied to the current study since the conditions under which projects are conducted in

Bangladesh are varied in terms of institutional, financial, environmental, and governance factors. Consequently, the risk responses need to be modified to fit the project realities as opposed to general applicability. A context-sensitive approach will be more effective towards helping to achieve efficient results as compared to a strict one-size-fits-all model (Howell *et al.*, 2010).

Bangladesh Context

This relationship is particularly crucial in the situation in Bangladesh. The procurement delays, approval delays, contract management, poor coordination and environmental shocks usually affect the public and development projects of the country. The implementation risk undermines efficiency as a World Bank review indicated about 70% of contracts assessed in Bangladesh were not fulfilled within the allocated time and the average time to fulfil contracts was about 150 days longer than scheduled timelines (World Bank, 2020). Delay, poor planning and administrative barriers are also cited by the research on local development projects in Bangladesh as frequent risks in projects. Collectively, these results indicate that risk management, which is stronger and context-specific, is necessary to enhance economic efficiency in the project environment of Bangladesh (World Bank, 2020; Sarker and Chakma, 2024).

Research Objective

The research questions of this research will be aimed at investigating the relationship between project risk management and economic efficiency in Bangladesh. They also assist with the organization of the analysis in terms of risk identification, efficiency outcomes, and improvement strategies.

- To determine the effects of project risk management on economic efficiency in Bangladesh.
- To determine the key project risks on project implementation in Bangladesh.
- To determine the impact of these risks on economic efficiency by delaying economic activities, increasing costs and wastage of resources.
- To determine how a better risk management approach, such as risk identification, mitigation and monitoring can enhance project results and bolster value money in Bangladesh.

Research Questions

The questions of the research define the direction of the study and outline the key issues discussed in the paper. They pay attention to the type of project risks, their efficiency impacts and the importance of risk management practices.

- What are the key project risks to the project implementation in Bangladesh?

- What are the effects of project risk management on the economic efficiency of Bangladesh?
- What is the best way to utilize better risk management practices to promote project efficiency, which is to control cost, deliver in time, and efficiently use the resources?

Hypotheses

Conceptual propositions regarding the secondary analysis of the study are developed therefore as the following hypotheses. They indicate the anticipated correlation with economical efficiency of project risk management in Bangladesh set up.

H1: The project risk management positively influences the economical activity in Bangladesh significantly through the enhanced level of cost, time, and resource control.

H2: There is a poor project risk management that leads to delays, cost increase, lack of coordination, and inefficient use of resources that lowers the performance of the project.

H3: Risk management practices that are context-specific enhance project performance in Bangladesh due to the effectiveness of risk responses that are more effective when on the basis of project conditions, institutional realities and environmental uncertainty.

METHODOLOGY

This research will use qualitative desk-based research design to study the effects of the management of project risks on the efficiency of the economy in Bangladesh. The qualitative approach is suitable as the paper tries to explain patterns, ideas and relationships observed in previous literature, as opposed to producing new numerical results. The research is fully based on secondary data, which enables the analysis to utilize the existing knowledge on the academic and institutional backgrounds related to project risk, implementation issues and efficiency performance.

The secondary data were based on three primary sources, which entailed peer-reviewed journal articles, institutional and development reports, and project-related documents published by reputable organizations. These sources have been chosen due to the fact that they explain the concept in relation to the project performance, the actual observations and the evidence about the project-related performance in Bangladesh, the governance, delay, cost overrun, and risk management activities. Organizations like the World Bank and Asian Development Bank reports were also of great help since they provided evidence of project implementation within the Bangladeshi environment.

The inclusion criteria were so constructed in order to make it relevant and quality. To begin with, the sources needed to be directly related to the management of project risk, project performance or economic efficiency. Second,

preference was made on studies and reports that were related to Bangladesh or similar development-project environment. Third, the sources were limited by credibility and citation to the journal articles and official institutional publications. Fourth, the sources needed to add value of either risks, management responses, or efficiency impacts. Thematic analysis was used to analyze the data collected. The themes that came out repeatedly over the literature

chosen using this method included, financial risk, a delay in procurement, a weak governance, the problem of institutional coordination, environmental uncertainty, and efficiency outcomes. The thematic analysis would be appropriate in the study as it assists in grouping the varied evidences into significant categories and facilitates inference of the effect of project risk management on economic efficiency in Bangladesh.

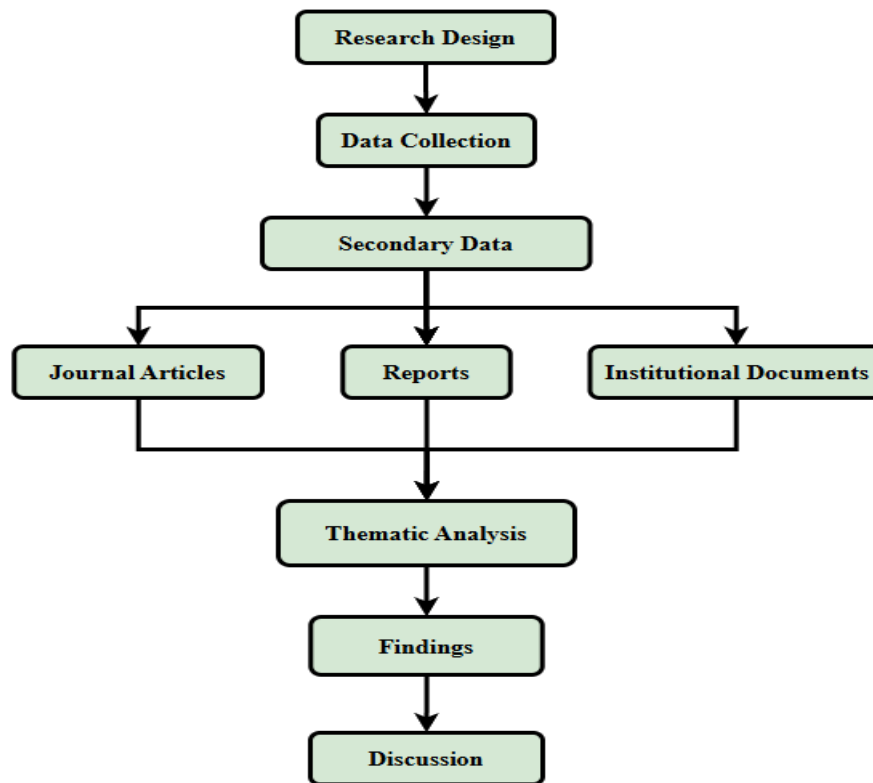


Figure 1. Methodology

FINDINGS

The assessed evidence suggests that the project execution in Bangladesh is influenced by the repetitive cycle of risks that directly undermine the economic efficiency. The most apparent issues include delay in procurement, poor management of a contract, sluggish administrative approval, bad inter-agency coordination, and insufficient project preparation. A survey of World Bank on the implementation of contracts in Bangladesh revealed that approximately 70 per cent of the government contracts were not delivered on time, the average time extension of civil works contract was approximately 41 per cent of the initial schedule and 34 per cent of the civil works contracts had cost increase (World Bank, 2020). A distinct IMED research note on gradual execution of development projects also finds that the delay in procurement and bottlenecks in the implementation of contracts are also

prominent causes of extended execution in Bangladesh (IMED, 2022).

The results also indicate that these risks of a project have a definite effect of efficiency. Delays add to labor, material and supervision costs as well as financing costs, cost overruns diminish value of money and in most cases require project redesign, re-scoping or low quality. Lack of administrative efficiency may also introduce idle time and wastage of equipment and human resources. Practically this implies that economic efficiency must be destroyed not only by the rise in budgets, but also by less efficient production according to the identical budget amount. The implementation weaknesses at the World Bank explicitly relate to reduced effectiveness of the involvement of the public in the investment, and conceptually the presence of a robust management effort is linked to the increased

profitability and project success, in particular when a complexities occurs (World Bank, 2020).

The other significant conclusion is that the project risks in Bangladesh are not technical only; they are also contextual and institutional. The local development projects studied in Bangladesh have identified the traditional system of administration, ineffective feasibility preparation, and inadequate coordination of stakeholders as the common delay factors (Sultana, 2024). This helps to affirm that project risk in Bangladesh is as much a result of wider governance setting as it is of site-specific operation problems. The development papers facing Bangladesh also note exposure to environmental and climate-related uncertainty, which further introduces implementation and sustainability risk in infrastructure and resiliency-based projects (World Bank, 2025).

Lastly, the reviewed literature in this research indicates that the existence of better risk management practices can enhance the performance of a project. Project-management studies indicate that formal risk management is positively related to the success of projects since it enhances anticipation, prioritization, and uncertainty control (Junior & Carvalho, 2013). This can be applied to Bangladesh; therefore, detecting risks at an earlier stage, setting up practical procurement plans, and efficient contract management and mitigation strategies, which are contextual, is likely to minimize procrastination, contain cost increase, and enhance resource mobilization. The results hence benefit the anticipation that improved project risk management has a beneficial effect on economic efficiency in Bangladesh.

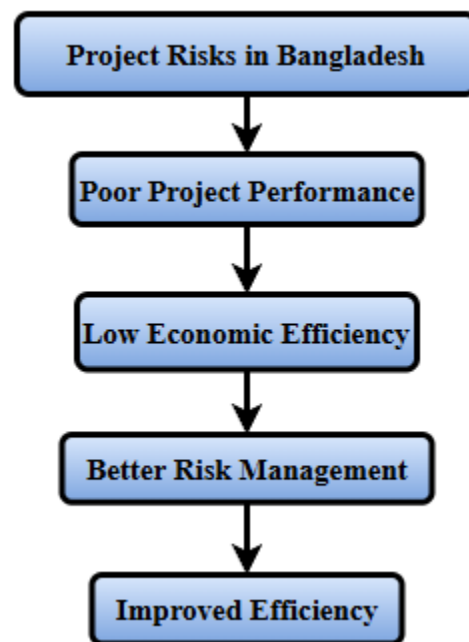


Figure 2. Findings framework on project risks and economic efficiency in Bangladesh.

DISCUSSION

The results suggest that the risk management of the project is closely related to the economic efficiency in Bangladesh. The evidence reviewed indicates that delay in procurement, increase in cost, poor contract control, and poor coordination are not single issues of operations. Rather, they depict underlying vulnerabilities in forecasting, evaluating and acting upon project unpredictability. Lack of proper management of these risks makes the projects to take more time and resources than initially budgeted, and this lowers the value of money and compromises the overall efficiency. Such interpretation helps to confirm the

first hypothesis of the work according to which the project risk management positively impacts economic efficiency. Kaufmann *et al.* (2022) believe that the intensive work of the project management is linked to superior project profitability, particularly with complicated projects, which supports the notion that the systematic management of the risk is linked to the superior efficiency.

The results are also consistent with the second hypothesis, according to which poor risk management in a project increases delays and cost overruns and the wastefulness of resources used. As evidenced by the Bangladeshi case of

implementations, the problem of delay in contract and time overruns still occurs frequently and contributes to poor performance of public investment. These are significant results since economic efficiency does not merely mean operating on a budget, but also producing on time and with the least wastage. Delays in project mean more labor, supervision and administration costs as well as delay of the intended development benefits. World Bank (2020) reveals that the inefficiency in the execution of contract and procurements has had a major impact on delivery of projects in Bangladesh which supports the thesis inefficient risk management kills efficiency.

Contingency Theory can be used to explain the findings, as well. According to this theory, the management approach is not best suited on all projects, since the way the management practices work is influenced by the circumstances that the project is dealing with. The project risks in Bangladesh do not only dictate by technical aspects, but also administrative, institutional and environmental reality. Consequently, the risk management practices should be tailored to fit the situation of a specific project and should not be implemented in a strict and standardized form. These meaning funds the third hypothesis of the study, which is that the context-specific risk management practices enhance project performance. Howell *et al.* (2010) state that strategies of project management must be different depending on uncertainty and its effects and this is quite applicable in this case of Bangladeshi context.

In general, this discussion proposes that, economic efficiency in Bangladesh cannot be improved only through financial investment. It involves harder, earlier and context sensitive project risk management during the project life cycle. When risk is defined and managed in early stages, constantly, and as per project requirements, the likelihood of delay time, wastage and the escalation of cost is minimized. This renders risk management an economic requirement and not a project technical activity only.

CONCLUSION

This paper draws a conclusion that project risk management plays a significant role in determining economic efficiency in Bangladesh. The evidence presented in the review indicates that among the reasons of the non-performance of the procurement process, there are poor risk management, cost overruns, low level of coordination, and ineffective utilization of the resources, which decrease project performance and undermine value creation. Conversely, better risk identification, assessment, mitigation, and monitoring could enhance cost control, facilitate on time delivery and better utilization of resources. These results suggest that project risk management is not a technical project activity, but also an

economic instrument to enhance efficiency. The practical significance of the topic in question is proven by the fact that World Bank shows that the weaknesses in the implementation have had a substantial impact on the contract's completion and project delivery in Bangladesh. The Contingency Theory also elaborates that risk management is best implemented when it is customized to fit into the context of a particular project instead of being applied across the board. In a nutshell, to enhance the economic performance of Bangladesh, there is a need to have greater contextual risk management and systemized risk management at the project life cycle.

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