AN APPRAISAL ON PRICING RISK FACTOR AT TENDER STAGE

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Declaration

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by other person or material to which to a substantial extent has been accepted for the award of any other degree or diploma of a university or of any other institute of higher education except where the acknowledgment is made or mentioned as reference.

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Abstract

Determining a fair margin of risk that forms a part of mark-up in a bid is a crucial issue when pricing bill of quantities at a tender. The results indicates that risk is not adequately priced by almost all the local contracting firms but they often use experience, intuition, rule of thumb or guesswork.

However, in the present day context of competitive business environment, it is time a new emphasis placed on identifying and assessing risk factor as precise as possible. Hence, the thesis is aimed to examine closely and objectively the risk factor involved in pricing construction projects and to propose a way of assigning a monetary value to the risk factor so as to arrive at a reasonable margin of risk and a contingency sum.

At this exercise, various risk management techniques such as risk premium, sensitivity testing, monte-carlo simulation, utility theory, risk adjusted discount rate and expected monetary value etc have been commentated including their relative merits, demerits and practical limitations.

Further, the contractual provisions as to apportionment of risk in tender and contract documents have also been discussed with special emphasis on ICTAD Conditions of Contract Revised in January 1989, conditions by which most of local building contract are governed.

A statistical approach, one that is already developed, to decide on the sum of contingency allocation supported with a worked example extracted from building schedule of rates is also suggested for the quantity surveyors to adopt in their pre-tender pricing exercises.

The research concludes with a proposal of guidelines and recommendations on how to cope with the risk factor. It is the author's belief that these guidelines will benefit both construction contracting and consultancy firms.

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BOQ	Bill of Quantities
BSR	Building Schedule of Rates
CLT	Central Limit Theorem
EV	Expected Value
ICTAD	Institute for Construction, Training and Development
n/s	not significant
s	significant
SMM	Standard Method of Measurement