Construction Risks Allocation: Current Practice, Problems and Their Implications

Ali A. Alsalman, PhD Candidate and David N. Sillars, Associate Professor
Oregon State University
Corvallis, Oregon

There is little conformity in allocation of risks in the construction industry. Usually, project participants allocate risk by aversion. Owners tend to shift risk to the primary contractor, who in turn pushes it to the subcontractors. As a result of this, risk is not necessarily allocated to the party that is best able to manage it efficiently and effectively but risk is re-allocated to parties with the least amount of control and influence over risk to manage it. The primary objective of this study is to investigate the current practice of construction risk allocation in the construction industry; identify, evaluate and classify the problems and present the findings. An overview examination of the literature reveals that that there are several problems related to the current practice of risk allocation in the construction industry. A recent survey concludes that inappropriate allocation of risk results in at least a 3% increase in contingency in bids. Another study reports that using disclaimer clauses to allocate risks adds a premium of between 8 and 20% to construction project bids, depending on whether business conditions were favorable, fair or high. A literature review and an online survey of professionals and practitioners involved in construction risk management revealed current risk allocation practices. Analysis of the response data shows that inappropriate and suboptimal risk allocation leads to disagreement, adversarial relationships, disputes, and claims. Other major problems are the subjective pricing of risks and the static allocation of risks at the beginning of projects. These problems negatively impact project performance. The research findings improve the understanding of the problems associated with the current practice of risk allocation. Also, the findings will aid the construction industry practitioners and professionals in understanding risk allocation and provide an alternative to the established mindset of risk allocation. Conclusions include a recommendation that the construction industry should look into alternative risk allocation mechanisms in order to alleviate the problems of disputes, adversarial relationships, increased cost, delays and negative deviations in quality in construction projects.

Key Words: Risk allocation, Modeling, Construction, Risk