## Impact of Construction Risk Factors into Actual Construction Price in PPP Projects

Authors: Saleh Alzahrani, Halim Boussabaine

**Abstract :** The majority of Public Private Partnership (PPP) are developed based on the rationale that the design, construction, operation, and financing of a public project is to be awarded to a private party within a single contractual framework. PPP project risks normally include the development and construction of a new asset as well as its operation for decades. Undoubtedly the most serious consequences of risks during the construction period are price and time overruns. These events are amongst the most broadly used scenarios in value for money analysis risks. The sources of risk change over the life cycle of a PPP project. In traditional procurement, the public sector normally has to cover all price distress from these risks. At least there is plenty evidence to suggest that price distress is a norm in some of the projects that are delivered under traditional procurement. This paper will find the impact of construction risk factors into actual construction price into PPP projects. The paper will present a brief literature review on PPP risk pricing strategies, and then using system dynamics (SD) to analyses of the risks associated with the estimated project price. Based on the finding from these analyses a risk pricing association model is presented and discussed. The paper concludes with thoughts for future research.

**Keywords:** Public Private Partnership (PPP), Risk, Risk Pricing, System Dynamics (SD), construction price **Conference Title:** ICCEBM 2015: International Conference on Civil Engineering and Building Materials

**Conference Location :** Paris, France **Conference Dates :** January 23-24, 2015