

**IMPACT OF COVID 19 PANDEMIC ON PROJECT
FINANCING OF CONSTRUCTION PROJECTS IN SRI
LANKA**

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(179190P)

Degree of Master of Science in Construction Law and Dispute
Resolution

Department of Building Economics

University of Moratuwa

Sri Lanka

June 2023

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Dissertation Submitted in partial fulfilment of the requirements for the degree of
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Declaration

I declare that this is my own work and this thesis does not incorporate without acknowledgment any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where the acknowledgment is made in the text.

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Date

The above candidate has carried out research for Masters's Dissertation under my supervision.

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Dr. Thanuja Ramachandra

Date

Dissertation Supervisor

Abstract

Project financing (PF) is a commonly used financing mechanism for large-scale construction projects in developing countries like Sri Lanka. Insufficient public funds, acquisition of foreign skills and know-how, reduction of public sector borrowing, the possibility of developing what might otherwise be non-priority projects, education and training for the local workforce, and lack of technical and managerial capacity are the reasons for choosing the PF concept for construction projects. Undoubtedly, the COVID 19 pandemic has adversely affected the construction industry and PF in countries. Sri Lanka is not exceptional to this effect, where a number of projects that were undertaken with PF seem to have been suspended and delayed due to the impact of the COVID 19 pandemic. Therefore, this study aims to examine the impact of the COVID 19 pandemic on the PF for construction projects in Sri Lanka.

Initially, an extensive literature review was carried out, and it was followed by a case study of three different construction projects which were performed under the PF, to fulfil the aim of the study. The first case included a building and infrastructure development, whilst the second and third cases were an airport development project and a power generating project, respectively. The data were collected through semi-structured interviews conducted with six professionals engaged in the selected cases, representing the key parties to PF including the lender, SPV and the sponsor, and review related project documents. Contract documents and loan agreements were reviewed to study the details of the projects and the financing arrangements. Content analysis was adopted to analyse the data collected from semi-structured interviews.

The effects of the COVID 19 pandemic have been identified under three different stages in these cases: formation, construction, and operation stages. The selected cases were not in the same stage when the COVID 19 pandemic started. One out of the three cases selected had already commenced before the origination of COVID 19 pandemic, and one case was in the formation stage, while the other case had passed the formation stage and had not commenced the construction work when COVID 19 originated.

Participants of the power generating projects at the formation stage experienced liquidity constraints and delays as the impact of the COVID 19 pandemic, and the same was commented by some other participants of the other selected cases. Increasing equity holders' involvement and allocating alternative methods of funds are identified as the key strategies to be adopted in the formation to mitigate the COVID 19 pandemic at the formation stage.

All participants in all three cases had experience with the impacts of COVID 19 pandemic at the construction stage, since the construction stage of all three cases was exposed to the COVID 19 pandemic. Delays in construction, issues in design development, supply chain disruptions, and project cost overruns are the identified impacts of the COVID 19 pandemic at the construction stage, faced by all participants in the selected cases. According to research findings, it was revealed that the use of new software, digital tools, and technologies, value engineering, use of alternative materials, design changes, a crisis recovery facility, and revising the imposed restrictions related to the construction industry are the strategies to be

implemented at the construction stage for mitigation of the impact of the COVID 19 pandemic at the construction stage of a project.

Although none of the projects were at the operation stage, the reduction in demand for the output of the project, the risk of reduced revenue, and debt service coverage are the identified probable impacts of the COVID 19 pandemic at the operation stage of a PF project by the participants of the selected cases. Most of the participants suggested that the use of strong marketing strategies, contract renegotiations, and debt restructurings are the discovered strategies for the mitigation of the impact of the COVID 19 pandemic at the operation stage.

The study finally suggested the precautions to be adopted towards PF for construction in Sri Lanka to manage a situation like COVID 19 pandemic, which include careful selection of lenders, strengthening and improving the domestic institutional investors' capacities, revising domestic policies and regulations related to PF transactions, providing sufficient contractual provisions, having a pre-agreement, getting additional insurance cover, and keeping an agreement with a financially strong guarantee fund.

It is expected that the identified strategies and precautionary measures would enable the PF participants to cope with similar situations like COVID 19 pandemic in future PF arrangements.

Keywords: Project Financing (PF), COVID 19, Sri Lanka, Construction Industry

Dedication

*To My Beloved Parents, Brother, Sisters and the Lecturers
who have being the utmost inspiration and light of my
life.....*

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List of Abbreviations

PF - Project Financing

PPP - Public-Private Partnership

BOOT - Build-Own-Operate-Transfer

BOT - Build-Operate-Transfer

BOO - Build-Own-Operate

DBFO - Design-Build-Finance-Operate

AIIB - Asian Infrastructure Investment Bank

JICA - Japan International Cooperation Agency

SPV –Special Purpose Vehicle

WB – World Bank

CBSL – Central Bank of Sri Lanka

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