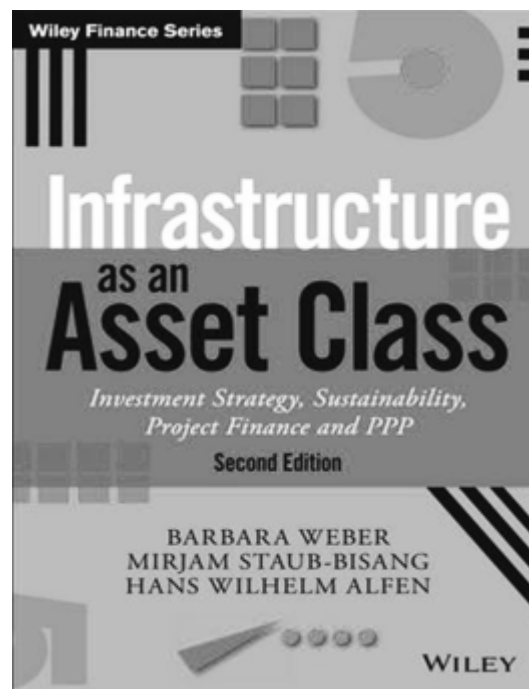

Book Review

Infrastructure as an Asset Class

Investment Strategy, Sustainability, Project Finance and PPP



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The quality and volume of infrastructure has a positive effect on the attractiveness, competitiveness, sustainability and economic growth of countries. Infrastructure opens up new business opportunities and promotes trade as well as the expansion of existing economic activity. It also improves the standard of living of the public by giving people access to essential resources. There is a growing gap between the acute need for new or modernized infrastructure, maintenance and overhaul measures and the actual level of investment and current expenditure all over the world. Against this backdrop, the present book titled

Infrastructure as an Asset Class discusses exhaustively about the various aspects of infrastructure in seven chapters. There are about 60 figures and 50 tables which make this book more understandable and relevant in the present context. The book exemplifies the vast practical experience and broad theoretical understanding of the authors. In addition to background knowledge and information on the latest developments in the area of infrastructure, the book also provides specific instructions and concrete proposals for assessing and making investments in infrastructure assets.

The book aimed at the following groups in particular such as: Financial investors (insurance companies, pension funds, fund managers and banks); strategic investors (construction, operation and supply groups, technology suppliers and facility managers); public authorities responsible for infrastructure in the various sectors (ministries of finance and legal supervisory institutions, regional building authorities etc.); public and private infrastructure companies (power supplier, water supply and disposal companies, airports and railroad companies) and international organizations (World Bank, EIB, OECD etc).

As mentioned by the authors, the purpose of this book is to comprehensively guide investors who are considering investing, or already invest, in infrastructure through the basic and advanced essential concepts of infrastructure investing. These include and understanding of the market and how closely related sustainability aspects are with the market, as well as any investment decision, benchmarking, possible investment approaches, organizational and contractual models and structures, characteristics of the most important infrastructure sectors and subsectors, general, sector specific and project-specific risk assessment and project finance.

The first chapter provides an overview of the international infrastructure market with a particular focus on demand for infrastructure assets and the expected capital requirements. It concludes with an overview of the most important infrastructure sectors, the country-specific, sector-specific and project-specific characteristics influencing the risk-return profiles of the infrastructure sectors. Chapter two presents an introduction to infrastructure as an asset class by going through a substantial body of research. It further discusses the case for sustainable investing in infrastructure keeping in mind the larger investment spectrum. The chapter concludes with an overview of the different approaches to infrastructure investment, listed and unlisted assets. It then focuses on unlisted assets, and in particular fund investments, because they represent the entry point to the infrastructure market for most investors.

Chapter three focuses on investors with an investment evaluation framework for direct assets. This chapter gives a structured overview of the various approaches to develop and organize infrastructure delivery with a particular focus on private investments. The model proposed by the authors distinguishes between privatization, partnership, business, contractual and financing sub-models, is to allow investors to analyse and classify individually. The model analyses the investment opportunity on the basis of key determining factor like general, technical, economic, financing and legal/contractual. This enables the investors to better understand and internationally compare the investment proposals.

The fourth chapter describes the typical characteristics of most infrastructure sectors and sub-sectors such as transport (road, rail and water transport/ports as well as air transport), water supply/disposal, solid waste management, renewable energy generation, energy transmission/distribution networks as well as social infrastructure. Each of these sectors has been discussed under five areas such as: organisation, financing and value added competition/regulation, private sector involvement

and sustainability considerations. The detailed discussion of the selected sectors will enhance the reader's awareness and understanding of the general approach of how to identify and assess the sector-specific factors, their interdependence and interaction with country and project-specific aspects as well as their overall influence on individual investments.

Chapter five discusses comprehensively general and project specific risks prevalent in the context of infrastructure investments that need to be identified, analysed, evaluated and ultimately allocated to the project parties involved. The accurate identification and understanding of risk is central to any investment decision, they form the basis for the implementation of appropriate structures that provide protection for investors. Successful project finance fundamentally depends on the ability to develop the appropriate contractual structures for the respective sector in terms of optimal allocation of risk among the parties involved, financing and value added, competition/regulation and the possibility of private sector involvement. Chapter six contains an introduction to the basics of project finance, including the main participants, cash flows, and contractual relationships, followed by an extensive discussion of the project finance process broken down into individual phases. Chapter seven addresses the various kinds of capital and financing instruments that are used within and beyond project finance. Further, it introduces selected European and national government support institutions that support infrastructure projects and programmes in various forms.

The long-term nature of infrastructure investments allows pension funds and insurance companies to use them to match the maturity structure of their liabilities. Infrastructure assets with this return profile are the driving force behind infrastructure's reputation as an attractive asset class – a hybrid with characteristics of debt, equity and real estate. Professional investors should have a sufficient understanding of the infrastructure sectors and the corresponding markets and industries along with the relevant legal, contractual, institutional and commercial conditions – which can vary significantly from region to region and sector to sector. This helps them to identify inherent project-specific risks and to determine their prospective risk-return profiles. Institutional investors with a sustainable investing mandate may miss clear information and tools for assessing and integrating sustainability conditions in their investment process as well as related risks in their overall risk analysis of infrastructure projects. Further, the institutional investors with a long-term perspective (insurance companies, pension funds, sovereign wealth funds etc.) are joining with strategic investors (construction, energy, and utility companies) as investments in infrastructure provide attractive returns in a low-interest rate environment. Additionally this serves to diversify and thus improve the risk-return profile of an investor's overall investment portfolio on account of their low correlation with traditional asset classes.

Overall, the book makes a good reference reading for researchers, policy makers and a valuable resource for the potential investors in the broad spectrum of infrastructure assets.

The ICAI University, Jharkhand

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- Diploma in Technology, a three year Program for the students of Class 10.