

# Infrastructure Financing in Asia

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# INFRASTRUCTURE FINANCING IN ASIA

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## Overview

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The book “Infrastructure Financing in Asia” is a collective volume of research papers that delve into the critical topic of financing infrastructure investment in developing Asia.

The central objective of the book is to give policymakers and researchers, as well as general readers, some insights and guidance about what the region must do to mobilize financing for infrastructure from a variety of sources.

ADB has made significant contributions to infrastructure financing in developing Asia since its inception, and will continue to do so in the coming years.



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## Overview

Some chapters of the book explain the central role of infrastructure investment in developing Asia's development, as well as the importance of institutions and link between infrastructure financing and growth.

Another set of chapters explore new, innovative financing modalities for infrastructure, including capturing spillovers, infrastructure bonds, and green bonds. One chapter takes an in-depth look at PPP.

Other chapters look at financing smart grids, human capital-infrastructure nexus, local currency bond markets in ASEAN+3, infrastructure financing in South Asia, and financing smart electricity grids.

Overall, the book covers a wide range of issues at some depth to offer a broad yet deep perspective on developing Asia's infrastructure financing challenge.

# Chapter 1: The Past and Future Role of Infrastructure in Asia's Development

- This chapter documents the evolution of Asia's infrastructure over the last half-century to examine the role of infrastructure has played in supporting economic development
- While developing Asia has largely advanced the pace of providing infrastructure, there is wide diversity both in quantity and quality across countries, and countries which were successful in providing infrastructure also expanded their economies faster.
- The chapter concludes by discussing the region's large future infrastructure needs, estimated at 5% of the region's GDP over the next decade, and how finding innovative approaches to infrastructure provision and financing remains a key challenge for the region.

# Chapter 2: Why Institutions Matter for Closing Asia's Infrastructure Financing Gap

- This chapter recorded evidences suggesting that there are specific types of institutions that works best with specific types of infrastructure financing modalities.
- The authors noted that to increase the private sector participation in infrastructure investment financing, the countries in the region would need to mitigate uncertainty and increase bankability of the project.
- They believe that a stronger focus on creating enabling institutions is essential to close infrastructure financing gaps and government reform should create institutions that would work best for the type of private investment it wants to attract.

# Chapter 3: Infrastructure Financing, Growth, and Development : Theory versus Empirical evidence

- This chapter find that, while the positive influence of infrastructure on growth is undeniable, the effect on development and inequality remains unclear.
- Authors urge governments acquaint themselves on the latest policy-driven researches on how infrastructure investment can help promote development, reduce inequality, and generate sustainable growth.
- The chapter suggests an independent infrastructure investment platforms at the national or regional level that could gain the interest and trust of institutional investors, sovereign wealth funds, pension funds, and insurance companies alike to generate a greater amount of financing for much-needed large-scale infrastructure projects



# Chapter 4: Spillover Capture Financing for Infrastructure Projects: Implication for Asia

- Chapter 4 surveys the different types of innovative financing modalities that are utilized by tax and their current use all over the world, including Asia.
- They explore the potential of alternative arrangements for private financing of infrastructure in the region that capture both direct and indirect effects of newly developed infrastructure.
- The chapter proposes that governments use spillover tax revenues to provide an additional policy option to increase the rate of return on private investment in infrastructure.

# Chapter 5: Meeting New Realities in the Era of Smart Grids: Implication of Energy Infrastructure Investment and Financing in Asia

- Chapter 5 discusses the transformation of energy infrastructure via the adoption of smart grids across the globe and how they can generate benefits and ultimately contribute to sustainable electrification in the region
- The authors note that a country will need to undertake regulatory and other policy reforms compatible with the emergent market design and new business models to make the most of smart grid technologies.
- To fund future energy infrastructure investments, the authors emphasize that innovative financing methods, such as through green bonds, crowd funding, and securitization, will also be needed.



# Chapter 6: Human Capital Formation and Inclusive Growth through Infrastructure

- This chapter raises the argument that investing in infrastructure—especially in social infrastructure serves as an important prerequisite for human capital formation and, in turn, long-term sustainable and inclusive development.
- It is noted that financing infrastructure projects remains the biggest challenge in such countries, where perceived investment risks are much higher compared with more advanced economies.
- Blended finance, according to this chapter, will serve as an innovative approach to complement existing strategies by sovereigns, institutional investors, and MDBs to increase human capital formation and inclusive growth through infrastructure.

# Chapter 7: Infrastructure Bond Market Developments in Asia: Challenges and Solutions

- This chapter investigates the factors influencing the growth of infrastructure bond markets in the region as well as the impact of initiatives seeking to expand such markets in Europe
- The estimations in the chapter indicate that, based on the results on Europe, making the effort to similarly enhance the credit quality of project bonds could help spur the expansion of Asian infrastructure bond markets.
- The authors encourages Asian policy-makers to deepen regional integration of Asian bond markets to help Asian economies reach an efficient economic scale to foster infrastructure bond market and policy measures in the forms of credit enhancement would facilitate issuance of infrastructure bonds.

# Chapter 8: Local Currency Bonds and Infrastructure Finance in ASEAN+3

- Chapter 8 delved into why local currency bond financing is not more widely adopted for infrastructure projects in Southeast Asia despite their known advantages in terms of providing longer-term funding and enhancing financial stability.
- According to this chapter, a well-structured PPP framework and a well-functioned domestic currency bond market are fundamentals needed to bolster growth in infrastructure financing.
- These will encourage the participation of private funding into infrastructure-related investments, which will significantly boost the development of project bond as a financing tool to meet infrastructure investment demand.

# Chapter 9: Infrastructure Financing in South Asia

- Chapter 9 examines the state of infrastructure in South Asia and finds that infrastructure needs of South Asia would require greater efficiency of public spending and a leveraging of the private sector through PPPs or similar arrangements.
- The chapter's empirical investigation shows that governance quality emerges as significant determinants of both public and private infrastructure spending.
- In a financial environment where banks tend to dominate, credit access also emerges as an important factor, prompting the authors to push for greater deepening of the region's capital markets to efficiently channel savings to productive infrastructure for sustained growth.

# Chapter 10: Green Local Currency Bonds and Infrastructure Development in ASEAN+3

- Chapter 10 focuses on green bonds as a way to finance the infrastructure needed by the region to meet its sustainable development goals.
- They examine how green bonds differ from conventional bonds and try to identify the different drivers of green bond growth.
- The authors end the chapter by brainstorming ways to promote the development of green bond markets in the region, providing specific recommendations to leverage green bonds for infrastructure development in Southeast Asian countries.

# Chapter 11: The Empirical Evidence and Channels for Effective Public-Private Partnerships

- This chapter attempts to shed light on the multifaceted nature of PPP, and how they can positively influence the macroeconomy.
- They identify four major channels through which PPPs can boost a country's growth; namely, by improving access to infrastructure; building technical and institutional capacities and promoting good governance; strengthening the allocation of public resources; and attracting global private savings.
- The authors note the positive influence of infrastructure PPPs on macroeconomic outcomes of a country and this success critically depends on improvements made in its legal and regulatory frameworks.



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## Concluding thoughts

The book confirms that developing Asia indeed faces a difficult challenge in securing the resources it needs to sustain growth and improve the quality of growth.

At the same time, the book suggests that as long as policymakers are willing to think in new fresh ways, there are plenty of innovative solutions which will help the region meet the infrastructure financing challenge.

In particular, private capital will have to play a visibly larger role than in the past. Therefore, creating and maintaining a conducive environment for the private sector to invest in infrastructure projects will be vital.





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Thank you!