Pak. j. life soc. Sci. (2025), 23(1): 7782-7791 E-ISSN: 2221-7630;P-ISSN: 1727-4915

Pakistan Journal of Life and Social Sciences

www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2025-23.1.00603

RESEARCH ARTICLE

DE-Risking Strategies in Infrastructure Projects Financing in Nigeria: A Conceptual Review

Ashoke D. Maliki[1] , Frank Alaba Ogedengbe[2]

[1,2]Department of Business Administration The Nile University of Nigeria, Abuja, Nigeria

ARTICLE INFO

Received: Jan 20, 2025

Accepted: Mar 6, 2025

Keywords

De-Risking Strategies

Infrastructure

Project Financing

***Corresponding Author:**

frank.ogedengbe@nileuniversity.edu.ng

ABSTRACT

Infrastructure projects encounter significant risks which oft deter financiers from investing in them. To address these ris financiers have developed and applied several strategies aimed encouraging investment. Therefore, this study reviewed seve pieces of literature from the past six years on the strategy used both public and private financiers to reduce risks and encoura investment in infrastructure projects. From the literatu reviewed, several strategies such as risk allocation & mitigatic blended finance, issuance of green bonds, and stakeholde engagement in project selection were utilized by major proje financiers in making investment decisions. Other factors such political stability, economic indicators, insurance & guarante and legal & regulatory framework were also identified positively impact investment decisions on infrastructure projec From the findings, Risk Management & Mitigation account f 19.23%, Blended Finance-23.08%, Issuance of Green bonc 19.23%, stakeholder engagement in project selection-19.23 and Insurances & Guarantees-19.23% of de-risking strategi adopted during the period under review. Blended Finan Mechanism accounts for 23.08% which is the highest de-riski strategy adopted by project financers' investment decision, wh Risk Allocation & Mitigation, Issuance of Green Bond, Stakehold Engagement in Project Selection and Insurances & Guarante individually accounted for 19.23% strategies. A conceptu framework linking de-risking strategies to infrastructure proje financing was developed. The magnitude of the impact of each c risking strategies on investment decisions is a subject of futu study.

INTRODUCTION

De-risking is a commonly used strategy in the business world to minimize the chances of financial loss or make risks more manageable, as defined by the Oxford dictionary (Alabi Ayotomiwa & Nwobi Lucy, 2021). In the global banking industry, de-risking is used by financial institutions as an alternative method to reduce risk by limiting their services to certain clients. This practice involves terminating relationships with and closing the accounts of clients who are considered high-risk. Furthermore, according to Pablo Duarte and de Neufville, (2021), de-risking is a team-based approach that aims to reduce the financial risks that come with infrastructure development and increase the likelihood of successful projects.

Therefore, access to long-term financing is a crucial enabler of economic expansion (Enoch, 2018). Project financiers play a crucial role in providing the finances and expertise required to create and implement infrastructure projects. However, their interest in investing in infrastructural projects is being slowed down by an associated number of growing risk factors. Using data from 23 nations between 1996 and 2016, (Phan et al., 2021) identified economic policy uncertainty as a detrimental factor affecting financial stability. Similarly, Canh et al., (2020), investigated the effects of domestic and global economic policy uncertainty on net inflows of foreign direct investment for 21 economies

over the period 2003–2013 discovered that while domestic economic policy uncertainty has a negative impact on inflows, an increase in global economic policy uncertainty may increase inflows of foreign direct investment into the nation.

Similarly, in their study on the delivery of an urban megaproject in Post-Socialist Central and Eastern Europe, Grubbauer & Čamprag, (2019) demonstrate how changes to national law were crucial for defining the public interest in investing, making certain contract types technically legal, and lowering the risks associated with private investor involvement. Likewise, Cecere et al., (2020) identified financial constraints for funding of internal and external infrastructure projects. Additionally, Enshassi et al., (2020) identified a lack of investment in Infrastructure projects to excessive geometric variability risks and misleading risk profiles.

Similarly, Li et al., (2021) identified cost overruns linked to construction and installation, land acquisition and resettling, and information sharing with the public as being the most significant risk factor militating infrastructure development projects. Likewise, S. A. R. Khan et al., (2019) identified environmental and social factors such as political instability, natural disaster, and terrorism as the primary causes of poor economic growth and environmental sustainability which by extension means poor investment in infrastructure projects. According to Campbell-Verduyn et al., (2021), banks and other financial institutions have moved to withdraw financial services from many emerging economies as a de-risking strategy as a consequence of re-regulatory efforts following the 2007-2008 global financial crisis, and having percept that the markets as posing greater risks. Abiru, (2022) stated that the lack of interest in private sector investors in infrastructure projects may be due to some negative perception of risk in certain regions. He asserted that regions like Asia, North America, Europe, and the Middle East, continue to attract the minimum volume of annual global foreign investment as compared to Africa.

Given the numerous challenges mitigating investing in Infrastructure projects for economic development, the overall aim of this study is to investigate the de-risking strategies used by project financiers to address risks that hinder investment in infrastructure projects. In summary, the de-risking strategies adopted by project financiers shall be identified and investigated. The researchers shall develop, based on the body of literature, a Conceptual Framework linking the de-risking strategies put in place by project financiers in order invest in infrastructure projects.

LITERATURE REVIEW

The financing of Infrastructure projects is confronted by significant risks that may deter financiers from investing in them. To address these risks, financiers have developed several strategies aimed at de-risking projects. World Bank in financing the implementation of the Solar Photovoltaic (PV) Utility-Scale Program in Zambia recognizes risk identification as an important phase to project success before the commencement of the project (Chama, 2020). Likewise, Khan et al., (2022) stated that government needs to adopt a targeted risk absorption strategy that negotiates marks up with interested firms to attract investors. Blending Support has been identified by Van Waeyenberge et al., (2020) as a de-risking technique utilized as a success factor for expanding private sector finance involvement in project financing. Blending mechanisms share projects' longer-term risks amongst the project financiers (development agencies), and the recipient governments. Though, this approach is not without concerns. Schindler et al., (2023) stated that the financialization of development enables global capital financiers of infrastructure by institutionalizing risk distribution, reward, and responsibility between investors and countries.

According to Braga et al., (2021), Governments and Multilateral organizations can de-risk green investments by supporting the issuance of green bonds in contrast to private green bonds - which show higher yields, volatility, and beta prices - and conventional energy bonds, which are more volatile due to oil price variations. Likewise, the World Bank states that strategy such as anti-collision is a useful tool for de-risking infrastructural projects (M. Khan et al., 2020a). Taghizadeh-Hesary et al., (2022) recommend Green Financing such as the Green Credit Guarantee as a recommended de-risking tool that is attractive to private sector investments in a hydrogen energy project. Richstein & Neuhoff, (2022) identified project-based carbon contracts-for-difference as a project financier's strategy to de-risking infrastructure projects from political and market uncertainty. Similarly,

Kedward et al., (2022) identified the strategy of utilizing public funds as against mobilizing private institutional investors to de-risk biodiversity infrastructure projects.

From the literature, it can be deduced that the de-risking strategies to reduce or eliminate risks before committing to infrastructure projects largely depend on the project type, the financier of the project, the location of the project, and the associated localized risks in the region of the project. The methodology section discussed in detail some selected de-risking strategies adopted to promote infrastructure projects financing.

METHODOLOGY

The main goal of this review writing is to highlight the de-risking strategies adopted by project financiers in infrastructure projects financing in Nigeria. This study offers helpful knowledge of de-risking strategies adopted to promote financing infrastructure projects. To evaluate the de-risking strategies in infrastructure projects all over the world were considered. The de-risking strategies in infrastructural projects were listed and examined after reviewing several academic studies.

This study analyses a significant amount of literature, mostly from a variety of publications that highlighted the numerous de-risking strategies in infrastructure projects. Each strategic variable was applied as a keyword to explore the appropriate literature after being identified as one of the issues. Only research that has been published within the last six (6) years was added to the study, with very recent studies receiving preference in the update.

RESULTS AND DISCUSSION

In the last six (6) years, several publications on de-risking strategies associated with infrastructure projects were reviewed as shown in Table 1 below:

Table 1: Articles or reviews published on de-risking strategies in infrastructure projects.

Year	No. of articles or reviews published on de-risking strategies in infrastructure projects	% increase in publications
2019	6	23.08
2020	8	30.77
2021	5	19.23
2022	5	19,23
2023	1	3.85
2024	1	3.85
Total	26	100%

(Source: Articles Reviewed)

Table 2 on the other hand shows the dimensions of de-risking strategies on infrastructure projects adopted by project financiers in the last six (6) years. Due to the limitation of this study, selected strategies adopted by project financiers were analyzed and a conceptual framework was developed.

Table 2: De-risking strategies in infrastructure projects financing

S/N	Strategies	Authors	No. of Citation	% Citation
1	Risk Allocation & Mitigation	(Selim et al., 2019), Zhang et al., (2020), (Castelblanco et al., 2020), (Nel, 2020), M. Khan et al., (2020b)	5	19.23%
2	Blended Finance	(*Blended Finance*, 2023), (Attridge & Engen, 2019), (Küblböck & Grohs, 2019), Murray & Spronk, (2019), Choi & Seiger, (2020), Anago, (2024)	6	23.08%
3	Issuance of Green Bond	Banga, (2019), Azhgaliyeva et al., (2020), Zhao et al., (2022), Sartzetakis, (2021), Sarma & Roy, (2021)	5	19.23%
4	Stakeholder Engagement	Kozokov, (2021), Arshad et al., (2021), Jayasuriya et al., (2020), Lehtinen &	5	19.23%

	in Project Selection	Aaltonen, (2020), Demirkesen & Reinhardt, (2021)		
5	Insurance and guarantees	Junxia, (2019), Chen et al., (2022), ,Inna Shkolnyk et al., (2022) Demirel et al., (2022), Akinradewo et al., (2022)	5	19.23%
		Total	26	100%

(Source: Literature)

De-risking strategies

Some selected strategies adopted to de-risk infrastructure projects to ensure the financing of projects were reviewed from the body of literature and presented below.

Risk Allocation and Mitigation*.* Some project financiers are of the view that putting in place a risk allocation and mitigation mechanisms strategy is a very vital tool in making funds available for projects. These risk allocation and mitigation mechanisms de-risking strategies were adopted largely on Public Private Partnership (PPP) infrastructure projects with mixed outcomes. Selim et al., (2019) reported that the strategy resulted in high-quality service and low-cost advanced technology outcomes. Castelblanco et al., (2020) and Nel, (2020), all acknowledged that strategies are essential to manage risks in solicited and unsolicited road projects. Similarly, M. Khan et al., (2020b) discussed how the perception of risk in environments with weak contract enforcement affects the de-risking of infrastructure financing.

A rapid enhancement in the rule of law could serve as a method to diminish risks. In high-risk scenarios, governments must offer subsidies to alter incentives and mitigate risks. Risk-mitigation subsidies that are competitive reduce risks for all potential investors interested in a project. On the contrary, Zhang et al., (2020), argued that the strategy largely failed to deliver in a PPP water supply project in China due to other risks factors such as policy change, government default, and safety accidents which are largely overlooked by project financiers

Blended Finance: Project financiers adopted 'blended finance' as strategies to de-risk infrastructure projects to make more funds available for many yielding infrastructure development projects. According to (*Blended Finance*, 2023.), blended finance means the practices of combining official development assistance with other private or public resources, to 'leverage' additional funds from other actors. This strategy was used by Multinational development banks and development finance institutions to mobilize private finances for the sustainable development goals of developing countries (Attridge & Engen, 2019). Though the study calls for a better understanding of the approach. Likewise, Küblböck & Grohs, (2019) and Murray & Spronk, (2019) reported the usefulness of the strategy for the same Sustainable Development Goals adopted by all United Nations Member States in 2015.

Choi & Seiger, (2020) reported on the potential for blended finance to de-risk infrastructure projects shortage, especially for climate-resilient development. Likewise, according to Anago, (2024) sub-national entities utilize a range of de-risking approaches to finance sustainable infrastructure projects. These methods include federal allocations, pension funds, private equity, bonds, and concessionary grants. Among these options, sub-national bodies typically favor private equity and concessional funding through catalytic or blended finance. This preference is largely attributed to the comparatively lower or below-market interest rates associated with these financing mechanisms.

Issuance of Green Bond: Another de-risk strategies in infrastructure projects adopted by project financiers is the issuance of Green Bonds especially in making funds available to developing countries' infrastructure projects (Banga, 2019). Unlike the developed and emerging countries, the full potential for Green Bonds seems to be underappreciated in developing countries due to the lack of appropriate institutional arrangements for green bond management, the issue of minimum size, and the high transaction costs associated with its issuance. Likewise, Azhgaliyeva et al.,(2020) reported on the use of the strategy for mobilizing private finance for renewable energy and energy efficiency projects for the Association of South-East Asian Nations (ASEAN) for not only meeting reduction of global temperature rise but also for meeting fast-growing energy demand. Additionally,

Zhao et al., (2022) also stated the advantage of green-bond financing on energy efficiency investment for green economic recovery.

Sartzetakis, (2021) outlined the pertinent role of green bonds as an instrument for financing the transition to a low-carbon economy. Similarly, Sarma & Roy, (2021) discussed de-risking approaches using eco-friendly financial tools in India. Their analysis of green financing practices showed that banks in India are actively engaged in issuing environmentally focused financial instruments. Additionally, Indian stock exchanges are adopting green finance principles by adjusting their operations and adhering to global sustainable finance initiatives. The country has introduced a wide range of green financial products, including environmentally focused indices, venture capital, bonds, loans, insurance, guarantees, banking services, and risk-sharing mechanisms.

Stakeholder Engagement in Project Selection: The de-risking strategies adopted by project financiers is to ensure detailed project scrutiny and stakeholders' engagement to ensure that their inputs and objectives are taken on board. According to Kozokov, (2021), this de-risking strategy is to satisfy stakeholders' various project objectives and methodology for choosing infrastructure projects which are closely aligned with the project delivery of the organization. Likewise, Arshad et al., (2021), acknowledged that stakeholder engagement in project selection should be holistic and effective to ensure the interests of individuals are properly captured to avoid project conflicting objectives. Similarly, Jayasuriya et al., (2020) stated that stakeholders' management roles are decisive and essential for managing risks in infrastructure projects.

Lehtinen & Aaltonen, (2020) identified strategies for reducing risks that provided benefits to various stakeholders in projects involving multiple organizations. Their research explored how project team members coordinated the involvement of external parties in inter-organizational initiatives. The study focused on two infrastructure projects in Northern Europe, revealing three organizational approaches based on governance, values, and adaptability. Likewise, Demirkesen & Reinhardt, (2021) determined that the de-risking approach of engaging stakeholders shows a significant and positive correlation with performance. The involvement of stakeholders encompasses ensuring that all parties participate in both the decision-making process and the execution phase.

Insurance and guarantees: Additional protection to de-risk infrastructure projects can be achieved by using insurance products, guarantees, or other financial instruments. Infrastructure projects can be de-risked using a variety of tools, including political risk insurance, construction bonds, performance guarantees, and revenue insurance. Junxia, (2019), acknowledged that securing international investment in the energy market involves the strengthening investment guarantee system. Likewise,Chen et al., (2022) identified the role of green insurance in influencing corporate overseas investment decisions. In the same vein, Inna Shkolnyk et al., (2022) acknowledged the use of deposit of insurance market as an essential subsystem of Ukraine's financial infrastructure.

This de-risking strategy allows for synchronous and slight increase in the level of the depth of the insurance system, the implementation of the deposit guarantee function and the activity of the banking system, the period of performance under pressure and the stabilization period demonstrated a desynchronization. Likewise, Demirel et al., (2022) discussed strategies employed by project financiers to mitigate risks and safeguard their investment returns, particularly in privately funded infrastructure projects. The study identified nine control mechanisms utilized by financiers, encompassing various asset and risk diversification portfolio approaches for infrastructure investments. These mechanisms were found to rely on governance practices related to the project environment, relationships, knowledge, and expertise.

In a similar manner, Shkolnyk et al. (2022) recognized the deposit insurance market as a vital component of Ukraine's financial infrastructure. This approach led to a harmonious and gradual enhancement of the insurance system's depth, the establishment of deposit guarantee mechanisms, and the revitalization of the banking sector. However, during the performance period under stress, a desynchronization occurred, which challenged the stability of the system. Additionally, Akinradewo et al., (2022) discussed de-risking strategies employed in financing infrastructure projects, noting that construction project challenges primarily revolve around time, cost, and quality factors. These elements are prone to uncertainty and have financial consequences. To address the high level of uncertainty, typical construction project contracts require contractors to secure insurance coverage

for all project-related work and personnel involved. Despite the widespread agreement that insurance serves as a crucial risk management tool, its adoption among contractors in developing nations remains limited.

Figure 1 shows the schematic representation of the de-risking strategies adopted leading to project financing. It shows the flow on the de-risking strategies utilized leading to infrastructure financing promotion.

Figure 1: Schematic representation of de-risking strategies and infrastructure project financing

(Source: Literature)

The flow chart in this case has identified de-risking strategies adopted to encourage infrastructure financing such Risk Management & Mitigation, Blended Finance, Issuance of bonds, stakeholder engagement in project selection, Political Stability, Economic indicators, Insurances & Guarantees and Legal & Regulatory frameworks as the strategies adopted to provide funding for infrastructural projects.

CONCLUSION AND RECOMMENDATIONS

To finance infrastructure projects, project financiers have adopted a variety of strategies to advance their developmental agenda. In this review work, the authors of this research unearthed the main de-risking strategies from the body of literature and linked these strategies to infrastructure financing. Risk Management & Mitigation, Blended Finance, Issuance of bonds, stakeholder engagement in project selection, and insurance & Guarantees are the strategies to de-risk infrastructure projects to promote its financing.

These strategies have long been used to reduce the risks identified with infrastructure project failures. According to the literature, these strategies guide against project failure which will in turn boost investor confidence to invest. Interestingly, this study drew emphasis placed by earlier studies to detail the strategies used by project financiers to reduce the risk linked to infrastructure projects to successfully provide funds, implement, and complete impactful projects.

The conceptual framework developed as shown in the figure confirms the effects of de-risking strategies that determine an investor decision on whether to invest or not in infrastructure projects. From the de-risking strategies reviewed from literature from the period 2019 to 2024, Risk Management & Mitigation account for 19.23%, Blended Finance-23.08%, Issuance of bonds-19.23%, stakeholder engagement in project selection-19.23%, and insurances & Guarantees-19.23%. In other words, risk allocation & mitigation, blended finance, issuance of the green bond, and stakeholders' engagement in project selection strategies of project financiers together with insurance & guarantees, all have a positive impact on investment decisions on infrastructure projects with Blended Finance Mechanism accounting for the highest level of de-risking strategy (23.08%) adopted by project financiers to promote infrastructure financing.

This framework was created utilizing a thorough assessment of the literature, which means that this study's main weakness is that it must be verified using quantitative data. Due to this framework's generic character, it is not used in specific sectors. Even though a lot of research has been reviewed, and every aspect of de-risk infrastructure projects has been examined, it cannot be ascertained that these aspects will be able to establish the baseline that will lead to increased infrastructure financing. So, the question is whether the strategies that will lead de-risking infrastructure projects are adequate to build a solid foundation that has an impact in promoting infrastructure projects financing.

REFERENCES

Abiru, M. (2022). *Infrastructure Deficit Meets Infrastructure Financing Gap: Derisking African Infrastructure Projects Towards Attracting Private Investment* (SSRN Scholarly Paper 4396442). https://doi.org/10.2139/ssrn.4396442

Akinradewo, O., Aghimien, D., Aigbavboa, C., & Onyia, M. (2022). Factors influencing the adoption of insurance as a risk treatment tool by contractors in the construction industry. *International Journal of Construction Management*, *22*(13), 2484–2492. https://doi.org/10.1080/15623599.2020.1797986

Alabi Ayotomiwa, O., & Nwobi Lucy, D. (2021). De-risking Investment in Power Projects. In W. Leal Filho, A. Marisa Azul, L. Brandli, A. Lange Salvia, & T. Wall (Eds.), *Affordable and Clean Energy* (pp. 264–275). Springer International Publishing. https://doi.org/10.1007/978-3-319-95864-4_27

Anago, J. C. (2024). Sustainable infrastructure development in sub-nations of Nigeria: What alternative financing options are open amidst constrained budget? *Sustainability Accounting, Management and Policy Journal*, *15*(6), 1378–1407. https://doi.org/10.1108/SAMPJ-02-2023-0054

Arshad, H., Thaheem, M. J., Bakhtawar, B., & Shrestha, A. (2021). Evaluation of Road Infrastructure Projects: A Life Cycle Sustainability-Based Decision-Making Approach. *Sustainability*, *13*(7), Article 7. https://doi.org/10.3390/su13073743

Attridge, S., & Engen, L. (2019). *Blended finance in the poorest countries: The need for a better approach* [Research Report]. ODI Report. https://www.econstor.eu/handle/10419/206745

Azhgaliyeva, D., Kapoor, A., & Liu, Y. (2020). Green bonds for financing renewable energy and energy efficiency in South-East Asia: A review of policies. *Journal of Sustainable Finance & Investment*, *10*(2), 113–140. https://doi.org/10.1080/20430795.2019.1704160

Banga, J. (2019). The green bond market: A potential source of climate finance for developing countries. *Journal of Sustainable Finance & Investment*, *9*(1), 17–32. https://doi.org/10.1080/20430795.2018.1498617

Blended Finance: What it is, how it works and how it is used. (2023.). Oxfam Policy & Practice. Retrieved July 2, 2023, from https://policy-practice.oxfam.org/resources/blended-finance-what-it-is-how-it-works-and-how-it-is-used-620186/

Braga, J. P., Semmler, W., & Grass, D. (2021). De-risking of green investments through a green bond market – Empirics and a dynamic model. *Journal of Economic Dynamics and Control*, *131*, 104201. https://doi.org/10.1016/j.jedc.2021.104201

Campbell-Verduyn, M., Rodima-Taylor, D., & Hütten, M. (2021). Technology, small states and the legitimacy of digital development: Combatting de-risking through blockchain-based re-risking? *Journal of International Relations and Development*, *24*(2), 455–482. https://doi.org/10.1057/s41268-020-00198-5

Canh, N. P., Binh, N. T., Thanh, S. D., & Schinckus, C. (2020). Determinants of foreign direct investment inflows: The role of economic policy uncertainty. *International Economics*, *161*, 159–172. https://doi.org/10.1016/j.inteco.2019.11.012

Castelblanco, G., Guevara, J., Mesa, H., & Flores, D. (2020). Risk Allocation in Unsolicited and Solicited Road Public-Private Partnerships: Sustainability and Management Implications. *Sustainability*, *12*(11), Article 11. https://doi.org/10.3390/su12114478

Cecere, G., Corrocher, N., & Mancusi, M. L. (2020). Financial constraints and public funding of eco-innovation: Empirical evidence from European SMEs. *Small Business Economics*, *54*(1), 285–302. https://doi.org/10.1007/s11187-018-0090-9

Chama, C. (2020). *Investigating the effect of de-risking strategies on implementation timelines for utility scale solar photovotaic projects in Zambia: A case study of Ngonye scaling solar project* [Thesis, The University of Zambia]. http://dspace.unza.zm/handle/123456789/7271

Chen, Q., Ning, B., Pan, Y., & Xiao, J. (2022). Green finance and outward foreign direct investment: Evidence from a quasi-natural experiment of green insurance in China. *Asia Pacific Journal of Management*, *39*(3), 899–924. https://doi.org/10.1007/s10490-020-09750-w

Choi, E., & Seiger, A. (2020). *Catalyzing Capital for the Transition toward Decarbonization: Blended Finance and Its Way Forward* (SSRN Scholarly Paper 3627858). https://doi.org/10.2139/ssrn.3627858

Demirel, H. C., Leendertse, W., & Volker, L. (2022). Mechanisms for protecting returns on private investments in public infrastructure projects. *International Journal of Project Management*, *40*(3), 155–166. https://doi.org/10.1016/j.ijproman.2021.11.008

Demirkesen, G. K., & Reinhardt, G. M. (2021). Effect of Stakeholder Involvement on Performance of The Government Projects in Poland. *Journal of Entrepreneurship & Project Management*, *5*(1), Article 1.

Enoch, C. (2018). *Finance in Africa: Addressing challenges in the 21st century*.

Enshassi, M. S. A., Walbridge, S., West, J. S., & Haas, C. T. (2020). Dynamic and Proactive Risk-Based Methodology for Managing Excessive Geometric Variability Issues in Modular Construction Projects Using Bayesian Theory. *Journal of Construction Engineering and Management*, *146*(2), 04019096. https://doi.org/10.1061/(ASCE)CO.1943-7862.0001747

Grubbauer, M., & Čamprag, N. (2019). Urban megaprojects, nation-state politics and regulatory capitalism in Central and Eastern Europe: The Belgrade Waterfront project. *Urban Studies*, *56*(4), 649–671. https://doi.org/10.1177/0042098018757663

Inna Shkolnyk, Dmytro Tkachenko, Viktoriia Kremen, Alina Bukhtiarova, & Andrii Semenog. (2022). Deposit insurance development (on the example of Ukraine). *Banks and Bank Systems*, *17*(4), 99–115. https://doi.org/10.21511/bbs.17(4).2022.09

Jayasuriya, S., Zhang, G., & Yang, R. J. (2020). Exploring the impact of stakeholder management strategies on managing issues in PPP projects. *International Journal of Construction Management*, *20*(6), 666–678. https://doi.org/10.1080/15623599.2020.1753143

Junxia, L. (2019). Investments in the energy sector of Central Asia: Corruption risk and policy implications. *Energy Policy*, *133*, 110912. https://doi.org/10.1016/j.enpol.2019.110912

Kedward, K., zu Ermgassen, S. O. S. E., Ryan-Collins, J., & Wunder, S. (2022). *Nature as an Asset Class or Public Good? The Economic Case for Increased Public Investment to Achieve Biodiversity Targets* (SSRN Scholarly Paper 4306836). https://doi.org/10.2139/ssrn.4306836

Khan, M., Matin, M., Zahan, I., Ashraf, Z., & Ajefu, J. (2020a). *Cheaper, cleaner power: De-risking as an anti-collusion strategy in Bangladesh* [Working Paper]. ACE SOAS Consortium. http://dspace.bracu.ac.bd/xmlui/handle/10361/13868

Khan, M., Matin, M., Zahan, I., Ashraf, Z., & Ajefu, J. (2020b). *Cheaper, cleaner power: De-risking as an anti-collusion strategy in Bangladesh* [Working Paper]. ACE SOAS Consortium. https://dspace.bracu.ac.bd:8443/xmlui/handle/10361/13868

Khan, M., Watkins, M., & Zahan, I. (2022). De-risking private power in Bangladesh: How financing design can stop collusive contracting. *Energy Policy*, *168*, 113146. https://doi.org/10.1016/j.enpol.2022.113146

Khan, S. A. R., Sharif, A., Golpîra, H., & Kumar, A. (2019). A green ideology in Asian emerging economies: From environmental policy and sustainable development. *Sustainable Development*, *27*(6), 1063–1075. https://doi.org/10.1002/sd.1958

Kozokov, U. (2021). COMPARATIVE ANALYSIS OF THE METHODS FOR SELECTING INFRASTRUCTURE PROJECTS IN THE EUROPEAN UNION AND THE USA (WITH CONCLUSIONS FOR UZBEKISTAN). *Theoretical & Applied Science*, *93*, 157–165. https://doi.org/10.15863/TAS.2021.01.93.27

Küblböck, K., & Grohs, H. (2019). *Blended finance and its potential for development cooperation* (Research Report 21). ÖFSE Briefing Paper. https://www.econstor.eu/handle/10419/200507

Lehtinen, J., & Aaltonen, K. (2020). Organizing external stakeholder engagement in inter-organizational projects: Opening the black box. *International Journal of Project Management*, *38*(2), 85–98. https://doi.org/10.1016/j.ijproman.2019.12.001

Li, Y., Xiang, P., You, K., Guo, J., Liu, Z., & Ren, H. (2021). Identifying the Key Risk Factors of Mega Infrastructure Projects from an Extended Sustainable Development Perspective. *International Journal of Environmental Research and Public Health*, *18*(14), Article 14. https://doi.org/10.3390/ijerph18147515

Murray, A., & Spronk, S. (2019). Blended financing, Canadian foreign aid policy, and alternatives. *Studies in Political Economy*, *100*(3), 270–286. https://doi.org/10.1080/07078552.2019.1682781

Nel, D. (2020). ALLOCATION OF RISK IN PUBLIC PRIVATE PARTNERSHIPS IN INFORMATION AND COMMUNICATIONS TECHNOLOGY. *International Journal of eBusiness and eGovernment Studies*, *12*(1), Article 1. https://doi.org/10.34111/ijebeg.202012102

Phan, D. H. B., Iyke, B. N., Sharma, S. S., & Affandi, Y. (2021). Economic policy uncertainty and financial stability–Is there a relation? *Economic Modelling*, *94*, 1018–1029. https://doi.org/10.1016/j.econmod.2020.02.042

Richstein, J. C., & Neuhoff, K. (2022). Carbon contracts-for-difference: How to de-risk innovative investments for a low-carbon industry? *iScience*, *25*(8), 104700. https://doi.org/10.1016/j.isci.2022.104700

Sarma, P., & Roy, A. (2021). Green financial instruments in India: A study on its current status and future prospects. *International Journal of Business Innovation and Research*, *26*(2), 194–218. https://doi.org/10.1504/IJBIR.2021.118445

Sartzetakis, E. S. (2021). Green bonds as an instrument to finance low carbon transition. *Economic Change and Restructuring*, *54*(3), 755–779. https://doi.org/10.1007/s10644-020-09266-9

Schindler, S., Alami, I., & Jepson, N. (2023). Goodbye Washington Confusion, hello Wall Street Consensus: Contemporary state capitalism and the spatialisation of industrial strategy. *New Political Economy*, *28*(2), 223–240. https://doi.org/10.1080/13563467.2022.2091534

Selim, A. M., Yousef, P. H. A., & Hagag, M. R. (2019). Risk allocation for infrastructure projects by PPPs—Under environmental management and risk assessment mechanisms. *International Journal of Risk Assessment and Management*, *22*(1), 89–108. https://doi.org/10.1504/IJRAM.2018.096698

Taghizadeh-Hesary, F., Li, Y., Rasoulinezhad, E., Mortha, A., Long, Y., Lan, Y., Zhang, Z., Li, N., Zhao, X., & Wang, Y. (2022). Green finance and the economic feasibility of hydrogen projects. *International Journal of Hydrogen Energy*, *47*(58), 24511–24522. https://doi.org/10.1016/j.ijhydene.2022.01.111

Van Waeyenberge, E., Dimakou, O., Bayliss, K., Laskaridis, C., Bonizzi, B., & Farwa, S. (2020, May 7). *The use of development funds for de-risking private investment: How effective is it in delivering development results?* [Monographs and Working Papers]. European Union. https://www.europarl.europa.eu/RegData/etudes/STUD/2020/603486/EXPO_STU(2020)603486_EN.pdf

Zhang, Y., Tsai, C.-H., & Liao, P.-C. (2020). Rethinking Risk Propagation Mechanism in Public–Private Partnership Projects: Network Perspective. *Journal of Infrastructure Systems*, *26*(2), 04020011. https://doi.org/10.1061/(ASCE)IS.1943-555X.0000538

Zhao, L., Chau, K. Y., Tran, T. K., Sadiq, M., Xuyen, N. T. M., & Phan, T. T. H. (2022). Enhancing green economic recovery through green bonds financing and energy efficiency investments. *Economic Analysis and Policy*, *76*, 488–501. https://doi.org/10.1016/j.eap.2022.08.019