

Title :

Investment Strategies for Achieving SDG 11 in Japan: A Portfolio Optimization Approach in Key Infrastructure Industries

Abstract :

Japan, being one of the most earthquake-prone countries in the world, faces significant challenges in maintaining sustainable and resilient urban development. In line with the United Nations' Sustainable Development Goal 11 (SDG 11), which aims to make cities inclusive, safe, resilient, and sustainable, this study explores the potential of achieving this goal through strategic investment in key industries. The research focuses on the domestic sectors of electricity, gas, telecommunication, and construction, which are critical for urban resilience and infrastructure. The methodology begins by narrowing down the scope to companies within these sectors, then further refining the selection to 20 companies through fundamental analysis. The analysis evaluates the financial health, market position, and long-term growth potential of these companies, ensuring they are well-positioned to contribute to sustainable urban development. Following the selection, a portfolio optimization approach is employed to determine the optimal investment allocation. This optimization considers not only the potential financial returns but also the companies' contributions to urban resilience and the broader societal benefits. By balancing these factors, the study aims to propose an investment strategy that not only maximizes returns for investors but also significantly contributes to the development of sustainable cities in Japan. The findings are expected to provide actionable insights for both investors and policymakers in aligning financial objectives with the achievement of SDG 11, thereby promoting a sustainable and resilient future for Japan's urban areas.