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Determinants of Capital Allocation Strategies for Energy Infrastructure Investments Based on Empirical Evidence

Md Shahdat Hossain¹, Rifah Tasnia²

1. Department of Electrical Engineering, University of New Haven, Connecticut- CT 06516 United States
 2. Master of Business Administration, Pennsylvania State University, University Park, PA 16802, USA
- * Correspondence: shf34781@gmail.com¹, rifahworks@gmail.com²

Abstract: Background: Investing in energy infrastructure needs lots of money and careful decisions for future success in both economic and functional terms. In line with that, it is crucial for companies to utilize the allocated funds wisely by considering different aspects related to finance, risks of investment, regulations, and others. Methods: The study was conducted employing the quantitative research design and using the primary data received from 175 people who work in the field of energy infrastructure within the USA. Data were obtained with the help of an online survey on a five-point Likert scale. Descriptive statistics, Pearson correlation analysis, and multiple linear regression were carried out by means of IBM SPSS Statistics Version 29 software. Result: It is found that investments in renewable energy projects have got the topmost investment priority (27%), whereas grid modernization has got the second (20%). Pearson correlation results reveal significant and positive relationships among all the variables under study. Capital Allocation Strategy shows significant association with Infrastructure Investment Performance ($r = 0.731$). Regression model has been able to explain 67.2% of the variation in investment performance ($R^2 = 0.672$). Capital Allocation Strategy ($\beta = 0.334$) shows itself to be the best predictor followed by Financial Performance ($\beta = 0.281$), Investment Risk Assessment ($\beta = 0.194$), and Regulatory Support ($\beta = 0.147$). Conclusion: This study concludes that proper capital allocation strategy combined with good financial performance and investment risk assessment can lead to better infrastructure investment performance.

Keywords: Capital allocation strategy, Energy infrastructure investment, Financial performance, Investment risk assessment, Regulatory support.

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1. Introduction

Changes in the global energy industry make it necessary to adopt efficient capital allocation strategies in investing in energy infrastructure at the utility scale [1]. Growing electricity demands, technology innovations, and changes in energy systems towards renewables result in complicated investment situations in the energy sector for energy firms, financial organizations, and policy makers [2]. Energy infrastructure investments, which include renewable energy plants, smart grid systems, transmission networks, and energy storage, require considerable amounts of funds and proper risk management [3]. Investment in clean energy infrastructure in the United States has become strategically important owing to energy security needs and climate policies, but it remains difficult in terms of market situation, regulation changes, innovation, and finances. Hence, factors that impact capital allocation decisions in this area should be taken into consideration [4].

Earlier research work has emphasized the need for factors such as financial performance, investment risk evaluation, regulation, and strategic capital management in influencing successful implementation of large infrastructure projects [5]. Strategic capital management will make it possible for companies to prioritize highly rewarding projects

and effectively manage their financial assets and achieve maximum returns on investments [6]. Financial performance indicators give valuable information on the viability and economic performance of projects whereas risk evaluation will help investors handle risks that arise during the process of infrastructure development [7]. Regulation is another factor that is important because it influences investor confidence, policy stability, and attractiveness of the market [8]. Despite earlier research having analyzed energy investments from economic, technological, and policy perspectives, very little empirical analysis has been done to analyze the joint impact of the four factors mentioned above on the performance of utility-scale energy infrastructure investments [9].

This study intends to provide an empirical investigation of the determinants of capital allocation strategies towards utility-scale energy infrastructure investments in the United States. This is to explore the capital allocation strategy, financial performance, investment risk evaluation, and regulatory factors affect the performance of the infrastructure investment. Based on quantitative survey data that has been gathered from experts working in the energy infrastructure industry, this study makes use of descriptive analysis, Pearson correlation, and multiple regression to investigate the relationship between the variables under study [10]. The findings of this study will provide practical implications for both investors in energy infrastructure projects, policymakers, and other stakeholders of the energy sector who are concerned about improving investment efficiency. This study is expected to contribute to the body of knowledge on sustainable energy finance, infrastructure management, and strategic investment planning.

2. Materials and Method

2.1 Research Design and Data Collection

The present study utilized a quantitative cross-sectional research design to examine the strategies of capital allocation in relation to investments in utility-scale energy infrastructures in the USA. Primary data were gathered using an online questionnaire that was conducted via a survey website tool. The target population for this study included professionals from electric utilities companies, renewable energy producers, engineering consultants, banks, independent power producers, and government agencies that regulate energy production. Purposive sampling was used in order to identify participants who had knowledge and experience in terms of financing infrastructure and making investment decisions [11]. The questions for the questionnaire included demographic data and research variables that were measured on a five-point Likert scale (from “Strongly Disagree” to “Strongly Agree”) [12]. The survey tool underwent validation process by experts and was pilot tested. Only complete questionnaires were used for statistical analysis in this study.

2.2 Measurement of Variables

The measurement structure of the current study was formulated based on an exhaustive literature review on energy infrastructure investments, corporate finance, and capital allocation strategies. The survey consisted of six research constructs such as capital allocation strategy, financial performance, investment risk assessment, regulatory support, investment decision efficiency, and infrastructure investment performance. Indicators used for measuring each construct were selected from well-tested peer-reviewed literature [13]. Capital allocation strategy focused on analyzing the effectiveness of financial resources allocation, while financial performance focused on analyzing expected investment results [14]. Investment risk assessment covered financial and operational risks, while regulatory support referred to the influence of government policies on investment decisions. Investment decision efficiency considered the effectiveness of strategic planning, while infrastructure investment performance was concerned with the overall success of projects [15].

2.3 Descriptive Statistics and Pearson Correlation Analysis

Analysis of data was done using IBM SPSS Statistics (Version 29). Descriptive statistics were used at first to describe the respondents' characteristics as well as the research variables by calculating frequencies, percentages, means, and standard deviations [16]. The validity of the measurement tool was determined by calculating the Cronbach's alpha coefficient, and the results indicated that all the constructs were above the desirable level of 0.70 [17]. The strength and the direction of the relationship between the variables were analyzed through Pearson correlation. This is due to the fact that correlation analysis would give preliminary evidence of the relationship between capital allocation strategy, financial performance, investment risk evaluation, regulation, investment decisions' efficiency, and infrastructure investment performance [18], [19]. The results of correlation were tested at 5% level of significance. Calculation of the Pearson correlation coefficient was done using the following formula:

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2 \sum_{i=1}^n (Y_i - \bar{Y})^2}}$$

Where, r represents the Pearson correlation coefficient, X_i and Y_i denote the observed values of the two variables, $\bar{X}$ and $\bar{Y}$ indicate the mean values of the respective variables, and n represents the total number of observations. The value of the correlation coefficient ranges from -1 to $+1$, where positive values indicate a direct relationship between variables, negative values indicate an inverse relationship, and values closer to ± 1 represent stronger associations [20].

2.4 Multiple Regression Analysis

A multiple linear regression model was used in order to analyze the impacts of capital allocation strategy, financial performance, risk assessment and regulation on infrastructure investments' performance [21]. The regression technique helps estimate the unique effect of each predictor variable by taking into account the effects of other predictor variables. The following statistical measures were used to evaluate the regression model: standardized coefficients, standard error, t-test, p-value, R^2 , adjusted R^2 and F-statistic. Linearity, normality, homoscedasticity, independence and no multi-collinearity were tested as the assumptions of regression analysis [22], [23]. The regression model in use is represented as:

$$IIP = \beta_0 + \beta_1(CAS) + \beta_2(FP) + \beta_3(IRA) + \beta_4(RS) + \varepsilon$$

where IIP represents Infrastructure Investment Performance, CAS denotes Capital Allocation Strategy, FP indicates Financial Performance, IRA represents Investment Risk Assessment, RS denotes Regulatory Support, β_0 represents the intercept, β_1 – β_4 are the regression coefficients, and ε represents the random error term.

3. Results

3.1 Demographic Characteristics of the Respondents

Table 1. Demographic Characteristics of the Respondents

Characteristics	Category	n	Percentage
Gender	Male	112	64.0
	Female	63	36.0
Age (years)	25–34	34	19.4
	35–44	67	38.3
	45–54	46	26.3
	≥55	28	16.0
Education	Bachelor's	39	22.3

Characteristics	Category	n	Percentage
Professional Experience	Master's	86	49.1
	Doctorate	50	28.6
	< 5 years	21	12.0
	5–10 years	46	26.3
	11–15 years	58	33.1
	16–20 years	31	17.7
	> 20 years	19	10.9

The demographics of the 175 individuals who took part in this research study as presented in **Table 1**. The percentage of male respondents was 64.0% (n=112), whereas the percentage of females was 36.0% (n=63). This shows that there were more men who took part in this study compared to women. Most respondents belonged to the age range of 35-44 (38.3%) and 45-54 (26.3%) years which suggests that the respondents had experience as mid-level career professionals. In relation to education, about half of the respondents had masters (49.1%) while 28.6% respondents had doctorate and 22.3% had bachelor's degree. As far as professional experience goes, 33.1% respondents had 11-15 years of experience and 26.3% respondents had 5-10 years of experience.

3.2 Capital Allocation Priorities for Utility-Scale Energy Infrastructure Investments

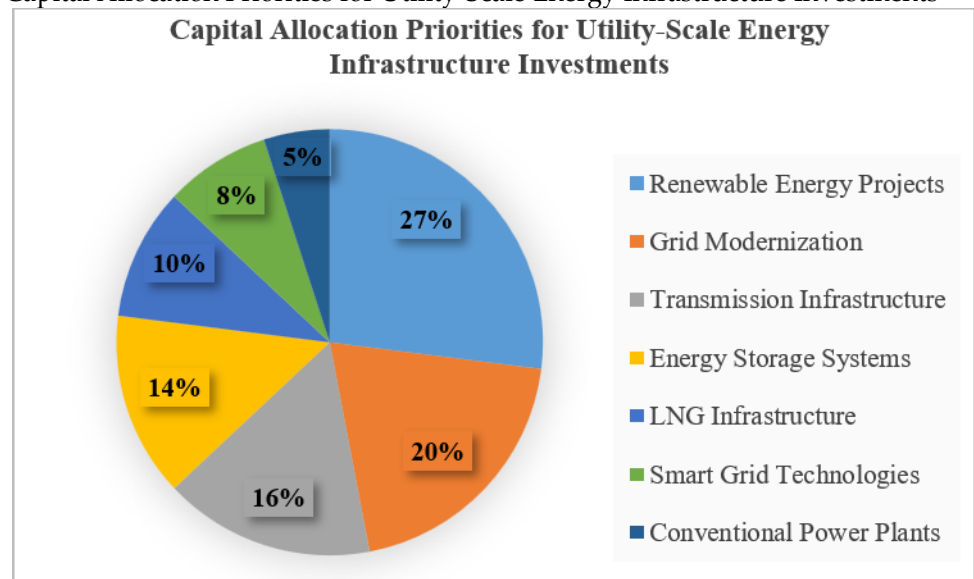


Figure 1. Capital Allocation Priorities for Utility-Scale Energy Infrastructure Investments

The allocation priorities of capital investment in utility-scale energy infrastructure are depicted in **Figure 1**, where 175 respondents have participated. The projects related to renewable energy took the first place (27%) in terms of capital allocation priorities, which reveals the high interest in development of clean energy. The projects related to grid modernization occupy the second place (20%) in terms of capital allocation priorities due to the increasing necessity to increase the efficiency of electricity transfer through the grid. The projects associated with transmission infrastructure took 16%, which shows its high significance in developing energy infrastructure. The projects concerning energy storage systems occupy 14% in terms of capital allocation priorities, which shows their significance for improving the flexibility of the grid. The projects concerning LNG infrastructure take 10% in terms of capital allocation priorities, which shows its continuing significance in terms of energy security.

3.3 Strategic Factors Influencing Capital Allocation Decisions

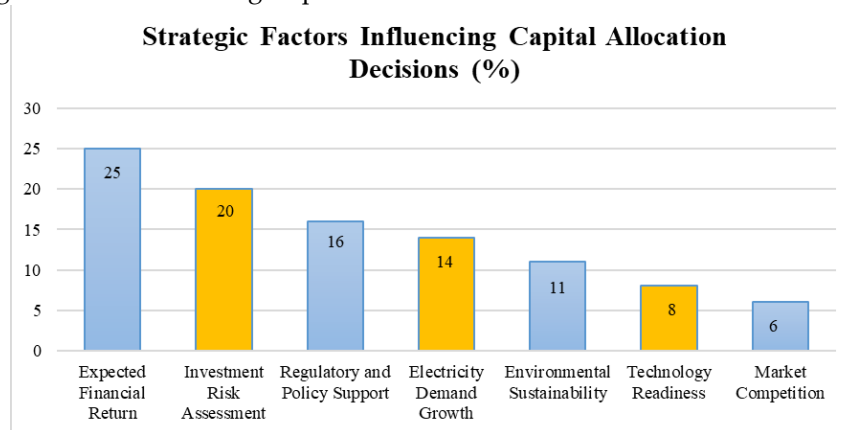


Figure 2. Strategic Factors Influencing Capital Allocation Decisions

The factors affecting the capital allocation decisions for investments in utility-scale energy infrastructure projects are shown in **Figure 2**. Expected financial return emerged as the factor having the highest influence on the capital allocation decision-making process (25%). This result reflects the continued relevance of profit maximization as the most important factor to consider when making an investment. Financial risk assessment came second in line (20%). The analysis of this factor reveals that it is important to evaluate risks associated with investment operations in order to make sound capital allocation decisions. Factors such as regulatory and policy support (16%), electricity demand growth (14%), and environmental sustainability (11%) influenced the capital allocation decisions. Technology readiness (8%) and market competition (6%) had a relatively low influence on the process of capital allocation.

3.4 Pearson Correlation Matrix

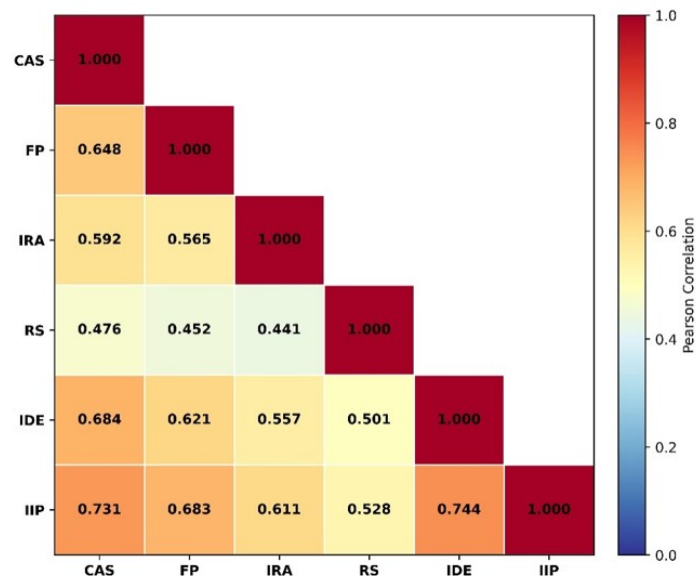


Figure 3. Pearson Correlation Matrix (Capital Allocation Strategy (CAS), Financial Performance (FP), Investment Risk Assessment (IRA), Regulatory Support (RS), Investment Decision Efficiency (IDE), Infrastructure Investment Performance (IIP))

Pearson correlation matrix of the relationships between the study variables as **Figure 3**. The coefficients of correlation between all the variables under consideration are positive and highly significant (at the 0.01 level, 2-tailed). Among others, the Capital Allocation Strategy (CAS) had very high positive correlations with Infrastructure Investment Performance (IIP) ($r = 0.731$), Investment Decision Efficiency (IDE) ($r = 0.684$), and

Financial Performance (FP) ($r = 0.648$). Additionally, there was a very strong relationship between the IIP and IDE ($r = 0.744$), which implies that efficient investments lead to good infrastructure investments. Finally, there were moderate positive correlations between the Investment Risk Assessment (IRA) and the Regulatory Support (RS) on one hand and the other variables on the other hand.

3.5 Multiple Regression Analysis

Table 2. Multiple Regression Analysis

Predictor	β	SE	t	p-value
Capital Allocation Strategy	0.334	0.056	5.96	<0.001
Financial Performance	0.281	0.061	4.61	<0.001
Investment Risk Assessment	0.194	0.058	3.34	0.001
Regulatory Support	0.147	0.052	2.82	0.005

Model Summary	
Statistic	Value
R^2	0.672
Adjusted R^2	0.664
F-statistic	86.53
p-value	<0.001

The results of multiple regression analysis, performed with the aim to reveal the factors affecting the performance of energy infrastructure investments, are presented in **Table 2**. Based on the results, it is possible to make a conclusion about the statistical significance of the obtained model ($F = 86.53$, $p < 0.001$), which accounts for 67.2% of variance in the performance of energy infrastructure investments ($R^2 = 0.672$; adjusted $R^2 = 0.664$). Speaking of independent variables used in regression analysis, it should be noted that the Capital Allocation Strategy is the most influential factor affecting the performance of energy infrastructure investments ($\beta = 0.334$, $t = 5.96$, $p < 0.001$). The above means that the proper allocation of the capital positively affects the performance of investment. The second variable is the Financial Performance of the firm ($\beta = 0.281$, $p < 0.001$) and the third one is the Investment Risk Assessment ($\beta = 0.194$, $p = 0.001$).

4. Discussion

The results obtained within the scope of the current study suggest that the capital allocation strategy is a decisive factor in the effectiveness of utility-scale energy infrastructure investment decisions [24]. According to the results, renewable energy projects have the highest priority among investment projects (27%), whereas the second place is taken by the grid modernization projects (20%), and the third place goes to the development of the transmission infrastructure (16%). The high priority of renewable energy and modern electricity network infrastructure is a consequence of the transformation of the energy industry into the cleaner, safer, and technologically advanced sector [25]. Therefore, investors tend to allocate financial resources to projects that will provide them with economic, environmental, and operational advantages. The increasing attention paid to the issues of sustainability and future electricity demand demonstrates that the investment process becomes more strategic and sustainable [26]. One of the significant outcomes of the research is the fact that the expected financial return (25%) turned out to be the main influencing factor of capital allocation decision-making, after which go investment risk assessment (20%) and regulatory support (16%). It is also important for regulatory stability because the presence of the predictable investment

environment boosts the level of investor's trust. Consequently, decisions about investment are not made on the basis of financial performance only but they are backed up with proper risk evaluation and favorable conditions for making decisions [27].

Correlation analysis gives additional evidence for these connections. Capital Allocation Strategy had the most positive correlation with Infrastructure Investment Performance ($r = 0.731$) meaning that organizations with good resource allocation strategies usually have good results with their projects. Investment Decision Efficiency had the best connection with Infrastructure Investment Performance ($r = 0.744$) which proves the effectiveness of systematic planning and making decisions when it comes to investment. Strong relationship between Financial Performance and Infrastructure Investment Performance ($r = 0.683$) emphasizes the importance of having financial strength through all the process of project development. Despite the fact that the correlations between Investment Risk Assessment ($r = 0.611$) and Regulatory Support ($r = 0.528$) are rather moderate, these two factors are still very significant. Moreover, the regression analysis reveals the degree of contribution of every predictor variable to the result [28]. The total explanatory power of the regression equation is 67.2%, as revealed by R squared value ($R^2 = 0.672$). It can be noted that the highest standardized coefficient is recorded for the Capital Allocation Strategy ($\beta = 0.334$), which indicates that proper allocation of financial resources is crucial for the investment success. The next predictor in importance is the Financial Performance ($\beta = 0.281$), followed by Investment Risk Assessment ($\beta = 0.194$) and Regulatory Support ($\beta = 0.147$). The results reveal that organizations with the ability to combine financial planning and proper risk management are expected to enjoy better investment performance in the infrastructure development projects [29]. From the practical standpoint, the results of the analysis provide guidance for investors and policymakers, financial institutions and utility companies, since increasing investment into renewable energy, electricity transmission systems, energy storage facilities and smart grids presupposes the transparency of the financial planning and proper frameworks for the capital allocation process [30]. Moreover, decision makers should consider the economic potential of projects together with their risk exposure and regulatory support. Enhancing institutional backing and regulatory conformity would help further increase private investments by minimizing the uncertainties in financing big infrastructure projects.

5. Conclusion

The results of the study highlight the importance of effective resource allocation strategies in improving the investment performance of energy infrastructure investments. It is evident that factors such as financial performance, risk assessments and regulatory support positively affect the investment process and result in better resource allocation. The results of the empirical analysis offer a number of important insights for decision makers, investors and energy institutions. In general, the present study is aimed at contributing to the developing field of energy infrastructure finance.

REFERENCES

- [1] T. Atalla and M. C. D'Errico, "Energy project financing in the GCC region: An empirical investigation," *Energy Transitions*, vol. 3, nos. 1–2, pp. 13–30, 2019, doi: 10.1007/s41825-019-0011-9.
- [2] K. Baumli and T. Jamasb, "Assessing private investment in African renewable energy infrastructure: A multi-criteria decision analysis approach," *Sustainability*, vol. 12, no. 22, Art. no. 9425, 2020, doi: 10.3390/su12229425.
- [3] G. Di Liddo, A. Rubino, and E. Somma, "Determinants of PPP in infrastructure investments in MENA countries: A focus on energy," *Journal of Industrial and Business Economics*, vol. 46, no. 4, pp. 523–580, 2019, doi: 10.1007/s40812-019-00129-7.
- [4] A. Masini and E. Menichetti, "The impact of behavioural factors in the renewable energy investment decision making process: Conceptual framework and empirical findings," *Energy Policy*, vol. 40, pp. 28–38, 2010, doi: 10.1016/j.enpol.2010.06.062.
- [5] R. Wüstenhagen and E. Menichetti, "Strategic choices for renewable energy investment: Conceptual framework and opportunities for further research," *Energy Policy*, vol. 40, pp. 1–10, 2011, doi: 10.1016/j.enpol.2011.06.050.

- [6] J. Curtin, C. McInerney, B. Ó. Gallachóir, C. Hickey, P. Deane, and P. Deeney, "Quantifying stranding risk for fossil fuel assets and implications for renewable energy investment: A review of the literature," *Renewable and Sustainable Energy Reviews*, vol. 116, Art. no. 109402, 2019, doi: 10.1016/j.rser.2019.109402.
- [7] E. A. Aly and S. Managi, "Energy infrastructure and their impacts on societies' capital assets: A hybrid simulation approach to inclusive wealth," *Energy Policy*, vol. 121, pp. 1–12, 2018, doi: 10.1016/j.enpol.2018.05.070.
- [8] J. Jaworski and L. Czerwonka, "Determinants of enterprises' capital structure in energy industry: Evidence from European Union," *Energies*, vol. 14, no. 7, Art. no. 1871, 2021, doi: 10.3390/en14071871.
- [9] M. Zhao, T. Sun, and Q. Feng, "Capital allocation efficiency, technological innovation and vehicle carbon emissions: Evidence from a panel threshold model of Chinese new energy vehicles enterprises," *Science of the Total Environment*, vol. 784, Art. no. 147104, 2021, doi: 10.1016/j.scitotenv.2021.147104.
- [10] E. M. Gui, M. Diesendorf, and I. MacGill, "Distributed energy infrastructure paradigm: Community microgrids in a new institutional economics context," *Renewable and Sustainable Energy Reviews*, vol. 72, pp. 1355–1365, 2016, doi: 10.1016/j.rser.2016.10.047.
- [11] X. Zheng, F. Li, S. Song, and Y. Yu, "Central government's infrastructure investment across Chinese regions: A dynamic spatial panel data approach," *China Economic Review*, vol. 27, pp. 264–276, 2013, doi: 10.1016/j.chieco.2012.12.006.
- [12] U. Arnold and Ö. Yildiz, "Economic risk analysis of decentralized renewable energy infrastructures—A Monte Carlo simulation approach," *Renewable Energy*, vol. 77, pp. 227–239, 2014, doi: 10.1016/j.renene.2014.11.059.
- [13] X. Kang, F. U. Khan, R. Ullah, M. Arif, S. U. Rehman, and F. Ullah, "Does foreign direct investment influence renewable energy consumption? Empirical evidence from South Asian countries," *Energies*, vol. 14, no. 12, Art. no. 3470, 2021, doi: 10.3390/en14123470.
- [14] J. Chou, H. P. Tserng, C. Lin, and C. Yeh, "Critical factors and risk allocation for PPP policy: Comparison between HSR and general infrastructure projects," *Transport Policy*, vol. 22, pp. 36–48, 2012, doi: 10.1016/j.tranpol.2012.05.009.
- [15] C. Cooremans, "Make it strategic! Financial investment logic is not enough," *Energy Efficiency*, vol. 4, no. 4, pp. 473–492, 2011, doi: 10.1007/s12053-011-9125-7.
- [16] Y. Chen and B. Lin, "Understanding the green total factor energy efficiency gap between regional manufacturing—Insight from infrastructure development," *Energy*, vol. 237, Art. no. 121553, 2021, doi: 10.1016/j.energy.2021.121553.
- [17] F. Grigoli and Z. Mills, "Institutions and public investment: An empirical analysis," *Economics of Governance*, vol. 15, no. 2, pp. 131–153, 2013, doi: 10.1007/s10101-013-0137-y.
- [18] S. Hall, T. J. Foxon, and R. Bolton, "Investing in low-carbon transitions: Energy finance as an adaptive market," *Climate Policy*, vol. 17, no. 3, pp. 280–298, 2015, doi: 10.1080/14693062.2015.1094731.
- [19] M. Van Eeten, A. Nieuwenhuijs, E. Luijck, M. Klaver, and E. Cruz, "The state and the threat of cascading failure across critical infrastructures: The implications of empirical evidence from media incident reports," *Public Administration*, vol. 89, no. 2, pp. 381–400, 2011, doi: 10.1111/j.1467-9299.2011.01926.x.
- [20] B. M. Eren, N. Taspinar, and K. K. Gokmenoglu, "The impact of financial development and economic growth on renewable energy consumption: Empirical analysis of India," *Science of the Total Environment*, vol. 663, pp. 189–197, 2019, doi: 10.1016/j.scitotenv.2019.01.323.
- [21] S. Lüthi and T. Prässler, "Analyzing policy support instruments and regulatory risk factors for wind energy deployment—A developers' perspective," *Energy Policy*, vol. 39, no. 9, pp. 4876–4892, 2011, doi: 10.1016/j.enpol.2011.06.029.
- [22] M. Javid, "Public and private infrastructure investment and economic growth in Pakistan: An aggregate and disaggregate analysis," *Sustainability*, vol. 11, no. 12, Art. no. 3359, 2019, doi: 10.3390/su11123359.
- [23] I. Boie, C. Fernandes, P. Frias, and M. Klobasa, "Efficient strategies for the integration of renewable energy into future energy infrastructures in Europe—An analysis based on transnational modeling and case studies for nine European regions," *Energy Policy*, vol. 67, pp. 170–185, 2014, doi: 10.1016/j.enpol.2013.11.014.
- [24] C. Tolliver, H. Fujii, A. R. Keeley, and S. Managi, "Green innovation and finance in Asia," *Asian Economic Policy Review*, vol. 16, no. 1, pp. 67–87, 2020, doi: 10.1111/aepr.12320.
- [25] T. Väilä, "Infrastructure and growth: A survey of macro-econometric research," *Structural Change and Economic Dynamics*, vol. 53, pp. 39–49, 2020, doi: 10.1016/j.strueco.2020.01.007.
- [26] R. Clark, J. Reed, and T. Sunderland, "Bridging funding gaps for climate and sustainable development: Pitfalls, progress and potential of private finance," *Land Use Policy*, vol. 71, pp. 335–346, 2017, doi: 10.1016/j.landusepol.2017.12.013.

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- [27] L. Kannenberg and P. Schreck, "Integrated reporting: Boon or bane? A review of empirical research on its determinants and implications," *Journal of Business Economics*, vol. 89, no. 5, pp. 515–567, 2018, doi: 10.1007/s11573-018-0922-8.
- [28] J. Terrapon-Pfaff, T. Fink, P. Viebahn, and E. M. Jamea, "Social impacts of large-scale solar thermal power plants: Assessment results for the NOORO I power plant in Morocco," *Renewable and Sustainable Energy Reviews*, vol. 113, Art. no. 109259, 2019, doi: 10.1016/j.rser.2019.109259.
- [29] N. Ameli, P. Drummond, A. Bisaro, M. Grubb, and H. Chenet, "Climate finance and disclosure for institutional investors: Why transparency is not enough," *Climatic Change*, vol. 160, no. 4, pp. 565–589, 2019, doi: 10.1007/s10584-019-02542-2.
- [30] V. Gaur and E. Gupta, "The determinants of electricity theft: An empirical analysis of Indian states," *Energy Policy*, vol. 93, pp. 127–136, 2016, doi: 10.1016/j.enpol.2016.02.048.