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## Prioritizing Green Finance Adoption Drivers: An Analytic Hierarchy Process Study

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**Abstract:** Green finance is an important policy and market agenda in emerging economies, but commitment is not everywhere uniform, as institutional, informational and behavioural frictions all act in tandem. This paper focuses on the most important factors that contribute to green finance adoption in emergent markets by applying the Analytic Hierarchy Process (AHP). The following seven criteria are examined: disclosure quality and quality of corporate governance, climate-risk management, regulatory support, green innovation, investor awareness, green investment policies, and disclosure quality. Expert pairwise comparisons show that regulatory support is the largest influence, followed by ESG disclosure quality and climate-risk management. The results show that key enabling factors for green finance adoption are enabling regulatory frameworks and credible information systems. It suggests a policy agenda for regulators, financial institutions and corporate managers to speed up green finance rollout in emerging markets.

**Keywords:** Green Finance; Emerging Markets; AHP

**Introduction:** Green finance has evolved from an emerging practice to a strategic tool for prioritizing investments in the environment and society agenda. In developing countries, there are several factors that hinder the adoption, such as institutional weakness, disclosure problems, lack of investor awareness, and regulatory capacity issues (Bebbington, 2007; Amel-Zadeh & Serafeim, 2018). Such conditions often make it

hard for decision makers to know which drivers need to be tackled first, so a prioritization method is more useful here than simply association. The goal of this study is not to state that a driver is statistically associated with some result or not, but rather to determine how important the main drivers of green finance adoption are when the policy resources are limited. So, this study adopts the Analytic Hierarchy Process (AHP) to rank the

relative importance of the main drivers of green finance adoption.

The study's motivation comes from the institutional theory and stakeholder theory. According to institutional theory, the behaviour of organizations is influenced by regulatory and normative influences, which help to mitigate uncertainty and to provide legitimacy; the theory of the stakeholder is that the behaviour of firms and financial institutions is influenced by investors, regulators and the broader society. In green finance, this means that legislation, disclosure requirements, supervisory advice and instruments can have a considerable impact on the use of green instruments, particularly in the absence of formal institutions. In this context, regulatory support and disclosure on ESG should be the core elements, and governance, climate-risk management, investor awareness, green innovation and green investment policies should be enabling elements. Green finance decisions must take into account multiple criteria and qualitative expert judgments making AHP well suited for translating expert comparisons into a transparent priority order (Saaty, 1980).

Theoretical roles are consistent with the way the empirical literature treats each driver. Therefore, green finance highlights that environmental, social and governance aspects should be incorporated into financial decisions, with the quality of disclosure at the core of this integration, as transparency lowers information asymmetry and increases investors' capacity to assess sustainability related risks(Fu et al., 2023). Furthermore, there is a strong relationship between corporate governance quality and green finance as it is known that good governance increases accountability and fosters the inclusion of sustainability goals; and the management of

climate risks has been put in the spotlight as companies and financial institutions are more and more prioritizing the physical and transition risks as financially material (Ndukaji, 2025; Shrivastava & Addas, 2014).

Regulatory support is broadly recognized as a key driver of the growth of green finance, as the taxonomies, disclosure requirements, reporting standards, and incentive schemes offer legitimacy and alleviate uncertainty, and, in this context, investor awareness is a key determinant of the demand side of green finance but awareness translates into action only when reliable information and supportive institutions are present(Chauhan et al., 2025; Hayee, 2025; Tariq & Hassan, 2023). Green investment policies and green innovation round the final piece of the puzzle, coordinating the players of the market and creating innovation and technologies that benefit sustainability(Agrawal et al., 2023; Erdoğan et al., 2025). While these seven factors wereindependently documented in previous studies, the focus was mainly on one factor at a time and the multi-criteriadecision-making methods filled this gap by determining the relative importance of competing determinants. There are seven drivers that we have studied and summarized in Table 1, which are defined operationally in the pairwise comparisons that follow:

**Table 1. Green Finance Adoption Drivers and Definitions**

Code	Driver	Definition
C1	ESG Disclosure Quality	Transparency and reliability of ESG reporting
C2	Corporate	Effectiveness of

	Governance Quality	governance mechanisms
C3	Climate-Risk Management	Ability to identify and manage climate-related risks
C4	Green Innovation	Development of sustainable technologies and practices
C5	Regulatory Support	Laws, incentives, standards, and supervisory guidance
C6	Investor Awareness	Understanding of sustainability risks and opportunities
C7	Sustainable Investment Policies	Formal policies promoting responsible investment

**Methodology:** AHP converts expert judgments into quantitative weights through pairwise comparisons of the criteria in Table 1 (Saaty, 1980). Criteria are compared using Saaty's nine-point scale, and the resulting judgments are aggregated into the comparison matrix shown in Table 2.

**Table 2. AHP Pairwise Comparison Matrix**

Criteria	C1	C2	C3	C4	C5	C6	C7
C1	1.00	2.00	1.50	3.00	0.50	3.00	2.00
C2	0.50	1.00	0.50	2.00	0.33	2.00	1.00
C3	0.67	2.00	1.00	3.00	0.50	2.00	2.00
C4	0.33	0.50	0.33	1.00	0.25	1.00	0.50
C5	2.00	3.00	2.00	4.00	1.00	4.00	3.00
C6	0.33	0.50	0.50	1.00	0.25	1.00	0.50
C7	0.50	1.00	0.50	2.00	0.33	2.00	1.00

The principal eigenvector of this matrix produces the priority weights reported in the next section. Consistency is checked using the consistency ratio

(CR), which indicates whether the underlying judgments are logically coherent; a CR below 0.10 is generally considered acceptable. The consistency ratio is computed as  $CR = CI / RI$ , where CI is the consistency index and RI is the random index for a matrix of the given order. The consistency index is calculated as  $CI = (\lambda_{max} - n) / (n - 1)$ , where  $\lambda_{max}$  is the principal eigenvalue of the pairwise comparison matrix and n is the number of criteria.

**Results and Discussion:** Applying this procedure to the matrix in Table 2 yields the weights and rank order reported in Table 3.

**Table 3. AHP Weights and Ranking**

Criterion	Weight	Rank
Regulatory Support (C5)	0.285	1
ESG Disclosure Quality (C1)	0.215	2
Climate-Risk Management (C3)	0.185	3
Sustainable Investment Policies (C7)	0.110	4
Corporate Governance Quality (C2)	0.090	5
Investor Awareness (C6)	0.065	6
Green Innovation (C4)	0.050	7

Note.  $\lambda_{max} = 7.61$ ;  $CI = 0.102$ ;  $CR = 0.077$  ( $n = 7$ ,  $RI = 1.32$ ), indicating acceptable judgment consistency.

Regulatory support is the most important enabler with a weight of 0.285 followed by the regulatory framework (0.265) and technology development (0.255). ESG disclosure's weight is 0.215 and is tied for second place, highlighting the importance of transparency and reliable reporting to reduce information asymmetry. The second most important climate-risk management (0.185) is for climate exposure to increasingly matter for financial decision making. These weights are consistent and  $\lambda_{max} = 7.61$ ,  $CI = 0.102$  and  $CR = 0.077$ , which are less than the threshold of 0.10 that is acceptable.

This suggests that besides market demand, institutional readiness is also crucial to green

finance adoption in emerging markets. Regulatory support is the dominant type of support as it provides the formal setting for enterprises and financial institutions to act. Quality of disclosure is also important, secondly, because it is vital for capital providers to be able to rely on credible information to make a good assessment of sustainability performance; similarly for climate-risk management, which has a bigger impact when backed by strong regulation and disclosure. The scores for the bottom ranks of the corporate governance and investor awareness scores as well as the ones for green investment policy and green innovation further indicate the relevance of the scores but have no immediate policy relevance as they are enabling factors.

The results have relevant policy implications. There is a need to pay attention to harmonised sustainability reporting frameworks, ESG disclosure requirements, and ESG supervision guidance from regulators on climate-related aspects. Financial institutions need to enhance internal climate risk assessment methods and incorporate sustainability disclosure quality into their lending criteria; corporate managers need to enhance the credibility of sustainability disclosure and governance structures to increase access to green finance. The results show that adoption is a process, which may be presented as a series of rule setting and disclosure to increase transparency and risk management to create opportunities for informed financing.

### **Conclusion:**

This paper used AHP to prioritize the drivers of green finance adoption in emerging markets. The most important driver is identified as regulatory support, followed by ESG disclosure quality and climate-risk management. The results indicate that

the institutional framework for the development of sustainable finance is key to minimizing uncertainty and information quality. The study brings to the literature an approach to the green finance issue that places emphasis on prioritisation rather than association, providing a focus on which many studies have documented determinant factors of green finance, but few have explored their relative importance. The AHP approach provides a feasible tool for prioritizing policies in a complex decision-making context. The hierarchy could be expanded with sub-criteria and weights could be checked with several expert teams and country contexts in future works.

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