**Table 1.** Overview of the selected Papers and the identified factors that drive ESG adoption

| **Paper No.** | **Authors** | **Region of Focus** | **Type of Paper** | **Factors** |
| --- | --- | --- | --- | --- |
| **P1** | Khamisu et al. (2024) | India | E | **(F2:** Profitability and Resource Allocation) |
| **P2** | Martiny et al. (2024) | Global | LR | **(F5:** Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), CDP (Carbon Disclosure Project), Integrated Reporting Framework (<IR>), EU Non-Financial Reporting Directive (NFRD), ISO 26000, Global Reporting Initiative (GRI)) | **(F13**: Profitability and Financial Performance) |  (**F2**: Profitability and Resource Allocation) |  (**F7**: Gender) **|**  (**F14**: Investors) |  (**Formal Institutions**: Democracy; Political stability; Educational systems; Corruption levels)| (**Informal Institutions**: Cultural Background; Media Pressures) |
| **P3** | Khaw et al. (2024) | Global | SLR | (**F13**: Profitability; Corporate governance; Firm Size) |  (**F2**: Profitability) |  (**F7**: Gender) |  (**F14**: Investors; Activist Investors; Institutional Investors; Shareholders; Employees; Media) | (**F10**: Accountability) |  (**F3**: Pollution control and waste management) | (**F12**: Governance Approach; managerial exploitation reduction; CEO influence) |
| **P4** | Bhaskaran et al. (2023). | Global | E | (**F13** – Firm Size) |  (**F13** – Level of risk) |  (**F8**: Link between board independence and proactive ESG initiatives) | (F14 – Institutional Investors) |  (**F14** – Investors: demand for ESG transparency drives bank strategy) |  (**F2** – Profitability and Resource Allocation; Revenue: positive market-valuation effects motivate ESG) |  (**F5** – UN Principles for Responsible Banking; regulations and guidelines significantly drive ESG adoption) |  (**F2** – Sectoral Variations: regional differences influence but less than bank-specific/market pressures) |
| **P5** | Singhania et al. (2024) | 28 countries (developed and developing) including Sweden, USA, India, China, etc. |  | (**F5**: PRI adopters score much better in ESG integrations; GRI; SASB; NFRD; UNGC) |  (**F12** – Social issues: in Africa ESG is driven by poverty, international aid, etc.) |  (**F14** – Investors; consumers: especially in developed countries) |  (**F7** – Gender: in developed countries) |  (**Digital transformation**: increased ICT readiness and sustainability-tech innovation improves ESG metrics) |
| **P6** | Mukhtar et al. (2024). | Malaysia | E | (**F5**: GRI; UNGC; UNPRI; SASB; IRF – key tool for alignment/reporting) |  (**F16**: part of organizational strategy) |  (**F13** – Level of risk: emphasized re capabilities) |  (**F2** – Market Competitiveness: linked to competitive advantage) |  (**F8**: governance factor influencing ESG) |  (**F7** – Racial diversity: strong driver of innovation) |  (**F6**: mentioned with limited emphasis) |  (**F14** – Consumers; Investors; Employees: key external drivers) |  (**F15**: supports sustainability governance) |  (**F3**: strong emphasis on green outcomes) |  (**F12** – Green technology adoption essential for goals) | (**F11**: primary driver for ESG practices) |  (**F14**: important for long-term success) |
| **P7** | Mooneeapen et al. (2022) | 27 countries (S&P Global 1200 firms) | E | (**F11**: regulatory quality and mandatories strongly determine ESG) |  (**Formal Institutions** – Political stability; democracy: shape ESG approaches) |  (**F14** – Consumers; Investors; NGOs: ESG to build trust in weak-governance contexts) |  (**Informal Institutions** – Political stability; globalization: ESG for legitimacy in cross-border markets) |
| **P8** | Balogh et al. (2022) | Czech Republic | E | (**F13** – Firm size: higher revenues → more ESG disclosure; Workforce size: large employee base drives social/governance reporting) |  (**F6/F7**: gender/board size had no significant effect in Czech firms) |  (**F2** – Sectoral Variations: mining, energy, pharma lead disclosures) |  (**Informal Institutions** – Legitimacy pressure: reputation drives ESG integration) |
| **P9** | Lisovsky (2021) | Russia | E | (**F13** – Firm size: resource access facilitates ESG) |  (**F15**: dedicated CSR units drive sustainability goals) | (**F14** – Investors; consumers; employees: external pressure for ESG) |  (**F2** – **Revenue**; competitive advantage; sectoral variations: certain industries more active) |  (**Digital transformation** : Investment in new green technologies is critical) |  (**Informal Institutions** – Globalization drive ESG) |  (**F11**: compliance with regulations) |  (**F5** – UNGC; Carbon Cross-Border Tax membership) |
| **P10** | Hasnan et al. (2023). | Global | SLR | (**F13** – Firm size: public scrutiny drives ESG disclosure) | (**F2** – Revenue: leverage → disclosure pressure; Profitability: funds ESG initiatives) |  (**F12** – Board Attributes: independence, diversity, size steer disclosure quality; ESP: economic sustainability performance justifies ESG) |  (**F7** – Gender: female board presence boosts ESG) |  (**F19** – Audit Committee External Members enhance transparency) |  (**F5** – SDGs; Paris Agreement frameworks guide disclosures) |  (**F14** – Investors; employees: stakeholder pressure for transparency) |
| **P11** | Li et al. (2023) | 20 developed & 20 emerging countries (40 total) | E | (**F13** – Firm size: resources & expectations drive more data) |  (**F2** – Leverage (D/E ratio): minimal developed-market impact) |
| **P12** | Sun et al. (2023) | China | E | (**F12** – Family Ownership: high stakes → ESG focus; Family Control: both positive (values alignment) and negative (overcontrol)) |  (**F2** – Market Competitiveness: cost/profit focus over ESG in tight markets) |  (**F8**: independent boards curb family influence) |  (**F6**: larger boards bring diversity but may slow decisions)| (**F12** – CEO duality: negative ESG effect) |  (**F13** – Firm size: resources & scrutiny boost disclosure) |
| **P13** | Lavin et al. (2021) | Chile | E | (**F14** – Shareholders: multiple-board directors → short-term profit bias; Institutional Investors: encourage long-term transparency) |  (**F8**: board independence → oversight & reduced agency problems) |  (**F7** – Racial diversity: broader perspectives for complex ESG issues; Gender) |  (**F12** – Ownership Concentration: high concentration → less ESG transparency) |  **(F13** – Firm size: resources/regulation drive disclosure) | **(F19** – Audit: independent committees for objectivity) |
| **P15** | Di Simone et al. (2022) | Global | E | **(F13** – Firm size: resource access for sustainable practices) |  **(F2** – Profitability: funds ESG; Sectoral Variations: social vs. environmental emphasis by industry) |  **(Formal Institutions** – Economic Development: higher implementation in developed vs. emerging economies) | **(F11:** developed vs. emerging economies differ in mandatory ESG roles) |
| **P16** | Daugaard et al. (2022) | Global | LR | **(Formal Institution**s – Economic Development: wealth/governance → better ESG infrastructure) |  **(F11**: mandatory disclosures & governance frameworks enforce ESG) |  **(F12** – Governance approach: board diversity, ethics & policies ensure strategic ESG) |  (**F14** – Investors; employees; customers; NGOs: broad stakeholder engagement drives adoption ;Institutional Investors/customers: ESG integration pressure) |  (**Informal Institutions** – Cultural norms: e.g. Islamic finance stewardship) |  (**F2** – Sectoral Variations: industry-specific scrutiny) |  (**F5** – UN SDGs; GRI: global standardization) |  (**Informal Institutions** – Media attention: public scrutiny motivates ESG) |  (**Digital transformation** – Blockchain: data analytics & transparent reporting) |
| **P17** | Helfaya et al. (2023) | Europe | E | (**F8**: non-executive directors ensure unbiased ESG oversight) |  (**F7** – Gender: female directors focus on social/enviro responsibilities) |  (**F15**: CSR committees improve governance & risk/opportunity identification) |  (**F5**: ESG guidelines standardize, legitimize global ESG metrics) |  (**Informal Institutions** – Cultures: individualism & uncertainty-avoidance shape reporting) |  (**F6**: board size for strategy development) |  (**F11**: strong regulation → higher disclosure scores) |  (**F12** – Board Meeting Frequency: engagement level for ESG issues) |
| **P18** | Kong et al. (2023) | Central and Southern Africa | E | (**F3**: environmental performance drives firm value, esp. in pharma) |  (**F12** – Social welfare: stakeholder trust & legitimacy; slightly lower direct financial impact) |  (**F7** – Racial diversity: oversight benefit but muted short-term financial effect) |  (**F14** – Investors; customers: clear policies → trust but modest value impact) |  (**F11**: risk-management disclosure → indirect ESG value)|  (Digital transformation: tech as enabler of enviro & social initiatives) |  (**Informal Institutions** – Legitimacy pressure: norm alignment for ESG) |
| **P19** | Issa (2023) | Europe | E | (**F7** – Gender: more women on boards → greater clean-energy adoption) |
| **P20** | Cucari et al. (2018) | Italy | E | (**F8**: independent directors → transparency & higher ESG scores) |  (**F15**: CSR committee presence → better ESG scores) | (**F7** – Gender: mere presence not enough for ESG enhancement) |  (**F13** – Firm size: control variable positive association) | (**F6** – Board size: minimal role in ESG) |
| **P21** | Ahmad et al. (2024) | Global | LR | (**F3**: boosts image, reduces risks, promotes sustainability) | (**F8**: governance structure for policy implementation & confidence) |  (**F7** – Gender: female participation improves decision-making) |  (**F12** – Digital transformation: traceability & reporting efficiency support ESG) |  (**F2** – Profitability: attracts investors & competitive edge) | (**F11**: mandatory/voluntary reporting frameworks like GRI/SASB) |  (**Informal Institutions** – Media Coverage; Cultures: religious-driven ESG in Islamic countries) |
| **P22** | Sciarelli et al. (2021) | Italy, France, Austria, Luxembourg | E | (**F14** – Institutional investors: demand stronger ESG/Gender-diverse governance) | |
| **P23** | Issa et al. (2023) | Europe | E | (**F7** – Gender: better waste management; lower biodiversity impact; ethical decision-making) |  (**F12** – Governance Approach: policy execution & score improvement) |  (**F3** – baseline environmental performance amplifies board-diversity effect) |  (**F8**: independent oversight critical for ESG matters) |  (**F13** – Firm size: resource & scrutiny advantages) |
| **P24** | Li et al. (2018) | United Kingdom | E | (**F12** – CEO power: stronger power → tighter link between ESG disclosure & firm value) |
| **P25** | Dicuonzo et al. (2022) | Europe | E | (**F7** – Gender: women in leadership support balanced decision-making) |  (**F8**: independent directors → CSR focus) |  (**F15**: dedicated committees for sustainability efforts)|  (**F14** – Investors: growing demand for sustainable banking) |  (**F11**: EU Action Plan on Sustainable Finance 2018) |
| **P26** | Barbosa et al. (2023) | Global | LR | (**Informal Institutions** – Culture: Europe’s ESG research leadership reflects regulatory emphasis) |  (**F2** – Sectoral Variations) |
| **P27** | Cherian et al. (2019) | India | E | (**F12** – Spending in education: drives profits & highlights CSR in skill development) |

Table 1 summarized the 27 articles that were included in our content analysis, detailing for each paper its identifying number, authorship, year of publication, geographic focus, methodological approach, and the ESG‐adoption drivers it reported. First, with regard to study design, nineteen of the articles were empirical investigations, five took the form of literature reviews, and the remaining three were conceptual or theoretical papers. Then, in terms of geographic scope, eleven Papers examined global or multi‐country samples, nine Papers focused exclusively on European markets, four addressed contexts in Asia (notably India and China), and three investigated African or other developing‐economy settings.

Subsequently, we recorded all ESG drivers identified across these papers, yielding eighteen distinct factors in total. Firm characteristics—such as organizational size, resource endowments, and strategic orientation—emerged as the most frequently cited driver, appearing in twenty‐three of the twenty‐seven studies. Demand by stakeholders (including investors, customers, and non‐governmental organizations) followed closely, having been identified in twenty‐one studies. Market performance metrics (for example, past profitability or revenue trends) were highlighted in seventeen papers, while board diversity and board independence were noted in fifteen and fourteen studies, respectively. Other recurrent drivers included adherence to voluntary reporting frameworks (twelve studies), the adoption of digital transformation (n=11), and compliance with mandatory disclosure policies (n=9)).

**Table 2.** Coding Framework for ESG Adoption Drivers: Categories and Constructs

| **Taxonomies** | **What was coded from the papers** |
| --- | --- |
| **F1: Financial performance** | Mentions of profitability, shareholder value, stock price performance, or ESG as a tool for financial risk mitigation / reputation insurance |
| **F2: Market performance** | Industry- or market-level dynamics such as sectoral variations, competitive pressures, profitability, and resource allocation affecting ESG adoption |
| **F3: Environmental performance** | Reporting or discussion of emissions reduction, pollution control, resource efficiency, energy use, renewable energy adoption |
| **F4: Earnings quality** | Accounting quality, earnings transparency, and financial reporting integrity in relation to ESG |
| **F5: ESG reporting guidelines** | Use of frameworks such as GRI, SASB, CSRD, NFRD, TCFD, or equivalent standards guiding ESG disclosure |
| **F6: Board size** | Number of directors on the board as a factor influencing ESG decision-making |
| **F7: Board diversity** | Representation of women and racial/ethnic minorities on corporate boards |
| **F8: Board independence** | Proportion of independent or non-executive directors; separation of CEO and chair roles |
| **F9: Signaling future performance** | Use of ESG reporting to signal long-term growth potential or reduced risk to markets and investors |
| **F10: Third-party ratings** | ESG scores and evaluations from external agencies (e.g., MSCI, Sustainalytics, Refinitiv) |
| **F11: Mandatory disclosure policies** | Legal requirements such as EU CSRD, NFRD, SEC rules, or national sustainability mandates |
| **F12: Managerial attributes** | CEO or top management traits, leadership style, compensation structure, ESG expertise, and personal commitment |
| **F13: Firm characteristics** | Internal features including firm size, corporate governance structures, and risk profile |
| **F14: Demand by stakeholders** | Pressures from investors, shareholders, customers, employees, institutional investors, impact investors, and NGOs |
| **F15: Presence of CSR committee** | Existence of a dedicated CSR/ESG/sustainability committee within the governance structure |
| **F16: ESG materiality** | Focus on materiality assessment, prioritization of ESG issues, and double materiality under EU standards |
| **F17: Reputation insurance** | ESG as a mechanism for protecting corporate reputation and legitimacy, especially during crises |
| **F18: Disclosure costs** | Costs of gathering, reporting, and auditing ESG information that may deter adoption |
| **F19: Audit and assurance** | External assurance of ESG or sustainability reports; role of auditors in ESG credibility |
| **F20: Reduced information asymmetry** | ESG disclosure reducing gaps between managers and investors, improving transparency and trust |
| **Formal Institutions** | Macro-level institutional drivers: corruption levels, democracy, political stability, economic development |
| **Informal Institutions** | Norms, culture, legitimacy pressures, media influence, globalization, mimetic pressures |