

Behavioral Determinants of Investor Decisions in ESG Investment Flows: Emerging Trends and New Developments

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Abstract

Background: Environmental, social, and governance (ESG) investing has emerged as a pivotal mechanism for channeling global capital toward sustainability-oriented assets, reshaping contemporary financial markets and investor behavior. Hence, the paper examines how behavioral drivers influence capital allocation to ESG assets. It synthesizes emerging trends and new developments by linking investor preferences, beliefs, and trust in disclosure with portfolio rules and market transmission mechanisms.

Methods: A structured bibliometric review of Scopus records (2010–2025) was conducted. Performance indicators (yearly publications, citations), source and institutional profiles, and science-mapping techniques were used, including co-authorship density, bibliographic coupling, and keyword co-occurrence. The analysis followed established reporting, and results were summarized through ranked tables and network visualizations.

Results: As per the findings, the field expanded strongly after 2019 and peaked in 2024. Finance and operations journals developed portfolio and optimization methods, while sustainability and strategy outlets assessed disclosure credibility, climate salience, and governance practices. Four high-frequency themes had emerged: portfolio construction and risk methods; sustainability policy and disclosure; markets and fund flows; and corporate responsibility and impact. These themes clarified how ESG preferences and perceived credibility were operationalized through screening and tilting and were transmitted to prices and liquidity via flows.

Conclusion: The study concludes that ESG allocation is fundamentally shaped by investor preferences and beliefs, operationalized through portfolio design, and transmitted to markets via fund flows. Strengthening disclosure credibility, aligning sustainability screens with risk protocols, and linking stewardship to measurable outcomes emerge as key levers for enhancing trust, performance discipline, and impact. While bibliometric analysis is constrained by database coverage and citation windows, future research should integrate behavioral metrics with portfolio and market microstructure tests to clarify flow-to-price channels and enhance evidence on credibility, salience, and impact.

Novelty: The study offers an integrated framework that connects behavioral mechanisms with portfolio implementation and market transmission. It consolidates fragmented evidence into a coherent map of sources, institutions, and themes, and it identifies research priorities that combine behavioral measurement with credible flow-to-price identification.

Keywords: ESG investing; behavioral finance; capital flows; bibliometric analysis; sustainability disclosure.

JEL classification: G11; G14; G41; Q56

Introduction

Environmental, social, and governance (ESG) investment flows are increasingly viewed as the lever to achieve persuasive transformations in the allocation of global savings toward sustainability-oriented assets in the majority of contemporary financial market set ups ([Kraussl, 2023](#)). Implicitly, sustainable finance as the philosophy of allocating capital in ways that consider environmental outcomes, social outcomes, and governance outcomes has knocked the doors of asset managers and policy institutions as an imperative activity that links impact with risk adjusted return ([Dinh, 2025](#)). As a program of research, ESG investing draws from behavioral finance in order to explain why investors think, behave, and perform in ways that deviate from fully rational benchmarks, and why flows do not always track fundamentals one

for one ([Costa et al., 2017](#); [Kraussl, 2023](#)). The core premise is that attention, beliefs, and norms shape how signals about sustainability are interpreted and priced, which positions behavioral drivers as central for understanding the magnitude, the direction, and the persistence of ESG fund flows across instruments and jurisdictions ([Dinh, 2025](#); [Meunier & Richit, 2023](#)).

Historically, responsible investment emerged from values based screens and subsequently expanded into integrated approaches that connect financially material sustainability information with valuation models; this evolution now occupies a central stage for many organizations that steward household savings and sovereign assets ([Kraussl, 2023](#)). In practice, ESG investing is the application of comparable information and credible governance in portfolio construction, engagement, and reporting; practically it is the ability of an investor to observe, to interpret, and to act as humans who also care about societal outcomes ([Adwani, 2018](#)). Although the concept of responsible investment has earlier roots, the contemporary acceleration has been catalyzed by data availability, analytics, stewardship codes, and the diffusion of labeling regimes that promise clarity for clients as well as regulators ([Dinh, 2025](#); [Meunier & Richit, 2023](#)). Behavioral mechanisms operate throughout this diffusion. Investors use heuristics when facing complex scorecards; they rely on salient narratives after climate events; they free ride on stewardship by anchor institutions; they anchor on labels when information is incomplete; and they react to perceived greenwashing through outflows even when cash flow fundamentals are unchanged ([Kraussl, 2023](#); [Meunier & Richit, 2023](#)).

The literature organizes behavioral drivers into overlapping clusters that are directly relevant for flows. First is attention and salience, where media coverage, climate disasters, and policy announcements draw investor focus toward categories rather than individual cash flows; the result is category momentum in which labeled funds attract disproportionate subscriptions relative to performance ([Kraussl, 2023](#)). Second is belief formation and ambiguity, where disagreement across rating agencies and the complexity of indicators create room for confirmation bias and ambiguity aversion; under such uncertainty some investors underweight long horizon benefits whereas others overweight moral satisfaction, which jointly affects fund selection and redemption ([Meunier & Richit, 2023](#)). Third is social norm and identity, where moral suasion, peer effects, and client demand motivate intermediaries to launch ESG products and to commit to net zero pathways, thereby creating self fulfilling supply and marketing feedback loops that channel flows ([Kraussl, 2023](#)). Fourth is trust and credibility, where audit quality, board independence, and disclosure assurance reduce perceived greenwashing risk and stabilize flows toward issuers with verifiable claims ([Abhilash et al., 2023](#)). Finally is literacy and complexity, where retail investors as well as trustees struggle with jargon and data overload; in those segments labels and third party endorsements substitute for due diligence and become powerful flow catalysts or deterrents ([Dinh, 2025](#)).

For emerging and smaller markets including Nepal, the salience of these behavioral channels may be magnified because market depth is modest and the institutional infrastructure for

verification is still evolving. Investors who allocate to hydropower, agriculture resilience, and financial inclusion vehicles face information gaps about environmental risk, social safeguards, and governance quality; they therefore lean more on reputation of sponsors, development partner endorsements, policy narratives, and media framing when making allocation decisions ([Pingle et al., 2025](#)). Thin liquidity increases the impact of attention shocks on prices and flows, while concentrated ownership increases the role of a few anchor institutions whose preferences can cascade through the market. In such contexts credible disclosure, assurance, and board level governance reforms have high marginal benefits because they compress uncertainty, reduce perceived misrepresentation, and crowd in capital from cautious investors who would otherwise sit on the sidelines ([Abhilash et al., 2023](#); [Pingle et al., 2025](#)).

Against this backdrop, two empirical problems motivate this study. The first problem is fragmentation: evidence on ESG flows spans finance, accounting, management, psychology, and public policy, which makes it difficult to see the intellectual structure and the dominant behavioral mechanisms without a systematic map ([Donthu et al., 2021](#); [Passas, 2024](#)). The second problem is measurement: disagreement among ratings, evolving taxonomies, and novelty in impact verification create moving targets for researchers and practitioners; consequently, studies often yield mixed results about the strength and persistence of ESG flow premia because their constructs and samples diverge ([Kraussl, 2023](#); [Meunier & Richit, 2023](#)). A rigorous bibliometric approach that integrates performance indicators with science mapping is therefore required in order to identify the knowledge base, the research fronts, and the thematic evolution of behavioral drivers influencing ESG flows ([Bornmann & Mutz, 2015](#); [Donthu et al., 2021](#); [Eduardsen & Marinova, 2020](#)).

By the above given background, the main objective of the present article is to systematically review the existence of research on behavioral drivers influencing ESG investment flows and the related domains in combination with sustainable finance for the past fifteen years. Specifically, the research aims to explore behavioral mechanisms while keeping ESG flows as the common dependent variable; identify the predominant themes that connect attention, beliefs, norms, trust, and disclosure credibility; examine the role of governance and assurance as credibility anchors in emerging markets; and discuss future directions for integrating bibliometrics with text mining and policy timelines. The rest of the article is segmented into various sections covering the literature review on behavioral drivers and ESG flows, research methodology and data statistics for the bibliometric study, data analysis including performance and science mapping, as well as discussion and conclusion that draw implications for Nepal and for comparable emerging markets.

Literature Review

ESG investment flows

ESG investment flows refer to the net movement of capital into and out of financial products that apply environmental, social, and governance screens or objectives ([Adwani, 2018](#)). Flows

are a behavioral outcome because they embed investors' beliefs, preferences, and perceptions in real money decisions; therefore they are a clean dependent variable to study how psychological and socio-cultural drivers shape sustainable finance ([Dhasmana et al., 2023](#)). Recent evidence documents that flows are highly sensitive to signals about "sustainability" labels and scores; for example, when Morningstar reclassified funds' sustainability categories, low-sustainability funds experienced large net outflows while high-sustainability funds experienced strong inflows, even though performance differences were not persistent. This pattern indicates both a taste for sustainability and salience-driven reactions that are not fully explained by risk-return alone ([Hartzmark & Sussman, 2019](#)). In equilibrium terms, if a meaningful segment of investors values sustainability directly, then "green" assets can command a non-pecuniary premium, that is, a greenium; expected returns may be lower on average, yet green assets can outperform when investor tastes for sustainability strengthen or climate-risk hedging is valued more highly ([Pastor et al., 2021](#)). Flows therefore become a barometer of changing tastes, beliefs about future payoffs, and the credibility of ESG information, and they are also pro-cyclical with attention and sentiment shifting across market regimes ([Financial Times, 2025](#); [Investopedia, 2022](#)).

Conceptual frame for behavioral drivers

A growing survey of ESG investing shows that investor expectations and beliefs, together with heterogeneity in values, are central for understanding sustainable flows. Investors combine pecuniary motives with pro-social or impact motives, and they rely on imperfect signals and evolving norms; consequently, flows reflect both rational updates and behavioral biases ([Kraussl, 2023](#)). From a behavioral-finance perspective, well-documented biases such as overconfidence, anchoring, and confirmation searching influence screening choices, fund selection, and the willingness to reallocate in response to ESG news; bibliometric mapping of behavioral-finance research demonstrates persistent clusters around these biases in investment decision contexts ([Costa et al., 2017](#)). In emerging markets, sentiment and volatility interact with ESG narratives, and investor sentiment shocks can alter the relative performance of ESG indices and the direction of flows ([Dhasmana et al., 2023](#); [Negi et al., 2025](#)).

Values alignment and pro-social preferences

A primary driver of ESG flows is values alignment. Many investors exhibit a willingness to accept slightly lower expected returns for portfolios that better match their ethical preferences, consistent with equilibrium models that yield a greenium ([Pastor et al., 2021](#)). Survey-based and field evidence link stated social responsibility values with stronger ESG attitudes and a higher probability of allocating to ESG funds. Recent analysis using the U.S. National Financial Capability Study shows that valuing social responsibility is positively associated with pro-ESG attitudes, while more extensive investment experience is negatively associated, possibly because seasoned investors are more skeptical of labeling and more attentive to style drifts ([Dinh, 2025](#)). These patterns imply that investor cohorts with stronger social value

salience or less entrenched conventional heuristics direct more flows to ESG vehicles during periods of heightened attention to sustainability topics ([Kraussl, 2023](#)).

Knowledge, literacy, and experience

Financial literacy and subjective investment knowledge shape the interpretation of ESG disclosures and labels. The subjective investment knowledge is positively associated with ESG attitudes, whereas longer investment experience correlates negatively; therefore, outreach that raises practical ESG literacy without triggering cynicism may be crucial for sustaining flows ([Dinh, 2025](#)). Moreover, investors with limited literacy may overweight simple labels or rankings; experimental evidence around sustainability star ratings shows that investors infer future performance from labels, although subsequent return differentials are modest. This mechanism explains flow sensitivity to reclassifications and rating changes ([Hartzmark & Sussman, 2019](#)).

Attention, salience, and media

Attention directs flows because it moves assets to the top of the investor's consideration set. Sustainable funds receive stronger inflows following spikes in media coverage of climate events, regulatory actions, or index rebrandings, consistent with attention and salience effects. New research on retail stock holdings documents that attention variables interact with ESG attributes when retail investors decide whether to buy, hold, or sell, reinforcing the role of attention in sustainable allocation choices ([Shrestha et al., 2025](#)). Additionally, shifts in salience can operate through platform design and fund menus in retirement plans, which can accentuate ESG categories and therefore tilt contributions toward sustainable options, even without strong performance signals ([Hartzmark & Sussman, 2019](#); [Shrestha et al., 2025](#)).

Sentiment and belief dynamics

Sentiment affects ESG flows in at least two ways. First, when overall market sentiment turns risk-off, investors may prefer perceived "quality" ESG leaders; second, sentiment about the energy transition can either amplify or suppress flows, depending on recent performance of clean-energy and fossil-fuel sectors. Evidence from India indicates that investor sentiment significantly influences ESG index dynamics, thereby validating that sentiment is not orthogonal to sustainable performance and flows ([Dhasmana et al., 2023](#)). During 2022–2025, cross-regional reports documented net outflows from ESG equity funds associated with underperformance of growth-oriented green themes, political backlash, and greenwashing scrutiny; nevertheless, ESG bond funds often retained inflows, which suggests segmentation by product class and a flight to perceived safety within sustainable fixed income ([Financial Times, 2025](#); [Investopedia, 2022](#)).

Herding, peer effects, and reputation

Institutional investors may herd into ESG leaders because of benchmark constraints, reputation concerns, and common rating technologies. Recent work shows that firms' ESG performance

can influence the degree of institutional herding, identifying ESG as a driver of correlated trading by asset managers who face similar evaluation criteria ([Assaf et al., 2025](#); [Zhang et al., 2025](#)). In retail channels, social imitation and platform-curated lists amplify flows to funds that are temporarily salient or labeled “sustainable,” producing momentum in assets under management that can persist even after performance mean-reverts ([Hartzmark & Sussman, 2019](#); [Zhang et al., 2025](#)).

Risk perception, ambiguity, and climate hedging

Investors interpret ESG as a partial hedge against climate and transition risks; therefore, when beliefs about climate regulation intensify or when disaster salience rises, flows shift toward ESG products that promise resilience ([Chaubey et al., 2025](#)). The equilibrium framework predicts that green tilts hedge climate risk, and that shocks to investor tastes or climate risk premia can cause green assets to temporarily outperform, which in turn attracts flows and reinforces the greenium ([Pastor et al., 2021](#)). However, ambiguity about the materiality of ESG metrics and the opacity of ratings can depress flows among experience-heavy or ambiguity-averse investors, generating the negative association between investment experience and ESG attitudes reported by [Dinh \(2025\)](#).

Trust, credibility, and greenwashing

Trust is fundamental because ESG information suffers from measurement errors and standardization gaps. The politicization of ESG in some jurisdictions and enforcement actions related to greenwashing reduce investor trust, and that reduction translates into outflows, name changes, and product closures ([Financial Times, 2025](#)). When trust is high, labels catalyze flows; when trust erodes, investors retreat to conventional index funds or to narrower sustainable themes with clearer key performance indicators. Evidence from the Morningstar reclassification “natural experiment” shows that trust-sensitive investors react strongly to exogenous changes in perceived sustainability ([Hartzmark & Sussman, 2019](#)).

Research Methods

The methodological turn toward bibliometrics is well established in finance and management. Performance analysis quantifies productivity and influence through publications, citations, h-indices, and source impact; science mapping uncovers structural relationships among documents, authors, and keywords through co citation, bibliographic coupling, and co word analysis ([Donthu et al., 2021](#)). Recent surveys recommend the combined use of Bibliometrix in R, VOSviewer, and Gephi with transparent protocols for data collection, cleaning, deduplication, fractional counting, and threshold choices so that results are reproducible and comparable across studies ([Aria & Cuccurullo, 2017](#); [Passas 2024](#)). Finance specific applications demonstrate that bibliometric techniques reveal how ideas emerge, diffuse, and coalesce; for example, mapping behavioral decision making has clarified core clusters around heuristics, overconfidence, and sentiment, while corporate governance mappings have shown

the centrality of board independence, audit quality, and disclosure networks for investor outcomes ([Abhilash et al., 2023](#); [Costa et al., 2017](#)). In parallel, as financial research increasingly incorporates artificial intelligence and machine learning to process unstructured text and alternative data, bibliometrics can interoperate with text mining in order to detect emergent topics, narrative shifts, and attention cycles that are likely to influence flows ([Goodell et al., 2021](#); [Obrenovic et al., 2024](#)). Hence, the article applied a transparent protocol for database selection, search strings, and screening; employing VOSviewer as unique contributions for performance analysis, network construction, and visualization ([Aria & Cuccurullo, 2017](#); [Donthu et al., 2021](#); [Passas, 2024](#)).

Data Collection

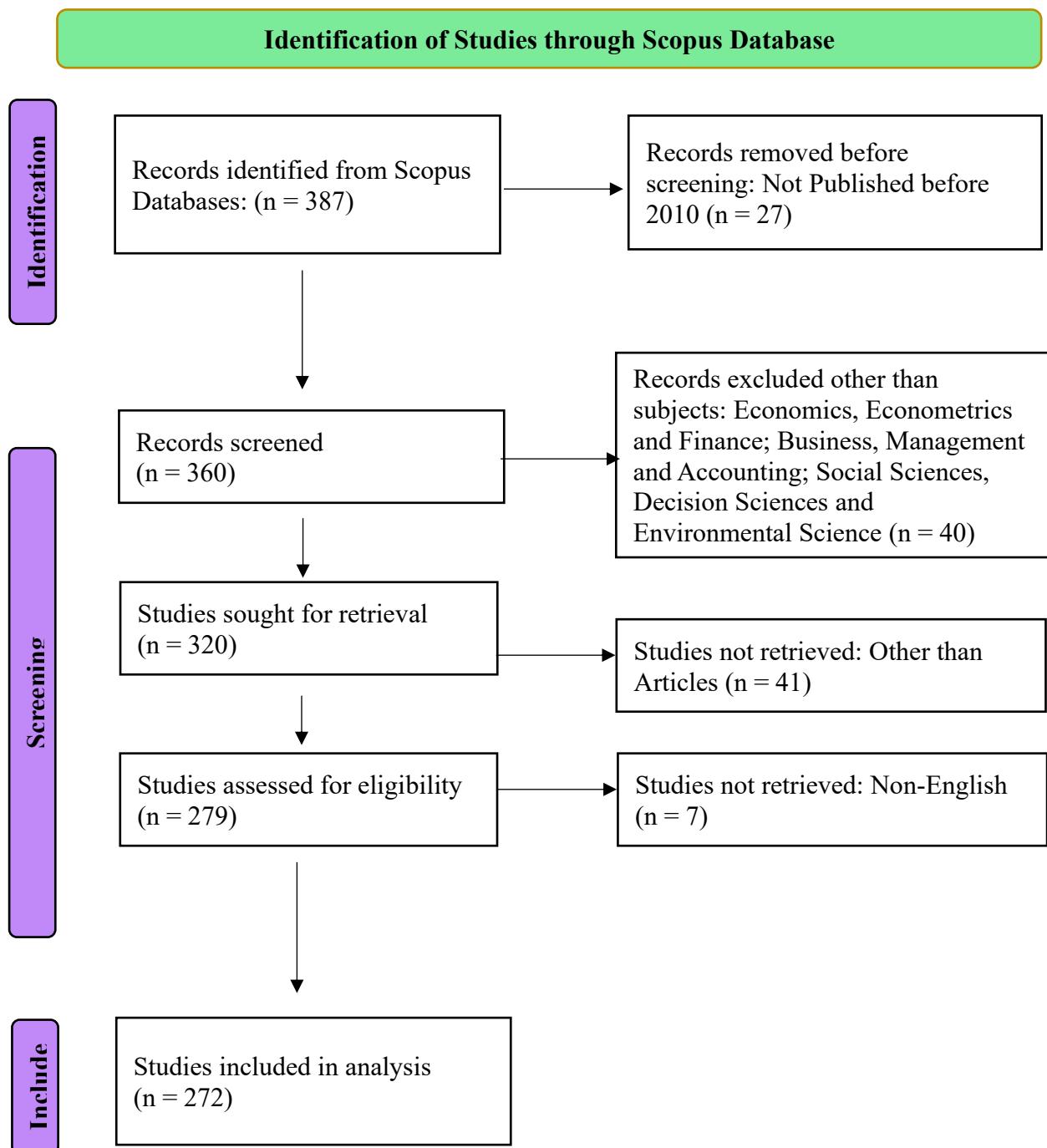
The study adopted the Preferred Reporting Items for Systematic Reviews and Meta Analyses, PRISMA, framework to structure evidence identification, screening, and inclusion, as shown in Figure 1 ([Page et al., 2021](#)). For this study, the Scopus database was utilized because of its comprehensive indexing of journals from major publishers such as Springer, Elsevier, Wiley, Taylor and Francis, and Emerald, and because prior high quality bibliometric reviews in operations and management have successfully relied on Scopus for transparent coverage and export friendly metadata ([Dhamija & Bag, 2020](#); [Donthu et al., 2021](#)).

Moreover, recent systematic reviews in management and social science also prefer Scopus for its breadth of coverage, which is reported as materially larger than the Web of Science Core Collection ([Coffie et al., 2025](#); [Harzing & Alakangas, 2016](#); [Hashim et al., 2025](#); [Obrenovic et al., 2024](#)). As of August 2024, independent library statistics indicate that Scopus lists about twenty seven thousand active peer reviewed journals, whereas Web of Science Core Collection lists about twenty two thousand ([DePaul University Library, 2025](#)).

In the identification stage, Scopus was queried in the Title, Abstract, and Keywords fields with the following Boolean string: TITLE-ABS-KEY(("behavioral bias*" OR "behavioral attitude*" OR "behavioral preference*" OR belief*) AND (ESG* OR "environmental, social, governance" OR "responsible invest*" OR "sustainable invest*" OR "impact invest*") AND ("investment flow*" OR "capital flow*" OR "fund flow*" OR "portfolio flow*" OR "portfolio selection*")) AND (LIMIT-TO(SUBJAREA,"ECON") OR LIMIT-TO(SUBJAREA,"BUSI") OR LIMIT-TO(SUBJAREA,"SOCI") OR LIMIT-TO(SUBJAREA,"DECI") OR LIMIT-TO(SUBJAREA,"ENVI")) AND LIMIT-TO(DOCTYPE,"ar") AND LIMIT-TO(LANGUAGE,"English") AND PUBYEAR > 2010 AND PUBYEAR < 2025. The search was restricted to peer reviewed journal articles, English language, and subject areas as stated in the flowchart. Following guidance on careful keyword specification that targets the underlying conceptual domains, and using a systematic approach that combines database searching with backward and forward reference checks, ensured comprehensive retrieval of the relevant behavioral and finance literatures ([Choong, 2013](#); [Eduardsen & Marinova, 2020](#)).

Figure 1

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Flowchart



Source. Adapted from [Page et al. \(2021\)](#).

The searches were executed on 28 September 2025, and the window covered fourteen years beginning in 2011 up to 2024, which aligns with the post global mainstreaming of ESG

investing and allows sufficient time to observe research responses to major policy milestones and taxonomy debates ([Kraussl, 2023](#); [Meunier & Richit, 2023](#)).

During screening, records were exported to comma separated values files; exact duplicates were removed; and titles and abstracts were reviewed to exclude studies outside the ESG and capital allocation domain, items without behavioral or psychological constructs, and papers that did not analyze flows, allocations, or portfolio choices. In the inclusion stage, full texts were assessed to confirm construct alignment and operationalization quality. Studies were retained when they measured behavioral determinants, for example attention, ambiguity aversion, social norms, trust, moral identity, heuristics, or biases such as representativeness and availability, and when they linked these to outcomes such as fund flows, capital reallocation, portfolio selection, or category momentum. Backward reference checks and forward citation tracking were conducted to capture additional relevant articles and to follow influential contributions across time, which is consistent with best practice in systematic evidence synthesis ([Donthu et al., 2021](#); [Eduardsen & Marinova, 2020](#)).

Screening Flow and Inclusion Criteria

Records retrieved by the Boolean query underwent a three stage screening flow consistent with best practice for evidence synthesis. First, the team removed exact duplicates produced by overlapping exports and by name and year collisions. Second, titles and abstracts were screened against the following inclusion criteria: the study must focus on behavioral or psychological determinants, the outcome must relate to investment flows or portfolio allocation in sustainable finance contexts, and the document must be a peer reviewed journal article in English within the 2011 to 2024 window. Third, we conducted full text checks to confirm construct relevance, to verify flow or allocation outcomes, and to code study characteristics such as geographical scope, method, asset class, and the presence of governance and disclosure variables that potentially moderate behavioral effects ([Kraussl, 2023](#); [Meunier & Richit, 2023](#)). Reference lists of included papers were scanned for additional eligible studies, backward snowballing, and forward citations were inspected to capture influential follow ups, forward snowballing, which aligns with the systematic procedures recommended by [Eduardsen and Marinova \(2020\)](#). To enhance transparency, we documented reasons for exclusion at each step, for example outside scope, conceptual only, non behavioral, and no flow outcome, and we archived the screening log.

Data Handling and Limitations

Author and affiliation metadata in very large collaborations can be incomplete or inconsistently formatted across databases, which is a known export limitation for bibliometric work ([Kumar, 2025](#); [Thelwall, 2018](#)). To mitigate this risk, we cross checked suspect records against publisher pages; where discrepancies appeared material, we corrected fields manually before analysis, which is consistent with recommendations in step by step guides for bibliometric studies ([Donthu et al., 2021](#); [Passas, 2024](#)). All search strings, query limits, and export timestamps

were archived for reproducibility, and a data dictionary was maintained to keep variable naming consistent across software. Because the bibliometric unit of analysis is the document and citations, the approach observes revealed attention and influence rather than underlying capital movements directly; therefore, we interpret bibliometric indicators as proxies for the salience and diffusion of behavioral explanations for ESG flows, and we triangulate them with the empirical findings emphasized in recent narrative reviews ([Kraussl, 2023](#); [Meunier & Richit, 2023](#)). Finally, macro series on flows are often monthly or quarterly, and some studies analyze very short event windows; our synthesis flags such horizon differences when interpreting thematic clusters and research fronts.

Data Analysis Technique

The study adopted a bibliometric methodology consistent with authoritative guidance that applies quantitative techniques to bibliographic data, thereby enabling performance analysis alongside science mapping in order to portray the structure and the evolution of a field ([Donthu et al., 2021](#)). In this framework, two complementary strands were employed. Performance analysis evaluated the contributions of research constituents such as authors, journals, institutions, and countries using publication counts and citation counts; science mapping examined the relational structure among those constituents, including co authorship, co citation, bibliographic coupling, and co word linkages that reveal latent themes in behavioral drivers and ESG flows ([Bornmann & Mutz, 2015](#); [Obrenovic et al., 2024](#)).

Records retrieved from Scopus were cleaned in Excel, where the study standardized author names, unified source titles, harmonized keywords, and removed non article document types that slipped through the query. As used previously by [Hamal et al. \(2025\)](#), the cleaned files were then imported into VOSviewer for science mapping and visual analytics. VOSviewer was used to quantify association strengths and to reveal latent structures in publication networks, and its implementation of the association strength normalization proposed by van Eck and Waltman improved the interpretability of proximities on the maps and therefore improved thematic delineation ([van Eck & Waltman, 2007; 2010](#)). To complement network maps with transparent commands and replicable statistics, we also ran Bibliometrix routines in R for performance indicators, thematic evolution, and conceptual structure analysis, which is consistent with best practice in recent finance related bibliometric surveys ([Aria & Cuccurullo, 2021](#); [Donthu et al., 2021](#)). Excel facilitated tabulation and graphical presentation of descriptive indicators in order to cross check counts and to summarize outputs for figures and tables.

Consistent with established practice, citation analysis was employed to identify highly referenced works, recurrent methods, and emerging topics, thereby tracing the historical focus of the field and the diffusion of behavioral explanations for flows ([Allahverdiyev & Yucesoy, 2017](#)). Document co citation analysis followed the network analytic perspective outlined by [Appio et al. \(2019\)](#) and [Shome et al. \(2023\)](#) and drew on network theory concepts that clarify community structure and linkage patterns ([Liu et al., 2015](#)). Keyword co-occurrence analysis,

conceptual structure mapping, and thematic evolution were used to detect clusters that join attention, trust, disclosure credibility, identity and norms, ambiguity, and rating disagreement with ESG flows, which directly speaks to the debate on whether flows are driven primarily by values, by risk adjusted return expectations, or by intermediated narratives ([Dinh, 2025](#); [Kraussl, 2023](#); [Meunier & Richit, 2023](#)). Finally, because the finance research workflow increasingly leverages artificial intelligence to parse large volumes of unstructured text, we documented how topic modeling and dictionary based sentiment measures can be layered on bibliometric maps in future extensions to triangulate attention shocks and narrative shifts that plausibly move ESG labeled capital ([Dhamija & Bag, 2020](#); [Goodell et al., 2021](#)).

Results

Descriptive statistics

In this study, the descriptive statistics summarized the distribution of publications on ESG investing and related behavioral-finance domains using Scopus records. Specifically, the study reported annual output trends, journal-wise and affiliation-wise publication counts, the ten most productive countries, and the subject-area classification of the retrieved documents. The study also identified the top twenty funding sponsors supporting this literature. Hence, these indicators depict where and how the field has been growing, which institutions and regions were most active, and which sponsors were driving research momentum within the ESG–behavior nexus.

Table 1 depicted the annual trajectory of publications and citations on behavioral drivers of ESG investment flows from 2010–2025. Output expands from 5 papers in 2010 to a high of 48 in 2024 and 46 in 2025, implying a strong long-run growth in publications (approx. 15.9%). The field begins to scale after 2019, with a sustained surge through 2022–2024 (20, 19, 28, 30, and 48 papers, respectively), signaling consolidation of ESG behavior as a mainstream research stream. Citations peak in 2020 (871) and 2022 (859), with additional spikes in 2011, 2015, and 2017 (368, 367, and 400), indicating that earlier waves of scholarship accumulated substantial influence. Citation intensity (citations per paper) is strongest in early years: 2015 (61.2), 2010 (52.2), and 2012 (51.8) and moderates in later years as the literature broadens (e.g., 2023: 11.0; 2024: 6.5; 2025: 0.6). This pattern is consistent with normal citation-window dynamics: recent publications have had less time to be cited, so their counts are temporarily depressed relative to earlier study ([Bornmann & Mutz, 2015](#)).

Table 1

Publication Trend and Citations of the Articles

Year	Publications	Citations
2010	5	261
2011	8	368
2012	6	311
2013	6	264
2014	9	226
2015	6	367
2016	8	137
2017	14	400
2018	5	41
2019	13	202
2020	20	871
2021	19	455
2022	28	859
2023	30	329
2024	48	310
2025	46	29

Interpreting the 2024–2025 citation dip, therefore, should be cautious and time-adjusted rather than substantive (Donthu et al., 2021). The series evidences three phases: (i) an initiation period (2010–2016) with low but highly cited foundational outputs; (ii) a transition (2017–2019) with steady build-up; and (iii) rapid expansion (2020–2025) where volume accelerates and influence concentrates around thematic inflection points in ESG and investor behavior. This temporal structure suggests a maturing research front with widening participation and evolving citation accrual consistent with bibliometric regularities ([Bornmann & Mutz, 2015](#); [Donthu et al., 2021](#)).

Top Cited Articles

Table 2 presented the ten most-cited studies that anchor the discourse on behavioral drivers and ESG investment flows, thereby indicating the themes that have shaped the field's development. The leading contribution is “Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?” in *Business Strategy and the Environment* with 354 citations, which clarifies how disclosure depth and assurance translate into performance signals that investors can act upon. The second study, “Is ethical money financially smart? Nonfinancial attributes and money flows of socially responsible investment funds” in *Journal of Financial Intermediation* with 288 citations, shows that investors respond not only to risk–return profiles but also to values-congruent fund attributes, which connects preferences to capital reallocation.

In third place, “Behavioural biases in investment decision making: a systematic literature review” in Qualitative Research in Financial Markets with 212 citations synthesizes cognitive and emotional deviations such as overconfidence, loss aversion, and herding, and it explains how these biases condition ESG screening and allocation choices. “Emerging new themes in environmental, social and governance investing: a systematic literature review” in Accounting and Finance with 208 citations maps the domain’s conceptual expansion to stewardship, impact pathways, and data quality, and it signals an agenda that links responsible investment to market micro-foundations of behavior.

Table 2

Most Cited Articles with Journals

Rank	Title	Journal	Cited by
1	Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?	Business Strategy and the Environment	354
2	Is ethical money financially smart? Nonfinancial attributes and money flows of socially responsible investment funds	Journal of Financial Intermediation	288
3	Behavioural biases in investment decision making – a systematic literature review	Qualitative Research in Financial Markets	212
4	Emerging new themes in environmental, social and governance investing: a systematic literature review	Accounting and Finance	208
5	The gambler's and hot-hand fallacies: Theory and applications	Review of Economic Studies	169
6	Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact	Organization and Environment	160
7	Does corporate social responsibility affect mutual fund performance and flows?	Journal of Banking and Finance	157
8	Socially Responsible Investment: A multicriteria approach to portfolio selection combining ethical and financial objectives	European Journal of Operational Research	152
9	Can sustainable investments outperform traditional benchmarks? Evidence from global stock markets	Business Strategy and the Environment	127
10	ESG risks in times of Covid-19	Applied Economics Letters	120

Source. Authors' compilation; Scopus database; 2010 – 2025 (28th September)

A theoretical anchor, “The gambler's and hot-hand fallacies: Theory and applications” in Review of Economic Studies with 169 citations, explains belief-based errors that may generate

ESG mispricing and episodic flow reversals. “Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact” in *Organization & Environment* with 160 citations reframes investor influence through transmission mechanisms such as screening, tilting, engagement, and primary-market financing, and it clarifies when flows can translate into real-economy outcomes. Empirical verification is provided in “Does corporate social responsibility affect mutual fund performance and flows?” in *Journal of Banking and Finance* with 157 citations, which tests whether ESG characteristics carry performance or flow premia. Methodological formalization appears in “Socially Responsible Investment: A multicriteria approach to portfolio selection combining ethical and financial objectives” in *European Journal of Operational Research* with 152 citations, which models the portfolio trade-off between efficiency and ethical constraints. Complementing these results, “Can sustainable investments outperform traditional benchmarks? Evidence from global stock markets” in *Business Strategy and the Environment* with 127 citations examines cross-market return differentials under alternative ESG specifications, and “ESG risks in times of Covid-19” in *Applied Economics Letters* with 120 citations documents stress-period behavior that reshapes risk perception and flow dynamics. The citation leaders integrate three logics, namely behavioral preferences, information and reporting quality, and transmission mechanisms; consequently, they explain why ESG-aligned capital reallocation can be persistent yet time-varying across market conditions.

Highly Impactful Authors

Table 3

Most prolific Authors with Higher Average Citation per Article

Rank	Author	Publication	Citations	Average Citation pr Article
1	Arvidsson, Susanne	1	354	354.00
2	Dumay, John	1	354	354.00
3	Arenas-Parra, Mar	5	318	63.60
4	Steuer, Ralph E.	4	309	77.25
5	Utz, Sebastian	4	309	77.25
6	Renneboog, Luc D.R.	1	288	288.00
7	Ter Horst, Jenke R.	1	288	288.00
8	Zhang, Chendi	1	288	288.00
9	Wimmer, Maximilian	3	280	93.33
10	Goyal, Nisha	1	212	212.00

Source. Authors' compilation; Scopus database; 2010 – 2025 (28th September)

Table 3 exhibited the distribution of author influence based on publications, total citations, and average citations per article, thereby highlighting a small set of highly impactful contributors in the corpus. Arvidsson, Susanne and Dumay, John occupy the top positions with 1 publication each and 354 citations apiece, which yields an average of 354.00 and signals the presence of landmark single articles. Among multi-paper contributors, Wimmer, Maximilian achieves the strongest impact efficiency with an average of 93.33 across 3 publications, whereas Steuer,

Ralph E. and Utz, Sebastian both post 77.25 across 4 publications, and Arenas-Parra, Mar sustains 63.60 across 5 publications. A coauthorship cluster is visible at 288 citations, because Renneboog, Luc D.R., Ter Horst, Jenke R., and Zhang, Chendi each record 1 publication and an identical average of 288.00, which suggests joint authorship on a widely cited article. Goyal, Nisha also shows a concentrated influence with 212 citations from a single paper (average 212). Two patterns are noteworthy. First, publication volume and citation intensity are not linearly related, since authors with fewer papers can register higher averages than peers with larger portfolios. Second, the right-tailed distribution indicates that a few flagship studies substantially elevate individual averages, which is consistent with bibliometric regularities where citation accrual is highly skewed and shaped by collaboration networks and topic salience. Consequently, the field's intellectual leadership is shared between single-hit authors of seminal pieces and steady multi-paper contributors whose work remains persistently visible over time.

Table 4 showed institutional productivity and impact for the corpus, ranked to foreground citation efficiency alongside volume. The leading institution was Macquarie Business School with 2 publications and 367 citations, yielding the highest average (183.50 per article). Close behind, Universität Hamburg records 2 publications and 192 citations (96.00 per article). Among three-paper contributors, Terry College of Business stands out with 280 citations (93.33 average), while the University of California, Berkeley posts 222 citations (74.00 average), and both the University of Alberta and York University, Glendon reach 203 citations (67.67 average each).

Table 4
Institutional Productivity and Impact for the Corpus

Ran k	Institution	Publicatio ns	Citatio ns	Avg Cites / Article
1	Macquarie Business School, North Ryde, Australia	2	367	183.5
2	Universität Hamburg, Hamburg, Germany	2	192	96
3	Terry College of Business, Athens, United States	3	280	93.33
4	Universität Zürich, Zurich, Switzerland	2	164	82
5	University of California, Berkeley, Berkeley, United States	3	222	74
6	University of Alberta, Edmonton, Canada	3	203	67.67
7	York University, Glendon, Toronto, Canada	3	203	67.67
8	Deakin University, Geelong, Australia	2	127	63.5
9	Universität Regensburg, Regensburg, Germany	5	293	58.6
10	Wharton School of the University of Pennsylvania, Philadelphia, United States	2	92	46

Two-paper institutions with strong profiles include Universität Zürich (164 citations; 82.00 average) and Deakin University (127; 63.50). Among five-paper institutions, Universität Regensburg registers the largest influence with 293 citations (58.60 average), which indicates both sustained output and high visibility. The Wharton School also features prominently with 2 publications and 92 citations (46.00 average). Hence, the panel shows that a small number of flagship studies can elevate institutional standing even with modest publication counts, whereas consistent three- to five-paper portfolios can deliver robust and durable impact.

Geographic Distribution of the Publications

Figure 2

Global Distribution of Scientific Publications in Corpus

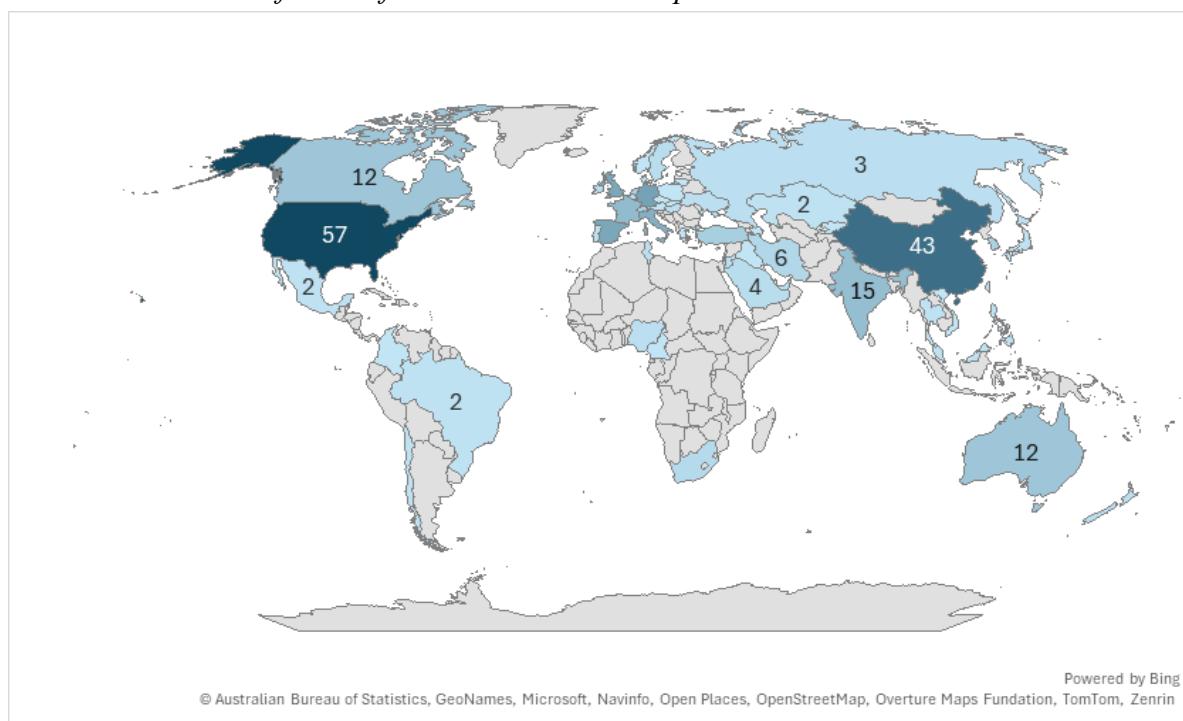


Figure 2 visualized the global footprint of publications on behavioral drivers influencing ESG investment flows. The map confirmed wide participation, with contributions from 58 countries. North America and East Asia emerged as the strongest nodes: the United States leads with 57 outputs, and China follows with 43. A large European cohort sustains the momentum, including Germany (25), Spain (23), the United Kingdom (23), and Italy (20), while France contributes 16. South and Southeast Asia add further depth, as India registers 15 publications and South Korea contributes eight, with Hong Kong at seven and Iran at six. The Anglosphere outside North America was also active, notably Australia and Canada (12 each). Regional diversification was evident, because Africa (for example, South Africa with five and Nigeria with three), the Middle East (Saudi Arabia and the United Arab Emirates with four each), and Latin America (Brazil and Chile with two each) appeared in the map, although with smaller counts.

Ten Journals Contributing Most to Literature

Table 5

Most Articles Publishing Journals

Rank	Journal	Publicatio	Citations	Average Citations	Publisher	5-year Impact
1	Sustainability	15	26 3	17.5 3	MDPI	3.6 5
2	European Journal of Operational Research	10	49 3	49.3 0	Elsevier Inc.	6
3	Business Strategy and The Environment	7	61 8	88.2 9	John Wiley & Sons, Inc	13.3
4	Finance Research Letters	6	25 2	42.0 0	Elsevier Inc.	6.9
4	International Review of Financial Analysis	6	71 3	11.8 3	Elsevier Inc.	9.8
4	Journal of Banking and Finance	6	23 8	39.6 7	Elsevier Inc.	3.8
5	Journal of Asset Management	4	22	5.50	Palgrave Macmillan	1.8
5	Operational Research	4	25	6.25	Springer Nature	2.6

Source. Authors' compilation; Scopus database; 2010 – 2025 (28th September)

Table 5 reported the core publication outlets and juxtaposes volume with influence to show where the field is most visible. Sustainability contributed the highest number of papers (15) although its citation intensity is moderate (average 17.53; 5-year IF 3.65), which suggests it functions as a broad venue for disseminating diverse ESG-behavior studies. In contrast, Business Strategy and the Environment delivered the strongest impact efficiency among high-output journals with 7 papers and an average of 88.29 citations per article (5-year IF 13.3), thereby indicating pronounced uptake of its published work. The European Journal of Operational Research followed with 10 papers and an average of 49.30 (5-year IF 6.0), while Finance Research Letters records 6 papers at 42.00 per article (5-year IF 6.9) and the Journal of Banking and Finance showed 6 papers at 39.67 (5-year IF 3.8). The International Review of Financial Analysis contributes 6 papers with an average of 11.83 (5-year IF 9.8), which reflected solid but more selective citation accrual. Lower-volume specialist venues, namely the Journal of Asset Management (4 papers; average 5.50; 5-year IF 1.8) and Operational Research (4; 6.25; 5-year IF 2.6), added niche perspectives. The publisher distribution indicated an Elsevier concentration across four of the most active titles, complemented by Wiley, MDPI, Palgrave Macmillan, and Springer Nature. The pattern showed that ESG-behavior scholarship is anchored by a small set of strategy, finance, and operations journals where articles tend to attract disproportionately high citations relative to their counts, whereas broader-scope outlets support diffusion and topic breadth.

Bibliographic Coupling and Co-authorship

Figure 3 *Network Visualization of Bibliographic Coupling by Countries*

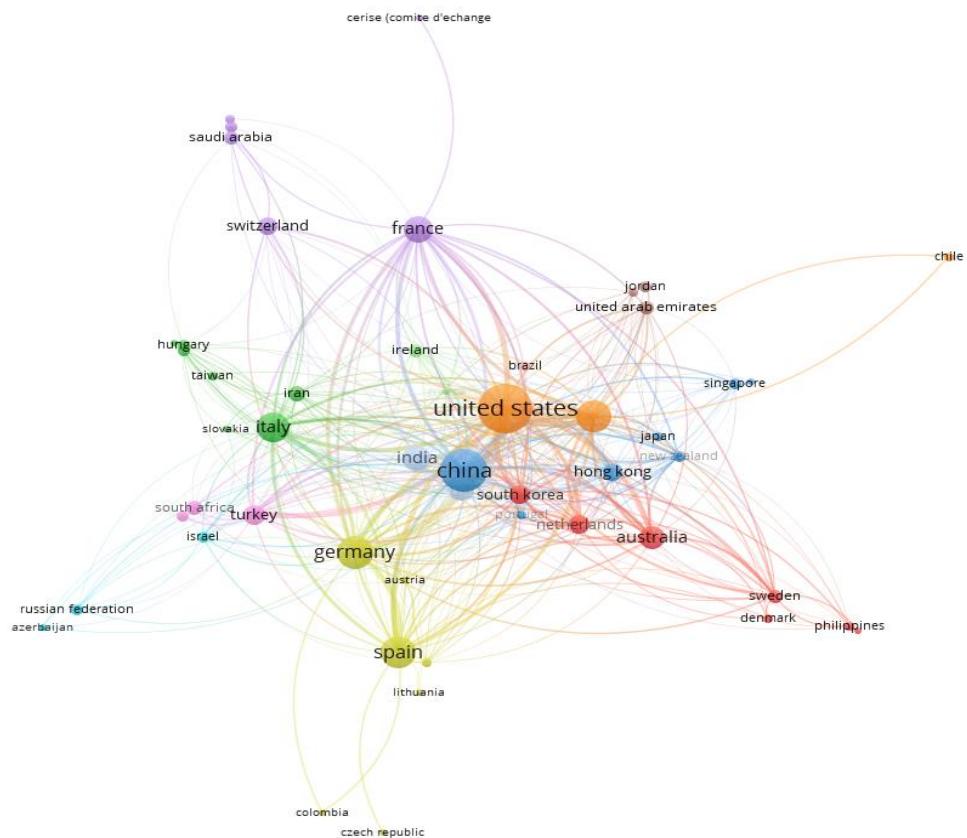


Figure 3 displayed the network visualization of bibliographic coupling by countries, which captures how closely national corpora resemble one another in their reference lists. Larger nodes represent higher publication volume and thicker edges indicate stronger coupling strength. The United States occupies the core of the network and connects densely with China, the United Kingdom, Germany, Spain, France, Australia, and Hong Kong, therefore signaling a shared foundational literature across these hubs. China forms a second anchor with strong ties to Hong Kong, South Korea, India, and the United States, while Germany and Spain constitute adjacent European clusters with substantial within-region linkages to Italy, Switzerland, the Netherlands, and Sweden. A further cluster emerges around France with bridges to Ireland, Saudi Arabia, and Switzerland, which suggests cross-regional diffusion of common sources. Countries such as the United Arab Emirates, Jordan, Singapore, and Japan appear as semi-peripheral nodes that nonetheless connect to the central group through the United States and China.

The structure implies three patterns. First, ESG-behavior scholarship is organized around a trans-Atlantic-Asia triangle in which the United States and China act as primary integrators of

the literature. Second, European contributors cohere into tightly knit subclusters that share methodological and topical anchors, consequently reinforcing citation overlap within the region. Third, several emerging contributors maintain selective but meaningful bridges to the core, which indicates that newer national streams are aligning their bibliographies with established work and are likely to converge further as output scales.

Figure 4

Density Visualization Co-Authorship by Countries

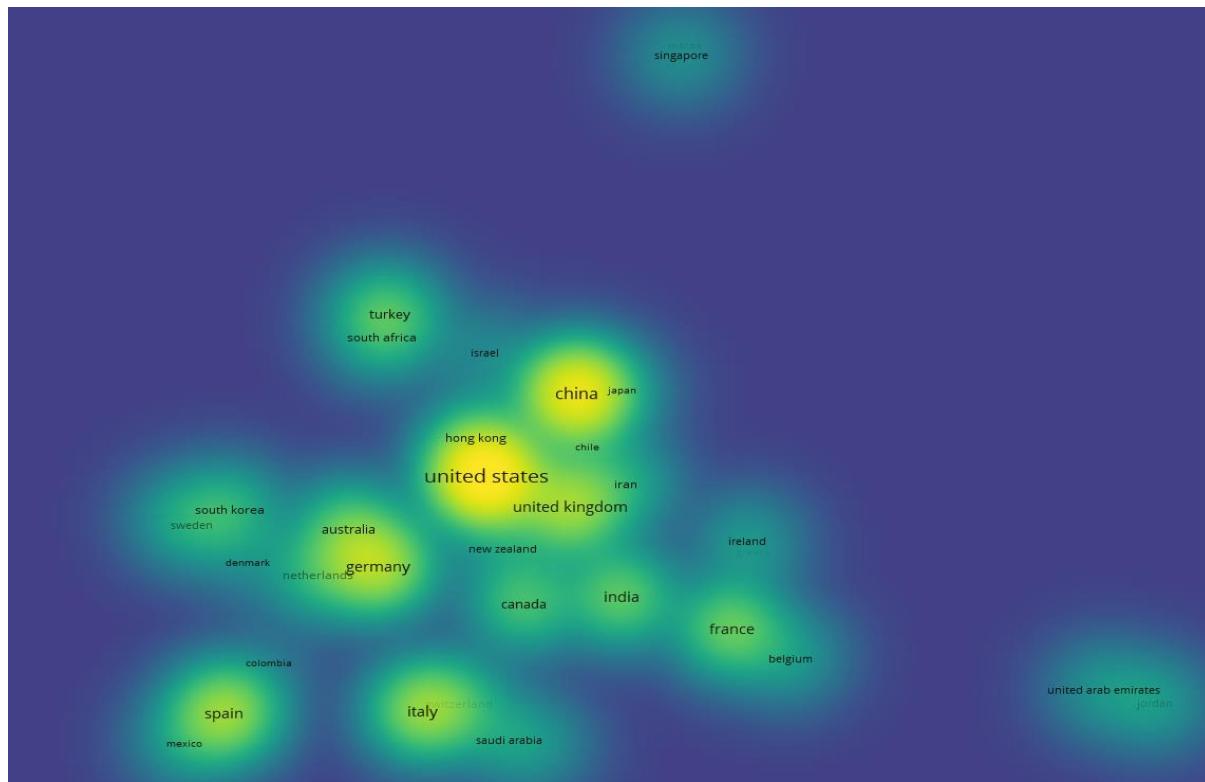


Figure 4 depicted the country-level co-authorship density and reveals a hub-and-spoke structure centred on the United States and China, where the brightest kernels indicate the thickest collaborative ties and the highest publication activity; a second ring of dense foci appears around the United Kingdom, Germany, Spain, and Australia, with Hong Kong and South Korea acting as bridges that connect the East Asian cluster to the Anglo-American core, and thinner but visible fields around France, India, Canada, and Switzerland that signal consistent participation. Peripheral yet emerging concentrations are observable for the United Arab Emirates–Jordan dyad and for Singapore, which suggests scope to cultivate South–South and Asia–Gulf partnerships. Inter-regional corridors are most evident along the United States–China–United Kingdom triangle and the Germany–Spain axis, which indicates that collaboration is still anchored in Global-North networks, although Asia’s footprint is strengthening. Methodologically, the figure follows standard science-mapping practice where co-authorship networks are used to trace social interactions among scholars and their affiliations, and where density visualization helps articulate clustered structures and bridges for

collaboration strategy ([Donthu et al., 2021](#)). Consequently, our interpretation emphasizes collaboration intensity rather than mere counts, and it aligns with bibliometric guidance to pair network reading with careful data cleaning and cautious qualitative inference when drawing field-level conclusions.

Keywords and Themes Analysis

Figure 5

Keyword Co-occurrence Keyword Co-occurrence Overlay Visualization

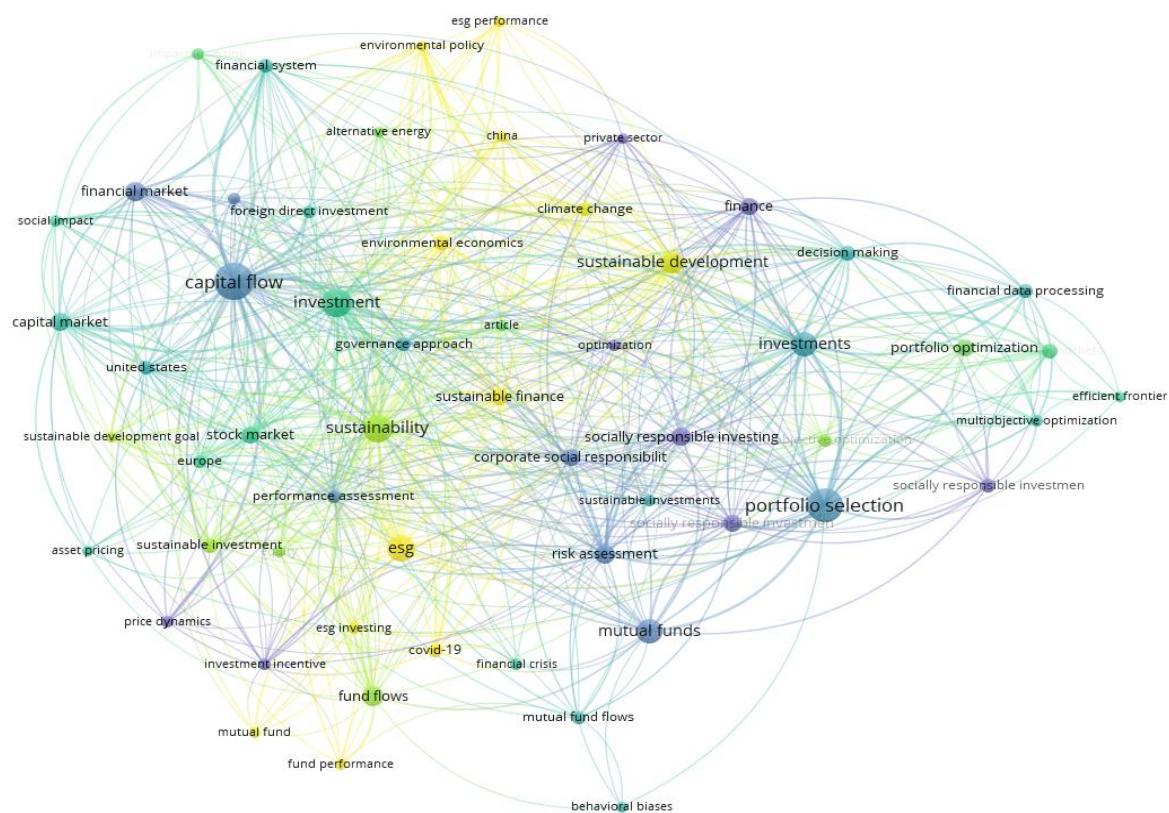


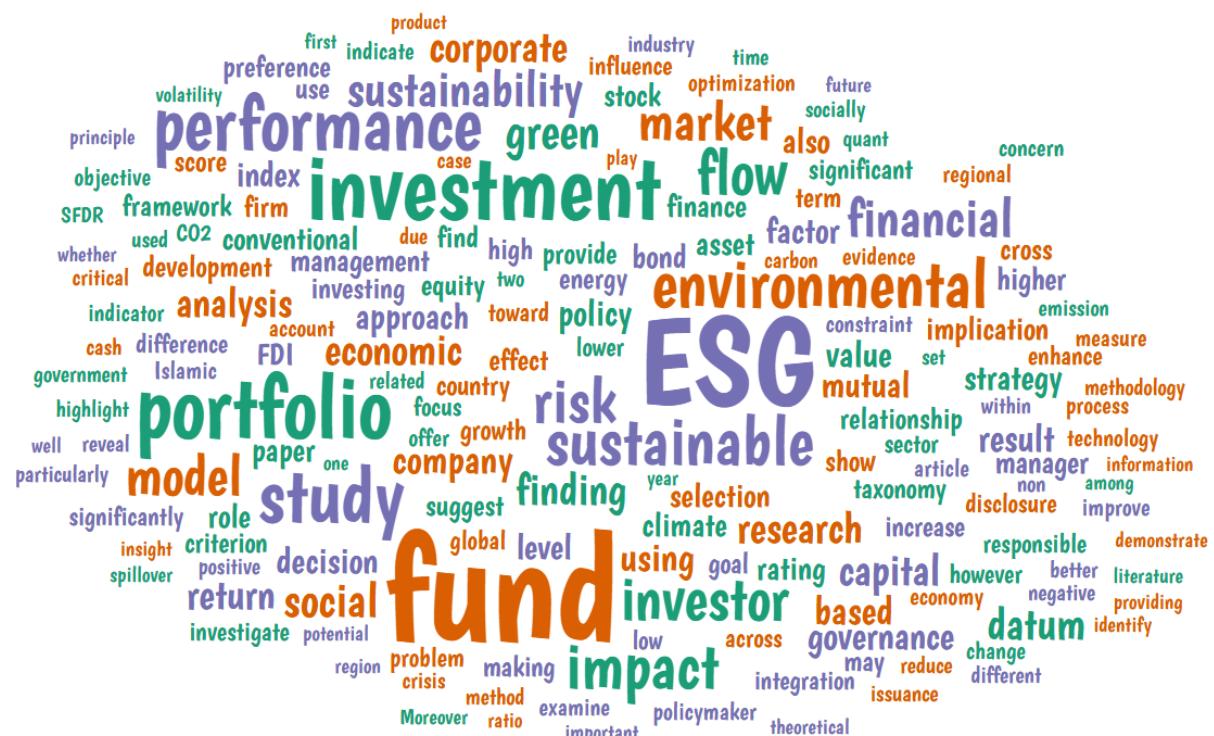
Figure 5 presented the keyword co-occurrence overlay and reveals four interlinked thematic cores. First, an allocation-methods cluster centers on “portfolio selection,” “investments,” “portfolio optimization,” and “multiobjective optimization,” with bridges to “decision making,” “risk assessment,” and “financial data processing.” Second, a sustainability-policy cluster aggregates “sustainable development,” “sustainability,” “ESG,” “environmental economics,” “environmental policy,” and “climate change,” which connects methodological work to policy-relevant outcomes. Third, a markets-flows cluster links “capital flow,” “financial market,” “stock market,” and “mutual funds,” extending to “fund flows” and “fund performance,” thereby situating ESG within capital reallocation mechanics. Fourth, an ethics-corporate behavior cluster groups “socially responsible investing,” “corporate social

responsibility,” and “sustainable finance,” indicating how firm-level practices intersect with investor preferences.

The overlay shading suggested a temporal shift from earlier emphasis on “portfolio optimization,” “mutual funds,” and “asset pricing” toward recent growth around “sustainable development,” “ESG,” and “sustainable finance,” with “COVID-19” marking a crisis-period inflection in risk and sustainability awareness. Brokerage terms such as “sustainability,” “investment,” and “sustainable development” sit at the intersection of the clusters, which implies that ESG-aligned flows are transmitted through portfolio-construction choices and are legitimated by policy and corporate-responsibility narratives. Although “behavioral biases” appears as a smaller node, its ties to “decision making,” “risk assessment,” and “fund flows” indicate an integrating role, especially where investor preferences and attention shape screening and tilting strategies. Collectively, the map shows that contemporary ESG-flow research is coalescing around the nexus of optimization methods, sustainability objectives, and market transmission channels, with policy and corporate practices reinforcing the salience of these links.

Figure 6

High Frequency Themes



The word cloud was generated from the abstract limiting to 10,000 words from the starting cell of the data due to word limit on wordshift.org. Figure 6 illustrated the high-frequency themes

in the corpus and shows a fund- and portfolio-centric vocabulary anchored by “ESG,” “fund,” “investment,” and “portfolio.” Surrounding these anchors, policy- and outcome-oriented terms such as “performance,” “risk,” “impact,” “governance,” and “sustainable” appear prominently, which indicates that most studies evaluate how ESG considerations are integrated into portfolio selection and how this integration translates into return–risk profiles and impact metrics. A market-level layer is visible through “market,” “flow,” “capital,” and “mutual fund,” therefore suggesting strong attention to the mechanisms that channel ESG preferences into capital reallocation and fund flows.

A second cluster links environmental and disclosure language with implementation tools. Frequent words include “environmental,” “climate,” “green,” “rating,” “taxonomy,” and “disclosure,” together with “financial,” “manager,” and “strategy,” which implies that studies connect environmental salience and reporting quality to managerial decisions and screening or tilting rules. Methodological and evidence terms such as “model,” “analysis,” “study,” “data,” and “result” confirm a quantitative and evaluation-driven orientation. Overall, the cloud reflects a field organised around three intertwined concerns, namely portfolio construction under ESG constraints, measurement of financial and impact outcomes, and the policy–reporting infrastructure that informs investor decisions.

Thematic Clusters

The keyword co-occurrence map and the word-cloud jointly revealed the thematic architecture of the corpus by clustering terms that frequently appear together across documents ([Donthu et al., 2021](#)). From Figures 5 and 6, four interlocking themes emerge. First, a portfolio construction and methods cluster links “portfolio selection,” “portfolio optimization,” “multiobjective optimization,” “risk assessment,” and “decision making” with “investments,” which indicates that allocation rules are the immediate locus where ESG preferences are operationalized. Second, a sustainability policy and disclosure cluster brings “ESG,” “sustainable development,” “sustainability,” “environmental policy,” “climate,” “rating,” “taxonomy,” and “disclosure” into one frame, thereby connecting measurement infrastructure to investable signals and governance choices ([Kraussl, 2023](#)). Third, a markets and flows cluster ties “capital flow,” “mutual funds,” “fund flows,” and “fund performance” to “financial market” and “stock market,” which shows how screening and tilting transmit preferences into reallocation and pricing outcomes. Fourth, a corporate responsibility and impact cluster associates “corporate social responsibility,” “sustainable finance,” and “impact” with “performance,” “risk,” and “return,” suggesting that outcome evaluation spans both financial efficiency and real-economy consequences.

These clusters point to a coherent thematic architecture for the article. The field is anchored in portfolio decisions under ESG constraints; disclosure quality, climate salience, and governance cues act as information carriers; and investor preferences and risk perception operate as behavioral mechanisms that translate sustainability objectives into observable flows and prices

([Dinh et al., 2025](#); [Kraussl, 2023](#)). Consequently, progress now depends on designs that fuse optimization models with behavioral drivers and credible identification of flow-to-price channels, while allowing for crisis regimes and policy shocks that can shift salience. At the practice and policy margin, the evidence motivates improvements in disclosure comparability, taxonomy clarity, and stewardship guidance, together with decision aids for fund managers and households so that ESG integration enhances both performance discipline and impact credibility ([Bornmann & Mutz, 2015](#); [Donthu et al., 2021](#)).

Discussion

The evidence indicates that behavioral drivers increasingly shape how capital is allocated to ESG assets. The annual trajectory shows a steady rise in publications from 2010 with a pronounced acceleration after 2019, and the counts reach a high in 2024. This timing coincides with the mainstreaming of sustainability disclosure regimes and with salience shocks related to climate and public-health risks, which plausibly amplified attention to ESG screens in both funds and households. In conceptual terms, investor expectations and perceptions about ESG value are central because they connect ethical preferences and risk beliefs to flow decisions ([Kraussl, 2023](#)). Attitudinal work further shows that pro-ESG intention is associated with perceived usefulness, social norms, and trust in disclosure, therefore suggesting that preference formation and perceived credibility operate together in channeling flows toward ESG vehicles ([Dinh et al., 2025](#)).

The bibliometric patterns provide structure to these mechanisms. Source analysis places Business Strategy and the Environment, European Journal of Operational Research, Finance Research Letters, and Journal of Banking and Finance among the most visible outlets, while Sustainability supplies topic breadth. This mix implies that the field advances on two fronts, namely method development for portfolio choice and empirical evaluation of performance and risk under ESG constraints. Institutional rankings reveal concentrated influence for a small group of universities in Australia, the United States, Germany, Switzerland, and Canada, which is consistent with the presence of flagship studies that lift citation intensity even with modest article counts. Country mappings confirm a broad footprint led by the United States and China, together with strong European participation and growing contributions from India, Australia, and Canada. The coupling and co-authorship visuals position the United States and China at the core and show European clusters around Germany, Spain, and France; consequently, the knowledge network combines a trans-Atlantic–Asia hub with several regional bridges. From a science-mapping perspective, these structures are characteristic of maturing domains where a few hubs integrate dispersed topic lines and where collaboration density predicts visibility ([Bornmann & Mutz, 2015](#); [Donthu et al., 2021](#)).

Theme analysis clarifies what those topic lines are. The keyword co-occurrence map and word cloud organize around four interlocking themes. First, a portfolio construction and methods



theme connects portfolio selection, optimization, multi-objective modeling, and risk assessment, thus identifying the locus where ESG preferences are operationalized. Second, a sustainability policy and disclosure theme ties ESG, climate, ratings, taxonomy, and disclosure to governance, which indicates that information infrastructure and credibility shape the investable signal ([Kraussl, 2023](#)). Third, a markets and flows theme links mutual funds, fund flows, fund performance, and capital flows to stock and financial markets, thereby describing the transmission from screening and tilting to prices and liquidity. Fourth, a responsibility and impact theme associates corporate social responsibility and sustainable finance with performance, risk, and impact, which situates ESG allocation within real-economy relevance. The overlay suggests a temporal shift from earlier emphasis on optimization and mutual-fund topics toward recent growth in climate, disclosure, and policy terms, while crisis markers such as COVID-19 indicate regime-dependent salience.

The results support three key implications. Behavioral channels are not peripheral; rather they are embedded in portfolio rules through preference alignment, attention amplification, and trust in reporting ([Dinh et al., 2025](#)). Disclosure comparability and taxonomy clarity act as multipliers of flows because they reduce ambiguity around what ESG means in practice, which in turn strengthens perceived usefulness and social endorsement ([Kraussl, 2023](#)). Moreover, collaboration density and cross-regional coupling matter for diffusion because they raise the probability that methodological advances in optimization or impact measurement travel quickly into applied fund settings ([Donthu et al., 2021](#)). Therefore, progress will depend on designs that combine behavioral measurement with credible identification of flow-to-price effects, together with careful field comparisons across regulation regimes

Conclusion

This study consolidates evidence on how behavioral determinants channel capital toward ESG assets. The bibliometric record shows a durable expansion after 2019, together with a 2024 peak in outputs, which signals that psychologically informed explanations have moved closer to the center of sustainable-finance research. Source and institution rankings indicate a dual engine: methods-oriented finance and operations journals develop portfolio and optimization tools, while sustainability and strategy outlets host evaluations of disclosure, climate salience, and governance. Country mappings reveal an international footprint led by the United States and China, with strong European participation and growing contributions from India, Australia, and Canada. Keyword structures cohere around four themes, namely portfolio construction and risk methods, sustainability policy and disclosure, markets and flows, and corporate responsibility and impact. The patterns suggest that ESG allocation is shaped by preferences and beliefs, operationalized through portfolio rules, and transmitted to prices and liquidity through fund flows.

The study emphasizes that credible, comparable disclosure and taxonomy clarity strengthen perceived usefulness and trust, which improves the propensity of investors to allocate toward ESG screens. Portfolio design that aligns screens with risk budgeting and rebalancing protocols can preserve performance discipline while honoring sustainability constraints. Similarly, stewardship and engagement guidance that links investor intent to measurable outcomes can enhance the impact credibility of ESG strategies and temper cycles driven by attention or narrative shocks. However, the bibliometric portrait depends on database coverage, query design, and the citation window; therefore, some relevant items may be omitted and recent works may be under-counted. Aggregation at the country and institution level compresses heterogeneity in teams, methods, and data quality. The thematic maps describe co-occurrence rather than causal relationships, so they should be read as structure, not proof. Therefore, future research should integrate behavioral measurement with portfolio and market microstructure tests in order to identify flow-to-price channels with greater precision. Designs that combine disclosure comparability, rating dispersion, and attention proxies can clarify how credibility and salience drive capital reallocation. Micro-level data from funds and platforms, together with high-frequency sentiment indicators, can illuminate regime dependence during crises and policy shifts. Comparative analyses across regulation regimes and investor compositions will help separate general mechanisms from context-specific features, thereby advancing an evidence base that supports both performance discipline and real-economy impact.

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Conflicts of Interest

Not applicable

Data Availability Statement

The study used data from the Scopus database (<https://www.scopus.com>) that was extracted following the data extraction process.

Informed Consent Statement

Not applicable

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