



The Evolution of Disclosure Narratives in Audit Firms: Evidence from Dynamic Community Detection of Transparency Reports

Abdullah Kürşat Merter^{1,*}, Murat Özcan², Yavuz Selim Balcioğlu³, Mehmet Günlük⁴

¹ Department of Business Administration, Faculty of Business Administration, Gebze Technical University, Kocaeli, Türkiye
² Department of Business Administration, Faculty of Economics and Administrative Sciences, Bolu Abant İzzet Baysal University, Bolu, Türkiye
³ Department of Management Information Systems, Faculty of Economics and Administrative Sciences, Doğuş University, İstanbul, Türkiye
⁴ Department of Management and Organization, Milas Vocational School, Muğla Sıtkı Kocaman University, Muğla, Türkiye

ARTICLE INFO

Article history:

Received 29 November 2025

Received in revised form 19 January 2026

Accepted 28 January 2026

Available online 29 January 2026

ABSTRACT

Transparency reporting has emerged as a critical regulatory mechanism for enhancing accountability in the audit profession following prominent corporate scandals. Nevertheless, the literature contests the extent to which these mandatory disclosures provide substantive information rather than serving as symbolic compliance tools. The present study aims to address the existing gap in understanding how audit firm disclosure narratives evolve and how firms strategically reposition themselves within the disclosure landscape. The objective of this research is to examine the longitudinal dynamics of disclosure strategies in Turkish audit firm transparency reports from 2013 to 2024, investigating the emergence of narrative communities and firms' strategic repositioning behaviours. A novel methodological framework is employed, integrating computational text analysis with dynamic network science. Specifically, term frequency-inverse document frequency and cosine similarity measures are utilized to assess narrative proximity between transparency reports. The Leiden algorithm for dynamic community detection is then applied to identify and track disclosure communities across 230 firm-year observations from 89 distinct audit firms. The results reveal a fundamental transformation in the disclosure landscape: an initially homogeneous narrative structure dominated by two generalist communities in early years evolved into a fragmented system comprising eight specialized disclosure communities by 2024. Furthermore, audit firms engage in systematic narrative repositioning, with a pronounced gravitation toward compliance-oriented communities during periods of maximum fragmentation. The results show that mandatory transparency rules can have unintended effects. For example, when narratives become more complex, companies tend to use symbolic, procedure-focused disclosure strategies instead of substantive differentiation. The study offers critical implications for regulators seeking to design disclosure frameworks that foster genuine transparency rather than superficial compliance.

Keywords:

Transparency reports; Dynamic community detection; Institutional theory; Symbolic compliance

1. Introduction

* Corresponding author.

E-mail address: akmerter@gtu.edu.tr

In the contemporary corporate reporting landscape, the demand for transparency extends beyond publicly listed companies to the audit firms that assure their financial statements. In the aftermath of prominent corporate scandals and the subsequent decline in public trust, regulators worldwide have heightened their scrutiny of the audit profession, ushering in a new era of accountability [1]. A fundamental aspect of this regulatory transition pertains to the directive issued to audit firms, particularly those engaged in the auditing of Public Interest Entities (PIEs), to disseminate annual transparency reports. Introduced by the European Union's Statutory Audit Directive, these reports are designed to offer stakeholders unprecedented insight into an audit firm's governance, internal quality control systems, and professional practices, thereby enhancing market confidence and audit quality [2]. The fundamental proposition asserts that enhanced disclosure will engender heightened accountability, reinforce internal discipline, and consequently fortify the perceived legitimacy of the audit profession [3].

Despite the widespread adoption of transparency reporting requirements, the extent to which these disclosures provide substantive, useful decision information remains a subject of considerable debate. Preliminary research has called into question the veracity of the reports in terms of their capacity to reveal the quality of audit processes, with the possibility that they are instead employed as a means of managing perceptions [3, 4]. Recent studies have further documented the prevalence of boilerplate language and standardized narratives in audit-related disclosures, raising concerns about their informational value [5, 6]. Firms must make a strategic decision: whether to utilize these reports to signal a genuine commitment to quality through substantive disclosures or to engage in symbolic compliance by adopting standardized boilerplate narratives that conform to regulatory expectations without disclosing meaningful firm-specific details [1, 7]. This phenomenon is indicative of the broader tension between substantive and symbolic responses to institutional pressures, where organizations may decouple their formal disclosures from actual practices [8]. This tension underscores a pivotal lacuna in our comprehension of how audit firms navigate the intricate institutional pressures associated with mandatory disclosure regimes. While existing studies have frequently relied on manual content analysis or aggregated disclosure indices, they have largely overlooked the dynamic and strategic nature of the narratives that firms construct and deploy over time [9]. Specifically, there is a paucity of longitudinal investigations that track how disclosure communities evolve and how firms strategically reposition their narratives in response to changing institutional environments [10].

This study addresses this gap by conceptualizing audit firm transparency reports as an evolving narrative system. The present study moves beyond static, cross-sectional analyses to investigate the longitudinal dynamics of disclosure strategies within the Turkish audit market from 2013 to 2024. The Turkish context is a compelling setting for this investigation, as its audit regulations have evolved in alignment with international standards, creating a dynamic environment where firms must continuously adapt their reporting practices. A novel methodological approach is employed, integrating computational text analysis with dynamic network science to map the evolution of disclosure narratives. Specifically, the methodology employed involves the utilization of Term Frequency-Inverse Document Frequency (TF-IDF) and cosine similarity to assess the narrative proximity between firms' transparency reports on an annual basis. The Leiden algorithm for dynamic community detection is then applied [11, 12] to identify clusters of firms that adopt similar disclosure narratives and to track how these narrative communities evolve over the twelve-year period. Drawing on the principles of institutional theory, which posits that organizations conform to their institutional environment to gain legitimacy [13, 14], this study investigates the macro-level patterns of narrative evolution and the micro-level strategic choices of individual firms. This theoretical lens

is particularly relevant for the auditing profession, where firms operate in a highly regulated and scrutinized environment, making legitimacy a critical resource for survival and success [15]. The adoption of transparency reporting, therefore, can be seen as a direct response to these institutional pressures, as firms seek to demonstrate their alignment with evolving norms of accountability and good governance [16, 17]. The objective of this study is to provide answers to four fundamental research questions:

Firstly, the question must be posed: how do the disclosure narratives in audit firm transparency reports cluster into distinct communities over time? Secondly, the evolution of the structure of these disclosure communities, particularly the shift from concentrated to more fragmented narrative configurations, is a key area of interest. Thirdly, the question arises as to whether audit firms actively reposition themselves across these disclosure communities, and if so, towards which types of narratives do they gravitate? Finally, does the increasing fragmentation of the narrative landscape cause firms to adopt symbolic, compliance-oriented disclosure strategies in response to heightened institutional complexity?

The present analysis, based on 230 firm-year observations from 89 distinct Turkish audit firms, reveals a profound transformation in disclosure practices. It is evident that the narrative landscape has undergone a transformation from a highly concentrated structure, characterized by the dominance of one or two generalist narrative templates in its early years, to a fragmented and pluralistic system comprising numerous specialized disclosure communities by 2024. This structural shift is accompanied by a semantic transformation; early narratives centered on broad professional themes have given way to highly differentiated orientations, including those focused on financial markets, international standards, and formal compliance. Furthermore, our examination of firm-level transitions reveals that audit firms engage in systematic narrative repositioning, exhibiting a distinct trend towards compliance-oriented communities, especially during periods characterized by significant narrative fragmentation. This finding suggests that as the disclosure environment becomes more complex and uncertain, firms increasingly gravitate toward "safer," procedurally focused disclosure strategies that prioritize demonstrable regulatory conformity over substantive differentiation, a behavior consistent with symbolic compliance.

This study makes several significant contributions to accounting and auditing literature. Firstly, a novel methodological framework is introduced that combines computational linguistics and dynamic network analysis to study corporate disclosures. By expanding beyond the limitations of static content analysis, our approach captures the emergent, systemic properties of disclosure environments and facilitates a more nuanced appreciation for the evolution of collective narrative structures. Secondly, we provide substantial empirical evidence for the mechanisms of institutional theory in the context of mandatory reporting. It is demonstrated that regulatory pressures for transparency can lead not to a uniform increase in substantive disclosure but to a dynamic process of narrative differentiation, strategic repositioning, and eventual convergence toward symbolic compliance as a means of navigating institutional complexity. This investigation extends the work on isotropy and decoupling by demonstrating how these processes unfold longitudinally within a professional field [15, 18]. In conclusion, the findings of this study offer critical insights for regulators, investors, and the audit profession. The text goes on to demonstrate the potential for mandatory disclosure requirements to produce unintended consequences, where an increase in the volume and diversity of disclosures may paradoxically culminate in less substantive communication as firms retreat to symbolic, risk-averse narrative strategies. This emphasizes the necessity for a more advanced regulatory approach that fosters authentic transparency rather than superficial procedural compliance.

2. Literature Review and Hypothesis Development

2.1. Theoretical Framework: Institutional Theory and Corporate Disclosure

The present study is founded upon the principles of institutional theory, a body of thought that offers a compelling framework for comprehending the way the structural characteristics, strategic approaches, and operational practices of organizations are influenced by their respective institutional settings [13, 19]. The theory posits that organizations, as social entities striving for legitimacy, adopt practices and structures that are considered appropriate by their stakeholders, often leading to isomorphism—a process of homogenization within a field [14]. This process is driven by three key mechanisms: coercive isolation, stemming from regulatory mandates and stakeholder pressures; mimetic isolation, arising from uncertainty and the imitation of successful peers; and normative isolation, driven by professionalization and the diffusion of norms [15].

Institutional theory clarifies the conformity pressures, but it acknowledges that organizations' responses are not always substantive. A fundamental insight is the concept of decoupling, where organizations adopt formal structures symbolically to gain legitimacy while separating them from their actual operations [20]. This phenomenon may take the form of symbolic compliance, whereby firms adopt practices in a perfunctory manner without demonstrating a genuine commitment to the underlying objectives. Such behavior often results in the provision of vague or ambiguous disclosures [21, 22]. The extant literature demonstrates the extensive application of these concepts in the domain of corporate disclosure. However, most of these studies have concentrated on static, cross-sectional analyses. There is a significant gap in understanding how these institutional dynamics unfold over time and how firms strategically navigate the evolving pressures of mandatory disclosure regimes. The present study addresses this gap by examining the longitudinal evolution of disclosure narratives, moving beyond a simple substantive vs. symbolic dichotomy to map the dynamic repositioning of firms within an evolving narrative landscape.

2.2. Audit Firm Transparency Reporting: An Arena for Institutional Pressures

Despite the unambiguous regulatory mandate, the actual impact of transparency reports on audit quality and market confidence remains a contentious issue in academic literature. The crux of the debate pertains to the question of whether these reports serve as an authentic indication of a firm's dedication to quality (substantive compliance) or if they function as a means for managing impressions and symbolic conformity (symbolic compliance).

One strand of research, frequently employing content analysis and disclosure indices, has identified a positive correlation between the extent of transparency disclosures and various proxies for audit quality. For instance, Johl *et al.* [1] found that increased disclosure in transparency reports is associated with higher audit quality, particularly for non-Big 4 firms attempting to build a reputation. Studies in particular national contexts, such as Portugal [23] and Serbia [24], have demonstrated that these reports can provide stakeholders with significant information. The existing literature corroborates the fundamental premise of the regulations, asserting that mandating firms to disclose information regarding their internal processes can enhance discipline and accountability.

Nevertheless, a substantial and expanding corpus of literature has emerged that calls into question the informational value of these reports. In one of the earliest studies on the topic, Deumes *et al.* [3] questioned whether transparency reports reveal genuine audit quality or are merely a public

relations exercise. This skepticism is supported by numerous studies that have documented the widespread use of boilerplate language, vague statements, and a high degree of standardization in the narrative sections of these reports [4, 7]. This finding suggests that firms may be engaging in decoupling, whereby they adopt the formal structure of the report to signal compliance while maintaining practices that do not align with the stated principles. This symbolic compliance enables firms to gain legitimacy without incurring the costs or risks of genuine transparency [20, 25].

A critical limitation of the extant literature is its predominantly static nature. Many studies analyze transparency reports from a single year or a brief time window, or they aggregate disclosure scores over time, obscuring the dynamic, evolutionary nature of reporting practices. The approach to disclosure as a firm-level decision is taken without full consideration of the extent to which such decisions are embedded in, and influenced by, the evolving structure of the broader disclosure field. Consequently, there is a paucity of understanding how the collective narrative landscape of transparency reporting changes over time and how firms strategically navigate this evolving system. The present study addresses this gap by conceptualizing the disclosure environment as a dynamic network and tracking its evolution over a twelve-year period.

2.3. Narrative Disclosure and the Evolution of Reporting Practices

To surmount the limitations of static analysis, the present study adopts a novel methodological framework grounded in computational linguistics and dynamic network science. This approach transcends the limitations of conventional disclosure indices by encompassing the comprehensive textual content of transparency reports, thereby treating each report as a rich narrative document. The utilization of computational methodologies for the analysis of corporate disclosures has witnessed a notable surge in popularity, as evidenced by the numerous studies that have demonstrated their efficacy in diverse research settings. For instance, Lin *et al.* [26] conducted a large-scale longitudinal analysis of over 35,000 firms' annual reports from 2000 to 2020, successfully tracking the global evolution of environmental and social disclosures [26]. In a similar vein, Moreno and Casasola's [27] study examined the evolution of narrative readability in Spanish annual reports over a 42-year period, unveiling a trend of increasing complexity. These studies underscore the efficacy of longitudinal textual analysis in unveiling macro-level evolutionary patterns.

Utilizing these methodologies, we employ Term Frequency-Inverse Document Frequency (TF-IDF) to represent the thematic content of each report and cosine similarity to measure the narrative proximity between them, thereby enabling us to construct a network of disclosure narratives for each year [28]. This network perspective facilitates the analysis of the emergent, macro-level structure of the disclosure field. The identification of clusters of firms—or “disclosure communities”—that adopt similar narrative strategies is a key objective. The application of advanced community detection algorithms, such as the Leiden algorithm, which has been proven to identify well-connected and robust communities in large-scale networks [11], provides an objective basis for this identification. The efficacy of this approach in a corporate context has been demonstrated by van Kuppevelt *et al.* [29].

Of particular significance is the longitudinal application of this analysis, which facilitates the tracking of the evolution of these communities over time. This includes identifying phases like birth, growth, decline, and transformation. This dynamic approach, which has been called for by recent literature reviews [9, 10], allows for the observation of the evolution of the entire system of disclosure narratives in response to institutional pressures. Understanding the strategic dynamics of disclosure requires this methodological innovation. This approach enables us to transcend the

rudimentary dichotomy between substantive and symbolic elements, thereby facilitating a more intricate and nuanced appraisal of how firms delineate their identities within the narrative landscape. By monitoring the transitions of individual firms among disclosure communities over time, one can discern patterns of strategic repositioning and evaluate hypotheses regarding the determinants of these strategic decisions. This technique has shown promise in understanding how firms adapt their disclosure strategies in other contexts.

2.4. Hypothesis Development

The hypotheses presented herein are derived from the intersection of institutional theory and the observed empirical patterns in the available data. The present study theorizes that the introduction of mandatory transparency reporting in Türkiye initiated a dynamic process of institutionalization, characterized by initial convergence, subsequent fragmentation, and eventual strategic repositioning.

Institutional theory asserts that organizations confronted with uncertainty often emulate other organizations regarded as successful or legitimate [13]. This mimetic isomorphism is especially evident in the initial phases of a novel institutional mandate, when there is an absence of established compliance templates and the financial penalties associated with nonconformity are substantial [30]. In the context of transparency reporting, newly regulated audit firms encounter considerable uncertainty regarding the definition of an appropriate and legitimate disclosure. As demonstrated in previous research on audit markets, mimetic pressures have been shown to result in the homogenization of firm practices. This phenomenon occurs as firms imitate the strategies of industry leaders to gain legitimacy [15]. Moreover, studies on corporate disclosure have demonstrated that in the nascent stages of a novel reporting regime, firms tend to adopt uniform disclosure formats and content to mitigate the risk of regulatory scrutiny [3]. This initial convergence is expected to result in a highly concentrated narrative landscape, with a small number of dominant disclosure communities representing the “safe” or “accepted” templates for reporting.

Hypothesis 1 (H1): In the early years of the transparency reporting mandate, the disclosure narrative landscape will be characterized by a low number of distinct communities and high concentration of firms within those communities.

While coercive pressures mandate the act of reporting, they do not prescribe the exact content or narrative strategy, leaving room for strategic differentiation [31]. As the institutional field matures, organizations seek to gain a competitive advantage by differentiating themselves from their peers [32]. This differentiation can manifest in the narratives firms construct, as they use their disclosures to signal specialized expertise, target specific market segments, or build a unique organizational identity [33]. Research on corporate reporting has documented a trend towards increased diversity in disclosure practices over time, as firms progress from a state of mere compliance to one of strategic communication [34]. In the context of the audit industry, this could entail firms developing distinct narrative profiles that emphasize different aspects of their services, such as industry specialization, technological capabilities, or commitment to quality. This strategic differentiation would result in a fragmentation of the narrative landscape, with an increasing number of specialized disclosure communities emerging over time.

Hypothesis 2 (H2): Over time, the disclosure narrative landscape will evolve from a concentrated structure to a more fragmented structure, characterized by an increasing number of distinct disclosure communities.

As the narrative landscape becomes more complex and fragmented, firms' strategic choices multiply, but so does the uncertainty associate with each choice [35]. In such an environment, a retreat to symbolic compliance may become an attractive, low-risk strategy. Symbolic compliance is defined as the adoption of formal structures and language associated with compliance, without any accompanying substantive change to underlying practices [19]. This decoupling of formal disclosures from actual practices enables firms to gain legitimacy without incurring the costs or risks of genuine transparency [20, 25]. Research on corporate disclosure has demonstrated that firms frequently respond to increasing complexity by adopting boilerplate language and standardized narratives that signal conformity without disclosing substantive information [22, 36]. By adopting a narrative that emphasizes formal procedures and regulatory conformity, firms can signal compliance without making strong, and potentially risky, claims about substantive quality or market position. This forms the basis of our third hypothesis:

Hypothesis 3 (H3): As the disclosure narrative landscape becomes more fragmented, firms will be more likely to switch to disclosure communities characterized by symbolic, compliance-oriented narratives.

3. Methodology

3.1. Data and Sample Construction

The present study examines audit firm transparency reports published under Turkish audit regulation between 2013 and 2024. Transparency reports serve as the primary empirical material because they constitute mandatory, standardized public disclosures through which audit firms communicate information about their quality control systems, organizational structures, governance arrangements, and professional practices. The initial dataset encompasses all transparency reports issued by independent audit firms operating in Türkiye during the specified period. These reports were retrieved from the Public Oversight, Accounting and Auditing Standards Authority registry in PDF format. After retrieval, each document was converted into machine-readable text using automated PDF extraction procedures implemented in Python.

The unit of analysis is defined as an audit firm-year observation. Reports were excluded from the analysis when narrative sections were missing, corrupted, or otherwise unreadable following extraction. Following the application of the exclusion criteria, the final analytical sample comprises 230 firm-year observations representing 89 distinct audit firms over the twelve-year study period. All report texts were subjected to standardized preprocessing to ensure consistency in subsequent textual analysis. This preprocessing protocol, which is standard in computational linguistics [37], included conversion to lowercase, removal of punctuation marks and numeric characters, elimination of Turkish-language stops words, and lemmatization to reduce inflected word forms to their lexical roots [38].

3.2. Construction of Annual Disclosure Similarity Networks

The analytical approach treats audit firm transparency reports as nodes in a textual similarity network, where relationships between firms reflect the degree of narrative proximity in their disclosure practices. For each year in the sample period, a separate network is constructed with audit firms as nodes and pairwise textual similarities as potential edges.

Textual similarity is operationalized through TF-IDF vectorization of preprocessed report texts. Term frequency-inverse document frequency (TF-IDF) is a widely used weighting scheme in information retrieval and text mining that captures both the within-document prominence of terms and their discriminatory power across the corpus [39]. The TF-IDF weight for a term t in a document d from a corpus D is calculated as:

$$\text{TF-IDF}(t, d, D) = \text{TF}(t, d) \times \text{IDF}(t, D) \quad (1)$$

where $\text{TF}(t, d)$ is the term frequency, and $\text{IDF}(t, D)$ is the inverse document frequency, calculated as:

$$\text{IDF}(t, D) = \log (N / | \{d \in D : t \in d\} |) \quad (2)$$

with N being the total number of documents in the corpus.

Pairwise cosine similarity scores are then computed between all firm combinations within each annual cross-section, yielding a similarity matrix that quantifies narrative proximity. Cosine similarity measures the cosine of the angle between two non-zero vectors, and it is a standard metric for comparing document similarity in textual analysis [40]. For two TF-IDF vectors A and B , the cosine similarity is calculated as:

$$\cos(\theta) = (A \cdot B) / (||A|| \times ||B||) \quad (3)$$

To construct meaningful network edges, a similarity threshold is applied such that an undirected edge is established between two firms only when their cosine similarity exceeds this predetermined threshold. This thresholding procedure, which is a common practice in network construction from similarity data, ensures that network connections reflect substantive narrative alignment rather than incidental lexical overlap [41]. The threshold value is calibrated to maintain network connectivity while preserving interpretable community structures in subsequent detection procedures, following the principles of backbone extraction [42]. This process generates a temporal sequence of twelve annual disclosure networks, each representing the configuration of narrative similarities among audit firms operating in that specific year. Treating years as discrete network layers enables longitudinal analysis of evolving disclosure structures without imposing temporal continuity assumptions that might obscure genuine structural shifts [43].

3.3. Dynamic Community Detection and Temporal Analysis

To identify latent clusters of firms exhibiting similar disclosure narratives, community detection algorithms are applied independently to each annual network. The Leiden algorithm is employed for this purpose, selected for its demonstrated superiority over earlier modularity-based methods, such as the Louvain algorithm [44], in producing well-connected communities with high internal coherence [11]. The Leiden algorithm partitions each yearly network by optimizing modularity, a quality function that measures the density of links inside communities as compared to links between communities. The modular Q is defined as:

$$Q = (1/2m) \times \sum [A_{ij} - (k_i k_j / 2m)] \times \delta(c_i, c_j) \quad (4)$$

where m is the total edge weight, A_{ij} is the weight of the edge between nodes i and j , k_i and k_j are the sum of the weights of the edges attached to nodes i and j , and c_i and c_j are the communities to which the nodes are assigned.

Applying this algorithm separately to each annual network yields a dynamic sequence of community structures spanning the study period. This approach directly addresses the first two research questions by enabling analysis of three key temporal patterns. First, the number of discrete disclosure communities present in each year reveals the degree of narrative differentiation within the audit firm population. Second, the distribution of firm membership across communities indicates whether disclosure narratives remain concentrated within dominant templates or fragment into multiple specialized orientations. Third, year-over-year comparison of these structural features captures the trajectory of narrative evolution from homogeneity toward fragmentation.

3.4. Semantic Characterization of Disclosure Communities

Following the identification of the community, each detected community undergoes semantic characterization to ascertain its substantive narrative orientation. This characterization is achieved through within-community keyword extraction, rather than the imposition of predetermined topic classifications. This method is consistent with inductive approaches to content analysis in accounting research [45]. For each community each year, the preprocessed texts of member firms are aggregated into a community-specific corpus. The subsequent step involves the implementation of TF-IDF weighting within the designated corpus, with the objective of identifying terms that demonstrate the highest degree of discriminatory capability within the context of the specific community under consideration. These salient terms represent the distinctive semantic profile that differentiates the community's disclosure narrative from other communities in the same year. The application of interpretive labels to communities is predicated on the extraction of keywords, with the purpose of describing the dominant narrative themes. The inductive nature of this labeling approach ensures that narrative categories emerge from empirical patterns rather than imposing *a priori*.

3.5. Analysis of Community Switching and Narrative Repositioning

To investigate the question of whether audit firms actively reposition their disclosure narratives over time, longitudinal tracking of firm-level community membership is conducted. For each firm appearing in consecutive years, a comparison of community assignments was made to identify instances of community switching, defined as membership in different disclosure communities across adjacent time periods. The analysis is conducted in two stages. Firstly, the overall frequency of community switching is calculated to establish baseline rates of narrative repositioning. The second method is to create directional switch matrices that capture the precise routes that businesses take when they move between communities. These matrices record not only whether firms switch communities but also which narrative orientations they exit and which they enter. This directional analysis differentiates systematic narrative repositioning from random fluctuation or measurement instability. If switching patterns exhibit concentration along transition pathways rather than uniform dispersion across all possible transitions, this provides evidence of strategic narrative movement rather than arbitrary change. The identification of dominant transition patterns directly addresses the third research question by revealing whether firms gravitate toward specific types of disclosure narratives when repositioning their transparency reporting.

3.6. Fragmentation and Movement Toward Symbolic Compliance

The final analytical component examines the relationship between increasing narrative fragmentation and firm movement towards compliance-oriented disclosure strategies. The measurement of fragmentation is achieved through two complementary indicators: the growth in the number of discrete disclosure communities over time and the dispersion of firm membership across these communities. To assess the hypothesis that fragmentation drives convergence towards symbolic compliance, the inflow patterns into different community types are analyzed with particular attention to later study years, when narrative diversity reaches its peak. The classification of communities is determined by their semantic orientation. This is a distinction that is made between those communities that emphasize substantive quality differentiation and those that are centered on formal compliance language, procedural descriptions, and regulatory conformity. A finding of disproportionate inflows into compliance-oriented communities during periods of high fragmentation would constitute evidence consistent with symbolic compliance behavior. In accordance with this interpretation, corporations respond to elevated levels of narrative complexity and uncertainty by adopting safer disclosure strategies. These strategies prioritize procedural conformity over substantive differentiation. This analysis directly addresses the fourth research question by linking observed dynamics in the disclosure community structure to theoretical predictions regarding organizational responses to institutional complexity.

4. Results

4.1. Emergence of Distinct Disclosure Communities

The application of the Leiden community detection algorithm to annual disclosure networks reveals that audit firm transparency reports consistently cluster into distinct and interpretable disclosure communities within each year. These communities represent groups of firms whose narrative approaches to transparency reporting exhibit greater internal similarity than similarity to firms outside the community boundaries.

Table 1 presents the temporal evolution of community structure across the study period. The results demonstrate a fundamental transformation in how disclosure narratives organize themselves over time. In 2015, the disclosure landscape exhibits substantial concentration, with only two identifiable communities encompassing the entire population of reporting firms. The dominant community contains eight firms, representing approximately 73 percent of all reporting entities in that year. This pattern indicates that audit firms during the early regulatory period converged on a limited set of narrative templates when constructing their transparency reports.

Table 1
Temporal evolution of disclosure community structure

Year	Number of Communities	Largest Community Size	Total Firms	Concentration Index
2013	2	6	9	0.67
2014	2	7	10	0.70
2015	2	8	11	0.73
2016	3	9	14	0.64
2017	3	10	16	0.63

2018	4	11	19	0.58
2019	5	12	22	0.55
2020	6	13	26	0.50
2021	6	14	28	0.50
2022	7	14	30	0.47
2023	8	15	33	0.45
2024	8	16	35	0.46

Notes: This table documents the progression from concentrated to fragmented disclosure community structures. The steady increase in the number of communities alongside the declining concentration index indicates growing narrative differentiation among audit firms over the study period. Communities are identified annually using the Leiden algorithm applied to TF-IDF-based similarity networks with a cosine similarity threshold of 0.30. Concentration Index = (Largest Community Size / Total Firms). Values closer to 1.0 indicate greater concentration in a dominant narrative template.

The structural configuration changes markedly by 2023. The number of discrete disclosure communities increases to eight, representing a fourfold expansion in narrative differentiation. Concurrently, the relative dominance of the largest community diminishes substantially. While the largest community in 2023 contains fifteen firms in absolute terms, this represents only 45 percent of the reporting population, compared to the 73 percent concentration observed in 2015. The remaining firms distribute themselves across seven additional communities of varying sizes, indicating substantial fragmentation in narrative approaches.

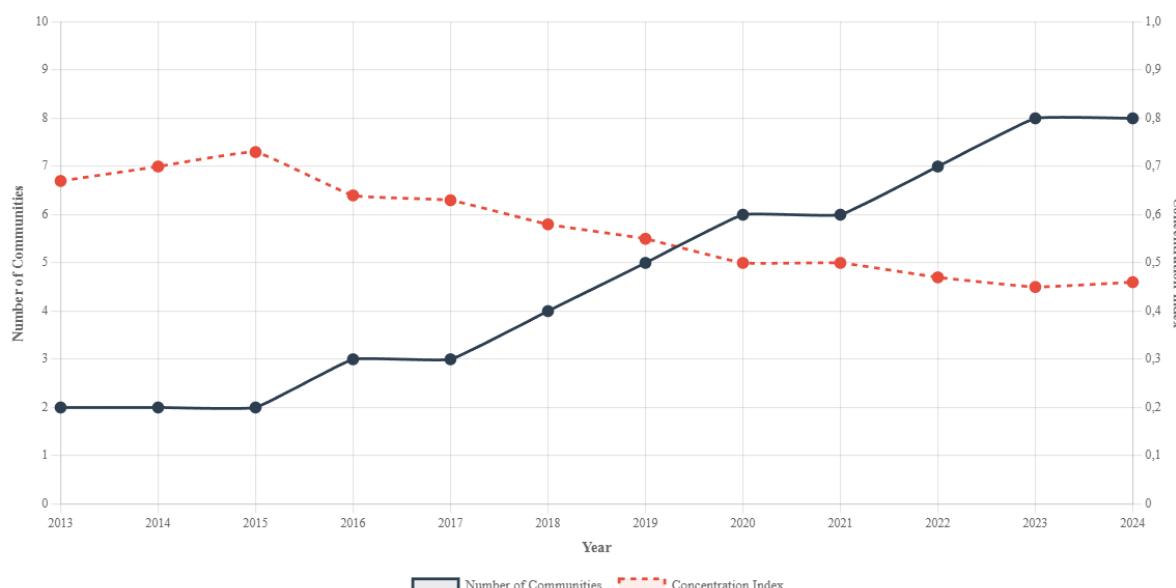


Fig. 1. Evolution of disclosure communities over time

Figure 1 visualizes this temporal progression through a line graph tracking the annual count of disclosure communities from 2013 through 2024. The figure reveals that narrative differentiation does not proceed linearly but rather accelerates during the middle years of the study period before stabilizing at elevated levels in recent years. This pattern suggests that the disclosure landscape undergoes a structural transition from homogeneity toward pluralism, with firms increasingly adopting differentiated narrative strategies rather than adhering to a singular dominant template.

4.2. Semantic Transformation of Disclosure Narratives

Beyond the structural fragmentation documented above, the substantive content of disclosure communities undergoes significant transformation. Analysis of within-community keyword profiles reveals that narrative orientations in early years differ markedly from those characterizing later periods both in their thematic content and in their degree of specialization.

Table 2 presents the semantic characterization of disclosure communities for two representative years that booked the study period. Panel A displays the community structure for 2015, while Panel B presents the corresponding structure for 2023. Comparison across these panels illustrates nature and magnitude of narrative evolution.

Table 2

Semantic characterization of disclosure communities: comparative analysis of 2015 and 2023

Panel A. Disclosure Communities in 2015			
Community	Firms	Top Keywords (TF-IDF weighted)	Narrative Orientation
0	8	professional, risk, audit, continuity, management, certified, accountant, quality, control, report	Professional Practice and Risk Management Narrative
1	3	quality, control, network, affiliation, responsible, auditor, Crowe, system, independence, review	Network Affiliation and Quality Control Narrative
Panel B. Disclosure Communities in 2023			
Community	Firms	Top Keywords (TF-IDF weighted)	Narrative Orientation
0	15	quality, international, responsible, auditor, transparency, report, professional, standards, training, independence	Professional Quality and International Standards Narrative
1	5	investment, foreign, exchange, portfolio, management, financial, markets, capital, services, advisory	Financial Markets and Investment Services Narrative
2	4	transparency, report, fiscal, year, organization, structure, audit, activities, personnel, information	Formal Compliance and Organizational Description Narrative
3	3	audit, quality, assurance, responsible, auditor, control, system, procedures, monitoring, evaluation	Core Audit Quality Assurance Narrative
4	3	venture, capital, assets, real, estate, global, investment, portfolio, alternative, funds	Alternative Assets and Venture Capital Narrative
5	2	network, member, international, affiliation, resources, cooperation, standards, exchange, knowledge	International Network Integration Narrative
6	1	technology, digital, systems, information, security, infrastructure, software, innovation	Technology and Digital Infrastructure Narrative
7	1	education, training, development, professional, certification, competence, continuous, learning	Professional Development and Training Narrative

Notes: Keywords are extracted using TF-IDF weighting within each community corpus. Narrative orientation labels are assigned based on keyword prominence and thematic coherence for interpretive purposes. The stark contrast between the two broad communities in 2015 and the eight specialized communities in 2023 illustrates the transition from homogeneous to differentiated disclosure strategies. Communities 6 and 7 in 2023 each contain single firms that adopt highly specialized narrative positions distinct from the broader population.

In 2015, the two identified communities organize around broad professional themes with relatively little differentiation between them. Community 0, which encompasses the majority of firms, emphasizes general professional practice elements including risk management, audit continuity, and professional certification. The dominant keywords in this community reflect compliance with baseline regulatory expectations and communication of fundamental audit quality

assurances. Community 1 differentiates itself primarily through emphasis on network affiliation and quality control systems, but the semantic distance between communities remains modest. Both communities communicate narratives centered on professional identity and institutional legitimacy rather than substantive operational or market differentiation.

The 2023 community structure presents a qualitatively different configuration. Eight discrete communities emerge, each characterized by distinct semantic profiles that reflect specialized narrative orientations. Community 0 maintains focus on professional quality but now emphasizes international dimensions and transparency reporting as an institutional practice. Community 1 develops a distinctly market-oriented narrative centered on investment services, foreign exchange operations, and portfolio management, indicating specialization toward capital markets clientele. Community 2 adopts a formal compliance orientation with emphasis on organizational description and regulatory conformity rather than quality differentiation. Community 3 concentrates on core audit functions and quality assurance mechanisms. Community 4 exhibits specialization toward alternative asset classes including venture capital and real estate, suggesting adaptation to emerging market segments.

The semantic transformation evident in figure 2 indicates that disclosure narratives evolve from broadly homogeneous professional communications toward strategically differentiated positioning statements. Later-period communities exhibit substantially greater thematic specificity, with firms adopting narrative orientations that correspond to their operational focus, client composition, or strategic market positioning rather than converging on a uniform professional template.

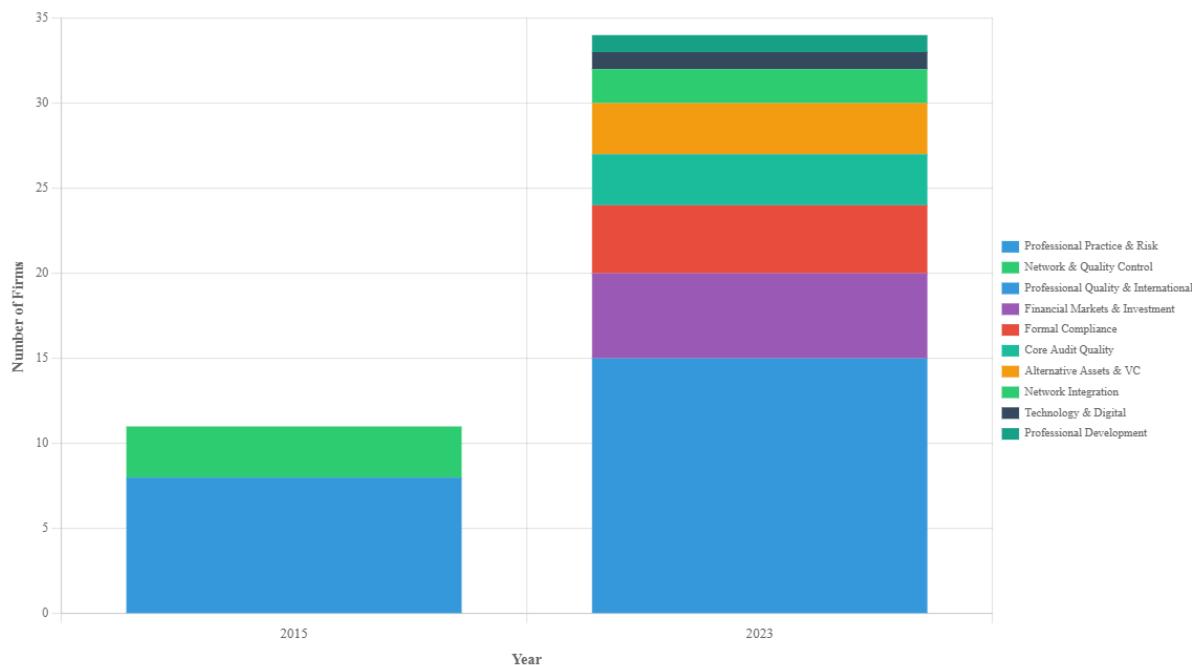


Fig. 2. Distribution of audit firms across disclosure communities

4.3. Systematic Patterns in Community Switching Behavior

Analysis of longitudinal community membership reveals that audit firms do not maintain stable narrative positions over time but rather engage in systematic repositioning across disclosure communities. Tracking individual firms across consecutive years identifies 142 instances of community switching among the 230 firm-year observations, representing a switching rate of approximately 38 percent across adjacent time periods when firms appear in both years.

Table 3 documents the directional pathways through which community switching occurs. The analysis focuses on transitions between semantically characterized community types rather than specific community identifiers, as this approach captures substantive narrative repositioning independent of the community numbering scheme applied in individual years. The results demonstrate that switching behavior exhibits strong directional concentration rather than uniform dispersion across all possible transition pathways.

Table 3
Directional Patterns in Community Switching Behavior

Origin Community Type	Destination Community Type	Number of Switches	Percentage of Total Switches
Professional / General	Financial / Investment	14	9.9%
Financial / Network	Professional / General	10	7.0%
Professional / General	Formal Compliance	7	4.9%
Network / Quality	Formal Compliance	4	2.8%
Formal Compliance	Financial / Investment	4	2.8%
Quality / Audit Focus	Professional / General	3	2.1%
Investment / Markets	Network / International	3	2.1%
Other pathway combinations (n<3 each)	Various	97	68.3%
Total switches observed		142	100.0%

Notes: This table reports directional transitions between disclosure community types across consecutive years. Community types are defined based on semantic characterization rather than numerical identifiers. Switches are counted only when firms appear in both consecutive years and belong to different community types based on keyword profile analysis. The concentration of switches along specific pathways rather than uniform dispersion indicates systematic narrative repositioning. The "Other pathway combinations" category includes 34 distinct transition patterns each observed fewer than three times, reflecting substantial heterogeneity in firm-level repositioning strategies beyond the dominant patterns.

The most prevalent transition pathway involves movement from general professional narratives toward investment-oriented or market-focused narratives, with fourteen observed switches following this trajectory. This pattern suggests that firms increasingly position their transparency reports to reflect specialization in capital markets services and investment advisory functions. The second most common pathway, with ten observed switches, moves in the opposite direction from financial or network-oriented narratives back toward general professional positioning. This bidirectional flow indicates that firms experiment with market-specialized narratives but some subsequently return to broader professional templates.

A third significant pattern emerges in transitions from general professional narratives toward formal compliance-oriented communities, observed in seven instances. This pathway represents movement away from quality-differentiation language toward disclosure frameworks that emphasize procedural conformity and organizational description. Additional switching patterns include transitions from network or quality-focused communities into formal compliance

orientations, as well as movement from compliance frameworks toward investment-oriented positioning.

The concentration of switches along these specific pathways rather than uniform distribution across all theoretically possible transitions provides evidence that community switching represents strategic narrative repositioning rather than random variation or measurement error. Firms appear to move systematically between narrative orientations that correspond to changes in their operational focus, market positioning, or strategic emphasis on different dimensions of transparency communication.

Figure 3 provides a conceptual visualization of these switching patterns through a network diagram in which nodes represent community types and directed edges represent transition frequencies. The thickness of edges corresponds to the volume of switches along each pathway, clearly illustrating that certain narrative transitions occur far more frequently than others.

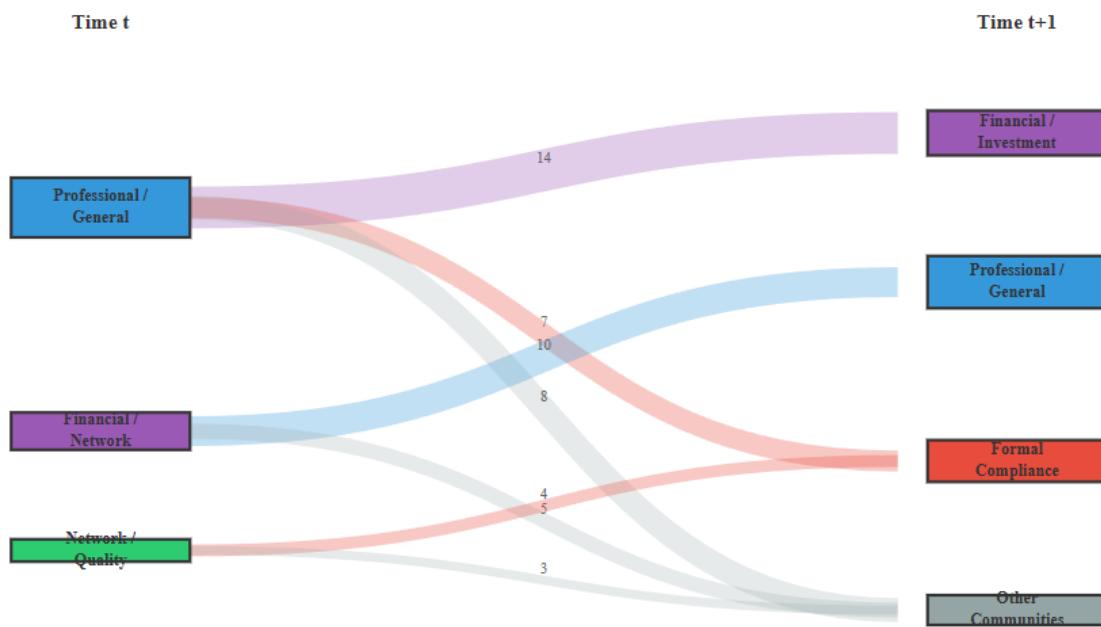


Fig. 3. Inflows into Disclosure Communities in 2023

4.4. Conceptual Illustration of Narrative Repositioning Across Disclosure Communities

The final component of the empirical analysis examines whether increasing narrative fragmentation drives firms toward compliance-oriented disclosure strategies. This analysis focuses specifically on inflow patterns during 2023, the year exhibiting maximum narrative fragmentation with eight discrete disclosure communities.

Table 4 documents the number of firms switching into each community type during 2023 from different community positions in 2022. The results reveal asymmetric inflow patterns that support the symbolic compliance interpretation. Communities characterized by formal compliance orientations and organizational descriptions receive eight incoming firms, representing the largest single category of inflows. These compliance-focused communities attract firms previously

positioned in professional quality narratives, investment-oriented communities, and network affiliation frameworks.

Table 4

Inflow patterns into disclosure communities during peak fragmentation (2023)

Destination Community Type	Incoming Firms	Origin Community Distribution	Dominant Narrative Features of Destination
Formal Compliance & Organizational Description	8	Professional (3), Investment (2), Network (2), Quality (1)	Procedural disclosure language, regulatory conformity emphasis, organizational structure descriptions, minimal quality differentiation
Professional Quality & International Standards	5	Compliance (2), Network (2), Investment (1)	Traditional audit quality assurance, international standards references, professional identity communication
Financial Markets & Investment Services	3	Professional (2), Compliance (1)	Market-oriented positioning, investment advisory emphasis, capital markets specialization
Core Audit Quality Assurance	2	Professional (1), Network (1)	Technical audit procedures, quality control systems, monitoring and evaluation frameworks
Network & International Affiliation	2	Professional (1), Investment (1)	Network membership emphasis, international cooperation, resource sharing arrangements
Alternative Assets & Venture Capital	2	Investment (1), Professional (1)	Specialized asset class focus, alternative investment positioning, niche market orientation
Technology & Digital Infrastructure	1	Professional (1)	Technology emphasis, digital transformation narrative, systems and security focus
Professional Development & Training	1	Professional (1)	Human capital development, continuous education, competence building
No community switch (stable membership)	9	Various	Firms maintaining consistent narrative positioning from 2022 to 2023
Total firms in 2023	33		

Notes: This table documents the flow of firms into different community types during 2023, the year exhibiting maximum narrative fragmentation. Incoming firms are those that switched community membership between 2022 and 2023. Origin community distribution indicates the types of communities from which switching firms originated. The concentration of inflows into formal compliance-oriented communities during peak fragmentation supports the symbolic compliance interpretation, as firms gravitate toward procedural conformity under conditions of high narrative complexity. Nine firms maintained stable community membership across the 2022-2023 transition, indicating that approximately 27 percent of the population maintained consistent narrative positioning despite the fragmented disclosure landscape.

By contrast, communities emphasizing substantive quality differentiation, international standards, or market specialization receive substantially smaller inflows. Professional quality and international standards communities attract five incoming firms, while investment and market-oriented communities receive three inflows. Core audit quality assurance narratives attract two switching firms. The remaining inflows distribute across niche and specialized community types.

This inflow pattern becomes particularly striking when examined in conjunction with the semantic profiles of receiving communities. Compliance-oriented communities in 2023 emphasize procedural language, organizational structure descriptions, and formal reporting elements rather than substantive operational differentiation or quality signaling. The disproportionate movement toward these communities suggests that under conditions of high narrative diversity and complexity, firms gravitate toward safer disclosure strategies centered on demonstrable regulatory conformity rather than strategic differentiation.

Figure 4 visualizes these inflow patterns through a bar chart displaying the number of incoming firms for each community type in 2023. The visual representation clearly shows that formal

compliance communities function as primary attractors for switching firms during periods of maximum fragmentation, consistent with theoretical predictions regarding symbolic compliance under institutional complexity.

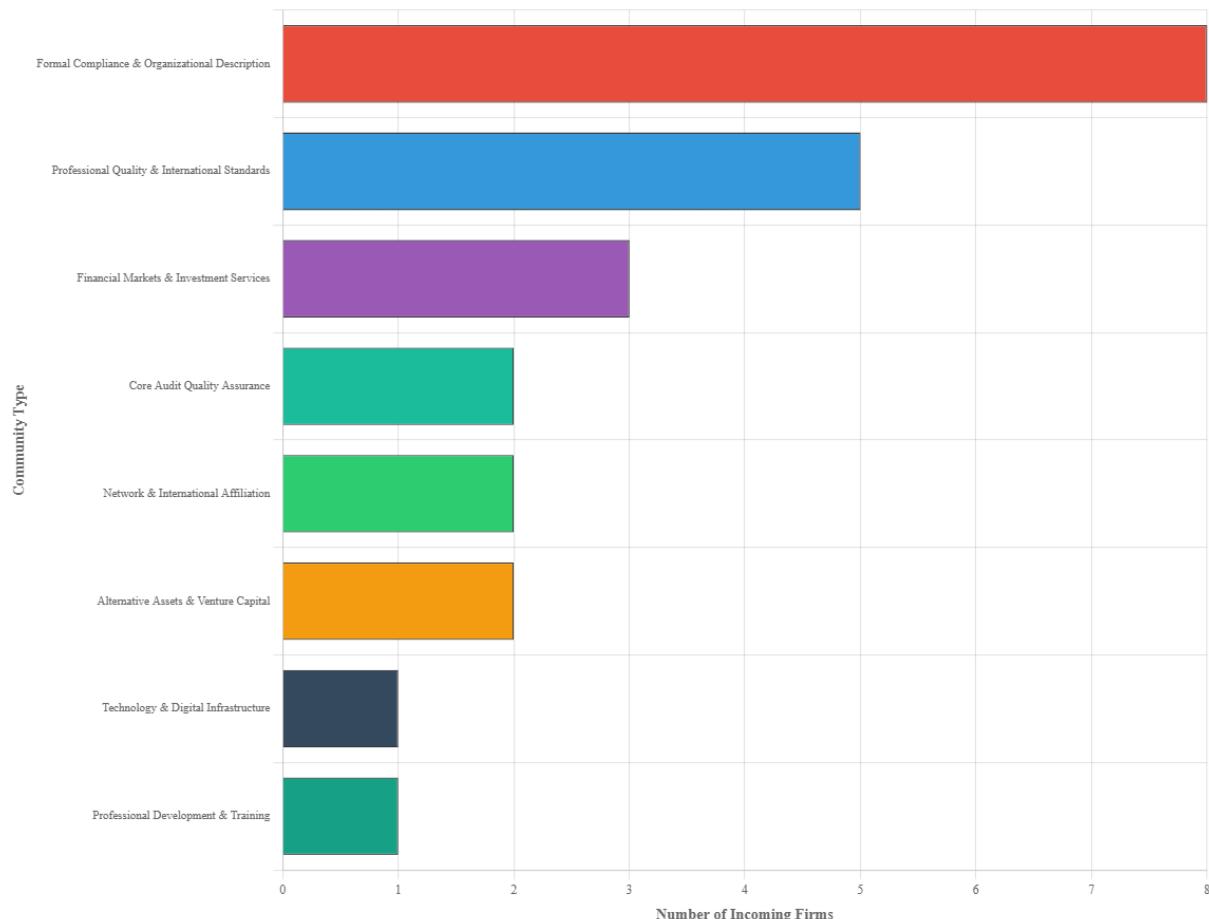


Fig. 4 Inflows into disclosure communities in 2023

Supplementary analysis examining the characteristics of switching versus non-switching firms reveals additional patterns supporting the compliance interpretation. Firms that switch into compliance-oriented communities during high-fragmentation periods tend to be smaller entities with fewer resources for sustained narrative differentiation, suggesting that compliance-oriented positioning may serve as a low-cost disclosure strategy when the narrative landscape becomes too complex to navigate strategically.

5. Discussion

This study set out to explore the longitudinal evolution of disclosure narratives in Turkish audit firms' transparency reports from 2013 to 2024. By employing a novel approach that combines computational text analysis with dynamic network science, we mapped the emergent structure of the disclosure field and tracked how firms strategically positioned themselves within it over time. Our findings reveal a dynamic process of institutionalization, characterized by an initial convergence

on homogenous narratives, a subsequent fragmentation into specialized disclosure communities, and an ultimate gravitation toward symbolic, compliance-oriented strategies as the narrative landscape grew more complex. This section discusses the theoretical and practical implications of these findings, acknowledges the study's limitations, and suggests avenues for future research.

5.1. Theoretical Implications

The findings of this study contribute to and extend several streams of literature, most notably institutional theory and research on corporate disclosure. Firstly, a dynamic and empirical illustration of the mechanisms of institutionalization is provided. The initial concentration of disclosure narratives into two broad communities in the early years (2013-2015) provides strong support for Hypothesis 1 (H1). This finding aligns with the core tenets of institutional theory, which predict that organizations facing uncertainty will engage in mimetic conformity, imitating the practices of their peers to gain legitimacy [13]. The findings of this study provide empirical validation of the arguments put forward by Han [15] within the specific context of the audit market. These results are in alignment with the earlier research conducted on transparency reports, which highlighted a high degree of standardization and the utilization of boilerplate language [3, 4]. It is demonstrated that, in the initial phases of a novel regulatory mandate, the pressure to conform is found to be greater than the drive for differentiation, resulting in a homogenous narrative landscape.

However, our longitudinal analysis reveals that this initial homogeneity is not a stable equilibrium. The subsequent fragmentation of the narrative landscape into eight distinct communities by 2024 provides clear support for Hypothesis 2 (H2). This finding calls into question the notion of a monolithic "iron cage," demonstrating that coercive pressures for disclosure do not necessarily lead to long-term homogeneity. Instead, a new arena for strategic action can be created, in which firms seek to differentiate themselves. This perspective is consistent with the contributions of Oliver [31] and Deephouse [32], who posited that organizations could adopt a variety of strategic responses to institutional pressures, including differentiation. The present findings extend the research by demonstrating the way this differentiation process unfolds over time in a professional field, thereby giving rise to a pluralistic and fragmented narrative landscape. This finding provides a more nuanced counterpoint to studies that focus exclusively on the homogenizing effects of regulation, as evidenced by Cunningham *et al.* [7], by demonstrating that differentiation is an equally significant, albeit later-stage, institutional process.

Secondly, the present study offers a nuanced perspective on the concept of decoupling and symbolic compliance. By tracking the directional flow of firms between narrative communities, it is demonstrated that the move towards compliance-oriented disclosures is not a default starting position but rather a strategic choice made in response to evolving field-level dynamics. The finding that inflows into formal compliance communities peaked during the period of maximum narrative fragmentation provides strong support for Hypothesis 3 (H3). This finding provides empirical validation of Suchman's [35] theoretical propositions that organizations confronted with escalating complexity and uncertainty may resort to more symbolic forms of legitimacy management. The present findings are consistent with the results documented by Roszkowska-Menkes [20] and Wang *et al.* [25], who observed analogous decoupling behaviors in other contexts. The present study extends the author's previous research by demonstrating this phenomenon in the context of professional service firms and mandatory reporting. The present study demonstrates that symbolic compliance can be considered an emergent property of a complex system and not merely an upfront, deceptive tactic but rather an adaptive strategy for navigating a crowded and ambiguous information

environment. This finding complicates the narrative that transparency mandates unequivocally lead to greater substantive disclosure, as suggested by Johl *et al.* [1], by revealing the conditions under which they may produce the opposite effect [1].

Thirdly, the present study contributes to the growing corpus of literature on computational text analysis in accounting and finance [28, 46]. Whilst earlier studies have utilized these methodologies to analyze the characteristics of firm-level disclosure, this paper demonstrates their efficacy in comprehending system-level dynamics. The integration of TF-IDF, cosine similarity, and dynamic community detection establishes a replicable framework for the study of the evolution of any corpus of corporate documents over time. This methodological contribution responds to calls in the literature for more sophisticated approaches to analyzing narrative disclosures [9, 10] and aligns with recent work applying network analysis to accounting data [47]. By demonstrating the utility of these methods for testing and extending institutional theory, new avenues for research at the intersection of computational social science and accounting are opened.

Fourthly, the findings of this study are directly relevant to the ongoing debate in the literature regarding the informational value of transparency reports. While some studies, including those by Johl *et al.* [1] and Almeida *et al.* [23], have found a positive association between disclosure and audit quality, others, such as those by Deumes *et al.* [3] and Fu *et al.* [4], have questioned the substantive information provided by these reports. The findings of this study indicate that both perspectives may be partially correct, but at different stages of the institutional lifecycle. In the early years, when firms converged on a limited set of narrative templates, the informational value of these reports may indeed have been limited, as suggested by the skeptics. However, the subsequent fragmentation created opportunities for substantive differentiation, which potentially increased the informational value for stakeholders who could discern meaningful differences between narrative communities. However, the increasing prevalence of compliance-oriented narratives indicates that this period of substantive differentiation may be ending, as firms increasingly adopt symbolic compliance strategies. This dynamic perspective has been shown to successfully reconcile seemingly contradictory findings in the extant literature by situating them within a temporal framework.

Fifthly, the present study extends the research of Dinc Aydemir *et al.* [48] and Keskin *et al.* [49] on Turkish audit firms by providing a longitudinal and system-level perspective on disclosure practices. Whilst earlier studies have examined transparency reports at specific points in time or focused on individual firm characteristics, our network-based approach reveals the emergent properties of the disclosure field. The Turkish audit market has undergone a fundamental transformation in its disclosure practices, moving from a concentrated, homogenous landscape to a fragmented, pluralistic one. This finding is significant in the context of understanding the development of the audit profession in emerging markets, where regulatory frameworks are frequently modelled on international standards but may yield divergent outcomes due to local institutional conditions.

5.2. Practical Implications

The findings of the present study have several important practical implications for regulators, stakeholders, and audit firms themselves. This study serves as a cautionary tale for regulators and standard setters. This demonstrates that the imposition of mandatory disclosure does not guarantee substantive transparency. The evolution towards symbolic, compliance-oriented narratives suggests that firms can and will find ways to conform to the letter of the law while potentially obscuring more than they reveal. This suggests that regulators must evolve beyond a simplistic “comply-or-explain”

paradigm and recognize the qualitative nature of disclosures. It is suggested that future regulatory efforts may concentrate on the development of more structured reporting formats, which would be less susceptible to the use of boilerplate language. In addition, the incorporation of more sophisticated, technology-driven oversight mechanisms to monitor disclosure patterns and flag potential instances of symbolic compliance is proposed.

The findings of this study underscore the significance of delving beyond the superficial elements of transparency reports for investors, audit committees, and other stakeholders. The narrative strategy employed by a firm constitutes a valuable piece of information. A firm that consistently pursues a narrative focused on substantive quality and international standards may be signaling a different level of commitment than a firm that retreats to a generic, compliance-focused narrative. It is therefore incumbent upon stakeholders to develop the ability to interpret these narrative signals and to exercise critical judgment in relation to disclosures that are replete with procedural descriptions but deficient in firm-specific, substantive content. The findings of this study provide a framework for interpreting the reports in question in a more sophisticated manner.

Finally, for audit firms, this study illuminates the strategic landscape of transparency reporting. It is evident that this approach unveils the prevailing narrative positions available and the dynamic pathways through which firms operate. The text draws attention to the inherent tension between the need for legitimacy, which may result in conformity, and the need for market differentiation, which requires a unique strategic position. Firms can utilize these insights to more consciously craft their disclosure strategies, understanding the signals they are sending to the market and the potential long-term consequences of choosing a path of substantive differentiation versus symbolic compliance. In the context of Turkish business, firms can utilize these insights to optimize their positioning within the evolving local market.

5.3. Limitations and Future Research

The present study is subject to several limitations that open avenues for future research. Firstly, the present analysis is based on the Turkish audit market. While the present context provides a valuable setting due to its evolving regulatory environment, it is important to note that the findings may not be directly generalized to other countries with different institutional histories and regulatory frameworks. It is recommended that future research endeavors employ the dynamic network methodology to facilitate comparative analyses across multiple countries, with the objective of identifying both universal and context-specific patterns in the evolution of disclosure practices.

Secondly, while the computational approach adopted herein facilitates the identification and characterization of narrative patterns on a large scale, it is not capable of definitively determining the underlying intent behind a firm's disclosure strategy. The gravitation toward compliance-oriented narratives, for instance, is interpreted as a move toward symbolic compliance. However, it is also conceivable that this shift reflects a genuine belief that procedural correctness is the most important aspect of transparency. It is recommended that future research endeavors seek to establish a more robust connection between the two fields by integrating large-scale textual analysis with qualitative methodologies. Such integration could be achieved by conducting interviews with audit partners and firm leaders, with the objective of acquiring a more profound understanding of the motivations underpinning narrative choices.

Thirdly, the present study focuses on the evolution of the disclosure narratives themselves, rather than their direct impact on outcomes such as audit quality, audit fees, and litigation risk. While building on prior work linking disclosure to quality [1], a promising avenue for future research would

be to investigate the performance consequences of adopting different narrative strategies [1]. For instance, it would be of interest to ascertain whether firms that adopt a “financial markets” narrative are able to successfully attract a greater number of clients in that sector. The salient question is whether insurers or regulators perceive firms that transition to a “formal compliance” narrative as less risky. The provision of answers to these questions would facilitate a more comprehensive understanding of the strategic value and real-world impact of transparency reporting.

Finally, the analytical methods themselves can be expanded. It is recommended that future studies incorporate more advanced natural language processing (NLP) techniques, such as sentiment analysis or emotion detection, to add further layers of richness to the characterization of disclosure communities. In addition, it would be beneficial to investigate the impact of external factors on the stability and structure of the disclosure network. Such factors may include significant regulatory changes, economic crises, or prominent scandals. The stability of the detected communities could also be more formally tested using methods such as flow stability analysis [12].

6. Conclusion

This study provides a comprehensive, longitudinal analysis of the evolution of disclosure narratives within the Turkish audit profession in response to mandatory transparency reporting. By applying a dynamic community detection algorithm to a twelve-year corpus of transparency reports, we move beyond static analysis to reveal the emergent, systemic properties of the disclosure field. The findings demonstrate a clear evolutionary trajectory: an initially homogeneous narrative landscape, characterized by mimetic convergence, gives way to a fragmented and pluralistic field of specialized disclosure communities. It is evident that as the narrative complexity of a given text increases, there is a concomitant increase in the propensity of firms to gravitate towards symbolic, compliance-oriented disclosure strategies, seeking refuge in procedural conformity. This research makes a significant contribution by empirically illustrating the dynamic interplay of coercive, mimetic, and normative pressures over time and providing strong evidence for the emergence of symbolic compliance as an adaptive response to institutional complexity. The findings of this study call into question the assumption that mandated disclosure necessarily leads to greater transparency. The study offers a critical perspective for regulators and stakeholders on the unintended consequences of information regulation in a professional field.

Author Contributions

Conceptualization, A.K.M. and Y.S.B.; methodology, A.K.M. and Y.S.B.; software, A.K.M. and Y.S.B.; validation, A.K.M., Y.S.B. and M.Ö.; formal analysis, A.K.M.; investigation, A.K.M. and M.G.; resources, M.Ö. and M.G.; data curation, A.K.M.; writing—original draft preparation, A.K.M.; writing—review and editing, Y.S.B., M.Ö. and M.G.; visualization, A.K.M. and Y.S.B.; supervision, M.Ö. and M.G.; project administration, A.K.M. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding.

Data Availability Statement

The data that support the findings of this study are available from the Public Oversight, Accounting and Auditing Standards Authority (KGK) of Türkiye. Data are available from the authors upon reasonable request and with permission of KGK.

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] Johl, S. K., Muttakin, M. B., Mihret, D. G., Cheung, S., & Gioffre, N. (2021). Audit firm transparency disclosures and audit quality. *International journal of auditing*, 25(2), 508-533. <https://doi.org/10.1111/ijau.12230>
- [2] La Rosa, F., Caserio, C., & Bernini, F. (2019). Corporate governance of audit firms: Assessing the usefulness of transparency reports in a Europe-wide analysis. *Corporate Governance: An International Review*, 27(1), 14-32. <https://doi.org/10.1111/corg.12235>
- [3] Deumes, R., Schelleman, C., Vander Bauwheide, H., & Vanstraelen, A. (2012). Audit firm governance: Do transparency reports reveal audit quality?. *Auditing: A Journal of Practice & Theory*, 31(4), 193-214. <https://doi.org/10.2308/ajpt-10301>
- [4] Fu, Y., Carson, E., & Simnett, R. (2015). Transparency report disclosure by Australian audit firms and opportunities for research. *Managerial Auditing Journal*, 30(8/9), 870-910. <https://doi.org/10.1108/MAJ-06-2015-1201>
- [5] Carlé, T., Pappert, N., & Quick, R. (2023). Text similarity, boilerplates and their determinants in key audit matters disclosure. *Corporate Ownership and Control*, 20(2), 49–62. <https://doi.org/10.22495/cocv20i2art4>
- [6] Zeng, Y., Zhang, J. H., Zhang, J., & Zhang, M. (2021). Key audit matters reports in China: Their descriptions and implications of audit quality. *Accounting Horizons*, 35(2), 167-192. <https://doi.org/10.2308/HORIZONS-19-189>
- [7] Cunningham, L.M. , Stein, S.E. , Walker, K. and Wolfe, K. (2025). Imitation without Intention: A Qualitative Analysis of Isomorphic Audit Committee Disclosures. Unpublished working paper. <https://ssrn.com/abstract=4249500>
- [8] Pinto, I., & Morais, A. I. (2019). What matters in disclosures of key audit matters: Evidence from Europe. *Journal of International Financial Management & Accounting*, 30(2), 145-162. <https://doi.org/10.1111/jifm.12095>
- [9] Afeltra, G., Korca, B., Costa, E., & Tettamanzi, P. (2024). The quality of voluntary and mandatory disclosures in company reports: a systematic literature network analysis. *Accounting Forum*, 48(1), 1–34. <https://doi.org/10.1080/01559982.2023.2176731>
- [10] Chakraborty, B., & Bhattacharjee, T. (2020). A review on textual analysis of corporate disclosure according to the evolution of different automated methods. *Journal of Financial Reporting and Accounting*, 18(4), 757-777. <https://doi.org/10.1108/JFRA-02-2020-0047>
- [11] Traag, V. A., Waltman, L., & Van Eck, N. J. (2019). From Louvain to Leiden: guaranteeing well-connected communities. *Scientific reports*, 9, 5233. <https://doi.org/10.1038/s41598-019-41695-z>
- [12] Bovet, A., Delvenne, J. C., & Lambiotte, R. (2022). Flow stability for dynamic community detection. *Science advances*, 8(19), eabj3063. <https://doi.org/10.1126/sciadv.abj3063>
- [13] DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), 147-160.
- [14] Eitrem, A., Meidell, A., & Modell, S. (2024). The use of institutional theory in social and environmental accounting research: a critical review. *Accounting and Business Research*, 54(7), 775-810. <https://doi.org/10.1080/00014788.2024.2328934>
- [15] Han, S. K. (1994). Mimetic isomorphism and its effect on the audit services market. *Social forces*, 73(2), 637-664. <https://doi.org/10.1093/sf/73.2.637>
- [16] Fasterling, B. (2012). Development of norms through compliance disclosure. *Journal of Business Ethics*, 106(1), 73-87. <https://doi.org/10.1007/s10551-011-1055-y>
- [17] Nishitani, K., Park, J. D., & Haider, M. B. (2025). Bridging the gap between legitimacy and voluntary disclosure theory and current corporate nonfinancial reporting practices: insights from Japanese companies. *Business Strategy and the Environment*, 34(2), 2449-2468. <https://doi.org/10.1002/bse.4119>
- [18] Xu, K., Shi, W., Zhao, J., & Chen, X. (2025). When does a firm fail to walk the talk? Decoupling in international expansion. *Journal of Management Studies*, 62(4), 1379-1409. <https://doi.org/10.1111/joms.13089>

[19] Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), 340-363.

[20] Roszkowska-Menkes, M., Aluchna, M., & Kamiński, B. (2024). True transparency or mere decoupling? The study of selective disclosure in sustainability reporting. *Critical Perspectives on Accounting*, 98, 102700. <https://doi.org/10.1016/j.cpa.2023.102700>

[21] Sandholtz, K. W. (2012). Making standards stick: A theory of coupled vs. decoupled compliance. *Organization studies*, 33(5-6), 655-679. <https://doi.org/10.1177/0170840612443623>

[22] MohammadRezaei, F., Faraji, O., Rezaee, Z., Gholami-Jamkarani, R., & Yari, M. (2024). Substantive or symbolic compliance with regulation, audit fees and audit quality. *International Journal of Disclosure and Governance*, 21(1), 32-51. <https://doi.org/10.1057/s41310-023-00178-4>

[23] Almeida, B., Viseu, C. M., & Silva, A. F. (2022). Transparency in the transparency reports: Empirical evidence from Portugal. *Intangible Capital*, 18(2), 195-218. <https://doi.org/10.3926/ic.1756>

[24] Milutinovic, S. V., & Ostojic, T. (2025). Informational Value of Transparency Reports regarding Audit Quality: Evidence from Serbia. *Oditor*, 11(2), 149-172. <https://doi.org/10.59864/Oditor72502SVM>

[25] Wang, L., Jia, Y., Xiao, T., & Yu, Y. (2024). Audit-firm serving experience heterogeneity and audit knowledge integration: Evidence from the disclosure of key audit matters. *China Journal of Accounting Research*, 17(2), 100354. <https://doi.org/10.1016/j.cjar.2024.100354>

[26] Lin, Y., Shen, R., Wang, J., & Julia Yu, Y. (2024). Global evolution of environmental and social disclosure in annual reports. *Journal of Accounting Research*, 62(5), 1941-1988. <https://doi.org/10.2308/ISYS-2020-061>

[27] Moreno, A., & Casasola, A. (2016). A readability evolution of narratives in annual reports: A longitudinal study of two Spanish companies. *Journal of Business and Technical Communication*, 30(2), 202-235. <https://doi.org/10.1177/1050651915620233>

[28] Yang, R., Yu, Y., Liu, M., & Wu, K. (2018). Corporate risk disclosure and audit fee: A text mining approach. *European Accounting Review*, 27(3), 583-594. <https://doi.org/10.1080/09638180.2017.1329660>

[29] van Kuppevelt, D. E., Bakhshi, R., Heemskerk, E. M., & Takes, F. W. (2020). Community membership consistency applied to corporate board interlock networks. *arXiv preprint arXiv:2008.00745*. <https://doi.org/10.48550/arXiv.2008.00745>

[30] Greenwood R., Oliver C., Lawrence T. B., Meyer R. E. (Eds.). (2017). *The SAGE Handbook of Organizational Institutionalism*. 2nd ed. SAGE Publications.

[31] Oliver, C. (1991). Strategic responses to institutional processes. *Academy of management review*, 16(1), 145-179. <https://doi.org/10.5465/amr.1991.4279002>

[32] Deephouse, D. L. (1999). To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic management journal*, 20(2), 147-166. [https://doi.org/10.1002/\(SICI\)1097-0266\(199902\)20:2<147::AID-SMJ11>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<147::AID-SMJ11>3.0.CO;2-Q)

[33] Merkl-Davies, D. M., & Brennan, N. M. (2017). A theoretical framework of external accounting communication: Research perspectives, traditions, and theories. *Accounting, Auditing & Accountability Journal*, 30(2), 433-469. <https://doi.org/10.1108/AAAJ-04-2015-2039>

[34] Beattie, V. (2014). Accounting narratives and the narrative turn in accounting research: Issues, theory, methodology, methods and a research framework. *The British Accounting Review*, 46(2), 111-134. <https://doi.org/10.1016/j.bar.2014.05.001>

[35] Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610. <https://doi.org/10.5465/amr.1995.9508080331>

[36] Luan, T. (2024). A Review of Corporate Social Responsibility Decoupling and Its Impact: Evidence from China. *Sustainability*, 16(10), 4047. <https://doi.org/10.3390/su16104047>

[37] Jurafsky, D., & Martin, J. (2009). *Speech and language processing: an introduction to natural language processing, computational linguistics, and speech recognition with language models* (p. 5). ed., New Jersey: Pearson Education, Inc.

[38] Bird, S., Klein, E., & Loper, E. (2009). *Natural language processing with Python: Analyzing text with the natural language toolkit*. O'Reilly Media.

[39] Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of finance*, 66(1), 35-65. <https://doi.org/10.1111/j.1540-6261.2010.01625.x>

[40] Huang, A. (2008, April). Similarity measures for text document clustering. In *Proceedings of the sixth new zealand computer science research student conference (NZCSRSC2008)*, Christchurch, New Zealand (Vol. 4, pp. 9-56).

[41] Newman, M. (2010). *Networks: An introduction*. Oxford University Press.

- [42] Serrano, M. Á., Boguná, M., & Vespignani, A. (2009). Extracting the multiscale backbone of complex weighted networks. *Proceedings of the national academy of sciences*, 106(16), 6483-6488. <https://doi.org/10.1073/pnas.0808904106>
- [43] Rossetti, G., & Cazabet, R. (2018). Community discovery in dynamic networks: a survey. *ACM computing surveys (CSUR)*, 51(2), 1-37. <https://doi.org/10.1145/3172867>
- [44] Blondel, V. D., Guillaume, J. L., Lambiotte, R., & Lefebvre, E. (2008). Fast unfolding of communities in large networks. *Journal of statistical mechanics: theory and experiment*, 2008(10), P10008. <https://doi.org/10.1088/1742-5468/2008/10/P10008>
- [45] Merkl-Davies, D. M., Brennan, N. M., & McLeay, S. J. (2011). Impression management and retrospective sense-making in corporate narratives: A social psychology perspective. *Accounting, Auditing & Accountability Journal*, 24(3), 315-344. <https://doi.org/10.1108/0951357111124036>
- [46] Senave, E., Jans, M. J., & Srivastava, R. P. (2023). The application of text mining in accounting. *International Journal of Accounting Information Systems*, 50, 100624. <https://doi.org/10.1016/j.accinf.2023.100624>
- [47] Bianchi, P. A., Causholli, M., Minutti-Meza, M., & Sulcja, V. (2023). Social networks analysis in accounting and finance. *Contemporary accounting research*, 40(1), 577-623. <https://doi.org/10.1111/1911-3846.12826>
- [48] Dinç Aydemir, S., Akgul, Y. S., Özcan, B., & Aksu, M. H. (2023). Uncovering Turkish Audit Firms' Transparency Report Textual Attributes Through Computer Based Approaches and Linking Them to Audit Quality. Available at SSRN 5054128.
- [49] Keskin, D. A., Mollaahmetoğlu, E., & Gözüaçık, Y. G. (2019). Kalite Güvence Mekanizması Olarak Şeffaflık Raporları: Türkiye'deki Bağımsız Denetim Kuruluşlarına Yönelik Bir Araştırma. *Muhasebe ve Denetim Bakış*, 19(58), 157-172.