Industry (Re)Classifications and Corporate Governance[1]

Gaizka Ormazabal
IESE Business School

Xucheng Shi
ESSEC Business School

April 2026

ABSTRACT

This study examines whether industry classifications affect how firms select peers for executive compensation benchmarking. For identification, we exploit the setting of Global Industry Classification Standard (GICS) reclassifications. We find that firms are significantly more likely to include peers whose GICS codes converge with their own and to drop peers whose codes diverge, with stronger effects when proxy advisors and passive investors provide greater oversight. We find no evidence of strategic selection, which suggests that these patterns reflect an update of the underlying benchmark. However, because reclassifications occur with a lag, compensation contracts may remain temporarily misaligned with evolving economic conditions. Overall, the results point to the influence of third-party classification providers in shaping corporate governance.

JEL Classifications: D43, D82, G34, L15

Keywords: industry reclassification, corporate governance, self-selected peers, peer benchmarking, GICS

Data Availability: Data are available from the sources cited in the text.

[1] We thank Pepa Kraft, Clemens Lauer, Devan Mescall, Jonathan Sangwook Nam, Luc Paugam, Crystal Shi, Daniel Yang, Yiqi Zhao (discussant), and participants at CKGSB, the University of Hong Kong, HEC Paris and the CAAA and EAA Annual Conferences for their helpful comments and suggestions. Gaizka Ormazabal thanks the "Cátedra de Dirección de Instituciones Financieras y Gobierno Corporativo del Grupo Santander," the R+D+I project Ref. PID2022-143016NB-I00 funded by MCIN/ AEI/ 10.13039/501100011033 and ERDF and EU Grant TED2021-132531B-I00 funded by MCIN/AEI/ 10.13039/501100011033 and by the "European Union NextGenerationEU/PRTR, IESE's High Impact Projects Initiative – 2023, and the Social Trends Institute (STI). Xucheng Shi gratefully acknowledges financial support from the ESSEC Research Center.

1. Introduction

Industry classification systems maintained by private information providers, such as MSCI and S&P, organize firms into groups that are presumed to pursue similar economic activities. These taxonomies underpin many financial and economic analyses, serving as the foundation for investment benchmarks, index construction, and the comparative evaluation of firm performance. By standardizing firm categorization, classification providers may influence how investors, analysts, and other market participants perceive industry boundaries and economic relationships. Yet little is known about the extent to which these classifications shape the behavior of market participants.

This paper contributes to this broader discussion by examining whether industry classifications influence corporate governance. We focus on their potential effect on the selection of peer firms used for executive compensation benchmarking. Because the choice of peers determines the perceived market wage for managerial talent, understanding how external classification systems shape which firms are viewed as comparable offers important insights into how information intermediaries can affect governance outcomes.

For identification, we focus on the United States and exploit the periodic reclassifications of industry boundaries conducted under the Global Industry Classification Standard (GICS) by MSCI and S&P. These reclassifications reassign firms across industries and occur regularly as part of the maintenance of the classification system, creating discrete variation in firm categories. We focus on GICS because it is the most widely used classification framework among investors, analysts, and proxy advisors, and it underpins many index and benchmarking practices in corporate governance. As shown in Figure 1, these reclassifications often involve hundreds of firms and a sizable share of total market capitalization. Some of these

reclassifications have been characterized in the financial media as major structural overhauls.[2] Our empirical design also leverages the fact that, since December 2006, the SEC has required U.S. public firms to disclose the set of peer firms used for executive compensation benchmarking in their annual proxy statements (SEC 2006).[3]

Boards of directors may adjust compensation peer groups when industry classifications change because these classifications provide an external reference for comparable firms. Executive pay decisions are scrutinized by shareholders, proxy advisors, and other governance intermediaries, who often evaluate a firm's compensation practices relative to similarly sized firms operating within the same industry (Compensia 2018; ISS 2018; Penserra 2018; Jochem et al. 2025). Under this industry-size benchmarking convention, a firm that benchmarks outside its assigned industry may face criticism for poor governance or misaligned pay practices. Consequently, when a reclassification alters the formal industry boundaries, boards may revise their peer groups—not necessarily because the firm's underlying economics have changed, but because the reclassification redefines the legitimate comparison set used to justify pay levels.

Nonetheless, industry reclassifications may also have little or no effect on firms' peer-selection decisions. Boards may rely primarily on internal signals (i.e., firm-specific assessments of economic fundamentals and comparability), with external pressure to conform to standardized industry benchmarks playing a limited role. Alternatively, even if boards place greater weight on external signals (i.e., standardized industry classifications produced by third-party providers) because of their broader, economy-wide perspective, the effect of reclassification may still be limited. As classifications become stale over time, boards may increasingly rely on internal assessments to adjust peer groups. If internal and external signals

[2] See, for example, Anderson (2018), Penserra (2018), and Randewich (2018).
[3] Beginning in December 2006, the SEC required firms to disclose their compensation benchmarking peers with the objective of improving governance transparency and aligning executive pay with the market wage for comparable talent (SEC 2006).

are sufficiently informative and therefore correlated—and if external pressure to adhere strictly to standardized benchmarks is limited—peer adjustments would occur gradually as fundamentals evolve, leaving little incremental change at the time of reclassification.

Using a comprehensive sample of U.S. public firms between 2008 and 2022, we first examine whether firms adjust their compensation peer groups following changes in GICS industry classifications. Our empirical design exploits firm-peer-year level data that link time-varying GICS codes with self-reported compensation peers disclosed in proxy statements. The analysis relies on a high-dimensional fixed effects structure—including (focal) firm *x* peer pair, firm *x* year, and peer *x* year fixed effects—to isolate within-pair variation over time and account for contemporaneous shocks affecting either firm. We find that firms are significantly more likely to include peers whose GICS codes converge with their own and to exclude those whose codes diverge. The estimated effects are economically meaningful: when two firms begin to share the same eight-digit GICS code as a result of a reclassification, the likelihood that one firm includes the other as a compensation peer increases by about 13 percentage points. These results are robust across alternative levels of classification granularity (two-, four-, six-, and eight-digit).

To illuminate why firms adjust their compensation peers following industry reclassifications, we examine whether these adjustments reflect conformity with the industry-size benchmarking practices promoted by proxy advisors and institutional investors. Consistent with this view, we find that firms are more likely to include GICS-converged peers when the focal and peer firms are similar in size (measured by assets, sales, or market capitalization). Moreover, the effect of reclassification significantly strengthens when proxy advisors are likely to exert greater influence, specifically when firms exhibit higher conformity with ISS's peer-selection methodology and when their institutional investor base has a higher share of passive investors, whose limited monitoring intensifies reliance on proxy advisors. Conversely, the

effect is weaker when the CEO also serves as chair of the board, reflecting the lower influence of proxy advisors in such firms.

Our next set of tests examines whether adjustments to compensation peer groups improve comparability across firms. Newly added peers whose GICS codes converge with those of the focal firm exhibit higher product similarity, as measured by the textual network industry classification (TNIC) score of Hoberg and Phillips (2016). These peers also show stronger stock return comovement with the focal firm, reflecting closer economic relatedness and shared risk exposures as perceived by financial markets. They likewise display greater analyst co-coverage, indicating that sell-side analysts view them as operating in closely related business activities. Taken together, these findings suggest that peer adjustments following industry reclassifications better align compensation benchmarks with the evolving structure of product markets.

We further examine how these adjustments affect executive compensation levels. The results show that firms drop peers with relatively lower levels of CEO pay, which in turn leads to higher benchmarked compensation at the focal firm. However, we find no evidence of strategic peer selection based on specific characteristics, such as size or compensation levels. Considered alongside our previous analyses, these findings suggest that the observed increase in compensation reflects an update of the underlying benchmark rather than strategic behavior.

Collectively, our findings support the notion that industry classifications have implications for corporate governance. Boards appear to consider these external taxonomies when benchmarking executive pay, responding to institutional pressures to conform to the industry-size benchmarking conventions emphasized by proxy advisors and institutional investors. In doing so, they adjust compensation peers not only in response to fundamentals, but also to maintain alignment with formally defined industry boundaries. Our results also suggest that the resulting peer groups consist of firms that are more economically comparable, consistent with

reclassifications being driven by an economic rationale. However, because reclassifications are updated only periodically, this standardization occurs with a lag. As illustrated in Figure 2, the delays can be nontrivial, implying that firms may remain temporarily misaligned with the evolving economic landscape.

This paper contributes to the literature in several ways. First, it extends research on the economic role of industry classification systems and their producers. Studies primarily compare alternative classification schemes—such as SIC, NAICS, and GICS—and examine their implications for investment decisions, market efficiency, and empirical research design (Kahle and Walkling 1996; Bhojraj et al. 2003; Colas and Brousseau 2025; Jain 2025). By contrast, this paper provides the first evidence on the consequences of major industry reclassifications for corporate governance, highlighting how external information providers, such as S&P and MSCI, can influence firms' compensation benchmarking.

Second, this study contributes to the literature on compensation peer benchmarking. Research examines whether firms' benchmarking reflects optimal contracting considerations or opportunistic behavior intended to inflate executive pay (Faulkender and Yang 2010; Bizjak et al. 2011; Albuquerque et al. 2013; Faulkender and Yang 2013; Cadman and Carter 2014; Larcker et al. 2021). More related to our paper, Jochem et al. (2025) document that the use of industry-size benchmarking has led to a decrease in the dispersion of CEO pay levels, to a great extent due to the influence of proxy advisors. We complement this work by showing that industry classifications shape firms' peer-selection decisions and, in turn, influence how boards set executive pay. At the same time, our results highlight one limitation of universal benchmarking criteria: because industry-size benchmarking relies on standardized classifications that adjust only periodically, their timing delays can distort peer selection when classifications have not yet incorporated current competitive realities.

Overall, the results point to an important role for industry classification providers, such as MSCI and S&P, in shaping corporate governance through firms' selection of compensation benchmarking peers. By showing that this influence strengthens when proxy advisors and passive institutional investors provide greater oversight, the findings highlight how industry classifications interact with external monitoring and benchmarking conventions to shape corporate decision-making.

2. Background and Hypothesis

2.1 Producers of Industry Classifications

Despite its importance, the production of major industry classifications has received little academic attention. NAICS, maintained by public statistical agencies in North America, provides classifications of business entities based on their economic activities. The NAICS classification is revised every five years and therefore provides a more updated description of various businesses than the SIC codes, which were last revised in 1987 by the U.S. government.

By contrast, the Global Industry Classification Standard (GICS) is maintained by private information providers, such as MSCI and S&P. The GICS, established in 1999 as a joint venture between MSCI and S&P, is a four-tiered industry taxonomy comprising sectors (two-digit), industry groups (four-digit), industries (six-digit), and sub-industries (eight-digit). According to the methodology (MSCI 2025), the production of GICS codes is based on a wide range of information sources, such as corporate annual reports, analysts' reports, and research literature. MSCI and S&P regularly review and update GICS classifications. They justify this practice by noting that "the evolution of industry sectors across world markets is dynamic and reflective of a constantly shifting landscape" (MSCI 2025). As shown in Table 1, the scope of these reclassifications varies substantially across years.

Anecdotal evidence suggests that, among all the industry classifications, the GICS classification is the most widely adopted by companies and proxy advisors for compensation

benchmarking (Compensia 2018; Penserra 2018). For example, in the 2022 proxy statement of U.S. Steel Corporation, one of the screening criteria used to define the compensation benchmark peers is "large companies primarily from the Materials sector or Industrials sector within the GICS classification codes." The firm stated that the "total target compensation is aligned at a level competitive with the median of our peer group." (See Online Appendix 2 for abstracts of the proxy statements.) The largest proxy advisory firm, ISS, stated in its guidelines that it uses the GICS classification for the construction of compensation peer groups (Compensia 2018; ISS 2018; Penserra 2018; Jochem et al. 2025). ISS first identifies a focal firm's peers within the same GICS codes and then filters peers based on such firm fundamentals as total assets, revenue, and market capitalization. (See Online Appendix 3.)

While the GICS classification is widely used, several controversies have arisen around its construction and revision. Although MSCI and S&P acknowledge that they rely on several sources of information, it is unclear how they use and weight each of these sources when designing the classification scheme. Prior to major reclassifications, MSCI and S&P publish brief commentaries. However, market participants rarely know the precise criteria and rationales underlying the re-categorizing of each of the businesses (Worldquant 2020).[4]

Importantly, despite the annual update, the GICS reclassifications may involve timing delays. Several factors contribute to this lag. First, the lag may result from the delay classification providers face in collecting and aggregating information from multiple sources. Second, MSCI and S&P can update classifications only after observing significant changes in the economy. Therefore, by design, these reclassifications lag economic shifts. For example, the major 2018 reclassification was triggered by accumulated transformations in technology

[4] For example, Worldquant (2020) has questioned whether Tesla should be classified as a technology company or an automaker given its new business model.

and communication sectors, where the convergence of telecommunications, media, and internet companies led to a broader definition of the Communication Services sector.

Third, MSCI and S&P may need to ensure a stable classification structure. MSCI reported that, for fiscal year 2022, 58% of its revenues stemmed from index licensing. Their subscribers include large mutual funds and sector exchange-traded funds (ETFs) that may have to rebalance their portfolios following GICS reclassifications, incurring transaction costs (State Street Global Advisors 2023). Therefore, classification providers may have incentives to respond to client demand for stable classifications, which can discourage frequent updates in response to minor industry changes.

2.2 Industry (Re)Classifications and Selection of Compensation Peers

The literature has documented that industry relevance is one of the most important criteria that firms consider when selecting peers, along with firm size (Bizjak et al. 2008; Faulkender and Yang 2010; Bizjak et al. 2011; Albuquerque et al. 2013; Faulkender and Yang 2013; Cadman and Carter 2014; Larcker et al. 2021; Choi et al. 2022). As discussed by Jochem et al. (2025), several institutional developments over the past two decades may have increased firms' reliance on the industry-size benchmarking criterion when selecting compensation peers. These developments include the SEC's 2006 mandate to disclose compensation peer groups (SEC 2006), the introduction of Say-on-Pay votes, the growing influence of proxy advisors in evaluating executive pay practices, and the rise of passive institutional investors, who rely heavily on standardized benchmarks. Together, these changes have heightened scrutiny of peer-group choices and strengthened incentives for firms to justify compensation decisions using transparent and widely accepted criteria.

In this institutional environment, industry classifications are likely to carry increased weight in firms' peer-selection decisions. As a result, industry reclassifications may prompt firms to adjust their compensation peer groups by including or excluding firms affected by the

reclassification. When proxy advisors evaluate pay practices relative to industry peers, their recommendations can directly influence shareholder voting outcomes. Negative recommendations or perceived deviations from prevailing standards can be costly for firms, both reputationally and in terms of shareholder support. Consistent with this view, research documents that proxy advisors significantly influence shareholder voting outcomes (Ertimur et al. 2010; Ertimur et al. 2018), and that boards often view them as de facto standard setters in executive compensation practices (Hayne and Vance 2019).

Nonetheless, industry reclassifications need not have a first-order effect on firms' selection of compensation peers. Peer selection may reflect a trade-off between internal signals, such as firm-specific assessments of economic fundamentals and comparability, and external ones, namely standardized industry classifications produced by third-party providers.[5] Boards may primarily rely on internal signals when selecting peers, particularly if external pressure to conform to standardized industry benchmarks is limited.

Alternatively, boards may place greater weight on external signals because classification providers have a broader, economy-wide perspective that may be informative for defining comparability. Even under this view, however, the effect of reclassification may still be limited. As competitive landscapes evolve and industry classifications become stale, boards may increasingly rely on internal assessments of economic comparability when they are not constrained by external pressure to conform to standardized benchmarks, thereby adjusting peer groups ahead of formal reclassifications. If internal and external signals are sufficiently informative and therefore correlated, peer adjustments would occur gradually as fundamentals evolve, leaving little incremental change at the time of a formal reclassification.

[5] This two-signal perspective is consistent with the accounting literature emphasizing that firms balance internal information with externally observable benchmarks when making disclosure and contracting decisions (e.g., Verrecchia 2001; Riedl and Srinivasan 2010).

In sum, whether industry reclassifications meaningfully affect peer-selection decisions depends on the relative importance of internal assessments, the informational value boards assign to external classifications, and the extent of external pressure—such as scrutiny from proxy advisors, investors, and regulators—to adhere to standardized benchmarking conventions.

3. Sample and Descriptive Statistics

We obtain the time-varying GICS industry classifications from GICS Direct, a product by MSCI and S&P. The database provides detailed information on the starting and ending dates of historical GICS classifications for companies in North America. Using GVKEY and fiscal year, we merge the classifications with the data on executive compensation peers from ISS, who collects firms' self-selected peers for compensation benchmarking. We exclude firms that are not publicly listed in the United States.

Our sample covers the period between 2008 and 2022. Following prior research (e.g., Larcker et al. (2021), we use 2008 as the starting year because it was the first year of full implementation of the SEC disclosure mandate. This approach allows us to avoid the initial confusion among firms regarding which types of compensation peers to disclose following the 2006 SEC rule and to mitigate bias from firms that self-selected into disclosure in 2006 and 2007 (Faulkender and Yang 2013; Larcker et al. 2021).

Our sample of firm-peer-year observations is constructed as follows. For each focal firm, we identify all firms that were ever listed as its compensation peers at any point during the sample period and define this union as the firm's set of potential peers, which remains fixed over time.[6] Then, for each fiscal year, we pair every focal firm with each member of its potential

[6] One could argue that the relevant set of potential peers consists of the universe of U.S. public firms, rather than only those firms that were ever listed as compensation peers during the sample period. Implementing our analysis over this broader universe is infeasible due to the many firms and data limitations. In any case, excluding firms that were never selected as peers does not affect our inferences, as these firms exhibit no variation in the key

peer set, regardless of whether that peer was identified in that specific year. This procedure results in 1,012,270 firm-peer-year observations, with each observation corresponding to a focal firm, one of its potential peers, and a fiscal year.

We obtain data on stock returns from the Center for Research in Security Prices (CRSP), institutional ownership from SEC 13F filings, S&P index membership from ISS Governance, and firms' financial information from Compustat. Merging our initial sample with these datasets yields 858,580 firm-peer-year observations, corresponding to 5,106 distinct firms (including 3,262 distinct focal firms and 5,089 distinct compensation peers).

Table 1 presents the total number of GICS-reclassified firms by year, as reported by MSCI and S&P. Panel A tabulates the number of reclassified firms at the GICS eight-, six-, four-, and two-digit levels. While MSCI and S&P update classifications annually, the most significant reclassifications occurred in 2008, 2010, 2011, 2014, and 2018. As an example of the reclassification, Panel B reports the initial and final number of firms in each sector (GICS two-digit) following the 2018 major reclassification. We observe a significant decline in the number of firms in consumer discretionary (25) and information technology (45), and a corresponding increase in communication services (50), consistent with the reclassification program announced by MSCI and S&P (see Exhibit OA4 in the Online Appendix).

Panel C of Table 1 reports the matching of focal and self-selected peer firms based on GICS, NAICS, SIC, and Fama-French industry codes. We find that 82% (74%, 59%, and 48%) of self-selected peers fall into the same two- (four-, six-, and eight-) digit GICS classification as the focal firm.[7] In contrast, only 67% (42% and 31%) of peers share the same two- (four-, and six-) digit NAICS classification. For SIC, 76% (60%, 45%, and 34%) of peers fall within

outcome variable—namely, inclusion in the focal firm's compensation peer group (i.e., the variable *Included*, as defined in Section 4.2).

[7] Alternatively, for example, 18% (26%, 41% and 52%) of self-selected peers are out of two- (four-, six-, and eight-) digit GICS classification as the focal firm. Despite this, we find that peers and focal firms at least share some degree of classification relatedness (82% of peers share at least the same two-digit GICS codes as their focal firms).

the same one- (two-, three-, and four-) digit classification. For Fama-French codes, 73% (66% and 61%) of peers fall within the same 12- (30- and 49-industry) classification. Overall, these figures indicate that compensation peer selection aligns more closely with GICS classifications than with other industry classifications, such as SIC, NAICS, or Fama-French.

Table 2 reports descriptive statistics for the main variables used in our sample. As described in Section 3, we use the extended sample that includes all potential peers. Because this sample contains peers not selected in a given year, the average overlap between focal firms and potential peers in GICS eight-, six-, four-, and two-digit classifications is 76%, 66%, 49%, and 40%, respectively, thus lower than the rates in Panel C of Table 1.

Regarding focal firms' financial characteristics, on average 20% are S&P 500 constituents, annual stock returns average 16%, total assets average USD 11.94 billion, the book-to-market ratio averages 65%, and return on assets averages 7%. For potential peers, the corresponding averages are 25% S&P 500 constituents, 15% annual stock return, USD 15.41 billion in assets, a 64% book-to-market ratio, and a 7% return on assets. With respect to size comparability, 48% of focal-peer pairs have total assets within a 0.5–2.0 multiple, 52% fall within this range based on sales, and 42% based on market capitalization. On average, focal firms include 22.6 peers in their compensation benchmark group. The average inclusion rate of potential peers is 51%.

4. GICS Reclassification and Peer Selection

4.1 Univariate Analyses

As a first step toward assessing the plausibility of an effect of industry reclassifications on firms' selection of compensation peers, we conduct several exploratory analyses. We begin by examining the total number of firms reclassified during our sample period, as reported by MSCI and S&P. As shown in Figure 1, the fraction of reclassified firms is substantial for several GICS codes. (See Exhibit OA4 for details on these GICS reclassifications.) Moreover, this fraction is not evenly distributed over time: certain years, particularly 2008, 2014, 2016, and 2018, exhibit

noticeably higher reclassification activity. Overall, the statistics in Figure 1 indicate that our sample period provides substantial variation in industry classifications.

Second, we examine whether these reclassifications attract public attention. We collect monthly Google Search Trend data for the keyword "GICS" in the United States from January 2008 to December 2022. The index ranges from 0 to 100, with 100 indicating the peak level of searches. As shown in Online Appendix OA5, searches spike markedly in August 2016 and September 2018, coinciding with the timing of major reclassifications. (See Figure 1 and Online Appendix OA4.) This pattern is consistent with the notion that GICS reclassifications attract public attention, which in turn may increase firms' awareness of and responsiveness to these classification changes.

Third, using the sample of focal firm-peer-year observations described in Section 3, we analyze peer inclusion patterns around 2018—the year of the largest GICS reclassification in our sample (see Figure 1).[8] Specifically, Exhibit OA6 (Online Appendix) plots the fraction of peers included in focal firms' compensation benchmark groups for three categories of firm-peer pairs: (i) pairs whose GICS codes diverged (from the same to different), (ii) pairs whose GICS codes converged (from different to the same), and (iii) pairs whose GICS codes remained unchanged. We report the average inclusion rate of peers over the 2017–2020 period.

As shown in Exhibit OA6, for GICS eight-, six-, four-, and two-digit codes, we observe a pronounced decline in peer inclusion when focal firms' GICS codes diverge from those of their peers and an upward trend when codes converge. By contrast, when GICS classifications remain unchanged, inclusion rates stay relatively flat. These graphical patterns suggest that firms' peer adjustments were influenced by the 2018 GICS reclassification. Taken together, the

[8] In October 2018, the GICS classification structure experienced the most significant change in its history. Several industry groups from the consumer discretionary and information technology sectors were discontinued and reclassified as communication services to reflect the integration between telecommunications, media, and internet companies (MSCI and S&P 2017). The magnitude was as large as more than 20 percent of the S&P 500 stocks in these sectors, and more than 10 percent of the market value of the index was affected by this reclassification.

evidence supports the notion that firms adjust their peer groups in response to industry reclassifications. In Table OA9 (Online Appendix), we conduct a multivariate version of this test. Inferences do not change.

Fourth, to illuminate the timeliness of GICS reclassifications, we examine changes in the Textual Network Industry Classification (TNIC) score developed by Hoberg and Phillips (2016) and stock return comovement within a five-year window surrounding industry reclassification events. The TNIC, which has been widely used in research, measures the pairwise similarity between firms based on the text of their 10-K product descriptions. By capturing how closely firms are related in product space, the TNIC provides a flexible, data-driven alternative to traditional SIC classifications and reflects underlying shifts in firms' product markets and industry structures. Similarly, return comovement provides a market-based measure of pairwise similarity by capturing the extent to which two firms' stock prices move together (Gong et al., 2011; Anton and Polk, 2014).

Figure 2 plots the average TNIC scores and stock return comovement for focal-peer firm pairs from five years before to five years after a reclassification. We first identify firms that experience a change in their GICS classification and then categorize focal-peer pairs as either "converged" or "diverged" based on how their GICS relationship changes following the reclassification. Panels A and B report average TNIC scores and return comovement, respectively, demeaned relative to year −5 to facilitate comparison. The figure shows that the trajectories of GICS-converged and GICS-diverged pairs begin to separate well before the reclassification, indicating that underlying product similarity and stock return comovement between the two groups already differed in the years leading up to the update.[9]

[9] In the TNIC graph, the pre-reclassification difference is mainly driven by a downward trend among GICS-diverged pairs, whereas in the return comovement graph, the difference is primarily driven by GICS-converged pairs. A potential explanation is that these two measures capture different aspects of economic relatedness. TNIC reflects similarity in firms' disclosed product descriptions and therefore relates more closely to product-market overlap, while return comovement reflects capital market perceptions of shared risks, which depend not only on product similarity but also on firms' financial structures, economic sensitivities, and common informational shocks.

The evidence in Figure 2 supports the view that industry reclassifications respond to shifts in the underlying economic landscape. At the same time, the results indicate that these reclassifications reflect established market trends with a lag. From an empirical standpoint, this lag provides a useful source of identification, as industry classifications do not appear to adjust contemporaneously with economic conditions. From an economic perspective, however, this lag implies that firms may temporarily rely on outdated classifications, causing compensation contracts to remain misaligned with evolving fundamentals during the interim period.

4.2 Multivariate Analysis

As a further step to assess how industry reclassifications influence firms' choices of compensation peers, we estimate the following model using the sample of focal firm-peer-year observations defined in Section 3:

$$Included_{ijt} = \alpha + \beta\, GICS_N_Same_{ijt} + \phi_1\, Controls_{it-1} + \phi_2\, Controls_{jt-1} + \phi_3\, Pair\ Similarity_{ijt-1} + \mu_{ij} + \lambda_{it} + \gamma_{jt} + \varepsilon. \quad (1)$$

The dependent variable, $Included_{ijt}$, equals one if a potential peer *j* is included in the peer group of focal firm *i* in a given year *t* and zero otherwise. The variable of interest, $GICS_N_Same_{ijt}$, is an indicator variable that equals one if peer *j* is in the same GICS code *N* as the focal firm *i* in year *t* and zero otherwise. We repeat the analysis using several values of *N*: 2, 4, 6, and 8. That is, we consider sectors (*N*=2, *GICS_2_Same*), industry groups (*N*=4, *GICS_4_Same*), industries (*N*=6, *GICS_6_Same*), and sub-industries (*N*=8, *GICS_8_Same*). By construction, *GICS_2_Same* provides the coarsest measurement of commonality, with *GICS_4_Same*, *GICS_6_Same*, and *GICS_8_Same* capturing progressively finer levels of industry similarity in that order. By examining *GICS_6_Same*, *GICS_4_Same*, and *GICS_2_Same*, we also capture cases where focal firms and peers are in broadly related industries.

$Controls_{it-1}$ and $Controls_{jt-1}$ are vectors of control variables that account for the fundamentals of the focal firm *i* and peer firm *j*, measured in the lagged year *t*−1, respectively.

These control variables are grounded in the literature on the selection of compensation peers (Albuquerque et al. 2013; Bizjak et al. 2011; Faulkender and Yang 2010). For the focal firms ($Controls_{it-1}$), we control for size (*Size*), book-to-market ratio (*BM*), return on assets (*ROA*), S&P 500 index constituent (*SP500*), and annualized stock return (*Stock_Return*). For the peer firms ($Controls_{jt-1}$), we include analogous measures: *Peer_Size*, *Peer_BM*, *Peer_ROA*, *Peer_SP500*, and *Peer_Stock_Return*.[10]

Pair Similarity$_{ijt-1}$ is a vector of variables measuring the similarity between the focal firm and the peer along key firm fundamentals. Consistent with the vectors of focal- and peer-firm controls, these indicators equal one if the relative difference between the focal and peer firms falls within the 0.5x and 2x range for size (*Pair_Size_Similarity*), revenue (*Pair_Sales_Similarity*), and market capitalization (*Pair_MV_Similarity*). Finally, we also control for the total number of self-selected peers in the compensation benchmark group (*Peer_Group*). Appendix A includes the detailed variable definitions.

The fixed effect structure in equation (1) includes *(focal) firm-peer pair* fixed effects (μ_{ij}), *(focal) firm x year* fixed effects (λ_{it}), and *peer firm x year* fixed effects (γ_{jt}). The *(focal) firm-peer pair* fixed effects absorb the time-invariant characteristics of the pair, so the identification comes from within-pair variation over time. Accordingly, changes in *GICS_N_Same* arise *solely* from instances in which a given firm-peer pair transitions from not sharing a GICS code to sharing one, or vice versa.

The *(focal) firm x year* and *peer x year* fixed effects account for time-varying firm- and peer-specific factors (both observable and unobservable) that may influence the inclusion or exclusion of a peer in a firm's compensation benchmark group. The *(focal) firm x year* fixed effects allow us to test whether, for a given focal firm in a given year, a potential peer operating

[10] In an OLS model, the inclusion of firm *x* year and peer *x* year fixed effects leads to perfect collinearity, causing any firm-year or peer-year level control variables to be dropped.

within the same GICS code is more likely to be included as a benchmark than a potential peer outside that code. Similarly, the *peer x year* fixed effects test whether, for a given peer in a given year, the peer is more likely to be included in the compensation peer group of a focal firm within its GICS code than in that of a focal firm outside its GICS code.

Because the *(focal) firm x year* and *peer firm x year* fixed effects control for contemporaneous, firm-specific circumstances affecting each firm in a given year, the specification mitigates concerns that the results are confounded by economic changes triggering the reclassification—which, as the evidence in Figure 2 suggests, likely occur with a lag. Including these two sets of fixed effects instead of the vectors of controls (which are subsumed by these fixed effects) also has the advantage of avoiding the sample attrition caused by firm-level constructs.

Table 3 reports the results from estimating equation (1). Columns 1–4 present specifications that include focal firm-peer pair and year fixed effects, along with the control variables described in Section 4. The coefficients on *GICS_8 (6, 4, 2)_Same* are all positive and statistically significant. In terms of economic magnitude, the estimates indicate that, when a pair of firms begins to share the same GICS eight- (six-, four-, or two-) digit code due to a reclassification, the focal firm becomes 10.1 (9.4, 9.8, and 8.2) percentage points more likely to include that peer in its compensation benchmark group. Overall, these results suggest that peers previously outside the focal firm's classification become significantly more likely to be included once they begin sharing a GICS code.[11]

Columns 5–8 present results from our main specification with *(focal) firm x year* and *peer firm x year* fixed effects to mitigate concerns about omitted variables and sample attrition. Because these fixed effects absorb time-varying characteristics of the focal firm and its peers,

[11] Due to space constraints, Table 3 does not report the coefficients on the control variables. The full set of estimates, including all control variables, is reported in Table OA7 (Online Appendix).

no additional control variables are required. The coefficients on *GICS_8 (6, 4, 2)_Same* remain positive and statistically significant. The economic magnitudes are also substantial: after a reclassification that causes a pair to share the same GICS eight-(six-, four-, or two-) digit code, the focal firm is 12.8 (12.7, 14.8, and 13.7) percentage points more likely to include the peer as a compensation benchmark.[12]

To verify that the fixed-effects structure in equation (1) adequately controls for the economic changes underlying the reclassifications, we augment the specification with indicator variables for pairs experiencing increases in product similarity or belonging to the top quartile of changes in product similarity. (See Table OA8 in the Online Appendix.) As in Figure 2, we use the TNIC score to measure product similarity. The coefficients on these additional variables are statistically insignificant, suggesting that our specification adequately accounts for contemporaneous changes in economic similarity.[13]

In Table 4, we examine whether the effect of industry classifications on compensation peer selection has strengthened over time. Specifically, we interact *GICS_8 (6, 4, 2)_Same* with *Time_Trend*, a linear time-trend variable defined as the fiscal year minus the first year of the sample period. Consistent with a growing influence of GICS reclassifications over time, the coefficients on all interaction terms are positive and statistically significant. This pattern is also consistent with recent work suggesting that industry-size benchmarking has become increasingly prevalent due to institutional developments, such as enhanced disclosure requirements, Say-on-Pay, the rise of proxy advisors, and the growing influence of passive institutional investors (Jochem et al. 2025).

[12] To explore whether our results are driven mainly by the 2018 reclassification (i.e., the largest reclassification in our sample period), we repeat the analysis excluding the years 2018 and 2019, namely the two periods most likely affected by this event. All coefficients remain positive and statistically significant (see Table OA10, Panel C in the Online Appendix).

[13] In an additional robustness test, we repeat the analysis restricting the sample to observations with non-missing values for the variables used in Sections 5 and 6. The results, both in terms of statistical significance and coefficient magnitude, resemble those reported in Table 3 (untabulated).

5. Why do Firms Respond to GICS Reclassifications?

The results in section 4 suggest that (focal) firms respond to GICS reclassifications by adjusting their compensation peer groups. We next explore the empirical validity of one explanation for why firms do so: proxy advisory influence. This possibility is supported by prior empirical work documenting several ways in which proxy advisors influence firms' compensation practices (Ertimur et al. 2013; Denis et al. 2020). Evidence from the field confirms this notion. For example, Hayne and Vance (2019) document in a field study that managers and other stakeholders often view proxy advisors as de facto standard setters rather than mere information intermediaries.

Proxy advisors evaluate companies' compensation practices by assessing whether executive pay levels are comparable to those of firms within the same industry classification and of similar size, a practice commonly referred to as "industry-size benchmarking." Regarding specific industry classifications, the largest proxy advisors, ISS and Glass Lewis, state in their policies that they rely on the GICS classification system, rather than alternative schemes such as SIC or NAICS (ISS 2018a; Glass Lewis 2020).

Accordingly, we conduct two additional tests. First, we examine whether the documented adjustments in compensation peer groups are not only driven by industry classification but also by size similarity. That would be consistent with the notion that firms follow the "industry-size benchmarking" criterion favored by proxy advisors. Second, we explore whether the documented patterns are more pronounced in cases where proxy advisors are likely to be more influential in the focal firm.

5.1 Following the Industry-Size Criterion

To test whether the documented adjustments in compensation peer groups are also driven by size similarity, we estimate a variant of equation (1) that includes an interaction between the *GICS_N_Same* variables and measures of size similarity between the focal firm and the peer

firm. Following the literature (Bizjak et al. 2011; Albuquerque et al. 2013; Faulkender and Yang 2010), we consider three measures of firm size: assets, sales, and market capitalization. Each captures size benchmarking slightly differently: assets from the balance sheet reflect accounting-based value, sales from the income statement represent revenue-generating capacity, and market capitalization captures market-perceived value. Also in line with this prior work and with the published policies of proxy advisors, we measure similarity based on whether the difference in size between the focal firm and the peer firm is within the 0.5–2.0 multiple.

Panel A of Table 5 presents results from regressions with pair and year fixed effects and the full set of control variables. The key variables of interest are the interaction terms *GICS_N_Same x Pair_Size(Sales, MV)_Similarity*, which capture the joint influence of external industry signals and size similarity. The estimates show that all coefficients on these interaction terms are positive and statistically significant.

Panel B of Table 5 reports the main specification with *firm–peer pair*, *(focal) firm x year*, and *peer x year* fixed effects, excluding control variables since these fixed effects absorb time-varying firm and peer characteristics. Consistent with the findings in Panel A, all coefficients on the interaction terms remain positive and statistically significant. In terms of economic magnitude, the interaction estimates indicate that, conditional on a reclassification causing a firm-peer pair to share the same GICS eight-digit code, size similarity further increases the likelihood of peer inclusion by 5.5, 2.4, and 3.9 percentage points when size is measured by assets, sales, and market capitalization, respectively. The total effect of reclassification on peer inclusion is therefore larger for pairs that are also similar in size.

5.2 Influence from Proxy Advisors

To examine whether the documented adjustments in compensation peer groups are more pronounced when proxy advisors firms are likely to exert greater influence over the focal firm, we estimate a variant of equation (1) that interacts the *GICS_N_Same* variables with several

measures of their influence at the firm level.

As a first approach to capturing that influence, we measure firms' conformity to ISS guidance as the fraction of their actual compensation peers that are identified as potential ISS peers in the previous year (*ISS_Conformity*). An "ISS peer" refers to a firm that would appear in the peer group constructed by ISS when benchmarking a focal firm's executive compensation—i.e., the firms included in ISS's proxy research reports used to determine the pay benchmark for that firm's top executives. Following Jochem et al. (2025), we construct this measure by simulating, for each focal-firm year, a synthetic list of ISS peers based on ISS's publicly disclosed methodology. (See Exhibit OA3 in the online appendix for details.)[14] This measure directly captures the extent to which a firm aligns its disclosed peer group with ISS's own benchmark and thus reflects how closely the firm conforms to this proxy advisor's policies.

As a second proxy for proxy advisor influence, we use *CEO_Duality*, an indicator variable equal to one when the CEO also chairs the board. This variable is widely used to proxy for managerial power and weaker board independence (Bebchuk and Cohen 2005; Goergen et al. 2020). Because proxy advisors typically advocate for the separation of these roles, firms with dual CEOs are less likely to comply with their recommendations, making this variable a negative indicator of the advisors' influence.

As a third proxy for proxy advisor influence, we measure the share of equity held by passive investors among institutional owners. Because passive investors hold broad portfolios and have limited capacity to monitor, they likely rely more on proxy advisors' voting recommendations. Following the literature, we operationalize this measure using the holdings of investors classified as quasi-indexers under Bushee's (1998) framework, scaled by total institutional ownership.

[14] Like prior research, we rely on a synthetic list of ISS peers because data on the actual firms included in ISS reports are not publicly available. One potential concern is that proxy advisory policies may vary over time. However, Jochem et al. (2025) document that, although ISS has made several revisions to its peer selection methodology, these changes have been minor and have not materially altered the underlying approach.

Table 6 reports the results of these tests. Columns 1–4 present specifications with *focal firm-peer pair* and *year* fixed effects and include all control variables, while Columns 5–8 report results with focal *firm-peer pair*, *firm x year*, and *peer x year* fixed effects. Across all specifications, the coefficients on the interaction term *GICS_N_Same x ISS_Conformity* are positive and statistically significant. The results suggest that, when a reclassification leads a firm-peer pair to share the same GICS digit code, the focal firm is more likely to include the GICS-converged peer when the firm is subject to greater influence from ISS.

Table 6 also shows that, with the exception of the GICS four-digit specification in Column (7), all coefficients on the interaction term *GICS_N_Same x CEO_Duality* are negative and statistically significant. That is, when a reclassification causes a pair to share the same GICS code, the focal firm is less likely to include the GICS-converged peer if the firm has a dual CEO-chair structure. Finally, Columns 3, 4, 7, and 8 of Table 6 indicate that firms with greater passive investor influence are more likely to adjust their compensation peer group in response to industry reclassifications.

As an alternative way to assess whether the documented patterns are driven by the influence of proxy advisors, we compare the effects of reclassifications under the GICS and NAICS industry systems. NAICS classifications, which are updated every five years, are not used by proxy advisors. In Table OA11 (Online Appendix), we estimate a model that includes *NAICS_N_Same*, an indicator variable equal to one if the focal firm and the peer share the same NAICS code. We then compare the coefficients associated with the two classification systems (*GICS_N_Same* and *NAICS_N_Same*). Note that NAICS codes consist of six digits, whereas GICS codes have eight. For comparability, we adopt the mapping approach of Bhojraj et al. (2003), which aligns GICS eight-, six-, four-, and two-digit codes with NAICS six-, five-, four-, and two-digit codes, respectively. As shown in Table OA11, the effects significantly strengthen for GICS than for NAICS—that is, for the classification system favored by proxy advisors.

6. Do Firms' Responses to GICS Reclassifications Matter?

A question arising from our previous results is whether the adjustments in compensation peer groups following GICS reclassifications have economic consequences. To explore this question, we conduct two sets of analyses. The first examines whether the reclassifications lead to peer groupings that exhibit greater inter-firm comparability—that is, stronger economic or informational linkages that justify firms' inclusion within the same industry group. The second investigates whether these adjustments translate into changes in compensation benchmarking, affecting how firms set executive pay relative to their peers.

6.1 Firm-Peer Comparability

We begin by investigating whether reclassifications enhance inter-firm comparability. We employ three measures designed to capture economically meaningful inter-firm linkages that justify inclusion within the same industry group. First, we examine product similarity between focal and peer firms using the TNIC score developed by Hoberg and Phillips (2016), which quantifies how closely firms' product descriptions align in 10-K filings and thus reflects similarity in economic activities and competitive positioning. Second, we examine stock return comovement, which reflects the pairs' economic relatedness and the shared risk exposures perceived by financial markets. Third, we analyze analyst co-coverage, defined as the number of sell-side analysts covering both the focal firm and its peer in a given year. Co-coverage indicates the extent to which market intermediaries view two firms as operating in related business activities.

(i) Product Similarity

We first test whether the documented adjustments around GICS reclassifications lead to compensation peer groups that exhibit greater product similarity. To measure the similarity between the products of the focal firm and the peer firm, we employ the TNIC score. This measure is based on information in 10-K filings analyzed using web crawling and text-parsing

algorithms. Item 1 of the 10-K, which contains the corporate business description, provides key information about how firms perceive and identify their rivals. Hoberg and Phillips (2016) compute firm-by-firm pairwise similarity scores by parsing these business descriptions and constructing word vectors for each firm to assess product similarity across all firm pairs. Based on this measure, to which we refer as *TNIC_Score*, we estimate the following model:

$$TNIC_Score_{ijt} = \alpha + \beta 1\ GICS_N_Converged_{ijt}\ x\ Added_Peer_{ijt} + \beta 2\ GICS_N_Converged_{ijt} + \beta 3\ Added_Peer_{ijt} + \beta 4\ GICS_N_Diverged_{ijt}\ x\ Dropped_Peer_{ijt} + \beta 5\ GICS_N_Diverged_{ijt} + \beta 6\ Dropped_Peer_{ijt} + \phi_1\ Controls_{it-1} + \phi_2\ Controls_{jt-1} + \phi_3\ Pair\ Similarity_{ijt-1} + \mu_{ij} + \lambda_{it} + \gamma_{jt} + \varepsilon. \quad (2)$$

In equation (2), *GICS_N_Converged* is an indicator equal to one from the year in which the focal and peer firms' eight- (six-, four-, or two-) digit GICS codes converge (i.e., change from different to the same) onward and zero otherwise. In contrast, *GICS_N_Diverged* equals one from the year in which the focal and peer firms' eight- (six-, four-, or two-) digit GICS codes diverge (i.e., change from the same to different) onward and zero otherwise. *Added_Peer* is an indicator variable that equals one from the year in which the peer is added to the compensation peer group and remains one until any subsequent exclusion; zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the year in which the peer is dropped from the compensation peer group and remains one until any subsequent inclusion; zero otherwise. As in prior sections, we estimate specifications with alternative fixed effect structures.[15]

The results, reported in Table 7, show that, except for Column (6), the coefficients on *GICS_N_Converged x Added_Peer* are positive and statistically significant, while the coefficients on *GICS_N_Diverged x Dropped_Peer* are negative and statistically significant.[16]

[15] The vector of control variables is the same as in prior tests. As in prior analyses, we winsorize all the continuous variables at the 1% and 99% levels to minimize the effects of outliers. Standard errors are clustered at the firm level.

[16] In this analysis, the coefficients on the main and control variables (untabulated) are relatively small (< 0.01) because the inclusion of pair fixed effects absorbs most of the cross-sectional variation. The estimates therefore

These findings indicate that, after the GICS reclassifications, added peers with converged GICS codes exhibit higher product similarity, whereas dropped peers with diverged GICS codes exhibit lower similarity.[17] Taken together, the results suggest that peer adjustments around GICS reclassifications are associated with increased product-market similarity between focal firms and their selected peers.

(ii) Stock Return Comovement

We next examine whether peer adjustments are associated with stronger alignment in stock return comovement. Return comovement captures the extent to which two firms' stock prices move together and provides a market-based measure of their economic similarity as perceived by financial markets, reflecting shared risk exposures (Gong et al. 2011; Anton and Polk 2014).

Specifically, we re-estimate equation (2) using *Return_Comovement* as an alternative dependent variable in place of *TNIC_Score*. To construct this measure, we estimate market-adjusted returns using a factor model that regresses firm daily excess returns on the market excess return and compute *Return_Comovement* as the correlation between the residual returns of each focal firm-peer pair. Table 8 reports the results. With the exception of Columns 2–4, the coefficients on *GICS_N_Converged x Added_Peer* are positive and statistically significant, while the coefficients on *GICS_N_Diverged x Dropped_Peer* are negative and significant. Consistent with Table 7, Table 8 shows that peer adjustments around GICS reclassifications are associated with higher return comovement between focal firms and their selected peers.

(iii) Analyst Co-Coverage

Next, we investigate whether the documented adjustments around GICS reclassifications

reflect only within-pair variation in the TNIC score over time. The economic magnitudes of the main variables of interest are comparable to those of the control variables.

[17] Our inferences are robust to using two alternative measures of product market similarity. First, we use the embeddings-based variant of the textual network industry classification (ETNIC). We report the robustness test in Table OA12 (Online Appendix). Second, in an untabulated test, we use the Financial Statement Benchmarking (FSB) score from Hoitash et al. (2023). This measure captures the degree of overlap in the financial statement line items reported by two firms.

result in compensation peer groups that exhibit more alignment with the peers used by financial analysts. Sell-side equity analysts regularly conduct peer-based research to support investment analysis, and their peer choices provide a meaningful benchmark for assessing whether newly composed peer groups reflect industry relevance as perceived by market participants. Because access to large-scale peer groups in sell-side reports and extraction of unstructured text is challenging, we follow Ramnath (2002), Hoitash et al. (2023), and Aharoni et al. (2024) and use analysts' co-coverage to proxy for analysts' following of industry peers. *Co-Coverage* is measured as the number of analysts who cover both the focal firm and the peer in a given year.

Specifically, we re-estimate equation (2) using *Co-Coverage* as an alternative dependent variable. Because *Co-Coverage* is a count variable that includes zero values, we estimate the model using a Poisson specification. (See Silva and Tenreyro 2006 and Correia et al. 2020 for similar applications with high-dimensional fixed effects.)[18]

The results, reported in Table 9, are consistent across specifications. The coefficients on the variables of interest, *GICS_N_Converged x Added_Peer*, are all positive and statistically significant, while the coefficients on *GICS_N_Diverged x Dropped_Peer* are negative and significant. These findings indicate that, following the GICS reclassifications, added (dropped) peers with converged GICS codes are associated with higher (lower) analyst co-coverage. As such, the evidence supports the notion that the revised peer groups better align with industry relevance as perceived by financial analysts.[19]

[18] As a robustness check, we re-estimate the OLS models using a logarithmic transformation of the dependent variable (see Table OA13 in the Online Appendix). The inferences endure. We do not adopt this specification in our main analysis because, as Silva and Tenreyro (2006) demonstrate, the common practice of adding one to a count variable containing zeros and then taking its natural logarithm can yield biased and inconsistent estimates in the presence of heteroskedasticity.

[19] Analyst co-coverage may be higher for some firm-peer pairs simply because certain firms attract greater analyst attention. However, our inclusion of firm-peer pair fixed effects ensures that identification relies on within-pair variation over time. Analysts may also incorporate GICS reclassifications when forming their own peer groups; if so, this implies that analysts view reclassifications as informative signals of industry relevance, consistent with our interpretation. Finally, analyst co-coverage is unlikely to be mechanically driven by firms' disclosed peer choices: in an unreported figure, we show that analysts adjust co-coverage prior to reclassifications, whereas firms' peer adjustments tend to follow them.

6.2 Peer Compensation

We next examine whether the adjustments in compensation peer groups following GICS reclassifications translate into changes in benchmarked executive pay. If reclassifications lead firms to revise their peers toward groups that better reflect the evolving competitive landscape, these updates may influence the compensation benchmarks used by boards when setting executive pay. Specifically, we test whether the addition or removal of peers resulting from industry reclassifications is associated with differences in the compensation levels of those peers. This analysis allows us to assess whether reclassifications have tangible implications for compensation contracting, beyond improving the comparability of peer group composition.

The expected effect of these adjustments on pay is not straightforward. If reclassifications promote more efficient contracting, their impact on compensation levels should depend on the direction of the prior deviation from the optimal benchmark. Because these deviations can be either positive or negative—reflecting the fact that clusters of economic activity do not necessarily correspond to systematically higher or lower pay levels—there is no clear prediction for the sign of the effect. In contrast, if firms adjust their peer groups strategically, using reclassifications as justification to include higher-paying peers, we would expect compensation benchmarks to increase, but not decrease. Observing asymmetry in the direction of the adjustment would therefore be more consistent with strategic behavior than with improved efficiency in contracting.

To examine whether the adjustments in compensation peer groups following GICS reclassifications translate into changes in benchmarked executive pay, we estimate equation (2) replacing the dependent variable (*TNIC_Score*) with *Peer_Compensation*, defined as the natural logarithm of the peer's total CEO compensation. Following prior research (e.g., Jochem et al., 2025 and many others), total CEO compensation is defined as TDC1 in ExecuComp.

The results, presented in Table 10, are consistent across specifications. The coefficients on

GICS_N_Diverged x Dropped_Peer are negative and statistically significant at conventional levels, whereas those on *GICS_N_Converged x Added_Peer* are indistinguishable from zero. These findings indicate that peers dropped following a GICS divergence tend to have lower pay levels, while there is no evidence that firms systematically add higher-paying peers when GICS codes converge. Because the dependent variable is defined at the peer-year level, we exclude *peer x year* fixed effects from this analysis to avoid perfect collinearity. Overall, the evidence in Table 10 suggests that, when GICS codes are reclassified, firms adjust their peer groups primarily by removing peers with lower compensation, rather than by adding higher-paying ones.

As an additional step to examine how peer adjustments affect focal firms' CEO pay, we conduct a firm-level analysis reported in Table OA14 (Online Appendix). We classify firms into four non-mutually exclusive categories: (1) firms that drop lower-paying peers following a GICS divergence, (2) firms that drop higher-paying peers following a GICS divergence, (3) firms that add lower-paying peers following a GICS convergence, and (4) firms that add higher-paying peers following a GICS convergence. Consistent with Table 10, the results indicate that firms dropping lower paying peers following a GICS divergence exhibit higher CEO compensation.[20] Overall, the results in Tables 10 and OA14 are hard to reconcile with the notion that GICS reclassifications lead to lower CEO compensation. If anything, the evidence points in the opposite direction.

To illuminate whether firms strategically select peers following GICS reclassifications, we perform two cross-sectional tests summarized in Table OA15 (Online Appendix). In the first test, we focus on focal firms that add a new peer after their GICS codes converge. For each focal firm, we attach all potential peers that were previously in different GICS codes but now

[20] We also find some results suggesting that higher compensation among firms adding high-paying peers after a GICS convergence. Nonetheless, the corresponding coefficient is not always statistically significant, and the magnitudes of the estimates are relatively small.

share its (new) GICS code and fall within the same industry-size range, and we test whether the actually added peer displays distinctive characteristics—such as larger size or higher compensation—relative to these potential alternatives. In the second test, we focus on focal firms that drop a peer after a GICS divergence. For each such firm, we identify all peers that used to share the same GICS code but no longer do and examine whether the dropped peer differs systematically from the other potential peers that could have been excluded. As reported in Table OA15, most coefficients are statistically insignificant, providing little evidence of systematic or strategic peer selection following reclassifications.[21]

One possible interpretation of the joint evidence from Tables 10, OA14, and OA15 is that the observed increase in compensation reflects an update to the underlying benchmark rather than peer selection aimed at increasing benchmark pay. In this view, industry reclassifications raise benchmark pay levels because they capture the evolution of the firm's economic environment, not because firms exploit reclassifications to increase compensation. Indeed, adherence to a standardized benchmarking framework—such as the industry-size criterion emphasized by proxy advisors—likely constrains, rather than expands, the scope for this behavior.

At the same time, we acknowledge that our tests in Table OA15 may not capture subtle forms of peer selection aimed at increasing compensation. A more comprehensive assessment of this behavior would require a broader set of analyses and is beyond the scope of this paper. Accordingly, we interpret the evidence as suggesting limited scope for pay-driven peer selection rather than ruling it out entirely.

[21] As a robustness check, we repeat the analysis without restricting the set of potential or incumbent peers to those within the same size range as the focal firm. In this variant, we include an indicator variable equal to one if the potential or incumbent peer is within the same size range as the focal firm. This indicator is highly significant, consistent with prior evidence that firms follow the industry-size benchmarking convention, while the coefficients on the remaining peer characteristics generally remain statistically insignificant, as in Table OA15 (untabulated).

7. Conclusion

This study examines whether industry classifications influence how firms select peers for executive compensation benchmarking. Exploiting periodic reclassifications under the Global Industry Classification Standard (GICS), we show that firms are significantly more likely to include peers whose GICS codes converge with their own and to drop peers whose codes diverge. These effects strengthen when proxy advisors and passive institutional investors provide greater oversight, consistent with pressures to conform to industry-size benchmarking conventions.

The resulting peer groups consist of firms that are more economically comparable, suggesting that classification updates help realign compensation benchmarks with the evolving structure of product markets. Nonetheless, because industry reclassifications occur discretely and with a lag relative to gradual economic change, this realignment may not be immediate, and compensation contracts can remain temporarily misaligned with current economic conditions prior to a reclassification. Taken together, our findings suggest that industry classification providers shape corporate governance by influencing firms' selection of compensation benchmarking peers.

References

Aharoni, G., J. Shemesh, and F. Zapatero. 2024. Competition or Spillover? Star Analyst Co-Coverage and Firms' Information Environment. *Working paper*.

Albuquerque, A. M., G. De Franco, and R. S. Verdi. 2013. Peer Choice in CEO Compensation. *Journal of Financial Economics* 108 (1):160-181.

Anderson, R. 2018. The Biggest Sector Structure Change in GICS History. *https://www.highlandplanning.com/learning-center-1/2018/9/10/the-biggest-sector-structure-change-in-gics-history*.

Anton, M., and Polk, C. 2014. Connected Stocks. *The Journal of Finance* 69: 1099-1127.

Bebchuk, L. A., and A. Cohen. 2005. The Costs of Entrenched Boards. *Journal of Financial Economics* 78 (2):409-433.

Bhojraj, S., C. M. C. Lee, and D. K. Oler. 2003. What's My Line? A Comparison of Industry Classification Schemes for Capital Market Research. *Journal of Accounting Research* 41 (5):745-774.

Bizjak, J., M. Lemmon, and T. Nguyen. 2011. Are All CEOs above Average? An Empirical Analysis of Compensation Peer Groups and Pay Design. *Journal of Financial Economics* 100 (3):538-555.

Bizjak, J. M., M. L. Lemmon, and L. Naveen. 2008. Does the Use of Peer Groups Contribute to Higher Pay and Less Efficient Compensation? *Journal of Financial Economics* 90 (2):152-168.

Bushee, B. J. 1998. The Influence of Institutional Investors on Myopic R&D Investment Behavior. *The Accounting Review* 73 (3):305-333.

Cadman, B., and M. E. Carter. 2014. Compensation Peer Groups and Their Relation with CEO Pay. *Journal of Management Accounting Research* 26 (1):57-82.

Choi, D., D. Cicero, and S. Mobbs. 2022. CEO Marketability, Employment Opportunities, and Compensation: Evidence from Compensation Peer Citations. *Journal of Financial and Quantitative Analysis* 57 (7):2766-2797.

Colas, B., and C. Brousseau. 2025. Industry Classification Misfits: Identification, Consequences and Guidance. *Review of Accounting Studies*.

Compensia. 2018. GICS Code Changes Will Affect Many Technology Companies. *https://compensia.com/gics-code-changes-will-affect-many-technology-companies/*.

Correia, S., P. Guimarães, and T. Zylkin. 2020. Fast Poisson Estimation with High-Dimensional Fixed Effects. *The Stata Journal* 20 (1):95-115.

Denis, D. K., T. Jochem, and A. Rajamani. 2020. Shareholder Governance and CEO Compensation: The Peer Effects of Say on Pay. *The Review of Financial Studies* 33 (7):3130-3173.

Ertimur, Y., F. Ferri, and D. Oesch. 2013. Shareholder Votes and Proxy Advisors: Evidence from Say on Pay. *Journal of Accounting Research* 51 (5):951-996.

———. 2018. Understanding Uncontested Director Elections. *Management Science* 64 (7):3400-3420.

Ertimur, Y., F. Ferri, and S. R. Stubben. 2010. Board of Directors' Responsiveness to Shareholders: Evidence from Shareholder Proposals. *Journal of Corporate Finance* 16 (1):53-72.

Faulkender, M., and J. Yang. 2010. Inside the Black Box: The Role and Composition of Compensation Peer Groups. *Journal of Financial Economics* 96 (2):257-270.

———. 2013. Is Disclosure an Effective Cleansing Mechanism? The Dynamics of Compensation Peer Benchmarking. *The Review of Financial Studies* 26 (3):806-839.

Glass Lewis. 2020. Pay for Performance Methodology & FAQ. *https://resources.glasslewis.com/hubfs/Issuer-Relations/2020%20NA%20Compensation%20Overview%20FAQs.pdf*.

Goergen, M., P. Limbach, and M. Scholz-Daneshgari. 2020. Firms' Rationales for CEO Duality: Evidence from a Mandatory Disclosure Regulation. *Journal of Corporate Finance* 65:101770.

Gong, G., L. Y. Li, and J. Y. Shin. 2011. Relative Performance Evaluation and Related Peer Groups in Executive Compensation Contracts. *The Accounting Review* 86 (3):1007-1043.

Hayne, C., and M. Vance. 2019. Information Intermediary or De Facto Standard Setter? Field Evidence on the Indirect and Direct Influence of Proxy Advisors. *Journal of Accounting Research* 57 (94):969-1011.

Hoberg, G., and G. Phillips. 2016. Text-Based Network Industries and Endogenous Product Differentiation. *Journal of Political Economy* 124 (5):1423-1465.

Hoitash, R., U. Hoitash, A. C. Kurt, and R. S. Verdi. 2023. A Measure of Financial Statement Benchmarking. *The Accounting Review* 98 (6):253-281.

ISS. 2018. Global Industry Classification Standard (GICS) Code 5020 Implementation. *https://www.issgovernance.com/file/policy/2018/americas/GICS-5020-FAQ.pdf*.

———. 2024. Peer Group Selection Methodology and Issuer Submission Process. *https://www.issgovernance.com/file/policy/active/americas/US-Peer-Group-FAQ.pdf*.

Jain, K. 2025. Industry Classification Providers as Information Intermediaries. *Working paper*.

Jochem, T., G. Ormazabal, and A. Rajamani. 2025. Why Have CEO Pay Levels Become Less Diverse? *Journal of Finance, forthcoming*.

Kahle, K. M., and R. A. Walkling. 1996. The Impact of Industry Classifications on Financial Research. *Journal of Financial and Quantitative Analysis* 31 (3):309-335.

Larcker, D. F., C. McClure, and C. Zhu. 2021. Peer-Group Choice, Chief Executive Officer Compensation, and Firm Performance. *Working paper*.

MSCI. 2025. Global Industry Classification Standard (GICS) Methodology. *https://www.msci.com/indexes/index-resources/gics*.

———, and S&P. 2017. Revisions to the Global Industry Classification Standard (GICS) Structure in 2018. *https://www.msci.com/documents/1296102/5603800/GICS+Structure+Revisions+in+2018.pdf/1b11d2e8-c482-4000-89f3-190225f02dc3*.

Penserra. 2018. Everything You Wanted to Know About the 9/28/18 GICS Revisions. *https://penserra.com/gics-revision-everything-wanted-revisions/*.

Ramnath, S. 2002. Investor and Analyst Reactions to Earnings Announcements of Related Firms: An Empirical Analysis. *Journal of Accounting Research* 40 (5):1351-1376.

Randewich, N.. 2018. Wall St's sector shakeup will let more tech stocks shine. *https://www.reuters.com/article/idUSKCN1L724H/*.

Riedl, E. J., and S. Srinivasan. 2010. Signaling Firm Performance Through Financial Statement Presentation: An Analysis Using Special Items. *Contemporary Accounting Research* 27 (1):289-332.

SEC. 2006. Executive Compensation and Related Person Disclosure: Final Rule and Proposed Rule *https://www.sec.gov/files/rules/final/2006/33-8732afr.pdf*.

Silva, J. M. C. S., and S. Tenreyro. 2006. The log of gravity. *The Review of Economics and Statistics* LXXXVIII (4):641-658.

State Street Global Advisors. 2023. GICS Changes Incoming: What it Means for S&P and MSCI Sectors. *https://www.ssga.com/library-content/story/general/etf/emea/spdr-gics-changes-incoming.pdf*.

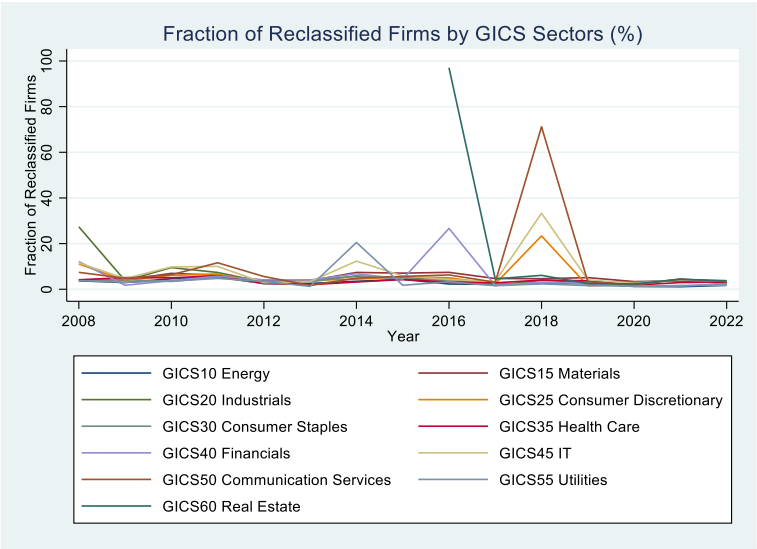
Verrecchia, R. E. 2001. Essays on disclosure. *Journal of Accounting & Economics* 32 (1):97-180.

Worldquant. 2020. Modern Challenges in Company Classification. *https://www.worldquant.com/ideas/modern-challenges-in-company-classification/*.

Figure 1 Fraction of Reclassified Firms by GICS Sectors

Panel A shows the percentage of reclassified firms across GICS 2-digit sectors over time. The fraction is calculated as the number of reclassified firms divided by the total number of firms in each sector. In 2014, a new sub-industry under Utilities was created for Renewable Electricity. In 2016, Real Estate was separated from the Financials sector and established as its own sector under code 60. In 2018, several industry codes within Consumer Discretionary and Information Technology were merged into the Communication Services sector. Panel B presents a heat map of the cumulative number of reclassification events by sector and year. Darker red shades indicate a higher number of cumulative reclassification events.

Panel A Fraction of Reclassified Firms by GICS Sectors



Panel B Cumulative Number of GICS Reclassification Events by Sector

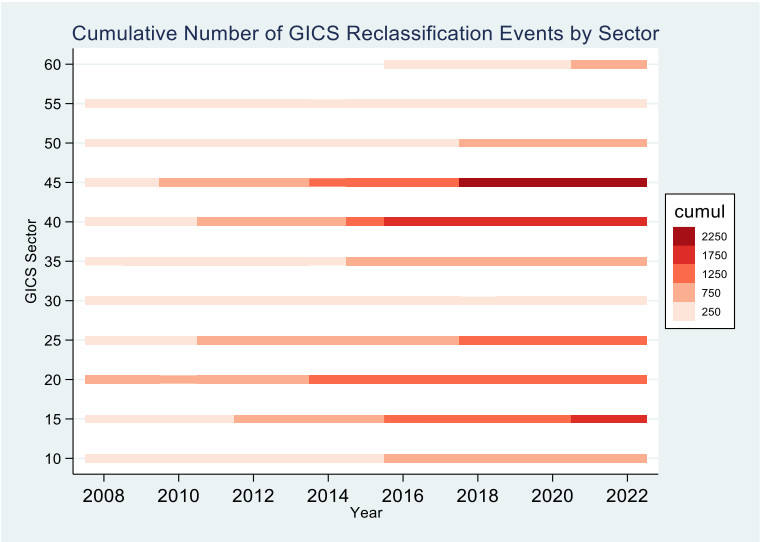
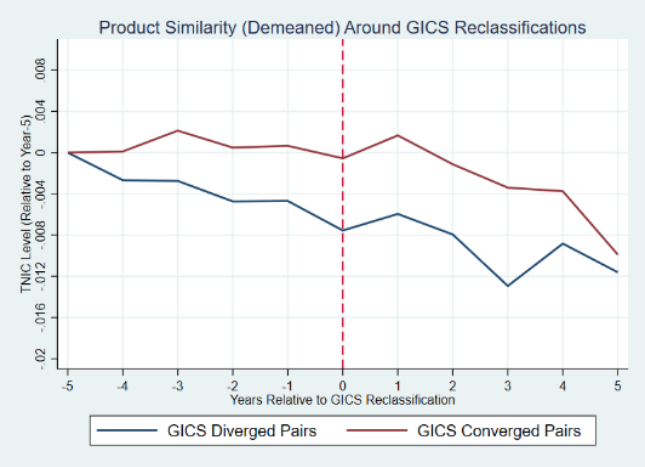


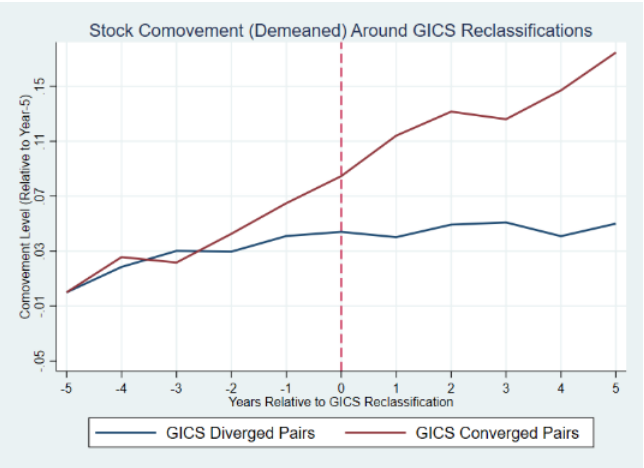
Figure 2 Timeliness of GICS Reclassification

This figure plots 1) the average product similarity measured by the Textual Network Industry Classification (TNIC) score and 2) the average stock return comovement for reclassified focal–peer pairs from five years before to five years after a GICS reclassification. Panel A reports average TNIC levels (demeaned relative to year −5). Panel B reports average return comovement (demeaned relative to year −5). Pairs are grouped as converged or diverged based on how their GICS relationships change following the reclassification. To mitigate concerns about outliers, the TNIC scores and comovement measures are winsorized at the top and bottom 5 percent.

Panel A Average TNIC Levels (Benchmark Year = t−5)



Panel B Average Return Comovement (Benchmark Year = t−5)



Appendix A Variable Definitions

Variables	Definition	Data Source
GICS_8 (6, 4, 2)_Same	Indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise.	GICS Direct
GICS_8 (6, 4, 2)_Converged	Indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise.	GICS Direct
GICS_8 (6, 4, 2)_Diverged	Indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise.	GICS Direct
Time_Trend	Linear time trend variable defined as the fiscal year minus the first year of the sample period.	GICS Direct
Included	Indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise.	ISS Compensation Peers
Added_Peer	Indicator variable that equals one from the add year and is maintained until any subsequent exclusion; zero otherwise.	ISS Compensation Peers
Dropped_Peer	Indicator variable that equals one from the drop year and is maintained until any subsequent inclusion; zero otherwise.	ISS Compensation Peers
Co-Coverage	Number of analysts who cover both the focal firm i and peer j in year t.	I/B/E/S
TNIC_Score	Textual Network Industry Classification (TNIC) score by Hoberg & Phillips.	Hoberg & Phillips
Return_Comovement	Correlation between the firms' market-adjusted residual returns, which captures the degree to which two firms' stock prices move together.	CRSP / Fama-French
Peer_Compensation	Natural logarithm of the peer's total CEO compensation.	ExecuComp
Passive_Share	Holdings of quasi-indexers scaled by total institutional ownership (Bushee 1998).	13F / Bushee Dataset
CEO_Duality	Indicator variable that equals one if a CEO serves as a chair of the board in the same year, and zero otherwise.	BoardEx
ISS_Conformity	Fraction of actual compensation peers that are ISS peers. ISS peers are simulated based on ISS methodology.	ISS / Compustat
BM	Book-to-market value ratio of the focal firm, calculated as the book value of equity divided by the market value of equity.	Compustat
ROA	Return on assets of the focal firm, calculated as operating income before depreciation divided by total assets.	Compustat
Size	Natural logarithm of total assets of the focal firm.	Compustat
Stock_Return	Annualized buy-and-hold stock returns of the focal firm.	CRSP
SP500	Indicator variable that equals one if the focal firm is in the S&P 500 index for a given year and zero otherwise.	ISS Governance
Peer_Group	Natural logarithm of the peer group size for a given year.	ISS
Peer_BM	Book-to-market value ratio of the peer, calculated as the book value of equity divided by the market value of equity.	Compustat
Peer_ROA	Return on assets of the peer, calculated as operating income before depreciation divided by the total assets.	Compustat
Peer_Size	Natural logarithm of total assets of the peer.	Compustat
Peer_Stock_Return	Peer's buy-and-hold stock returns.	CRSP
Peer_SP500	Indicator variable that equals one if the peer firm is in the S&P 500 index for a given year and zero otherwise.	ISS Governance
Pair_Size (Sales, MV)_Similarity	Indicator variable that equals one if the size (sales or market capitalization) of the peer firm is within 0.5x and 2x of the focal firm, and zero otherwise.	Compustat

Table 1 GICS Reclassifications as Reported by S&P and MSCI

Panel A presents the total number of GICS reclassified firms by year, as reported by S&P and MSCI. Panel B presents the changes in constituents of GICS reclassified sectors (GICS 2-digit) in 2018. Panel C presents the matching of focal and peer firms based on GICS, NAICS, SIC, and Fama-French in the sample.

Panel A Number of GICS Reclassified Firms as Reported by S&P and MSCI

Year	GICS 8 Reclassified	GICS 6 Reclassified	GICS 4 Reclassified	GICS 2 Reclassified
2008	759	458	300	262
2009	270	226	180	147
2010	466	389	328	284
2011	498	412	328	290
2012	229	174	131	115
2013	237	200	168	141
2014	496	266	218	183
2015	363	283	241	206
2016	751	672	619	551
2017	184	141	121	106
2018	898	849	662	645
2019	215	162	120	102
2020	144	116	94	77
2021	216	172	139	108
2022	184	159	120	101

Panel B GICS Reclassified Sectors (GICS 2-Digit) in 2018 as Reported by S&P and MSCI

GICS 2-Digit	Sector	Initial Number of Firms	Dropped Firms	Added Firms	Final Number of Firms
10	Energy	1,405	19	9	1,395
15	Materials	2,009	21	12	2,000
20	Industrials	1,403	15	24	1,412
25	Consumer Discretionary	1,473	280	52	1,245
30	Consumer Staples	570	6	7	571
35	Health Care	1,733	8	37	1,762
40	Financials	1,722	9	19	1,732
45	Information Technology	1,723	278	13	1,458
50	Communication Services	191	1	461	651
55	Utilities	379	2	3	380
60	Real Estate	445	6	8	447

Panel C Matching of Focal and Self-Selected Peer Firms Based on GICS, NAICS, SIC, and Fama-French

Proportion of exact match	GICS 2-Digit 82%	GICS 4-Digit 74%	GICS 6-Digit 59%	GICS 8-Digit 48%
Proportion of exact match	NAICS 2-Digit 67%	NAICS 4-Digit 42%	NAICS 6-Digit 31%	
Proportion of exact match	SIC 1-Digit 76%	SIC 2-Digit 60%	SIC 3-Digit 45%	SIC 4-Digit 34%
Proportion of exact match	Fama-French 12 73%	Fama-French 30 66%	Fama-French 49 61%	

Table 2 Descriptive Statistics

This table presents the descriptive statistics for the main variables used for the analysis. All continuous variables are winsorized at the 1% and 99% levels. All variables are defined in Appendix A.

VARIABLES	(1) mean	(2) sd	(3) p25	(4) p50	(5) p75
GICS_8_Same	0.40	0.49	0.00	0.00	1.00
GICS_6_Same	0.49	0.50	0.00	0.00	1.00
GICS_4_Same	0.66	0.48	0.00	1.00	1.00
GICS_2_Same	0.76	0.43	1.00	1.00	1.00
Included	0.51	0.50	0.00	1.00	1.00
Time_Trend	7.25	3.99	4.00	7.00	11.00
BM	0.65	0.29	0.42	0.66	0.90
Size (in millions)	11,937.45	31,128.10	650.16	2,346.97	7,882.80
ROA	0.07	0.16	0.03	0.10	0.15
Stock_Return	0.16	0.49	-0.12	0.11	0.36
SP500	0.20	0.40	0.00	0.00	0.00
Peer_BM	0.64	0.29	0.40	0.63	0.89
Peer_Size (in millions)	15,413.14	41,809.22	728.96	2,677.80	9,633.02
Peer_ROA	0.07	0.16	0.03	0.10	0.15
Peer_Stock_Return	0.15	0.46	-0.12	0.11	0.34
Peer_SP500	0.25	0.44	0.00	0.00	1.00
Pair_Size_Similarity	0.48	0.50	0.00	0.00	1.00
Pair_Sales_Similarity	0.52	0.50	0.00	1.00	1.00
Pair_MV_Similarity	0.42	0.49	0.00	0.00	1.00
Peer_Group	22.57	14.08	15.00	19.00	24.00
ISS_Conformity	0.23	0.18	0.08	0.21	0.35
Passive_Share	0.74	0.21	0.64	0.73	0.80
CEO_Duality	0.15	0.36	0.00	0.00	0.00
TNIC_Score	0.11	0.09	0.04	0.09	0.16
Return_Comovement	0.19	0.20	0.05	0.15	0.29
Co-Coverage	2.85	4.06	0.00	1.00	3.00
Peer_Compensation (in thousands)	7,746.18	6,580.17	3,020.35	5,919.96	10,462.63

Table 3 GICS Reclassification and Peer Selection

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same. Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same	**0.101*** **	**0.094*** **	**0.098*** **	**0.082*** **	**0.128*** **	**0.127*** **	**0.148*** **	**0.137*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**
Observations	858,580	858,580	858,580	858,580	1,012,270	1,012,270	1,012,270	1,012,270
R-squared	0.503	0.503	0.503	0.503	0.546	0.546	0.546	0.546
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 4 GICS Reclassification and Time Trend

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same* and *Time_Trend. Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. *Time_Trend* is a linear time trend variable defined as the fiscal year minus the first year of the sample period. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same x Time_Trend	**0.003*** **	**0.006*** **	**0.008*** **	**0.010*** **	**0.003*** **	**0.005*** **	**0.008*** **	**0.009*** **
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
GICS_N_Same	0.074***	0.045***	0.030**	-0.001	0.105***	0.089***	0.079***	0.057***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Observations	858,580	858,580	858,580	858,580	1,012,270	1,012,270	1,012,270	1,012,270
R-squared	0.503	0.503	0.504	0.504	0.546	0.546	0.547	0.546
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 5 GICS Reclassification and Peer Firm Characteristics

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same, Pair_Size_Similarity, Pair_Sales_Similarity,* and *Pair_MV_Similarity. Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. *Pair_Size (Sales, MV)_Similarity* is an indicator variable that equals one if the size (sales or market capitalization) of the peer firm is within 0.5x and 2x of the focal firm, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year, or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

Panel A Pair and Year Fixed Effects

	Dependent Variable=*Included*											
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
GICS_N_Same x Pair_Size_Similarity	**0.046*** **	**0.043*** **	**0.046*** **	**0.039*** **								
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**								
GICS_N_Same x Pair_Sales_Similarity					**0.016*** **	**0.021*** **	**0.026*** **	**0.028*** **				
					(0.01)	**(0.01)**	**(0.01)**	**(0.01)**				
GICS_N_Same x Pair_MV_Similarity									**0.035*** **	**0.030*** **	**0.029*** **	**0.030*** **
									(0.00)	**(0.00)**	**(0.00)**	**(0.01)**
GICS_N_Same	0.079***	0.073***	0.079***	0.066***	0.093***	0.083***	0.086***	0.069***	0.085***	0.081***	0.087***	0.071***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Pair_Size_Similarity	0.086***	0.083***	0.074***	0.075***	0.104***	0.104***	0.104***	0.104***	0.103***	0.104***	0.104***	0.104***
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Pair_Sales_Similarity	0.145***	0.145***	0.145***	0.145***	0.140***	0.135***	0.129***	0.125***	0.145***	0.145***	0.146***	0.146***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Pair_MV_Similarity	0.062***	0.062***	0.062***	0.062***	0.062***	0.062***	0.062***	0.062***	0.049***	0.048***	0.043***	0.040***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	858,580	858,580	858,580	858,580	858,580	858,580	858,580	858,580	858,580	858,580	858,580	858,580
R-squared	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm x Year FE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Peer x Year FE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Panel B Pair, Firm x Year and Peer x Year Fixed Effects

	Dependent Variable=*Included*											
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
GICS_N_Same x Pair_Size_Similarity	**0.055*** **	**0.057*** **	**0.062*** **	**0.056*** **								
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**								
GICS_N_Same x Pair_Sales_Similarity					**0.024*** **	**0.030*** **	**0.036*** **	**0.038*** **				
					(0.01)	**(0.01)**	**(0.01)**	**(0.01)**				
GICS_N_Same x Pair_MV_Similarity									**0.039*** **	**0.041*** **	**0.038*** **	**0.038*** **
									(0.00)	**(0.00)**	**(0.00)**	**(0.01)**
GICS_N_Same	0.104***	0.101***	0.122***	0.115***	0.117***	0.113***	0.130***	0.119***	0.115***	0.114***	0.136***	0.126***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Pair_Size_Similarity	0.128***	0.120***	0.109***	0.107***								
	(0.00)	(0.00)	(0.00)	(0.01)								
Pair_Sales_Similarity					0.170***	0.164***	0.155***	0.150***				
					(0.00)	(0.00)	(0.01)	(0.01)				
Pair_MV_Similarity									0.077***	0.071***	0.067***	0.063***
									(0.00)	(0.00)	(0.00)	(0.00)
Observations	988,614	988,614	988,614	988,614	988,614	988,614	988,614	988,614	988,614	988,614	988,614	988,614
R-squared	0.552	0.552	0.552	0.552	0.555	0.555	0.555	0.555	0.547	0.547	0.547	0.547
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Firm x Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Peer x Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

Table 6 Influence from Proxy Advisors

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same, ISS_Conformity, CEO_Duality* and *Passive_Share*. *Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. *ISS_Conformity* is the fraction of actual compensation peers that are ISS peers. *CEO_Duality* is an indicator variable that equals one if a CEO serves as a chair of board in the same year, and zero otherwise. *Passive_Share* is defined as the holdings of quasi-indexers scaled by total institutional ownership. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same x ISS_Conformity	**0.154*** **	**0.229*** **	**0.227*** **	**0.233*** **	**0.217*** **	**0.361*** **	**0.374*** **	**0.390*** **
	(0.02)	**(0.02)**	**(0.03)**	**(0.03)**	**(0.02)**	**(0.02)**	**(0.03)**	**(0.03)**
GICS_N_Same x CEO_Duality	**-0.021** **	**-0.021** **	**-0.017* **	**-0.027** **	**-0.032*** **	**-0.032** **	-0.020	**-0.037** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	(0.01)	**(0.02)**
GICS_N_Same x Passive_Share	0.008	0.024	**0.046** **	**0.065*** **	0.031	0.016	**0.038* **	**0.052* **
	(0.02)	(0.02)	**(0.02)**	**(0.02)**	(0.02)	(0.02)	**(0.02)**	**(0.03)**
GICS_N_Same	0.063***	0.033**	0.026	0.006	0.054***	0.037*	0.031	0.023
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
ISS_Conformity	-0.066***	-0.129***	-0.163***	-0.189***				
	(0.02)	(0.02)	(0.02)	(0.03)				
CEO_Duality	0.013**	0.015**	0.016**	0.025***				
	(0.01)	(0.01)	(0.01)	(0.01)				
Passive_Share	-0.031**	-0.041**	-0.058***	-0.077***				
	(0.01)	(0.02)	(0.02)	(0.02)				
Observations	666,732	666,732	666,732	666,732	761,250	761,250	761,250	761,250
R-squared	0.546	0.546	0.546	0.546	0.595	0.596	0.596	0.595
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 7 Product Similarity

This table presents the results from an OLS estimation where the dependent variable is *TNIC_Score*. The independent variables are *GICS_8 (6, 4, 2)_Converged*, *GICS_8 (6, 4, 2)_Diverged*, *Added_Peer*, and *Dropped_Peer*. *TNIC_Score* is the Textual Network Industry Classification (TNIC) score by Hoberg & Phillips. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*TNIC_Score*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	**0.002*** **	**0.001** **	**0.003*** **	**0.004*** **	**0.001** **	0.000	**0.001** **	**0.002*** **
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	(0.00)	**(0.00)**	**(0.00)**
GICS_N_Diverged x Dropped_Peer	**-0.006*** **	**-0.006*** **	**-0.004*** **	**-0.005*** **	**-0.003*** **	**-0.003*** **	**-0.005*** **	**-0.004*** **
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
Added_Peer	0.001**	0.001**	0.000**	0.000**	0.001***	0.001***	0.001***	0.001***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	-0.001**	-0.001**	-0.001***	-0.001***	-0.000***	-0.000***	-0.000**	-0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Converged	-0.000	0.000	0.003***	0.004***	0.005***	0.004***	0.005***	0.006***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Diverged	-0.007***	-0.006***	-0.004***	-0.002*	-0.003***	-0.003***	-0.003***	0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	812,850	812,850	812,850	812,850	924,092	924,092	924,092	924,092
R-squared	0.927	0.927	0.927	0.927	0.962	0.962	0.962	0.962
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 8 Stock Return Comovement

This table presents the results from an OLS estimation where the dependent variable is *Return_Comovement*. The independent variables are *GICS_8 (6, 4, 2)_Converged*, *GICS_8 (6, 4, 2)_Diverged*, *Added_Peer*, and *Dropped_Peer*. *Return_Comovement* is measured as the correlation between the firms' market-adjusted residual returns and captures the degree to which two firms' stock prices move together, reflecting their economic relatedness. We require at least 120 overlapping trading days for a pair in a given year. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Return_Comovement*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	**0.008*** **	0.005	-0.002	-0.001	**0.009*** **	**0.007*** **	**0.009*** **	**0.010*** **
	(0.00)	(0.00)	(0.00)	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
GICS_N_Diverged x Dropped_Peer	**-0.019*** **	**-0.020*** **	**-0.027*** **	**-0.034*** **	**-0.010*** **	**-0.012*** **	**-0.021*** **	**-0.023*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
Added_Peer	0.000	0.001	0.001	0.001	0.002***	0.002***	0.002***	0.002***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	-0.013***	-0.013***	-0.012***	-0.012***	-0.010***	-0.010***	-0.010***	-0.010***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Converged	0.045***	0.033***	0.017***	0.011**	0.033***	0.027***	0.033***	0.031***
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
GICS_N_Diverged	-0.021***	-0.024***	-0.040***	-0.043***	-0.012***	-0.012***	-0.013***	-0.015***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	758,904	758,904	758,904	758,904	786,266	786,266	786,266	786,266
R-squared	0.729	0.729	0.729	0.729	0.862	0.862	0.862	0.862
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 9 Analyst Co-Coverage

This table presents the results from a Poisson estimation where the dependent variable is *Co-Coverage*. The independent variables are *GICS_8 (6, 4, 2)_Converged*, *GICS_8 (6, 4, 2)_Diverged*, *Added_Peer*, and *Dropped_Peer*. *Co-Coverage* is the number of analysts who cover both the focal firm i and peer j in year t. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Co-Coverage*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	**0.127*** **	**0.063*** **	**0.080*** **	**0.107*** **	**0.044*** **	**0.026* **	**0.051*** **	**0.072*** **
	(0.02)	**(0.02)**	**(0.03)**	**(0.04)**	**(0.02)**	**(0.01)**	**(0.02)**	**(0.02)**
GICS_N_Diverged x Dropped_Peer	**-0.192*** **	**-0.179*** **	**-0.177*** **	**-0.168*** **	**-0.166*** **	**-0.148*** **	**-0.170*** **	**-0.103** **
	(0.04)	**(0.04)**	**(0.05)**	**(0.06)**	**(0.03)**	**(0.03)**	**(0.04)**	**(0.05)**
Added_Peer	0.074***	0.080***	0.079***	0.080***	0.060***	0.061***	0.060***	0.060***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	0.002	0.001	0.001	-0.001	0.013**	0.011*	0.012**	0.009*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GICS_N_Converged	0.144***	0.080***	0.212***	0.324***	0.175***	0.100***	0.133***	0.291***
	(0.03)	(0.03)	(0.04)	(0.05)	(0.04)	(0.02)	(0.03)	(0.05)
GICS_N_Diverged	0.026	-0.050	-0.182***	-0.153***	-0.089***	-0.198***	-0.238***	-0.155***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.04)	(0.05)	(0.05)
Observations	527,679	527,679	527,679	527,679	549,254	549,254	549,254	549,254
Model	Poisson	Poisson	Poisson	Poisson	Poisson	Poisson	Poisson	Poisson
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table 10 Peer Compensation

This table presents the results from an OLS estimation where the dependent variable is *Peer_Compensation*. The independent variables are *GICS_8 (6, 4, 2)_Converged*, *GICS_8 (6, 4, 2)_Diverged*, *Added_Peer*, and *Dropped_Peer*. *Peer_Compensation* is the natural logarithm of the peer's total CEO compensation. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Peer_Compensation*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	-0.003	-0.007	-0.007	-0.009	-0.012	-0.012	-0.011	-0.013
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GICS_N_Diverged x Dropped_Peer	**-0.039****	**-0.062*****	**-0.029***	**-0.029***	**-0.074*****	**-0.093*****	**-0.047****	**-0.049*****
	(0.02)	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**
Added_Peer	0.017***	0.017***	0.017***	0.017***	0.023***	0.023***	0.023***	0.023***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	0.006*	0.006*	0.005	0.006	-0.019***	-0.019***	-0.020***	-0.020***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Converged	0.030***	0.044***	0.026**	0.011	0.040***	0.043***	0.049***	0.047***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
GICS_N_Diverged	0.022*	0.040***	0.036***	0.019	0.041***	0.041***	0.035**	0.036**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Observations	648,982	648,982	648,982	648,982	742,512	742,512	742,512	742,512
R-squared	0.796	0.796	0.796	0.796	0.791	0.791	0.791	0.791
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	NO	NO	NO	NO
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Online Appendix

Industry (Re)classifications and Corporate Governance

Exhibit OA1: GICS Mapping as Reported by S&P and MSCI
Exhibit OA2: Examples of Firms' Use of Industry Classifications
Exhibit OA3: ISS's Methodology for the Selection of Compensation Peers
Exhibit OA4: Summary Table of GICS Major Reclassifications
Exhibit OA5: Google Search Trend for "GICS"
Exhibit OA6: Peer Adjustments Around the 2018 GICS Reclassification

Table OA7: Results in Table 3 Including Tabulated Control Variables
Table OA8: Analysis in Table 3 Controlling for Changes in Product Similarity
Table OA9: Changes in Peer Groups around the 2018 GICS Reclassification
Table OA10: Analysis in Table 3 Excluding Years 2018 and 2019
Table OA11: GICS vs NAICS Reclassifications
Table OA12: Product Similarity (ETNIC) – Alternative Measure
Table OA13: Analyst Co-Coverage (OLS Model) – Robustness Test
Table OA14: GICS Reclassifications and CEO Compensation Analysis at the Focal Firm Level
Table OA15: Strategic Peer Selection

Exhibit OA1: GICS Mapping as Reported by S&P and MSCI

The GICS Structure

10 Energy

1010 Energy
- 101010 Energy Equipment & Services
  - 10101010 Oil & Gas Drilling
  - 10101020 Oil & Gas Equipment & Services
- 101020 Oil, Gas & Consumable Fuels
  - 10102010 Integrated Oil & Gas
  - 10102020 Oil & Gas Exploration & Production
  - 10102030 Oil & Gas Refining & Marketing
  - 10102040 Oil & Gas Storage & Transportation
  - 10102050 Coal & Consumable Fuels

15 Materials

1510 Materials
- 151010 Chemicals
  - 15101010 Commodity Chemicals
  - 15101020 Diversified Chemicals
  - 15101030 Fertilizers & Agricultural Chemicals
  - 15101040 Industrial Gases
  - 15101050 Specialty Chemicals
- 151020 Construction Materials
  - 15102010 Construction Materials
- 151030 Containers & Packaging
  - 15103010 Metal & Glass Containers
  - 15103020 Paper Packaging
- 151040 Metals & Mining
  - 15104010 Aluminum
  - 15104020 Diversified Metals & Mining
  - 15104025 Copper
  - 15104030 Gold
  - 15104040 Precious Metals & Minerals
  - 15104045 Silver
  - 15104050 Steel
- 151050 Paper & Forest Products
  - 15105010 Forest Products
  - 15105020 Paper Products

20 Industrials

2010 Capital Goods
- 201010 Aerospace & Defense
  - 20101010 Aerospace &Defense
- 201020 Building Products
  - 20102010 Building Products
- 201030 Construction & Engineering
  - 20103010 Construction & Engineering
- 201040 Electrical Equipment
  - 20104010 Electrical Components & Equipment
  - 20104020 Heavy Electrical Equipment
- 201050 Industrial Conglomerates
  - 20105010 Industrial Conglomerates
- 201060 Machinery
  - 20106010 Construction Machinery & Heavy Trucks
  - 20106015 Agricultural & Farm Machinery
  - 20106020 Industrial Machinery
- 201070 Trading Companies & Distributors
  - 20107010 Trading Companies & Distributors

2020 Commercial & Professional Services
- 202010 Commercial Services & Supplies
  - 20201010 Commercial Printing
  - 20201050 Environmental & Facilities Services
  - 20201060 Office Services & Supplies
  - 20201070 Diversified Support Services
  - 20201080 Security & Alarm Services
- 202020 Professional Services
  - 20202010 Human Resource & Employment Services
  - 20202020 Research & Consulting Services

2030 Transportation
- 203010 Air Freight & Logistics
  - 20301010 Air Freight & Logistics
- 203020 Airlines
  - 20302010 Airlines
- 203030 Marine
  - 20303010 Marine
- 203040 Road & Rail
  - 20304010 Railroads
  - 20304020 Trucking
- 203050 Transportation Infrastructure
  - 20305010 Airport Services
  - 20305020 Highways & Railtracks
  - 20305030 Marine Ports & Services

25 Consumer Discretionary

2510 Automobiles & Components
- 251010 Auto Components
  - 25101010 Auto Parts & Equipment
  - 25101020 Tires & Rubber
- 251020 Automobiles
  - 25102010 Automobile Manufacturers
  - 25102020 Motorcycle Manufacturers

2520 Consumer Durables & Apparel
- 252010 Household Durables
  - 25201010 Consumer Electronics
  - 25201020 Home Furnishings
  - 25201030 Homebuilding
  - 25201040 Household Appliances
  - 25201050 Housewares & Specialties
- 252020 Leisure Products
  - 25202010 Leisure Products
- 252030 Textiles, Apparel & Luxury Goods
  - 25203010 Apparel, Accessories & Luxury Goods
  - 25203020 Footwear
  - 25203030 Textiles

2530 Consumer Services
- 253010 Hotels, Restaurants & Leisure
  - 25301010 Casinos & Gaming
  - 25301020 Hotels, Resorts & Cruise Lines
  - 25301030 Leisure Facilities
  - 25301040 Restaurants
- 253020 Diversified Consumer Services
  - 25302010 Education Services
  - 25302020 Specialized Consumer Services

2550 Retailing
- 255010 Distributors
  - 25501010 Distributors
- 255020 Internet & Direct Marketing Retail
  - 25502020 Internet & Direct Marketing Retail
- 255030 Multiline Retail
  - 25503010 Department Stores
  - 25503020 General Merchandise Stores
- 255040 Specialty Retail
  - 25504010 Apparel Retail
  - 25504020 Computer & Electronics Retail
  - 25504030 Home Improvement Retail
  - 25504040 Specialty Stores
  - 25504050 Automotive Retail
  - 25504060 Homefurnishing Retail

30 Consumer Staples

3010 Food & Staples Retailing
- 301010 Food & Staples Retailing
  - 30101010 Drug Retail
  - 30101020 Food Distributors
  - 30101030 Food Retail
  - 30101040 Hypermarkets & Super Centers

3020 Food, Beverage & Tobacco
- 302010 Beverages
  - 30201010 Brewers
  - 30201020 Distillers & Vintners
  - 30201030 Soft Drinks
- 302020 Food Products
  - 30202010 Agricultural Products
  - 30202030 Packaged Foods & Meats
- 302030 Tobacco
  - 30203010 Tobacco

3030 Household & Personal Products
- 303010 Household Products
  - 30301010 Household Products
- 303020 Personal Products
  - 30302010 Personal Products

35 Health Care

3510 Health Care Equipment & Services
- 351010 Health Care Equipment & Supplies
  - 35101010 Health Care Equipment
  - 35101020 Health Care Supplies
- 351020 Health Care Providers & Services
  - 35102010 Health Care Distributors
  - 35102015 Health Care Services
  - 35102020 Health Care Facilities
  - 35102030 Managed Health Care
- 351030 Health Care Technology
  - 35103010 Health Care Technology

3520 Pharmaceuticals, Biotechnology & Life Sciences
- 352010 Biotechnology
  - 35201010 Biotechnology
- 352020 Pharmaceuticals
  - 35202010 Pharmaceuticals
- 352030 Life Sciences Tools & Services
  - 35203010 Life Sciences Tools & Services

S&P Global Market Intelligence | MSCI

Exhibit OA1: GICS Mapping as Reported by S&P and MSCI (continued)

40 Financials

- 4010 Banks
  - 401010 Banks
    - 40101010 Diversified Banks
    - 40101015 Regional Banks
  - 401020 Thrifts & Mortgage Finance
    - 40102010 Thrift & Mortgage Finance
- 4020 Diversified Financials
  - 402010 Diversified Financial Services
    - 40201020 Other Diversified Financial Services
    - 40201030 Multi-Sector Holdings
    - 40201040 Specialized Finance
  - 402020 Consumer Finance
    - 40202010 Consumer Finance
  - 402030 Capital Markets
    - 40203010 Asset Management & Custody Banks
    - 40203020 Investment Banking & Brokerage
    - 40203030 Diversified Capital Markets
    - 40203040 Financial Exchanges & Data
  - 402040 Mortgage Real Estate Investment Trusts (REITs)
    - 40204010 Mortgage REITs
- 4030 Insurance
  - 403010 Insurance
    - 40301010 Insurance Brokers
    - 40301020 Life & Health Insurance
    - 40301030 Multi-line Insurance
    - 40301040 Property & Casualty Insurance
    - 40301050 Reinsurance

45 Information Technology

- 4510 Software & Services
  - 451020 IT Services
    - 45102010 IT Consulting & Other Services
    - 45102020 Data Processing & Outsourced Services
    - 45102030 Internet Services & Infrastructure
  - 451030 Software
    - 45103010 Application Software
    - 45103020 Systems Software
- 4520 Technology Hardware & Equipment
  - 452010 Communications Equipment
    - 45201020 Communications Equipment
  - 452020 Technology Hardware, Storage & Peripherals
    - 45202030 Technology Hardware, Storage & Peripherals
  - 452030 Electronic Equipment, Instruments & Components
    - 45203010 Electronic Equipment & Instruments
    - 45203015 Electronic Components
    - 45203020 Electronic Manufacturing Services
    - 45203030 Technology Distributors
- 4530 Semiconductors & Semiconductor Equipment
  - 453010 Semiconductors & Semiconductor Equipment
    - 45301010 Semiconductor Equipment
    - 45301020 Semiconductors

50 Communication Services

- 5010 Telecommunication Services
  - 501010 Diversified Telecommunication Services
    - 50101010 Alternative Carriers
    - 50101020 Integrated Telecommunication Services
  - 501020 Wireless Telecommunication Services
    - 50102010 Wireless Telecommunication Services
- 5020 Media & Entertainment
  - 502010 Media
    - 50201010 Advertising
    - 50201020 Broadcasting
    - 50201030 Cable & Satellite
    - 50201040 Publishing
  - 502020 Entertainment
    - 50202010 Movies & Entertainment
    - 50202020 Interactive Home Entertainment
  - 502030 Interactive Media & Services
    - 50203010 Interactive Media & Services

55 Utilities

- 5510 Utilities
  - 551010 Electric Utilities
    - 55101010 Electric Utilities
  - 551020 Gas Utilities
    - 55102010 Gas Utilities
  - 551030 Multi-Utilities
    - 55103010 Multi-Utilities
  - 551040 Water Utilities
    - 55104010 Water Utilities
  - 551050 Independent Power and Renewable Electricity Producers
    - 55105010 Independent Power Producers & Energy Traders
    - 55105020 Renewable Electricity

60 Real Estate

- 6010 Real Estate
  - 601010 Equity Real Estate Investment Trusts (REITs)
    - 60101010 Diversified REITs
    - 60101020 Industrial REITs
    - 60101030 Hotel & Resort REITs
    - 60101040 Office REITs
    - 60101050 Health Care REITs
    - 60101060 Residential REITs
    - 60101070 Retail REITs
    - 60101080 Specialized REITs
  - 601020 Real Estate Management & Development
    - 60102010 Diversified Real Estate Activities
    - 60102020 Real Estate Operating Companies
    - 60102030 Real Estate Development
    - 60102040 Real Estate Services

Exhibit OA2: Examples of Firms' Use of Industry Classifications

Example 1: US Steel Corporation 2022 Proxy Statement (Page 50)

EXECUTIVE COMPENSATION PEER GROUP

The executive compensation peer group is used to serve as a market reference when making compensation decisions and designing program features, and to assess the competitiveness of each element of compensation and compensation in total. We also use this peer group as a reference when analyzing pay-for-performance alignment. In setting the executive compensation peer group, the Compensation Committee considered a set of broader, industrial peers who might compete with the Corporation for talent as well as companies outside of the material/industrial industry who might attract our executives that have skills transferable outside of the metals industry. The Compensation Committee aims to set executive compensation targets in line with the executive compensation peer group median.

The executive compensation peer group was selected based on the following criteria:

-large companies primarily from the Materials sector or Industrials sector within the Global Industry Classification Standard (GICS) classification codes;

- companies similar in complexity – specifically, companies that have: revenues that range from half to double that of the Corporation;

-capital intensive businesses as indicated by lower asset turnover ratios; market capitalization reasonably aligned with the Corporation;

- similar employee levels; acceptable levels of financial and stockholder performance and a higher company stock price volatility (referred to as "beta") to align with that of the Corporation;

- elimination of companies with unusual compensation practices (e.g., company founders who receive little or no compensation and companies that are subsidiaries of other companies).

Exhibit OA2: Examples of Firms' Use of Industry Classifications (continued)

Example 2: Lazard Ltd. 2022 Proxy Statement (Page 47)

Lazard's selected peer group reflects the competitive market for talent in which we compete, and we aim to align compensation within this group. We believe other peer groups generated by broad industry categorization and market capitalization do not accurately reflect the businesses and competitive market for intellectual talent in which we operate, and the value of our alignment of employee interests with shareholder value through our compensation program. Shareholder feedback on this topic was supportive of our methodology and results, and recognized that our unique combination of business, size and global footprint mean that we have few direct peers. However, we continually assess our peer groups and adapt as companies, markets and other situations evolve.

We chose this comparator group because we compete in the same marketplace with these companies, among other, larger financial services firms, for highly qualified and talented financial service professionals. Though none of these firms serve as comparators for both of Lazard's businesses, CAP (Compensation Advisory Partners) believes this comparator group is appropriate in terms of size and represents a reasonable mix of firms in each of Lazard's businesses. Additional details regarding the composition of our peer group recommended by CAP, based on Global Classification Standard (GICS) Sub-Industry classification, revenue, and market capitalization, are set forth in the following tables.

Due to the limited universe of standalone public company comparators, for 2021, the analysis that CAP prepared for the Compensation Committee put more emphasis compared to prior years on survey data that includes compensation information for private companies, subsidiary businesses of larger financial services firms, and cross-industry organizations that are similar to Lazard in terms of complexity to get a more complete picture of the competitive market for Lazard's NEOs. The Compensation Committee also reviewed data with respect to certain other companies with which we compete for financial service professionals, but that substantially exceed our market capitalization; however, this review was for informational purposes only and these companies served only as reference points to provide a broader perspective on competitive pay levels and practices. Such data included compensation expense and revenue changes for such companies over 2021.

Exhibit OA3: ISS's Methodology for the Selection of Compensation Peers

In a white paper published in December 2011, ISS disclosed its methodology for constructing comparison peer groups, which consists of the following steps (Gibson, 2011; Jochem et al., 2025):

1. Identify potential peers within the same two-digit GICS sector as the subject company that meet two criteria:
    - potential peers have annual sales between 0.45 and 2.1 times those of the subject company (assets for financial firms); and
    - potential peers have a market capitalization between 0.2 and 5 times that of the subject company.
2. Refine the list by restricting potential peers to those within the subject company's six-digit GICS category and ranking them from 1 to *N* based on the absolute relative difference in sales, such that the subject company is positioned near the median of the group.
3. Select the top 24 peers from the ranked list. If fewer than 14 peers remain, expand the search iteratively: first to the four-digit GICS level, and if necessary, to the two-digit GICS level, repeating step (2) at each stage until at least 14 peers are identified.

Exhibit OA4: Summary Table of GICS Major Reclassifications

Panel A. 2008 Reclassification

			Industry Group Level	
No.	Type of Change	Industry Code	Current Industry Group Name	New Industry Group Name
1	Name Change	2020	Commercial Services & Supplies	Commercial & Professional Services
			Industry Level	
No.	Type of Change	Industry Code	Current Industry Name	New Industry Name
1	New Industry	202020		Professional Services
2	Industry Name Change	452030	Electronic Equipment & Instruments	Electronic Equipment, Instruments & Components
			Sub-Industry Level	
No.	Type of Change	Sub-Industry Code	Current Sub-Industry Name	New Sub-Industry Name
1	Discontinued Sub-Industry	20201030	Diversified Commercial & Professional Services	
2	Discontinued Sub-Industry Code	20201040	Human Resource & Employment Services	
3	New Sub-Industry Code	20202010	Human Resource & Employment Services	
4	New Sub-Industry	20202020		Research & Consulting Services
5	New Sub-Industry	20201070		Diversified Support Services
6	New Sub-Industry	20201080		Security & Alarm Services
7	Sub-Industry Name Change	25401020	Broadcasting & Cable TV	Broadcasting
8	New Sub-Industry	25401025		Cable & Satellite
9	Sub-Industry Name Change	40403010	Real Estate Management & Development	Diversified Real Estate Activities
10	New Sub-Industry	40403020		Real Estate Operating Companies
11	New Sub-Industry	40403030		Real Estate Development
12	New Sub-Industry	40403040		Real Estate Services
13	Sub-Industry Name Change	45203010	Electronic Equipment Manufacturers	Electronic Equipment & Instruments
14	New Sub-Industry	45203015		Electronic Components

Exhibit OA4: Summary Table of GICS Major Reclassifications (continued)

Panel B. 2014 Reclassification

SECTOR LEVEL				
No.	Type of change	Code	Current Sector Name	New Sector Name
No change				
INDUSTRY GROUP LEVEL				
No.	Type of change	Code	Current Industry Group Name	New Industry Group Name
No change				
INDUSTRY LEVEL				
No.	Type of change	Code	Current Industry Name	New Industry Name
1	Name change	252020	Leisure Equipment & Products	Leisure Products
2	Name change	401010	Commercial Banks	Banks
3	Name change	452020	Computers & Peripherals	Technology Hardware, Storage & Peripherals
4	Discontinued	452040	Office Electronics	
5	Name change	551050	Independent Power Producers & Energy Traders	Independent Power and Renewable Electricity Producers
SUB-INDUSTRY LEVEL				
No.	Type of change	Code	Current Sub-Industry Name	New Sub-Industry Name
1	Definition change	15104020	Diversified Metals & Mining	
2	New	15104045		Silver
3	Definition change	15104050	Steel	
4	Name change & Definition change	20106010	Construction & Farm Machinery & Heavy Trucks	Construction Machinery & Heavy Trucks
5	New	20106015		Agricultural & Farm Machinery
6	Definition change	25201010	Consumer Electronics	
7	Discontinued	25202020	Photographic Products	
8	Definition change	35201010	Biotechnology	
9	Definition change	40101010	Diversified Banks	
10	Definition change	40101015	Regional Banks	
11	Definition change	40102010	Thrifts & Mortgage Finance	
12	Definition change	40201020	Other Diversified Financial Services	
13	New	40402035		Hotel & Resort REITs
14	New	40402045		Health Care REITs
15	Definition change	40402070	Specialized REITs	
16	Definition change	45101010	Internet Software & Services	
17	Definition change	45201020	Communications Equipment	
18	Discontinued	45202010	Computer Hardware	
19	Discontinued	45202020	Computer Storage & Peripherals	
20	New	45202030		Technology Hardware, Storage & Peripherals
21	Discontinued	45204010	Office Electronics	
22	Definition change	55105010	Independent Power Producers & Energy Traders	
23	New	55105020		Renewable Electricity

Exhibit OA4: Summary Table of GICS Major Reclassifications (continued)

Panel C. 2016 Reclassification

SECTOR LEVEL			
Type of Change	**Code**	**Current Sector Name**	**New Sector Name**
New Sector and code	60		Real Estate

INDUSTRY GROUP LEVEL			
Type of Change	**Code**	**Current Industry Group Name**	**New Industry Group Name**
Discontinued code	4040	Real Estate	
New code	6010		Real Estate

INDUSTRY LEVEL			
Type of Change	**Code**	**Current Industry Name**	**New Industry Name**
Rename	255020	Internet & Catalog Retail	Internet & Direct Marketing Retail
New industry and code	402040		Mortgage Real Estate Investment Trusts (REITs)
Discontinued code	404020	Real Estate Investment Trusts (REITs)	
Discontinued code	404030	Real Estate Management & Development	
New code	601010		Equity Real Estate Investment Trusts (REITs)
New code	601020		Real Estate Management & Development

SUB-INDUSTRY LEVEL			
Type of Change	**Code**	**Current Industry Name**	**New Industry Name**
New sub-industry and code	15104025		Copper
Rename	25502020	Internet Retail	Internet & Direct Marketing Retail
Definition change	40201040	Specialized Finance	
New sub-industry and code	40203040		Financial Exchanges & Data
New code	40204010		Mortgage REITs
New code	60101010		Diversified REITs
New code	60101020		Industrial REITs
New code	60101030		Hotel & Resort REITs
New code	60101040		Office REITs
New code	60101050		Health Care REITs
New code	60101060		Residential REITs
New code	60101070		Retail REITs

New code	60101080		Specialized REITs
SUB-INDUSTRY LEVEL cont'd			
Type of Change	**Code**	**Current Industry Name**	**New Industry Name**
New code	60102010		Diversified Real Estate Activities
New code	60102020		Real Estate Operating Companies
New code	60102030		Real Estate Development
New code	60102040		Real Estate Services
Discontinued code	25502010	Catalog Retail	
Discontinued code	40402010	Diversified REITs	
Discontinued code	40402020	Industrial REITs	
Discontinued code	40402030	Mortgage REITs	
Discontinued code	40402035	Hotel & Resort REITs	
Discontinued code	40402040	Office REITs	
Discontinued code	40402045	Health Care REITs	
Discontinued code	40402050	Residential REITs	
Discontinued code	40402060	Retail REITs	
Discontinued code	40402070	Specialized REITs	
Discontinued code	40403010	Diversified Real Estate Activities	
Discontinued code	40403020	Real Estate Operating Companies	
Discontinued code	40403030	Real Estate Development	
Discontinued code	40403040	Real Estate Services	

Exhibit OA4: Summary Table of GICS Major Reclassifications (continued)

Panel D. 2018 Reclassification

SECTOR LEVEL			
Type of change	**Code**	**Current Sector Name**	**New Sector Name**
Name Change	50	Telecommunication Services	Communication Services
INDUSTRY GROUP LEVEL			
Type of change	Code	**Current Industry Group Name**	**New Industry Group Name**
Discontinued	2540	Media	
New	5020		Media & Entertainment
INDUSTRY LEVEL			
Type of change	**Code**	**Current Industry Name**	**New Industry Name**
Discontinued	254010	Media	
Discontinued	451010	Internet Software & Services	
New	502010		Media
New	502020		Entertainment
New	502030		Interactive Media & Services
SUB-INDUSTRY LEVEL			
Type of change	**Code**	**Current Sub-Industry Name**	**New Sub-Industry Name**
Discontinued	25401010	Advertising	
Discontinued	25401020	Broadcasting	
Discontinued	25401025	Cable & Satellite	
Discontinued	25401030	Movies & Entertainment	
Discontinued	25401040	Publishing	
Discontinued	45101010	Internet Software & Services	
Discontinued	45103030	Home Entertainment Software	
New	45102030		Internet Services & Infrastructure
New	50201010		Advertising
New	50201020		Broadcasting
New	50201030		Cable & Satellite
New	50201040		Publishing
New	50202010		Movies & Entertainment
New	50202020		Interactive Home Entertainment
New	50203010		Interactive Media & Services
Definition Change	10102040	Oil & Gas Storage & Transportation	
Definition Change	25502020	Internet & Direct Marketing Retail	
Definition Change	45103010	Application Software	
Definition Change	50101020	Integrated Telecommunication Services	
Definition Change	50102010	Wireless Telecommunication Services	
Definition Change	55102010	Gas Utilities	

Exhibit OA5: Google Search Trend for "GICS"

This graph illustrates the monthly Google Search Trend for the keyword "GICS" between January 2008 and December 2022 in the United States. The index is bounded between 0 and 100.

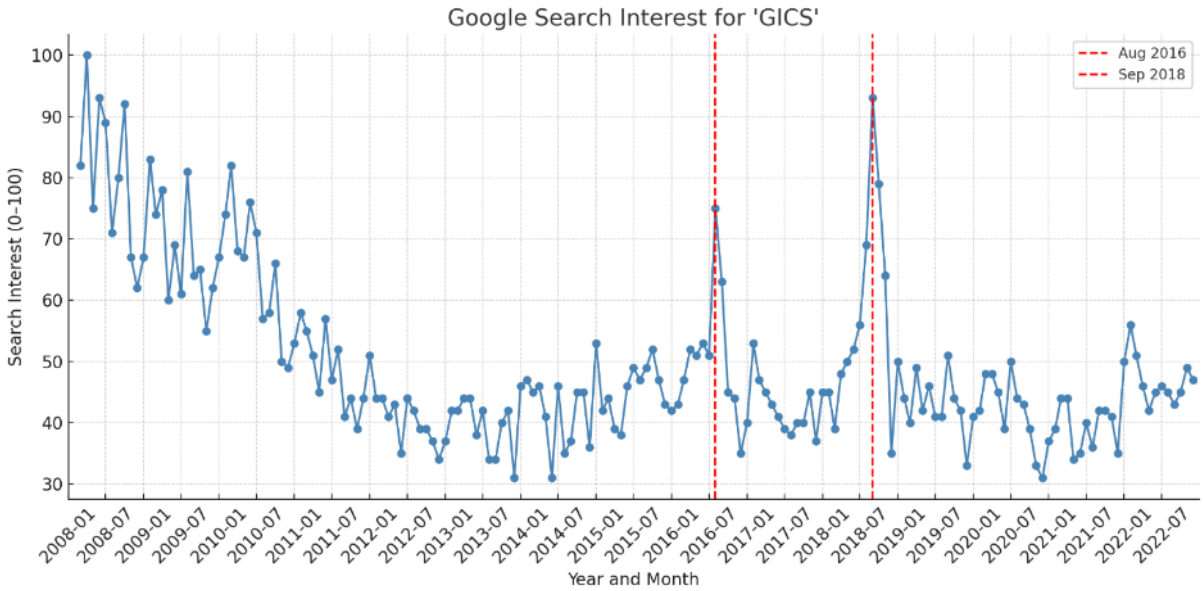
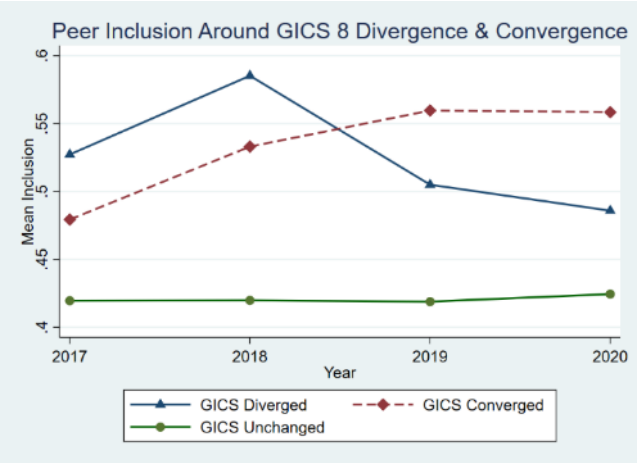
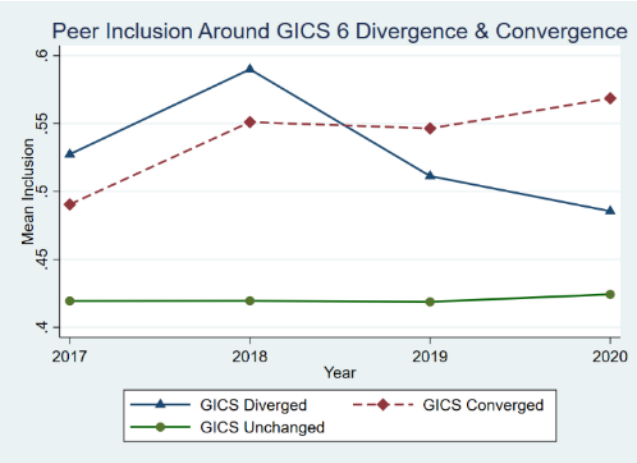
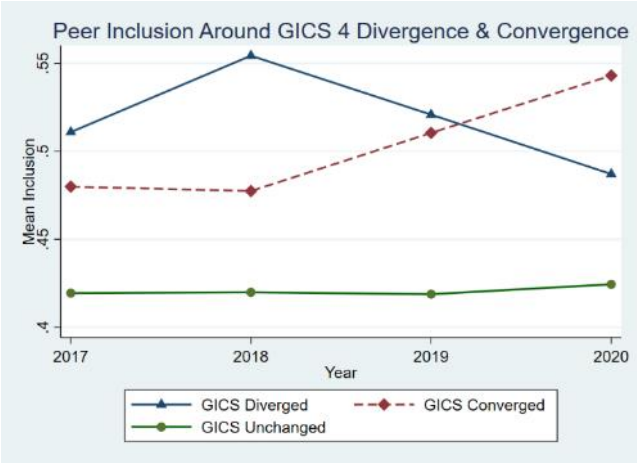


Exhibit OA6: Peer Adjustments Around the 2018 GICS Reclassification

This graph illustrates the average rate of peer inclusion across three groups: 1) GICS diverged between focal and peer firms; 2) GICS converged between focal and peer firms; 3) GICS codes unchanged around the 2018 GICS major reclassification.







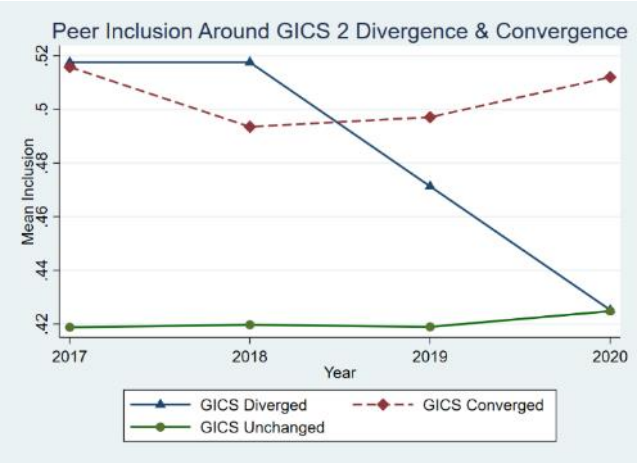


Table OA7: Results in Table 3 Including Tabulated Control Variables

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same*. *Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. See Appendix A for definitions of all control variables. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same	**0.101*** **	**0.094*** **	**0.098*** **	**0.082*** **	**0.128*** **	**0.127*** **	**0.148*** **	**0.137*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**
BM	0.006	0.006	0.007	0.006				
	(0.01)	(0.01)	(0.01)	(0.01)				
Size	-0.010***	-0.010***	-0.010***	-0.010***				
	(0.00)	(0.00)	(0.00)	(0.00)				
ROA	-0.040***	-0.040***	-0.040***	-0.041***				
	(0.01)	(0.01)	(0.01)	(0.01)				
Stock_Return	0.000	0.000	0.000	0.000				
	(0.00)	(0.00)	(0.00)	(0.00)				
SP500	0.006	0.006	0.006	0.005				
	(0.01)	(0.01)	(0.01)	(0.01)				
Peer_BM	-0.072***	-0.072***	-0.072***	-0.072***				
	(0.01)	(0.01)	(0.01)	(0.01)				
Peer_Size	0.094***	0.094***	0.094***	0.094***				
	(0.00)	(0.00)	(0.00)	(0.00)				
Peer_ROA	-0.027***	-0.027***	-0.028***	-0.028***				
	(0.01)	(0.01)	(0.01)	(0.01)				
Peer_Stock_Return	-0.013***	-0.013***	-0.013***	-0.013***				
	(0.00)	(0.00)	(0.00)	(0.00)				
Peer_SP500	-0.005	-0.005	-0.006	-0.006				
	(0.01)	(0.01)	(0.01)	(0.01)				
Pair_Size_Similarity	0.104***	0.104***	0.104***	0.104***				
	(0.00)	(0.00)	(0.00)	(0.00)				
Pair_Sales_Similarity	0.146***	0.146***	0.146***	0.146***				
	(0.00)	(0.00)	(0.00)	(0.00)				

Pair_MV_Similarity	0.062***	0.062***	0.062***	0.062***				
	(0.00)	(0.00)	(0.00)	(0.00)				
Peer_Group	0.367***	0.367***	0.367***	0.367***				
	(0.01)	(0.01)	(0.01)	(0.01)				
Observations	858,580	858,580	858,580	858,580	1,012,270	1,012,270	1,012,270	1,012,270
R-squared	0.503	0.503	0.503	0.503	0.546	0.546	0.546	0.546
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES

Table OA8: Analysis in Table 3 Controlling for Changes in Product Similarity

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same*, *TNIC_Increase*, and *TNIC_Large_Increase*. *Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. In Panel A, *TNIC_Increase* equals one if the TNIC score increases from the prior year, and zero otherwise. In Panel B, *TNIC_Large_Increase* equals one if the change in the pair's TNIC score from the prior year is in the top quartile, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

Panel A Controlling for Increases in TNIC

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same	**0.108*** **	**0.103*** **	**0.103*** **	**0.089*** **	**0.143*** **	**0.142*** **	**0.157*** **	**0.149*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**
TNIC_Increase	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	776,500	776,500	776,500	776,500	871,501	871,501	871,501	871,501
R-squared	0.512	0.512	0.512	0.512	0.554	0.554	0.554	0.554
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Panel B Controlling for Large Increases in TNIC

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same	**0.108*** **	**0.103*** **	**0.103*** **	**0.089*** **	**0.143*** **	**0.142*** **	**0.157*** **	**0.149*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**
TNIC_Large_Increase	*-0.000*	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	776,500	776,500	776,500	776,500	871,501	871,501	871,501	871,501
R-squared	0.512	0.512	0.512	0.512	0.554	0.554	0.554	0.554

Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA9: Changes in Peer Groups around the 2018 GICS Reclassification

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same*. *Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. Given that the GICS reclassification was implemented in October 2018, we consider 2019 to be the first full year of implementation. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

Panel A Restricted to [-3, +3] of 2018 Reclassification

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Independent Variables:	Sample Period: 2016-2021							
GICS_N_Same	**0.067*** **	**0.068*** **	**0.058*** **	**0.035*** **	**0.089*** **	**0.086*** **	**0.089*** **	**0.066*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**(0.01)**
Observations	369,885	369,885	369,885	369,885	432,948	432,948	432,948	432,948
R-squared	0.667	0.667	0.667	0.667	0.697	0.697	0.697	0.697
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Panel B Restricted to [-2, +2] of 2018 Reclassification

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Independent Variables:	Sample Period: 2017-2020							
GICS_N_Same	**0.033*** **	**0.038*** **	**0.032** **	**0.029** **	**0.046*** **	**0.048*** **	**0.052*** **	**0.044*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**(0.01)**
Observations	244,686	244,686	244,686	244,686	286,089	286,089	286,089	286,089
R-squared	0.753	0.753	0.753	0.753	0.774	0.774	0.774	0.774
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS

Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA10: Analysis in Table 3 Excluding Years 2018 and 2019

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same*. *Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Included*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Same	**0.105*** **	**0.097*** **	**0.104*** **	**0.091*** **	**0.129*** **	**0.128*** **	**0.151*** **	**0.143*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**
Observations	730,382	730,382	730,382	730,382	863,159	863,159	863,159	863,159
R-squared	0.511	0.511	0.511	0.511	0.554	0.554	0.554	0.554
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA11: GICS vs NAICS Reclassifications

This table presents the results from an OLS estimation where the dependent variable is *Included*. The independent variables are *GICS_8 (6, 4, 2)_Same and NAICS_6 (5, 4, 2)_Same. Included* is an indicator variable that equals one if a potential peer is included in the peer group for a given year, and zero otherwise. *GICS_8 (6, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same GICS 8 (6, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. *NAICS_6 (5, 4, 2)_Same* is an indicator variable that equals one if the peer is in the same NAICS 6 (5, 4, 2)-digit code as the focal firm for a given year, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variable=*Included*							
Independent Variables:	Sub-Industry	Industry	Industry Group	Sector	Sub-Industry	Industry	Industry Group	Sector
GICS_8_Same	**0.100*** **				**0.123*** **			
	(0.01)				**(0.01)**			
NAICS_6_Same	0.011				**0.046*** **			
	(0.01)				**(0.01)**			
GICS_6_Same		**0.093*** **				**0.122*** **		
		(0.01)				**(0.01)**		
NAICS_5_Same		**0.018** **				**0.050*** **		
		(0.01)				**(0.01)**		
GICS_4_Same			**0.098*** **				**0.143*** **	
			(0.01)				**(0.01)**	
NAICS_4_Same			**0.031*** **				**0.061*** **	
			(0.01)				**(0.01)**	
GICS_2_Same				**0.082*** **				**0.134*** **
				(0.01)				**(0.01)**
NAICS_2_Same				**0.023*** **				**0.053*** **
				(0.01)				**(0.01)**
Difference in Coefficients of GICS and NAICS	**0.088*** **	**0.075*** **	**0.068*** **	**0.058*** **	**0.077*** **	**0.072*** **	**0.082*** **	**0.081*** **
	(0.01)	**(0.01)**	**(0.01)**	**(0.02)**	**(0.01)**	**(0.01)**	**(0.02)**	**(0.02)**
Observations	847,187	847,187	847,187	847,187	995,180	995,180	995,180	995,180
R-squared	0.504	0.504	0.504	0.504	0.546	0.546	0.546	0.546
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA12: Product Similarity (ETNIC) – Alternative Measure

This table presents the results from an OLS estimation where the dependent variable is *ETNIC_Score*. The independent variables are *GICS_8 (6, 4, 2)_Converged*, *GICS_8 (6, 4, 2)_Diverged*, *Added_Peer*, and *Dropped_Peer*. *ETNIC_Score* is the Embeddings-Based Textual Network Industry Classification score by Hoberg & Phillips. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*ETNIC_Score*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	**0.003****	0.001	**0.004****	**0.006*****	**0.003****	0.002	**0.005*****	**0.006*****
	(0.00)	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	(0.00)	**(0.00)**	**(0.00)**
GICS_N_Diverged x Dropped_Peer	**-0.013*****	**-0.014*****	**-0.013*****	**-0.008****	**-0.009*****	**-0.008*****	**-0.011*****	**-0.006****
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
Added_Peer	0.002***	0.002***	0.002***	0.002***	0.002***	0.002***	0.002***	0.002***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	-0.003***	-0.003***	-0.003***	-0.003***	-0.002***	-0.002***	-0.002***	-0.002***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Converged	0.009***	0.006**	0.012***	0.009***	0.013***	0.012***	0.013***	0.014***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Diverged	-0.015***	-0.011***	-0.012***	-0.007***	-0.011***	-0.008***	-0.008***	-0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	833,407	833,407	833,407	833,407	953,554	953,554	953,554	953,554
R-squared	0.845	0.845	0.845	0.844	0.897	0.897	0.897	0.897
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA13: Analyst Co-Coverage (OLS Model) – Robustness Test

This table presents the results from an OLS estimation where the dependent variable is *Co-Coverage*. The independent variables are *GICS_8 (6, 4, 2)_Converged, GICS_8 (6, 4, 2)_Diverged, Added_Peer, and Dropped_Peer*. *Co-Coverage* is the natural logarithm of one plus the number of analysts who cover both the focal firm i and peer j in year t. *GICS_8 (6, 4, 2)_Converged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes converge (i.e., change from different to the same) onward, and zero otherwise. *GICS_8 (6, 4, 2)_Diverged* is an indicator equal to one from the year in which the focal and peer firms' 8 (6, 4, 2)-digit GICS codes diverge (i.e., change from same to different) onward, and zero otherwise. *Added_Peer* is an indicator variable that equals one from the add year and is maintained until any subsequent exclusion, and zero otherwise. *Dropped_Peer* is an indicator variable that equals one from the drop year and is maintained until any subsequent inclusion, and zero otherwise. All firm fundamental controls are measured in the lagged fiscal year. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Pair, firm *x* year, peer *x* year or year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1.

	Dependent Variable=*Co-Coverage*							
	N=8	N=6	N=4	N=2	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GICS_N_Converged x Added_Peer	**0.060*** **	**0.032** **	**0.035** **	**0.048** **	**0.044*** **	**0.029*** **	**0.029*** **	**0.044*** **
	(0.01)	**(0.01)**	**(0.02)**	**(0.02)**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**
GICS_N_Diverged x Dropped_Peer	**-0.065*** **	**-0.037*** **	**-0.036** **	-0.023	**-0.058*** **	**-0.039*** **	**-0.046*** **	**-0.029* **
	(0.02)	**(0.01)**	**(0.01)**	(0.02)	**(0.01)**	**(0.01)**	**(0.02)**	**(0.02)**
Added_Peer	0.013***	0.015***	0.015***	0.015***	0.019***	0.020***	0.021***	0.020***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Dropped_Peer	-0.048***	-0.048***	-0.048***	-0.048***	-0.032***	-0.033***	-0.032***	-0.033***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GICS_N_Converged	0.102***	0.062***	0.097***	0.109***	0.121***	0.087***	0.114***	0.142***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
GICS_N_Diverged	0.004	-0.040***	-0.092***	-0.083***	0.012	-0.033**	-0.068***	-0.067***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Observations	774,138	774,138	774,138	774,138	881,664	881,664	881,664	881,664
R-squared	0.865	0.865	0.865	0.865	0.910	0.910	0.910	0.910
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Pair FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	NO	NO	NO	NO
Firm x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Peer x Year FE	NO	NO	NO	NO	YES	YES	YES	YES
Controls	YES	YES	YES	YES	NO	NO	NO	NO

Table OA14: GICS Reclassifications and CEO Compensation Analysis at the Focal Firm Level

This table presents the results from an OLS estimation where the dependent variable is the natural logarithm of CEO pay of focal firms. All firm fundamental controls are measured in the lagged fiscal year. We classify firms into four categories: (1) those dropping lower paying peers after a GICS divergence, (2) those dropping higher paying peers after a GICS divergence, (3) those adding lower paying peers after a GICS convergence, and (4) those adding higher paying peers after a GICS convergence. Based on these classifications, we create a dummy variable that indicates the category. A high (low) paying peer is defined as a peer whose executive compensation is above (below) the median of the industry group–year. Firm controls are as in Table 3. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Firm and year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1

	Dependent Variable=*CEO_Pay*			
	N=8	N=6	N=4	N=2
Independent Variables:	(1)	(2)	(3)	(4)
GICS_N_Diverged_Drop_Low_Pay	**0.089*** **	**0.075** **	**0.066* **	**0.065* **
	(0.03)	**(0.03)**	**(0.04)**	**(0.04)**
GICS_N_Diverged_Drop_High_Pay	-0.010	-0.012	-0.020	-0.036
	(0.03)	(0.04)	(0.04)	(0.04)
GICS_N_Converged_Add_Low_Pay	-0.007	-0.011	0.007	0.009
	(0.02)	(0.02)	(0.03)	(0.03)
GICS_N_Converged_Add_High_Pay	**0.055*** **	**0.047** **	0.032	**0.045* **
	(0.02)	**(0.02)**	(0.02)	**(0.02)**
Observations	20,011	20,011	20,011	20,011
R-squared	0.783	0.783	0.783	0.783
Model	OLS	OLS	OLS	OLS
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES

Table OA15: Strategic Peer Selection

This table presents the results from an OLS estimation of focal firms' selection of peers to be included (excluded) as a result of convergence (divergence) in GICS codes. In Panel A, we focus on focal firms that add a new peer after their GICS codes converge. For each focal firm, we attach all potential peers that were previously in different GICS codes but now share its (new) GICS code and fall within the same industry-size range, and we test whether the actually added peer displays distinctive characteristics such as larger size or higher compensation, relative to these potential alternatives. In Panel B, we focus on focal firms that drop a peer after a GICS divergence. For each such firm, we identify all peers that used to share the same GICS code but no longer do and examine whether the dropped peer differs systematically from the other potential peers that could have been excluded. See Appendix A for variable definitions. Robust standard errors are presented in parentheses. Standard errors are clustered by firm. Firm and year fixed effects are included. All continuous variables are winsorized at the 1% and 99% levels. *** denotes p < 0.01, ** denotes p < 0.05, and * denotes p < 0.1

Panel A Focal firms adding peers as a result of GICS convergence

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variable=*Included*							
	In the Same Range of Assets				In the Same Range of Assets, Sales, and Market Capitalization			
Independent Variables:	GICS 8 Converged	GICS 6 Converged	GICS 4 Converged	GICS 2 Converged	GICS 8 Converged	GICS 6 Converged	GICS 4 Converged	GICS 2 Converged
Peer_BM	-0.057	-0.117	-0.151	-0.112	-0.063	0.035	-0.106	-0.159
	(0.07)	(0.09)	(0.10)	(0.09)	(0.14)	(0.15)	(0.23)	(0.22)
Peer_Size	0.082**	0.094**	0.066	0.011	0.076	0.072	-0.012	-0.090*
	(0.04)	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)	(0.06)	(0.05)
Peer_ROA	0.157	0.153	-0.075	-0.016	0.389	0.630*	0.368	-0.452
	(0.16)	(0.20)	(0.20)	(0.24)	(0.27)	(0.35)	(0.30)	(0.40)
Peer_Stock_Return	-0.016	-0.010	-0.046	-0.002	0.016	0.033	-0.102**	-0.027
	(0.02)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.05)	(0.06)
Peer_Compensation	0.045***	0.026	0.005	0.004	0.037	0.028	0.023	0.006
	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
Peer_SP500	-0.010	-0.009	0.034	0.082	0.040	0.048	-0.010	0.058
	(0.03)	(0.04)	(0.04)	(0.06)	(0.04)	(0.04)	(0.04)	(0.06)
Observations	5,759	5,653	3,777	3,355	2,568	2,647	1,454	1,413
R-squared	0.322	0.319	0.271	0.257	0.355	0.366	0.344	0.342
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Firm x Year FE	YES	YES	YES	YES	YES	YES	YES	YES

Panel B Focal firms dropping peers as a result of GICS divergence

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variable=*Excluded*							
	In the Same Range of Assets				In the Same Range of Assets, Sales, and Market Capitalization			
Independent Variables:	GICS 8 Diverged	GICS 6 Diverged	GICS 4 Diverged	GICS 2 Diverged	GICS 8 Diverged	GICS 6 Diverged	GICS 4 Diverged	GICS 2 Diverged
Peer_BM	0.250*	0.183	0.133	0.152	0.529**	0.266	-0.008	0.140
	(0.13)	(0.12)	(0.12)	(0.12)	(0.22)	(0.31)	(0.19)	(0.14)
Peer_Size	-0.037	-0.040	-0.038	-0.102**	-0.047	0.031	0.088	-0.072
	(0.06)	(0.05)	(0.06)	(0.05)	(0.06)	(0.08)	(0.07)	(0.07)
Peer_ROA	0.775***	0.507**	0.610**	0.409*	0.106	0.061	0.214	0.046
	(0.28)	(0.25)	(0.28)	(0.21)	(0.55)	(0.57)	(0.43)	(0.41)
Peer_Stock_Return	0.073	0.072	0.063	0.036	-0.002	-0.046	0.010	-0.006
	(0.05)	(0.05)	(0.04)	(0.04)	(0.08)	(0.09)	(0.06)	(0.06)
Peer_Compensation	-0.001	-0.010	-0.017	-0.000	0.073**	0.037	0.046	0.032
	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.05)	(0.04)	(0.03)
Peer_SP500	-0.049	-0.025	-0.017	0.018	-0.123*	-0.189*	-0.254***	-0.160***
	(0.07)	(0.06)	(0.05)	(0.06)	(0.07)	(0.10)	(0.07)	(0.06)
Observations	1,562	1,833	2,551	2,513	623	722	923	904
R-squared	0.500	0.478	0.370	0.417	0.614	0.517	0.449	0.522
Model	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Firm x Year FE	YES	YES	YES	YES	YES	YES	YES	YES