ARTICLE

REGULATION BY INDEXATION?

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If index fund asset managers are the new "emperors" of Wall Street, are index providers the power behind the throne? The financial press has called the indexers "kingmakers" and suggested they may soon "rule the world." If so, why do they seem to have more influence over sovereign governments than corporate executives? Is it appropriate to think of indexers as private regulators? If so, what is the source of their regulatory power? This article answers these questions with the first theoretical model and empirical review assessing the regulatory capacity of global equity index providers.

I propose three regulatory roles through which indexers might deliver incentives or sanctions sufficient to exercise regulatory power: (1) subsidizers, delivering financial benefits to parties who follow their rules for index inclusion, (2) certifiers, delivering reputational benefits to parties who follow their rules, and (3) gatekeepers, delivering access to benefits (e.g., capital, licenses, markets) that are otherwise unavailable. I assess the influence of these regulatory channels on two groups—corporate managers, considering whether indexers can regulate corporate governance and sustainability choices, and sovereign governments, considering whether indexers can influence sovereign choices about financial market rules.

After establishing the theoretical frame, I review the empirical literature to assess the theoretical roles in three

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contexts: (1) corporate governance restrictions on inclusion in benchmark equity indices, (2) eligibility criteria for inclusion in ESG indices and (3) market requirements for inclusion in emerging markets indices. Empirical studies suggest that the subsidizer role is ineffective, the certifier role may provide sufficient incentives to meet eligibility criteria in some contexts if the costs are not too high, and the gatekeeper role can be very effective, even with high costs, but only if the indexers hold the keys to sufficiently valuable, otherwise unavailable assets.

INTRODUCTION

Imagine for a moment that you are the finance minister of a middle-income country with a population of 32 million and a nominal GDP of around USD $200 billion and you learn that a small committee of individuals in New York are about to make a decision that could pull billions of dollars out of your economy. What do you do? Take the next plane to New York? That is precisely what Alonso Segura Vasi, the former Finance Minister of Peru, did when he learned that MSCI, Inc., one of the largest index providers in the world, was considering downgrading Peru from its emerging markets index to its frontier markets index in 2015.[1] Fearing cataclysmic outflows of capital from their country, Vasi and a team of officials from Peru's financial market regulators successfully convinced MSCI not to delete Peru from the emerging markets index after sharing their plans for market reforms.[2]

Now imagine that you are the founder and CEO of a leading decacorn start-up planning an initial public offering. As you prepare for the IPO, you learn that S&P Global, purveyor of the S&P 500 index, has declared that companies with a dual-class stock structure will never be included in the index. The S&P 500 is the largest equity index in the world, with $5.4 trillion dollars of passive investment assets following the index and an additional $8 trillion dollars of actively managed funds benchmarking to the index as of

[1] Tracy Alloway, Dani Burger & Rachel Evans, *Index Providers Rule the World – For Now, at Least*, BLOOMBERG MARKETS (Nov. 26, 2017, 7:00 PM EST), https://www.bloomberg.com/news/articles/2017-11-27/index-providers-rule-the-world-for-now-at-least [https://perma.cc/W37P-2WLZ].

[2] *Id.* Peru was added to the MSCI Emerging Markets Index in 1994 and remains a constituent of the index to this day. MSCI, EMERGING MARKETS INDEXES 3–4 (2023), https://www.msci.com/documents/1296102/38312924/MSCI+Emerging+Markets+Indexes.pdf [https://perma.cc/7SPF-58UM]. Argentina and Pakistan have had very different experiences. Argentina, an inaugural constituent of the index in 1988, was deleted in 2009, re-added in 2019, and re-deleted in 2021. Pakistan was added in 1994, deleted in 2008, re-added in 2017 and re-deleted in 2021. *Id.*

December 31, 2020.[3] As the founder of the start-up, do you give up the dual-class stock structure, or permanently pass on more than $13 trillion in investment assets in order to retain control of your company following the IPO? Brian Chesky, CEO of AirBnB chose to retain its dual-class stock structure when AirBnB completed its IPO in 2020, the largest IPO of the year, despite the S&P 500 ban on dual-class stocks. Chesky made the right choice. In April 2023, S&P Global rescinded the exclusion of dual-class stocks from the S&P 500,[4] and AirBnB was added to the S&P 500 in September 2023.[5]

What makes index providers more effective regulators of sovereign governments than corporations? There has been a seismic shift from active to passive investing in global equity markets in the last decade. According to the Investment Company Institute, U.S. domestic equity index funds received $2.5 trillion in net new investments from 2013 through 2022, while actively managed funds experienced net outflows of $2.3 trillion.[6] As a result, index funds grew from holding 8% of the

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3 S&P GLOBAL, 2021 INVESTOR FACT BOOK: ACCELERATING PROGRESS IN THE WORLD 49 (2021), https://s29.q4cdn.com/690959130/files/doc_downloads/2022/06/2021-SPGI-Investor-Fact-Book-web.pdf [https://perma.cc/7CXP-QNFA]. Active funds that benchmark to an index typically invest in many of the stocks included in the index as part of their strategy to at least equal, if not beat, the results of the index.

4 Press Release, S&P Dow Jones Indices, S&P Dow Jones Indices Announces Results of S&P Composite 1500 Index Consultation on Share Class Eligibility Rules (Apr. 17, 2023), https://www.spglobal.com/spdji/en/documents/indexnews/announcements/20230417-1463543/1463543_prapril20231500shareclassconsultresults.pdf [https://perma.cc/VTW4-EL6U].

5 Press Release, S&P Dow Jones Indices, Blackstone and Airbnb Set to Join S&P 500; Others to Join S&P 100, S&P MidCap 400 and S&P SmallCap 600 (Sept. 1, 2023), https://press.spglobal.com/2023-09-01-Blackstone-and-Airbnb-Set-to-Join-S-P-500-Others-to-Join-S-P-100,-S-P-MidCap-400-and-S-P-SmallCap-600 [https://perma.cc/ATS6-YU7R].

6 INV. CO. INST., 2023 INVESTMENT COMPANY FACT BOOK 48 (2023), https://www.ici.org/system/files/2023-05/2023-factbook.pdf [hereinafter "2023 FACT BOOK"]. Index mutual funds' (excluding ETFs) total net assets grew from $384 billion to $4.8 trillion from 2000 to 2022, and index mutual

total market capitalization of U.S. stocks at the end of 2012 to holding 18% of the market cap at the end of 2022.[7] Global passive equity funds surpassed active equity funds for the first time in 2023, with $15.1 trillion in assets under management versus $14.3 trillion for active funds at the end of December 2023.[8] The rapid growth of equity index funds, coupled with muscular moves in corporate governance and emerging markets regulation by index providers have left the financial press breathless in its exaltation of the indexers. *The Economist* declared indexers "finance's new kingmakers: arbiters of how investors should allocate their money;"[9] the

funds' share of long-term mutual fund net assets more than tripled, from 7.5% to 27.9%. *Id.* at 80. ETF total net assets have grown even faster, from $992 billion at the end of 2010 to $6.5 trillion at the end of 2022. *Id.* at 82. Index ETF funds hold more than 94% of ETF assets. *Id.*

7 *Id.* at 23 fig.2.6. It is important to note that the remaining shares—69% of the total market capitalization—remained in the hands of investors other than public investment funds (i.e., hedge funds, pension funds, life insurance companies and individuals). *Id.* However, Chinco and Sammon have argued that the official statistics understate the total amount of funds held in passive investment strategies. They estimated that passive investors held 33.5% of the equity in the U.S. stock market at the end of 2021. Alex Chinco & Marco Sammon, *The Passive-Ownership Share Is Double What You Think It Is*, J. OF FIN. ECON., Jul. 2024, at 1, 1 (implying private passive ownership through index reconstitution day trading volumes).

8 Patturaja Murugaboopathy, *Global Passive Equity Funds' Assets Eclipsed Active in 2023 for First Time,* REUTERS (Feb. 1, 2024, 4:58 AM PST) https://www.reuters.com/markets/us/global-markets-funds-passive-2024-02-01/ [https://perma.cc/2BWU-DZ44] (statistics according to LSEG Lipper). Passive funds attracted inflows of $466 billion over the year, while active fund suffered outflows of $576 billion. *Id.* Morningstar reported slightly lower numbers, but the same trend. Jeff Cox, *Passive Investing Rules Wall Street Now, Topping Actively Managed Assets in Stock, Bond and Other Funds*, CNBC (Jan. 18, 2024, 12:53 PM EST) https://www.cnbc.com/2024/01/18/passive-investing-rules-wall-street-now-topping-actively-managed-assets-in-stock-bond-and-other-funds.html [https://perma.cc/3BX5-XRX6] (Morningstar reported passive equity assets under management as of December 31, 2023 of $13.29 trillion, compared to $13.23 trillion for actively managed funds).

9 *Index-makers are Growing in Power, and Facing Greater Scrutiny*, THE ECONOMIST, Aug. 26, 2017, at 61. *See also* Steve Johnson & Simeon Kerr,

Financial Times listed the CEOs of FTSE Russell, MSCI and S&P among the twelve most powerful people in global finance;[10] and Bloomberg published an article entitled, *When MSCI and S&P Rule the World*.[11]

Investors,[12] journalists,[13] scholars,[14] and at least some corporate managers and sovereign governments appear to believe that index providers wield tremendous influence in the global economy through their power to determine the eligibility criteria for the indices tracked by index funds—effectively directing investment flows into and out of companies around the world. The growing salience of the indexing business has led to a competition law investigation

Landmark for Saudi Stocks as Index Providers Become Kingmakers, FIN. TIMES (Mar. 20, 2019) (on file with the Columbia Business Law Review).

[10] Robin Wigglesworth, *The Power of Twelve: The Financial Industry's New Emperors*, FIN. TIMES (June 17, 2022) (on file with the Columbia Business Law Review) (discussing John C. Coates' THE POWER OF TWELVE and declaring "some think . . . just a dozen or so people could end up enjoying de facto control over most public companies in the US – and even perhaps the world"). *See also* Robin Wigglesworth, Opinion, *The Index Providers are Quietly Building Up Enormous Powers*, FIN. TIMES (Jan. 20, 2020) (on file with the Columbia Business Law Review) ("Index providers are an under-appreciated power in finance, and that power is only likely to grow. At some point, politicians and regulators will have to stop scrambling after facile headlines, and attempt to tackle this far thornier, more complex issue.").

[11] Justin Fox, Opinion, *When MSCI and S&P Rule the World*, BLOOMBERG (June 23, 2017, 7:00 AM PDT) (on file with the Columbia Business Law Review).

[12] *Index Providers and Dual-Class Stock*, COUNCIL OF INST'L INVS., https://www.cii.org/index-providers-dual-class-stock [https://perma.cc/VXX8-HZ9R] (last visited Sept. 21, 2024) ("Why do index providers have an appropriate role on [the dual-class stock] issue? . . . [I]t is important to recognize the role of indexes within the context of deep impediments to addressing this issue elsewhere in a substantive way.").

[13] Alloway, *supra* note 1; Fox, *supra* note 11.

[14] Johannes Petry, Jan Fichtner & Eelke Heemskerk, *Steering Capital: The Growing Private Authority of Index Providers in the Age of Passive Asset Management*, 28 REV. OF INT'L POL. ECON. 152, 153 (2021). *See also* Wigglesworth, *supra* note 10 (citing Petry et al.); Mark Andriola, *Index-Maker Activism and Private Rulemakers*, 1 CORP & BUS. L. J. 1, 2–3 (2020).

by the UK FCA,[15] and possible regulation by the U.S. Securities and Exchange Commission.[16] But how much influence do the index providers really have over other actors in the world economy? Is it appropriate to think of them as private regulators? If so, what is the source of their regulatory power? This article is the first to provide a model for thinking about the regulatory capacity of global equity index providers.[17]

One might be inclined to link the influence of index providers to the power of index fund asset managers. The rise of index investing and concentration of corporate voting power in the hands of the Big Three index fund asset managers—BlackRock, Vanguard and State Street—caused Charlie

[15] Sandra Heistruvers & Ed Moisson, *FCA to Probe Index Providers over Potential Competition Law Breaches*, FIN. TIMES (Jan. 18, 2022) https://www.ft.com/content/58946854-72b8-4c0d-9507-b9ec1c350a85 [https://perma.cc/XNS2-WBNB] (noting FCA concern that "competition problems may be causing users to pay prices above the competitive level, which could potentially translate into higher costs for end investors").

[16] *See* Request for Comment on Certain Information Providers Acting as Investment Advisors, 87 Fed. Reg. 37254 (proposed June 22, 2022) (citing Paul Mahoney & Adriana Robertson, *Advisers by Another Name*, UNIV. OF VA. SCH. OF L. (L. & Econ. Paper Series, Jan. 2021)). Paul Mahoney and Adriana Robertson have suggested that "the SEC should create a nonexclusive, conditional safe harbor giving index providers guidance on what activities will and will not make them subject to regulation as investment advisors." Paul Mahoney & Adriana Robertson, *Advisers by Another Name*, UNIV. OF VA. SCH. OF L. (L. & Econ. Paper Series, Jan. 2021).

[17] The existing literature has examined aspects of index provider regulatory influence, but has not offered a comprehensive theory of how indexers may or may not act as regulators. *See, e.g.*, Petry, Fichtner & Heemskerk, *supra* note 14, at 152, 155 (assessing the authority of index providers from an international political economy perspective); Scott Hirst & Kobi Kastiel, *Corporate Governance by Index Exclusion*, 99 B.U. L. REV. 1229, 1229 (2019) (describing index providers as reluctant regulators, exploring their incentives, and theorizing the effects of index exclusion generally and in the case of dual-class shares); Andrew Winden & Andrew Baker, *Dual-Class Index Exclusion*, 13 VA. L. & BUS. REV. 101, 101–02 (2019) (skeptically assessing the regulatory influence of index providers in connection with dual-class exclusion).

Munger to refer to them as the new "emperors"[18] and led some scholars to raise alarm bells about their power in the global economy.[19] There are vigorous debates about whether passive asset managers should be permitted to vote in corporate elections,[20] and whether the concentration of ownership in a small number of hands adversely effects competition among corporations owned in more-or-less equal measures—"common ownership"—by such asset managers.[21] If index fund

[18] Wigglesworth, *The Power of Twelve*, *supra* note 10 (quoting Charlie Munger, "[w]e have a new bunch of emperors and they're the people who vote the shares in the index funds. . . . I think the world of Larry Fink, but I'm not sure I want him to be my emperor.").

[19] *See, e.g.*, John C. Coates, IV, THE PROBLEM OF TWELVE: WHEN A FEW FINANCIAL INSTITUTIONS CONTROL EVERYTHING 1392 (2023); Lucian Bebchuk & Scott Hirst, *Big Three Power, and Why it Matters*, 102 B.U. L. REV. 1547 (2022). *See also* Alon Brav, Andrey Malenko and & Nadya Malenko, *Corporate Governance Implications of the Growth of Indexing* 1–2, 26, 29 (Eur. Corp. Governance Inst., Finance Working Paper No. 849/2023, 2023), https://ssrn.com/abstract=4222402 [https://perma.cc/W7RF-26BA].

[20] *See, e.g.*, Dorothy S. Lund*, The Case Against Passive Shareholder Voting,* 43 J. CORP. L. 493, 516–17 (2018) (proposing that index funds be prohibited from voting or be required to pass through votes); Jill E. Fisch & Jeff Schwartz, *Corporate Democracy and the Intermediary Voting Dilemma* 5 (Eur. Corp. Governance Inst., Law Working Paper 685/2023, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4360428 [https://perma.cc/E6WN-FW9B]; Jill E. Fisch*, Mutual Fund Stewardship and the Empty Voting Problem,* 16 BROOK. J. CORP. FIN. & COM. L. 71, 90–92 (2021) (advocating for "pass-through voting" for mutual funds); Caleb Griffin, *We Three Kings: Disintermediating Voting at the Index Fund Giants,* 79 MD. L. REV. 954, 983 (2020) (proposing diluting index fund votes by altering their weight); Sean Griffith*, Opt-In Stewardship: Toward an Optimal Delegation of Mutual Fund Voting Authority,* 98 TEX. L. REV. 983, 990 (2020) (proposing that mutual fund voting on certain issues should be restricted); Dick Weil, Opinion, P*assive Investors, Don't Vote*, WALL ST. J. (Mar. 8, 2018, 6:44 PM), https://www.wsj.com/articles/passive-investors-dont-vote-1520552657 [https://perma.cc/22FT-MJMY] (arguing that passive fund managers should not vote).

[21] Some papers argue that common ownership is a significant hindrance to competition. *See, e.g.*, Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1268, 1269–71 (2016); Eric A. Posner, Fiona M. Scott Morton & E. Glen Weyl, *A Proposal to Limit the Anti-Competitive Power of Institutional Investors*, 81 ANTITRUST L.J. 669, 669–70 (2017) (proposing antitrust enforcement agencies enforce the Clayton Act against

asset managers are the new emperors, are the indexers the power behind the throne?

It would be a mistake to ascribe the power of the asset managers to the index providers behind them. The regulatory capacity of asset managers is derived from their ability to directly penalize corporate managers by voting against directors and other management initiatives as the largest shareholders, in aggregate, of most public companies.[22] While the index providers determine which companies the index fund asset managers invest in, they have no control over share voting and no regulatory tools that so clearly affect the interests of corporate managers.

I propose three regulatory roles through which indexers might deliver incentives or sanctions sufficient to exercise regulatory power: (1) subsidizers who deliver financial benefits to parties who follow their rules for index inclusion, (2) certifiers who deliver reputational benefits to parties who follow their rules, and (3) gatekeepers who deliver access to benefits (e.g., capital, licenses, markets) that are otherwise unavailable. I assess the influence of these regulatory channels on two groups: (1) corporate managers who consider whether indexers can regulate corporate governance and sustainability choices, and (2) sovereign governments that consider whether indexers can influence sovereign choices

institutional investors with large cross-holdings unless those institutions limit their stake to 1% of the industry or commit to passivity); Jose Azar, Martin C. Schmalz & Isabel Tecu, *Anticompetitive Effects of Common Ownership*, 73 J. FIN. 1513, 1517 (2018) (finding that institutional investor cross-ownership correlates with higher ticket prices in the airline industry).

Other papers argue that concentrated ownership among passive investors is not as problematic as suggested by the "common ownership" literature. *See, e.g.*, Patrick Dennis, Kristopher Gerardi & Carola Schenone, *Common Ownership Does Not Have Anti-Competitive Effects in the Airline Industry*, 78 J. FIN. 2765, 2767–68 (2022); Daniel P. O'Brien & Keith Waehrer, *The Competitive Effect of Common Ownership: We Know Less Than We Think,* 81 ANTITRUST L.J. 729, 730, 734 (2017); Edward B. Rock and Daniel L. Rubinfeld, *Antitrust for Institutional Investors*, 82 ANTITRUST L.J. 221, 277–78 (November 2018).

[22] *See, e.g.*, Dorothy S. Lund, *Asset Managers as Regulators*, 177 U. PENN. L. REV. 77, 82, 128–29 (2023).

about financial market rules. I argue that because the index providers' power is mostly levied through public financial markets, their influence is limited. To be effective, regulators must combine rules with sufficient incentives or sanctions to induce compliance.[23] Corporate managers and sovereign states will only comply with rules established by index providers— the requirements for index eligibility—if the benefits of index inclusion or losses from deletion or exclusion outweigh the costs (economic, political or otherwise) of following the rules.

Index providers are unlikely to be effective in the subsidizer role. As noted above, many market participants and observers seem to believe that index providers wield tremendous power through the indirect allocation of capital. Indexing decisions sometimes have dramatic impacts on the stock prices of companies newly added to an index,[24] and might be expected to benefit companies' costs of capital. This belief derives in part from a long line of scholarship, starting with Andrei Shleifer's 1986 article[25] that shows significant stock price increases in response to index inclusion—called the "index inclusion effect." However, such events are unlikely to produce durable stock price improvements (and therefore cost of capital and stock compensation benefits) because, as efficient markets theory posits, stocks in public markets generally revert to their intrinsic economic value. Scholars have noted, for example, that it is very difficult for impact investors to subsidize a socially beneficial corporation through public equity market investments or penalize a socially harmful corporation through adverse divestments, because other values-neutral investors will often take the other side of

[23] George J. Stigler, *The Theory of Economic Regulation,* 2 BELL J. ECON. & MGMT. SCI. 3, 6 (1971) (discussing the importance of coercive power).

[24] Tesla's stock price increased dramatically when it was added to the S&P 500. Pippa Stevens & Todd Haselton, *Tesla Stock Jumps on Carmaker's Addition to the S&P 500*, CNBC (Nov. 16, 2020, 5:21 PM), https://www.cnbc.com/2020/11/16/tesla-stock-jumps-on-news-company-is-joining-sp-500.html [https://perma.cc/8R52-MEVL].

[25] Andrei Shleifer, *Do Demand Curves for Stocks Slope Down?*, 41 J. FIN. 579, 582 (1986).

the trade, driving the market price of the corporation's stock back to its intrinsic value.[26] Since index providers establish rules for investments in public companies, the same dynamic should apply to inclusion and deletion decisions made on the basis of index eligibility rules—the value of firms included should settle back down to intrinsic value and the value of firms excluded from indices should rise back up to intrinsic value any time that large flows of passive index fund dollars flow into and out of such companies as a result of index changes.

If the subsidizer role is likely to be a failure, indexers may have more regulatory influence as certifiers of corporate (or financial market) quality. Reputation is an important part of firm value.[27] Third-party certifications and rankings can act as a credible signaling device for corporations to differentiate themselves based on reputational matters.[28] When such certifications have sufficient influence to alter the behavior of corporate officers or government officials, they can have a regulatory effect.[29] Indexers may provide certification through index inclusion or de-certification through index deletion.

Corporate managers may believe that index inclusion leads to improved stock prices through certification of

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[26] *See* Paul Brest, Ron Gilson & Mark Wolfson, *Essay: How Investors Can (and Can't) Create Social Value*, 44 J. CORP. L. 205, 210, 218 (2018); Eleonora Broccardo, Oliver Hart & Luigi Zingales, *Exit Versus Voice*, 130 J. POL. ECON. 3101, 3137 (2022) (finding that investors exercising voice (engagement) are more likely to achieve a socially optimal outcome than those exercising exit (divestment and boycott)).

[27] *See, e.g.*, Charles Fombrun & Mark Shanley, *What's in a Name? Reputation Building and Corporate Strategy*, 33 ACAD. OF MGMT. J. 233, 234 (June 1990) (concluding that companies construct reputations based on information about firms' relative positions through market and accounting signals, institutional signals regarding conformity to social norms and strategy signals indicating strategic postures).

[28] *See, e.g.*, Tim Bartley, *Certification as a Mode of Social Regulation*, *in* HANDBOOK ON THE POLITICS OF REGULATION 441 (David Levi-Faur ed., 2011).

[29] Cherie Metcalf, *Corporate Social Responsibility as Global Public Law: Third Party Rankings as Regulation by Information*, 28 PACE ENV'TL L. REV. 145, 161, 165–66 (2010).

corporate quality or sustainability commitments.[30] As the below discussion of the subsidizer role suggests, however, that would be a mistake—index inclusion is unlikely to have positive long-term cost of capital effects. If indexers are to influence corporate managers through certification, it will have to be due to a belief that index inclusion delivers reputational benefits outside the stock markets. Managers may believe that index inclusion is useful to relationships with shareholders, customers, employees or suppliers. Alternatively, there may be private non-pecuniary benefits for corporate managers from index inclusion—"country-club cache." However, for certification to have regulatory effect, it must be considered both credible and relevant.[31] Managers would have to believe that the index is both salient to and respected by the relevant target audience. One might reasonably question the credibility of ESG index inclusion decisions among stakeholders, for instance, because of the substantial variability of corporate ESG ratings among ESG rating firms, including indexers.[32] Also, if the cost of meeting index eligibility criteria is high, it is unlikely that index inclusion will deliver sufficient reputational benefits to alter manager behavior.[33] In the context of emerging market sovereigns, however, it is possible that index inclusion may

[30] *Id.* at 161–66. *See also* Maria J. Charlo, Ismael Moya & Anna M. Munoz, *Sustainable Development and Corporate Financial Performance: A Study Based on the FTSE4Good IBEX Index,* 24 BUS. STRATEGY & ENV'T 277, 278–79 (2015) ("There is no doubt that the stock exchange indices are a communications tool and compose a kind of seal, or standard[.] . . . Business companies are thus interested in belonging to a sustainability index that not only will allow them to publicize their results, but also will be seen as a seal of quality that will boost their reputation.").

[31] Metcalf, *supra* note 29, at 196.

[32] The variability of ESG definitions and judgments has led to significant diversity in ESG ratings for the same firm among different ESG rating agencies. *See, e.g.*, Florian Berg, Julian F. Kölbel & Roberto Rigobon, *Aggregate Confusion: The Divergence of ESG Ratings*, 26 REV. FIN. 1315, 1335 (2022) (concluding that divergence in ESG ratings among Sustainalytics, Moody's, S&P Global and MSCI, among others, is due to divergence in measurement (56%), scope (38%) and weight (6%) of ESG factors considered).

[33] Metcalf, *supra* note 29, at 160–61.

have certification effects that make efforts to meet index eligibility criteria highly valuable and worth the political cost.

It is in the context of emerging markets that we also encounter the potential power of the indexer's role as gatekeepers. Namely, indexers can limit access to highly valuable assets. Stock exchanges, credit rating agencies, and some standard-setting organizations have private regulatory power as gatekeepers. They offer significant benefits, not otherwise available, to corporations that follow their rules. To have regulatory influence, however, gatekeepers must have substantial market power—that is, there cannot be alternative avenues to the resources they guard.[34] The resources for which index providers keep the keys—capital flows to index funds—do not give them market power with respect to public corporations. Since index funds control in aggregate only a fraction of total market capitalization, there are always alternative sources of capital. However, they may function as gatekeepers to foreign capital that is not otherwise available to emerging markets, giving them more influence over the financial market regulatory choices of emerging markets' governments.[35]

To tell the story of index providers and their potential for regulatory influence in the world economy, I begin, in Part I, with a description of the indexing business—the indices, the indexers, and the explosion of index investments in the last decade. In Part II, I discuss the theoretical frame for thinking about index providers as private regulators in the global economy. In Part III, I study the three possible regulatory roles of indexers as applied to three different contexts: (1) the exclusion of multi-class stock companies from benchmark equity indices, (2) eligibility criteria for inclusion in ESG indices, and (3) requirements for inclusion in emerging markets indices. Empirical studies in each of these contexts show that index providers have limited influence on corporate decision-makers because the benefits of index inclusion are unlikely to be greater than the costs unless the latter are

[34] *See infra* Section II.C.
[35] *See infra* Section III.C.

limited. On the other hand, index providers may have significant influence on the governments of countries seeking to attract foreign capital to their domestic capital markets.

I. THE INDEXING BUSINESS

A. *Indexing*

Indices track the value of an underlying basket of assets over time. Rauterberg and Verstein helpfully describe an index as an investment blueprint.[36] Investors can obtain the performance offered by the index or get exposure to the risks modeled by an index by adopting an investment strategy that includes the securities included in the index. The performance of an index (or set of risk exposures) can be compared to the performance of other baskets of assets over time, which makes indices a useful tool for assessing or measuring the value of investments that are not technically following the index (referred to as "benchmarking"). Financial indices follow the value of a variety of assets, including commodities, debt securities and equity securities. In this article, I focus on the regulatory potential of equity index providers.

The core business of *index providers* is to segment market risks into investable baskets to permit investors to obtain exposure to specific risks. As explained further below, some equity indices provide exposure to the entire U.S. or world economy. Other equity indices offer geographic, industry and factor exposures. Securities are selected for inclusion in an index based on eligibility rules, which can be completely objective or "rules-based," or somewhat subjective, giving the index committee some discretion in selecting securities for inclusion.[37] The Russell 1000, 2000 and 3000 indices are strictly rules-based indices that effectively include all listed equity securities in the U.S. market above a certain market capitalization on each of two dates every year. The index

[36] Gabriel Rauterberg & Andrew Verstein, *Index Theory: The Law, Promise and Failure of Financial Indices*, 30 YALE J. REG. 1, 6 (2013).

[37] Adriana Z. Robertson, *Passive in Name Only: Delegated Management and "Index" Investing*, 36 YALE J. REG. 795 (2019).

committee for the S&P 500, on the other hand, has complete discretion in choosing new constituent companies from among the many companies that satisfy the objective market cap, liquidity, income and seasoning criteria for inclusion at any time.[38]

Equity indices are used as both benchmarks against which the performance of active asset managers or the funds and portfolios they manage are measured and the foundation on which passive index funds are created to invest assets tracking the performance of the index as closely as possible. Funds that follow an index (index funds) represent an alternative investment value proposition to active funds. Instead of seeking to outperform a market index through active stock selection, index funds seek to track the composition and performance of an index as closely as possible, thus providing low cost exposure to risk arising from general market movements (beta), or other collections of risk exposures (factors).[39] While portfolio managers engaged in active investing need to understand the rules and the investment theses for investing in various indices, the portfolio management process for index investments does not rely on fundamental analysis of individual stocks and maintains economies of scale that tend to facilitate lower expense ratios.[40]

There are an enormous number of indices available for replication or benchmarking. There are now many times more

[38] S&P waited several years, for example, before including Tesla in the S&P 500, possibly to avoid volatility in the index. Investors in the index arguably lost billions of dollars in value as Tesla became one of the most valuable stocks in the world. *See* Bernard S. Sharfman & Vincent Deluard, *How Discretionary Decision-Making Impacts the Financial Performance and Legal Disclosures of S&P 500 Funds*, 87 BROOK. L. REV. 915, 917, 923, 927–28 (2022); Allen Sloan, *Tesla Has Taken the S&P on a Wild Ride to Nowhere,* BARRONS, Nov. 20, 2023, at 26 (on file with the Columbia Business Law Review); *see also* Adriana Z. Robertson, *The (Mis)uses of the S&P 500,* 2 U. CHI. BUS. L. REV. 137, 140–41, 145, 148 (2023).

[39] Laurence Fink & Barbara Novick, *Trends in Global Asset Management: The Rise of Index Investing*, in NON-BANK FINANCE: TRENDS AND CHALLENGES 52 (Banque de France ed., 2018).

[40] *Id.* at 52–53.

equity indices than public company stocks.[41] One scholar has counted over 29,000 independent indices in a search of Morningstar's website.[42] MSCI, Inc., one of the three largest equity index providers, claims that it calculates the value of more than 190,000 equity indices daily.[43] It seems safe to say that index investing is here to stay. And that may give sustained economic influence to the three largest index providers.

B. Indexers

Equity index providers are primarily private for-profit corporations that develop indices to license to third parties, or for use with their own investment products.[44] The equity indexing business is dominated by three global players: FTSE International Limited, which does business as FTSE Russell, a wholly-owned subsidiary of the London Stock Exchange group; MSCI, Inc., formerly Morgan Stanley Capital International,[45] a public company listed on the New York Stock Exchange; and S&P Dow Jones Indices, Inc., a wholly-owned subsidiary of S&P Global, Inc.[46] Each of these index

[41] *See, e.g.*, *There Are Now More Indices Than Stocks*, BLOOMBERG NEWS (May 12, 2017) (on file with the Columbia Business Law Review) (documenting that, as of May 2017, there were almost 5,000 stock indices).

[42] Robertson, *supra* note 37 at 810 n.59.

[43] *MSCI is the #1 Index Choice for International Investing*, MSCI, https://www.msci.com/documents/1296102/1362201/GlobalInvestingStandard-Infographic.pdf/2c7413a1-2038-457e-a40b-2155c3f6843b (last visited Sept. 26, 2024) [https://perma.cc/KDK3-HUJ7].

[44] A growing number of financial institutions are creating indices to use as benchmarks for their own investment funds or ETFs. This creates an increasing number of paradoxical situations where an index is used for one fund and one fund only. Robertson, *supra* note 38, at 810.

[45] MSCI was originally a joint venture between Morgan Stanley and Capital Group. *Q&A with Henry A. Fernandez, Chairman and Chief Executive Officer of MSCI*, MORGAN STANLEY (last visited Dec. 24, 2024), https://www.morganstanleyalumni.com/s/1651/news-detail.aspx?sid=1651&gid=1&pgid=741&cid=3698&ecid=3698&crid=0&calpgid=512&calcid=3066.

[46] There are hundreds of smaller index providers. In a search of Morningstar Direct, one scholar found 206 index providers with fewer than

providers generate and track thousands or even tens of thousands of indices on a daily basis, but they derive most of their revenue from licensing a few highly followed indices.

FTSE Russell and S&P dominate the market for U.S. benchmark equity indices.[47] The S&P 500 is the most popular equity index in the world. Among a total of 3,209 U.S. equity funds in one study, 842 (26%) were benchmarked to the S&P 500, and USD $4 trillion or 41% of the total assets under management by all funds were benchmarked to the S&P 500.[48] The FTSE 1000, 2000 and 3000 give exposure to a much broader cross-section of the U.S. equity capital markets, including many small-cap stocks.

MSCI is the leading equity index provider for capital markets outside the United Kingdom and the United States. Funds holding USD $4.6 trillion in assets follow or benchmark against MSCI's suite of indices related to its ACWI index covering global equity markets as of December 31, 2023.[49] MSCI's Emerging Markets Index is the most widely used emerging markets benchmark.[50] MSCI believes that USD $1.3 trillion of global investment assets follow or are benchmarked against indices in its suite of indices related to its Emerging Markets Index.[51] Institutional funds managing

10 indices and another 282 index providers with fewer than 100 indices. Robertson, *supra* note 37, at 810 n.59.

[47] The FTSE Russell U.S. Equity indices, including the Russell 1000 and Russell 2000 (which together form the Russell 3000), and the S&P 1500 Composite Index and its sub-indices, including the S&P 500, S&P 400 mid-cap and S&P 600 small-cap indices, represent 18 of the 20 most popular benchmark equity indices by number of funds following them and 15 of the 20 largest by assets under management. *Id.* at 806.

[48] *Id.* at 813.

[49] *ACWI IMI's Complete Geographic Breakdown*, MSCI (Dec. 31, 2023) https://www.msci.com/research-and-insights/visualizing-investment-data/acwi-imi-complete-geographic-breakdown [https://perma.cc/L9N9-P2ZS].

[50] John Authers, Opinion, *China A-shares Offer Conflicting Bets over Time*, FIN. TIMES (May 16, 2018) https://www.ft.com/content/dca6a064-58e9-11e8-bdb7-f6677d2e1ce8 [https://perma.cc/VU9H-4ZDW].

[51] *Emerging Markets Indexes*, MSCI, https://www.msci.com/our-solutions/indexes/emerging-markets (last visited Sept. 26, 2024) [https://perma.cc/5CHB-GH4W].

USD $15.6 trillion globally either track or benchmark to the MSCI indexes.[52] In 2017, prior to a post-pandemic underperformance by emerging markets stocks, MSCI's global investable market indices (GIMI) methodology, applied to its Emerging Markets Index and other global indices, was considered the most important document in asset management by some managers, since it influenced how USD $10 trillion in active and passive assets were invested.[53]

Indexers receive fees from asset managers and institutional investors to license their indices (for use on funds following and using the name of the index) or provide information about the constituents of the indices in order to follow the index.[54] Generally, fees are calculated based on a percentage of assets under management tracking an index, so they are considerable and growing as the total amount of assets in passive index funds grows.[55] In the year ended December 31, 2022, there were USD $20 trillion in assets indexed or benchmarked to FTSE Russell indices, generating £607 million in revenue from index fees;[56] MSCI had USD $13.7 trillion following its indices, generating USD $1.3 billion in revenue;[57] and S&P had USD $16.8 trillion following its indices,[58] generating USD $1.3 billion in revenue.[59]

[52] MSCI*,* *supra* note 49.

[53] Nancy Gondo, *MSCI Gives Green Light to China A-shares on Fourth Try*, INVESTOR'S BUS. DAILY (June 20, 2017), https://www.investors.com/etfs-and-funds/etfs/msci-gives-green-light-to-china-a-shares-on-fourth-try/ [https://perma.cc/AYN5-UUWQ] (quoting Brenan Ahern of KranShares).

[54] MSCI Inc., Annual Report (Form 10-K) (Feb. 10, 2023); S&P Global Inc., Annual Report (Form 10-K) (Feb. 10, 2023).

[55] Yu An, Matteo Benetton & Yang Song, *Index Providers: Whales Behind the Scenes of ETFs*, 149 J. FIN. ECON. 407, 409 (2022) (Index provider index licensing fees have been estimated to constitute one-third of all ETF expense ratios that ETF issuers collect from ETF investors).

[56] LONDON STOCK EXCHANGE GROUP, ANNUAL REPORT 2022 (2022), at 36.

[57] MSCI Inc., Annual Report 58 (Form 10-K) (Feb. 10, 2023).

[58] Press Release, S&P Global, S&P Dow Jones Indices Annual Survey of Assets as of December 31, 2022 (Dec. 31, 2022).

[59] S&P Global Inc., Annual Report 39 (Form 10-K) (Feb. 10, 2023).

While investing in an index is a passive activity, constructing an index is anything but passive.[60] Index providers make numerous subjective, discretionary decisions in constructing an index. They constantly consult their clients—asset owners (e.g., pension funds) and asset managers (such as BlackRock and Vanguard)—in both the subject matter and design of the indices they create. Investors provide input on what kinds of investment exposures are desired and therefore what kinds of investment indices should be created.[61] In establishing the criteria for stocks to be included in an index (the "eligibility criteria"), index providers typically conduct a consultation with their customers or the broader investment community to solicit views on how factors should be measured or which kinds of companies or countries should be included in the index.

In a sense, the index providers are a voice for the international institutional investor community.[62] Index providers are increasingly articulating the policy preferences as well as the investment preferences of institutional investors by establishing index inclusion eligibility rules that reflect the policy preferences of institutional investors.

C. Indexes

1. Benchmark Equity Indices—including the S&P 500

Popular benchmark equity indices such as the S&P 500 and the Russell 2000 permit investors to obtain exposure to a broad swath of the U.S. equity market. S&P states that the S&P 500, which measures the performance of approximately 500 companies in the large-cap segment of the U.S. market, is

[60] Robertson, *supra* note 37, at 797–98.

[61] Jenna McCarthy, Note, *Benchmarking the World: A Proposal for Regulatory Oversight of Index Providers*, 51 VAND. J. TRANSNAT'L L. 1191, 1191, 1223 (2018).

[62] Matt Levine, *ISS Knows How Investors Want to Vote*, BLOOMBERG VIEW: MONEY STUFF (Jan. 30, 2018, 7:05 AM PST) (on file with the Columbia Business Law Review).

"considered a proxy for the U.S. market."[63] FTSE Russell claims that the Russell 2000, which measures the performance of approximately 2000 small-cap U.S. equities and has USD $1.674 trillion benchmarked to its returns, is "the leading small-cap index among sophisticated investors."[64]

The MSCI ACWI Index, MSCI's flagship global equity benchmark, is designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 24 emerging markets around the world. As of March 2018, it covered more than 2,400 constituents across 11 sectors and represented approximately 85% of the free float adjusted market capitalization in each market.[65]

2. Factor Indices—including ESG Indices

Indices can also be compiled according to methodologies and eligibility criteria that extend beyond traditional equity indices. Such traditional indices weight stocks by market-capitalization. But other indices may opt to weight stocks equally; by price; according to fundamental metrics; or other factors, such as growth, value, volatility and other investment theses.[66] Factor strategies have generated increased interest as investors try to implement investment exposures that

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[63] S&P DOW JONES INDICES, S&P U.S. INDICES METHODOLOGY 4 (2024), https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-us-indices.pdf [https://perma.cc/XF2J-CBSG].

[64] *Russell US Indices: Russell 2000 (Factsheet)*, FTSE RUSSELL (Aug. 31, 2024), https://www.lseg.com/en/ftse-russell/indices/russell-us#t-factsheets [https://perma.cc/CQ8Y-3NFF].

[65] MSCI, ACWI: IT ONLY TAKES ONE INDEX TO CAPTURE THE WORLD 2 (2018) (on file with the Columbia Business Law Review).

[66] Investment strategies focusing on the size of issuers and style of investment—such as small-cap and "value" stocks—have been used by investors for decades, based on the work of Benjamin Graham and David Dodd in the 1930s. BLACKROCK, INDEX INVESTING SUPPORTS VIBRANT CAPITAL MARKETS 4 (2017), https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-index-investing-supports-vibrant-capital-markets-oct-2017.pdf. Indices focused on other factors are relatively new, however. ANDREW ANG, ASSET MANAGEMENT: A SYSTEMATIC APPROACH TO FACTOR INVESTING (2014).

target risk and return profiles that differ from traditional market capitalization indices.[67] The index providers determine which companies should be included in a factor index based on the extent to which they satisfy the relevant investment theme, or factor. Deciding upon and designing the criteria for a factor fund is an active investment activity, but once the criteria are applied and the constituent securities for an index are chosen, investors and asset managers need only copy the index constituents in a passive index fund. Factor index funds can be perceived as putting an active strategy in a passive bottle.

In recent years, there has been a significant increase in interest among institutional investors in environmental, social and governance ("ESG") factors in investing.[68] This is related in part to increased demands on asset owners and asset managers to engage in greater investment stewardship.[69] Although government and private efforts to promote stewardship are important, client demand is the factor asset managers cite most frequently for increasing the amount of assets under management incorporating ESG exposures.[70] According to PwC, ESG-related assets under management globally are expected to increase from USD $19.4 trillion in 2021 to USD $33.9 trillion by 2026, constituting 21.5% of all assets under management, with ESG assets in the United States increasing from USD $4.5 trillion in 2021 to USD $10.5 trillion in 2026.[71]

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[67] BLACKROCK, *supra* note 66, at 6.

[68] Fink & Novick, *supra* note 39, at 49.

[69] *Id.* (noting the promulgation of government requirements for investor stewardship in the EU, the UK, Japan and the Netherlands, and the 2017 establishment of the Investor Stewardship Group, with initial members including all three of the Big Three asset managers and multiple government pension funds).

[70] GLOBAL SUSTAINABLE INVESTMENT ALLIANCE, GLOBAL SUSTAINABLE INVESTMENT REVIEW 2020, at 21 (2021), https://www.gsi-alliance.org/wp-content/uploads/2021/08/GSIR-20201.pdf [https://perma.cc/QR4A-3NUS].

[71] PWC, ASSET AND WEALTH MANAGEMENT REVOLUTION 2022: EXPONENTIAL EXPECTATIONS FOR ESG 3–4 (2022), https://www.pwc.com/gx/en/financial-services/assets/pdf/pwc-awm-revolution-2022.pdf [https://perma.cc/6LLM-7K7N].

In response to increasing demand from investors for responsible investment opportunities, the index providers have developed ESG indices that include companies with acceptably high scores on complex, industry-specific ESG criteria established by the index providers through consultation with investors and sustainability experts. These indices identify a segment of the investable market that is deemed to be appropriate for responsible investors. For investors with an investment thesis based on the belief that good governance leads to better returns, these indices also provide an opportunity to make passive investments based on that belief.

3. Geographic Indices—including Emerging Markets Indices

Other equity indices segment the risks available in the investable universe into geographic markets for investors wishing to take a view on particular economies. In addition to the well-known benchmark indices focusing on the U.S. equity market, discussed above, there are indices focusing on Japanese equities such as TOPIX and the Nikkei 225, London listed companies such as the FTSE 100, European equities, Asian equities, and developing economies, often segmented into emerging markets and frontier markets.

S&P currently has 79 emerging markets indices and 4 frontier markets indices.[72] FTSE Russell offers the FTSE Emerging Index and a few regional emerging markets indices, as well as Russell frontier markets indices.[73] MSCI's leading

[72] *S&P Dow Jones Indices: Emerging*, S&P GLOBAL (last visited Sept. 26, 2024), https://www.spglobal.com/spdji/en/regional-exposure/global/emerging/#indices [https://perma.cc/EFS8-SN7K]; *S&P Dow Jones Indices: Frontier*, S&P GLOBAL (last visited Sept. 26, 2024), https://www.spglobal.com/spdji/en/regional-exposure/global/frontier/#indices [https://perma.cc/6TDQ-HG5R].

[73] *FTSE Global China A Inclusion Index Series: Emerging Markets Index (Factsheet)*, FTSE RUSSELL (Aug. 30, 2024). The countries included as emerging markets in FTSE Russell's FTSE Emerging Index include Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India,

emerging markets and frontier markets indices include its MSCI Emerging Markets Index (which aims to cover 85% of the market capitalization of companies in the emerging markets countries), MSCI Emerging Markets IMI Index (which aims to cover 99% of the market capitalization in the emerging markets countries), MSCI Frontier Markets IMI, MSCI Frontier Markets 100 Index, and MSCI Emerging+Frontier Markets Index.[74] MSCI states on its website that USD $1.3 trillion in global investment capital either follows or benchmarks to its emerging markets indices.[75]

As of October 2023, the four largest emerging markets ETFs by assets under management were the Vanguard FTSE Emerging Markets ETF (VWO), with USD $69 billion; BlackRock's iShares Core MSCI Emerging Markets ETF (IEMG), with USD $68 billion; BlackRock's iShares MSCI Emerging Markets ETF (EEM), with USD $16 billion; and the Schwab Emerging Markets Equity ETF (SCHE), with USD $8 billion.[76] The four funds follow the FTSE Custom Emerging Markets All Cap China A Inclusion Net Tax (US RIC) Index, the MSCI Emerging Markets Investable Market Index, the MSCI Emerging Markets Index, and the FTSE All-World Emerging Index, respectively.[77]

Indonesia, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and the UAE.

[74] In the MSCI emerging and frontier markets indices, emerging markets countries include Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, South Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. MSCI classifies South Korea as an emerging market. FTSE and S&P do not. Frontier markets countries include Argentina, Bahrain, Bangladesh, Burkina Faso, Benin, Croatia, Estonia, Guinea-Bissau, Ivory Coast, Jordan, Kenya, Kuwait, Lebanon, Lithuania, Kazakhstan, Mauritius, Mali, Morocco, Niger, Nigeria, Oman, Romania, Serbia, Senegal, Slovenia, Sri Lanka, Togo, Tunisia and Vietnam. MSCI, *supra* note 51.

[75] MSCI, *supra* note 51.

[76] *Emerging Markets Equities ETFs*, VETTAFI (last visited Sept. 26, 2024), https://etfdb.com/etfdb-category/emerging-markets-equities/ [https://perma.cc/H9XN-TRZQ].

[77] *Id.*

In determining which countries to include in emerging markets and frontier markets indices, index providers use eligibility criteria that categorize countries based on the size of their economies, the market capitalization of their public stock markets and the investability of equity securities in their markets. Investability is determined based on (1) restrictions on foreign ownership of domestic securities; (2) ease of capital flows into and out of the country, including exchange restrictions by which securities can be traded only in local currencies; (3) the operational frameworks of the capital markets; (4) the institutional frameworks in the country; and (5) corporate governance norms. Classifications of countries among the developed, emerging and frontier market indices change when there are material changes in a country's economy or investability.[78] While there are

[78] The FTSE Country Classification process is carried out annually in September and classifies all countries contained in FTSE's global benchmarks as developed, advanced emerging, secondary emerging or frontier. The FTSE Country Classification Advisory Committee, a group of independent and experienced market practitioners, assesses each country on twenty-one "Quality of Markets" criteria, and on the country's economic status as measured by GNI per capita. Based on this framework, FTSE Russell presents its assessments to the FTSE Policy Group for further discussion. September's Annual Country Classification announcement is approved by FTSE's internal Governance Board taking the FTSE Country Classification Advisory Committee and Policy Group recommendations into consideration. FTSE RUSSELL, PREPARING FOR CHINA'S INCLUSION IN GLOBAL BENCHMARKS 9 (May 2015), https://www.lseg.com/content/dam/ftse-russell/en_us/documents/other/preparing-for-chinas-inclusion-in-global-benchmarks.pdf [https://perma.cc/6R6F-DA9X] [hereinafter PREPARING FOR CHINA'S INCLUSION]. The MSCI's annual market classification review is based on the MSCI Market Classification Framework, which aims to reflect the views and practices of the international investment community by striking a balance between a country's economic development and the accessibility of its market while preserving index stability. The framework focuses on economic development (used only to further classify developed markets), market size and liquidity (to determine practical investability by the international investment community), market accessibility issues (including criteria such as openness to foreign ownership, ease of capital flows, operational efficiency and institutional stability. *MSCI Market Classification*, MSCI (last visited Sept. 26, 2024), https://www.msci.com/market-classification [https://perma.cc/C3RJ-237C]. *See*

discrepancies in how the major indexers divide the markets, there is broad consensus as to which countries belong in which index.

D. The Indexplosion

In recent years, there has been explosive growth in the amount of assets invested in funds following equity indices—often referred to as "passive index funds." Because they are cheaper to operate, index funds typically have much lower fees than active funds.[79] Index funds are scalable, allowing already comparatively limited costs to be spread among many investors. Scalability, combined with the difficulty of beating the performance of a benchmark equity market index fund through active management, has made index funds an increasingly popular investment approach.[80] Investors have

also MSCI, MSCI GLOBAL MARKET ACCESSIBILITY REVIEW 1 (June 2018), https://www.msci.com/documents/1296102/1330218/MSCI_Global_Market_Accessibility_Review_June_2018_%28FINAL%29.pdf/04dd3b70-487a-8395-912c-89a202b5b4fa [https://perma.cc/QCP7-2YDK].

[79] Jill Fish, Assaf Hamdani & Steven Davidoff Solomon, *The New Titans of Wall Street: A Theoretical Framework for Passive Investors*, 168 U. PA. L. REV. 17, 38–39 (2019).

[80] It is very difficult for actively managed investment funds to outperform passive index funds net of fees charged to recover costs. In 2016, two-thirds of active managers of large-capitalization U.S. stocks underperformed the S&P 500 large-cap index, while more than 90% of active managers underperformed their benchmark indices over a 15-year period. Burton G. Malkiel, Opinion, *Index Funds Still Beat "Active" Portfolio Management*, WALL ST. J., June 6, 2017, at A17. This is because benchmark equity index funds are well diversified and more likely to capture the growth provided by positive outliers and because they have significantly lower costs than actively managed funds. Christopher B. Philips, *The Case for Indexing*, VANGUARD RSCH. (Feb. 2011). The entire capital gain of USD $35 trillion in US equity markets from 1926 to 2015 is attributable to only 4% of the listed stocks—the top 86 stocks created 50% of the growth. More than half of the stocks in the University of Chicago's Center for Research in Security Prices (CRSP) database of historical securities prices for all publicly listed equities in the United States delivered negative lifetime returns. Hendrik Bessembinder, *Do Stocks Outperform Treasury Bills?*, 129 J. FIN. ECON. 440, 441 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2900447 [https://perma.cc/4DW4-QC43].

taken note of this trend and moved increasingly into passive index investment funds.[81] Index mutual funds and exchange-traded funds (ETFs) have democratized access to low-cost, diversified portfolios.[82]

The Investment Company Institute (ICI) has recorded explosive growth in indexing and a seismic shift from active to passive index investing in the last decade. According to the ICI, U.S. domestic equity index funds received USD $2.5 trillion in net new investments from 2013 through 2022, while actively managed funds experienced net outflows of USD $2.3 trillion during the same period.[83] As a result, index funds grew from holding 8% of the total market capitalization of public U.S. stocks at the end of 2012 to holding 18% of the market cap at the end of 2022, while active fund holdings declined from 18% to 14%.[84] Index funds held $7.2 trillion in domestic equity assets at the end of 2022.[85]

Globally, BlackRock estimated that, as of December 2016, the global investable universe for equity securities was USD $68 trillion in market capitalization, of which USD $11.9 trillion, or 17.5% of total market capitalization of global equity stocks, was invested in index strategies, with USD $5 trillion,

[81] Pension funds led the way into index investing, followed by other institutional investors and, ultimately, retail investors. Fink & Novick, *supra* note 39, at 52.

[82] Fink & Novick, *supra* note 39, at 50.

[83] 2023 FACT BOOK at 48. Index mutual funds (excluding ETFs) total net assets grew from USD $384 billion to USD $4.8 trillion from 2000 to 2022, and index mutual funds' share of long-term mutual fund net assets more than tripled, from 7.5% to 27.9%. *Id.* at 80. ETF total net assets have grown even faster, from USD $992 billion at the end of 2010 to USD $6.5 trillion at the end of 2022. *Id.* at 82. Index ETF funds hold more than 94% of ETF assets. *Id.*

[84] *Id.* at 23. It is important to note that the remaining shares—69% of the total market capitalization, remained in the hands of investors other than public investment funds—hedge funds, pension funds, life insurance companies and individuals. *Id.*

[85] Calculated from statistics in the 2023 FACT BOOK. *Id.* at 18, 23. Total index fund asset holdings grew to USD $10.9 trillion at the end of 2022. *Id.* at 22.

or 7.4% of market capitalization, invested in index mutual funds or ETFs.[86]

II. INDEXERS AS REGULATORS

With so much money flowing into passive index funds based on rules established by index providers, it is easy to imagine indexers wielding significant power in the global economy. After all, they decide which companies will receive trillions of dollars from investors following passive index investment strategies.[87] The financial press has fanned the flames of this impression with attention-grabbing headlines such as "*When MSCI and S&P Rule the World*."[88] Institutional investors clearly believed in the prospects of regulation by indexation when they requested that leading index providers exclude first non-voting shares—and subsequently all companies adopting multi-class share structures—from their benchmark equity indices.[89]

Private actors can have regulatory influence by offering incentives to third parties to comply with rules established by the private party acting in a regulatory capacity. They may

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[86] BLACKROCK, *supra* note 66, at 6. A report published by the Bank for International Settlements found that passive funds managed about 20% of aggregate global investment assets invested in investment funds as of June 2017, up from 8% in 2007. The same report estimated that passive funds constitute 43% of U.S. equity fund assets. Vladyslav Sushko & Grant Turner, *The Implications of Passive Investing for Securities Markets* 113, BIS Q. Rev. (Mar. 2018), https://www.bis.org/publ/qtrpdf/r_qt1803j.pdf [https://perma.cc/MSP7-SM6E]. It is difficult to know precisely how much money is either invested in index funds or benchmarked to indices since a significant portion of all financial assets are privately held and independently managed. Asset managers, as opposed to asset owners, manage something between 24% and 40% of global financial assets (not counting loans). Fink & Novick, *supra* note 39, at 51 (citing McKinsey & Company and IMF Global Financial Stability Report (2015).

[87] Technically, when a company is newly added to an index, indexing investors following that index have an incentive to purchase the shares of that company on the public stock markets, but the company itself does not receive any new capital.

[88] Fox, *supra* note 11.

[89] *See infra* Section III.A.

engage in rule-making or standard-setting that is specifically intended to affect the operational choices of other private actors. The parties targeted by such standards must have sufficient economic or non-economic incentives to accept the standards proposed by the private regulator for the regulations—in this case, eligibility rules for index inclusion—to have any effect on their choices. The regulations must have normative force and either adequate benefits for compliance or consequences for non-compliance.[90]

Regardless of the nature of the incentives offered by private regulators to influence the behavior of third parties, the value of the incentives is likely to have a significant impact on the willingness of such third parties to abide by the rules proposed. The cost of accepting the rule will also affect third party choices. Thus, the strength of the private regulatory regime will depend on the cost-benefit analysis of compliance. If the benefit is too small or the cost is too high, the regulatory influence of the private regulator will be insignificant. If the benefit is significant and outweighs the cost, third parties can be expected to conform to the expectations of the private regulator.

This section discusses the prospects for regulation by index providers, exploring possible mechanisms of regulatory influence before testing them in Section III. I propose and assess three regulatory roles, or channels, through which indexers might exercise regulatory influence: (1) subsidizers who deliver financial benefits to parties who follow their rules for index inclusion, (2) certifiers who deliver reputational benefits to parties who follow their rules, and (3) gatekeepers who deliver access to benefits (e.g., capital, licenses, markets) that are otherwise unavailable. I will consider the influence of these regulatory channels on two groups: corporate managers and sovereign governments. I will consider whether indexers can regulate corporate governance and sustainability choices

[90] Cary Coglianese, *Regulation's Four Core Components*, REGUL. REV. (Sept. 17, 2012), https://www.theregreview.org/2012/09/17/regulations-four-core-components [https://perma.cc/GTJ6-QCF5] ("All regulatory instruments consist of some rule or rule-like statement having normative force and backed up with some type of consequences.").

and whether indexers can influence sovereign choices about financial market rules, respectively.

A. Indexers as Subsidizers

A variety of market participants and financial journalists have assumed that individual companies have an incentive to comply with index eligibility criteria to obtain lower costs of capital. This expected discount is due to additional demand from locked-in index investors who are expected to hold the stock if it is in the index. If this is true, indexers are acting as subsidizers, granting subsidies in the form of lower capital costs to managers or sovereigns who choose to comply with their index eligibility criteria.

As noted above, many participants in and commentators on the public capital markets believe that index inclusion can have positive cost of capital effects for included companies. This misperception may arise for several reasons, including inadequate information about the limited portion of aggregate equity market capitalization held by index investors following indexing strategies. It is primarily based, however, on numerous finance papers suggesting that index inclusion has positive pricing effects, the conclusions of which have only recently been called into question by more extensive studies with longer and more recent time horizons. Financial journalists perpetuate the conventional wisdom that addition to benchmark equity indices benefits companies because index portfolio managers and other investors benchmarking against such indices will be forced to buy their shares.[91] Anecdotal evidence often supports these expectations. Tesla's stock price experienced a 13% bump the day S&P announced it would be added to the S&P 500, for instance.[92]

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[91] *See, e.g.*, Ross Kerber, *FTSE Russell Turns to Investors on Snap Voting Rights Quandary*, REUTERS (Mar. 8, 2017, 1:35 PM), https://www.reuters.com/article/technology/ftse-russell-turns-to-investors-on-snap-voting-rights-quandary-idUSL2N1GK1U0/ [https://perma.cc/P3HZ-5AZ9].

[92] Pippa Stevens & Todd Haselton, *Tesla Stock Jumps on Carmaker's Addition to the S&P 500*, CNBC (Nov. 16, 2020, 5:21 PM EST),

The genesis of these expectations around index inclusion was Andrei Shleifer's seminal 1986 study, which determined that between 1976 and 1983 stocks added to the S&P 500 experienced abnormal returns of about 3% on the day after the announcement day of the addition—the index inclusion effect.[93] Later studies found that the S&P 500 inclusion effect increased to 5–9% in the 1990s and early 2000s as the amount of capital invested in S&P 500 index funds rapidly expanded.[94] The basic argument is that adding a stock to an index will create increased demand from index-tracking investors, putting upward pressure on the price, despite the fact that a company's fundamentals have not changed. This is in contrast to the efficient markets theory and the Capital Asset Pricing Model, which model stock prices as a function of future expected cash flows discounted by their systematic risk.[95]

https://www.cnbc.com/2020/11/16/tesla-stock-jumps-on-news-company-is-joining-sp-500.html [https://perma.cc/K43B-H5S3]. The reasons Tesla was an unusual outlier are discussed in Chinco and Sammon. Alex Chinco & Marco Sammon, *The Passive-Ownership Share Is Double What You Think It Is*, 157 J. FIN. ECON. 1, 14 (2024).

[93] Shleifer, *supra* note 25.

[94] *See, e.g.*, Messod D. Beneish & Robert E. Whaley, *An Anatomy of the 'S&P Game': The Effect of Changing the Rules,* 51 J. FIN. 1909, 1925, 1929 (1996); Anthony W. Lynch & Richard R. Mendenhall, *New Evidence on Stock Price Effects Associated with Changes in the S&P 500 Index*, 70 J. BUS. 351, 352 (1997) (1990–1995 = 3.80%); Honghui Chen, Gregory Noronha & Vijay Singal, *The Price Response to S&P 500 Index Additions and Deletions: Evidence of Asymmetry and a New Explanation*, 59 FIN. ANALYSTS J. 1901, 1908 (2004) (1976–1989 = 3.17%, 1990–2000 = 5.45%); William B. Elliott et al., *What Drives the S&P Inclusion Effect? An Analytical Survey*, 35 FIN. MGMT. 31, 32 (2006) (finding support for investor awareness and price pressure theories of cross-sectional abnormal returns upon index inclusion and rejecting imperfect substitutes, improved liquidity, and improved operating performance explanations for stock price increases); (1993–2001 = 5.67%); Antti Petajisto, *The Index Premium and Its Hidden Cost for Index Funds*, 18 J. EMPIRICAL FIN. 271, 275 (2011) (1990–2005 = 8.8%, 2001–2005 = 4.5%).

[95] William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425, 436 (1964); Pyemo N. Afego, *Effects of Changes in Stock Index Compositions: A Literature Survey*, 52 INT'L REV. FIN. ANALYSIS 228, 230 (2017) (noting that systematic nature

Countless papers have proposed numerous explanations of the index inclusion effect, but the most compelling argument is that short-term price pressures push prices up as a result of a sudden increase in demand for shares from index funds and short-term supply constraints if there are not enough sellers at the time index funds need to start including the shares of a company newly added to an index.[96]

To be useful to corporate managers seeking to raise capital, however, a capital pricing subsidy needs to be durable. If the subsidy is not durable, regulation by indexation through subsidies would fail. Because the indexer subsidy is intermediated through the public capital markets, there is ample reason to be skeptical of its success. Even if index investors buy a stock upon addition to an index or sell a stock upon deletion from an index, the impact of those transactions on the market price of the security will depend on the concurrent market for sellers or buyers of the same stock. For a stock trading in the public markets, that should ultimately depend upon the extent to which the market price reflects the intrinsic value of the stock.[97] Thus, it is difficult for index providers to deliver material benefits in the form of cost of capital improvements to companies that change their governance or environmental practices to become eligible for index inclusion.

In their essay, *How Investors Can (and Can't) Create Social Value*, Paul Brest, Ronald Gilson and Mark Wolfson explain the challenge of creating social value through impact investing in public capital markets.[98] They note that it is virtually impossible to subsidize socially valuable activities or

of observed price and volume effects of index additions is inconsistent with the efficient market hypothesis).

[96] Jan Schitzler, *S&P 500 Inclusions and Stock Supply*, 48 J. EMPIRICAL FIN. 341, 356 (2018) (finding that stock supply has a significant impact on the cross-sectional size of the index inclusion effect). As of December 31, 2017, 14.8% of the shares of a company added to the S&P 500 would have to change hands to satisfy the anticipated demand from index funds, which could put significant short-term price pressure on its stock price. *Id.*

[97] Sharpe, *supra* note 95, at 441–42.

[98] Paul Brest, Ronald Gilson & Paul Wolfson, *Essay: How Investors Can (and Can't) Create Social Value*, 44 J. CORP. L. 205, 209 (2018).

penalize socially adverse activities through public market investments and divestments. If investors seek to lower the cost of capital of socially beneficial corporations by investing in their shares, values-neutral investors will sell the shares at a premium, returning the stock price to its unsubsidized level. Similarly, if investors seek to penalize socially adverse corporate behavior by divesting the stock of a socially harmful company, values-neutral investors will bid the price back up to its fundamental value-based price, reaping outsized profits in the process, and the company's cost of capital will not be adversely affected.[99]

[99] *Id.* at 213–15. Recent studies in the financial literature support the Brest, Gilson & Wolfson thesis. *See*, *e.g.*, Alex Edmans, Doron Levit & Jan Schneemeier, *Socially Responsible Divestment* 28 (Eur. Corp. Governance Inst., Finance Working Paper No. 823/2022, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4093518 [https://perma.cc/P7EN-R3KU] (the presence of an arbitrageur who buys underpriced stocks increases the relative effectiveness of a tilting strategy over a divestment strategy to encourage brown industries to become greener); Erika Berle, Wanwei (Angela) He & Bernt Arne Odegaard, *The Expected Returns of ESG Excluded Stocks. Shocks to Firms' Costs of Capital? Evidence from the World's Largest Fund* 37 (Working Paper, 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4095395 [https://perma.cc/X6WY-GW5Y] (finding that firms excluded from Norway's sovereign wealth fund for poor ESG records have superior performance post-exclusion of about 5%; most firms do not get their exclusion revoked; and the firms that do make efforts to get their exclusion revoked (perhaps believing that it will improve their cost of capital) have low ESG scores (scope for improvement), higher revenue growth (need for investment) and an absence of superior performance post-reinclusion). Other scholars argue that coordinated divestment campaigns are valuable as an exercise of voice by investors, potentially leading to increased costs of capital and decreased profits in the long-term, as they resonate through the economy, even if they do not have immediate cost of capital effects. *See, e.g.*, Marco Brecht, Anete Pajuste & Anna Toniolo, *Voice Through Divestment* 29–30 (Eur. Corp. Governance Inst., Finance Working Paper No. 900/2023, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4386469 [https://perma.cc/K548-8HU5]; Eleonora Broccardo, Oliver Hart & Luigi Zingales, *Exit Versus Voice*, 130 J. POL. ECON. 3101, 3137 (2022) (noting that exit is superior to voice for impacting the preferences of purely selfish individuals who would otherwise take advantage of cheaper prices and affecting social preferences more generally in the economy). Another recent study suggests, however, that because the impact of divestment campaigns

A similar dynamic would play out in the context of index eligibility rules. If a company is deleted or excluded from an index, even if that did have an adverse demand effect on the company's shares because of index fund divestment, active investors will purchase the shares of the company divested by (or never purchased by) index funds if the shares are underpriced because of the decrease in demand. If a company is added to an index and investors following or benchmarking against the index buy the company's shares as a result, active investors will sell the shares if they are overpriced due to the additional demand from index strategy investors. Thus, we should expect that it will be very difficult to impact the behavior of firms whose securities trade in public markets through inclusion in or exclusion from equity indices based on their corporate governance, environmental, labor or other policies and operational choices. On the other hand, it is possible that index providers can have influence through other means—primarily, the reputation effects of index certification, which can affect perceptions of corporate value, customer relations, and shareholder engagement, all of which can affect market price and otherwise impact executive choices.[100]

depends on the fraction of socially conscious capital in the financial market, the fraction of targeted firms in the economy and the return correlation between the targeted firms and the rest of the stock market, the cost of capital impact of divestment campaigns is too small to meaningfully affect real investment decisions by management. *See* Jonathan B. Berk & Jules H. van Binsbergen, *The Impact of Impact Investing* (Working Paper, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3909166 [https://perma.cc/P5UE-S243] (concluding that instead of divesting, investors should exercise voice).

[100] To affect the behavior of public companies that are deemed socially harmful, Brest, Gilson & Wolfson suggest it is necessary to activate multiple kinds of stakeholders, with the most effective levers being the power of public awareness, reputation, shame and new ways to appeal to the interests of values-neutral investors (by persuading them the hoped-for outcome is value positive). Brest, Gibson & Wolfson, *supra* note 98, at 228. Recent work in the financial literature supports this view. *See, e.g.*, Samuel M. Hartzmark & Kelly Shue, *Counterproductive Sustainable Investing: The Impact Elasticity of Brown and Green Firms* (Working Paper, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4359282

B. Indexers as Certifiers

Even if they cannot act as effective subsidizers, index providers may be able to act as certifiers, delivering reputational incentives to encourage compliance with index eligibility criteria. Reputation is an important part of firm value.[101] As a result, the managers of corporations can be expected to take steps to enhance and preserve firm reputation, and managers have responded positively to certification incentives from rankings in some contexts.[102] Third-party certifications and rankings can act as a credible signaling device for corporations to differentiate themselves

[https://perma.cc/6LC4-XAVY] (finding that sustainable investing that directs capital away from brown firms and toward green firms may be counterproductive because it makes brown firms more brown without making green firms more green, and a mistaken focus on percentage (as opposed to absolute) reductions in emissions primarily rewards green firms for trivial reductions in already low emissions).

[101] *See, e.g.*, Charles Fombrun & Mark Shanley, *What's in a Name? Reputation Building and Corporate Strategy*, 33 ACAD. MGMT. J. 233, 234 (1990) (concluding that companies construct reputations based on information about firms' relative positions through market and accounting signals, institutional signals regarding conformity to social norms, and strategy signals indicating strategic postures); Ying Cao, James N. Myers, Linda A. Myers & Thomas C. Omer, *Company Reputation and the Cost of Equity Capital,* 20 REV. ACCT. STUD. 42, 73 (2015) (finding in a study of 9,276 US companies included in Fortune's reputation rankings from 1987 to 2011 that companies with higher reputation scores enjoy a lower cost of equity capital even after controlling for other factors that determine the cost of equity).

[102] Sascha Raithel & Manfred Schwaiger, *The Effects of Corporate Reputation Perceptions of the General Public on Shareholder Value*, 36 STRATEGIC MGMT. J. 945, 952–54 (2015) (concluding that among German firms superior reputation perceptions among the public increase shareholder value measured by future stock returns and nonfinancial aspects of reputation are more value relevant in the future than perceptions driven by past financial performance); Aaron K. Chatterji & Michael W. Toffel, *How Firms Respond to Being Rated,* 31 STRATEGIC MGMT. J. 917, 918 (2010).

based on reputational matters.[103] When such third-party certifications have sufficient influence to alter the behavior of corporate officers, they can be considered to have a regulatory character. Bartley has referred to this process as "regulation by information."[104] It is possible that indexation can be a form of regulation by information, with indexers acting as certifiers of reputation.

Indexers may provide certification through index inclusion or de-certification through index deletion and exclusion, that encourages targeted parties to make operational and policy choices to comply with index eligibility criteria. In the corporate context, depending on the nature of the index and the criteria for inclusion, certification by indexers may be perceived as useful to relationships with shareholders, customers, employees or suppliers. Executives might believe inclusion in a well-known ESG index, for example, certifies the company as a sustainable enterprise.[105] However, for certification to have regulatory effect, it must be considered both credible and relevant.[106]

One way that index inclusion might be considered relevant to corporate executives is if it provides financial benefits. Hartzmark and Sussman showed, for example, that ESG ratings ("globe ratings") provided to investment funds by

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[103] *See, e.g.*, Bartley, *supra* note 28; Metcalf notes that studies show Morningstar ratings and credit ratings have effects on returns of affected funds and companies, suggesting that third party rankings regarding corporate social responsibility may provide credible signals that can inspire corporate investments if they are rewarded by the markets. Metcalf, *supra* note 29, at 161, 165–166. However, Metcalf also found equivocal results from an event study of market returns following announcements of the *Fortune* sustainability rankings from 2004–2006, suggesting those rankings do not provide valuable signals to the market. *Id.*

[104] Bartley, *supra* note 28; Metcalf, *supra* note 29.

[105] Charlo et al., *supra* note 30, at 278–79 ("There is no doubt that the stock exchange indices are a communications tool and compose a kind of seal, or standard[.] . . . Business companies are thus interested in belonging to a sustainability index that not only will allow them to publicize their results, but also will be seen as a seal of quality that will boost their reputation.").

[106] Metcalf, *supra* note 29.

Morningstar increased the amount of assets flowing into funds with higher ratings.[107] As discussed in Section II. A., however, efficient markets theory suggests that firms will not obtain cost of capital benefits from inclusion in an index (ESG or otherwise).[108] As a result, managers must either be ignorant of the limited cost of capital benefits from index inclusion or believe that there are other reputational benefits from addition to an index. They may believe, for example, that certification as a sustainable firm through inclusion in a well-known ESG index will appeal to consumers, employees, suppliers, or other stakeholders in ways that enhance firm value over time.[109] In order for that to work, corporate managers would have to believe that the relevant

[107] Samuel M. Hartzmark & Abigail B. Sussman, *Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows*, 74 J. FIN. 2789, 2790 (2019). Subsequent research has shown, however, that after funds with higher globe ratings underperformed, investors shifted to funds with higher returns, suggesting that investors had moved into funds with higher sustainability ratings on the assumption they would lead to higher returns, and not because they wanted to support sustainable firms, so fund managers stopped trading to improve their globe ratings. Nickolay Gantchev, Mariassunta Giannetti & Rachel Li, *Sustainability or Performance? Ratings and Fund Managers' Incentives*, 155 J. FIN. ECON. 103831 (2024).

[108] In fact, one recent study suggests that higher ESG ratings lead, on average, to a higher cost of equity. Alessio Galluzzi, Fergus O'Donnell & Reuben Segara, *The Cost of Being Green: How ESG Ratings Affect a Firm's Cost of Equity* (Working Paper, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4495822 [https://perma.cc/8BXD-37XJ] (finding a one standard deviation increase in ESG ratings is linked, on average, to a 15 basis points increase in a firm's cost of equity).

[109] Recent scholarship supports the theory that consumers care about ESG issues. *See e.g.*, Jean-Marie Meier, Henri Servaes, Jiaying Wei & Steven Chong Xiao, *Do Consumers Care About ESG? Evidence from Barcode-level Sales Data* (Eur. Corp. Governance Inst., Finance Working Paper No. 926/2023, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4260716 [https://perma.cc/8JC2-NQDM] (finding that higher ESG ratings of product market rivals negatively affect sales, monthly product sales decline following negative firm news on E&S issues, and sales in counties close to natural and environmental disasters decline following such events).

stakeholders pay attention to index inclusion (as opposed to other ESG ratings, for example) and that indexer certification is credible and relevant. One might reasonably question the credibility of ESG index inclusion decisions among stakeholders because of the substantial variability of corporate ESG ratings among ESG rating firms, including indexers.[110] Third-party certifications can bolster an organization's reputation, though efforts to obtain and publicize certifications can also be perceived as hypocritical if they are inconsistent with other corporate actions.[111]

[110] The variability of ESG definitions and judgments has led to significant diversity in ESG ratings for the same firm among different ESG rating agencies. *See, e.g.*, Florian Berg, Julian F Kolbel & Roberto Rigobon, *Aggregate Confusion: The Divergence of ESG Ratings*, 2022 REV. FIN. 1315, 1317 (2022) (concluding that divergence in ESG ratings among Sustainalytics, Moody's, S&P Global and MSCI, among others, is due to divergence in measurement (56%), scope (38%) and weight (6%) of ESG factors considered); Dennis Bams & Bram van der Kroft, *Tilting the Wrong Firms? How Inflated ESG Ratings Negate Socially Responsible Investing Under Information Asymmetries* (MIT Ctr. for Real Est. Rsch. Paper No. 22/12, 2022); Dane Christensen, George Serafeim & Anywhere Sikochi, *Why is Corporate Virtue in the Eye of the Beholder? The Case of ESG Ratings,* 97 ACCT. REV. 147 (2022) (finding that raters disagree more about ESG outcome metrics than input metrics (policies), that disclosure appears to amplify disagreement more, and greater ESG disagreement is associated with higher return volatility, larger absolute price movements, and a lower likelihood of issuing external financing); David F. Larcker, Lukasz Pomorski, Brian Tayan & Edward M. Watts, *ESG Ratings: A Compass Without Direction* (Stan. Closer Look Series, 2022) (finding that while ESG ratings providers may convey important insights into the nonfinancial impact of companies, significant shortcomings exist in their objectives, methodologies, and incentives which detract from the informativeness of their assessments). *But see* Pierre Chaigneau & Nicolas Sahuguet, *Executive Compensation with Social and Environmental Performance* (Working Paper, 2024) https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=4345102 [https://perma.cc/6P7F-89E9] (arguing that multiple and disparate ESG ratings are valuable means to prevent gaming of ESG outcomes and promote socially and environmentally beneficial outcomes at firms rather than "managing to the rating").

[111] W. Chad Carlos & Ben W. Lewis, *Strategic Silence: Withholding Certification Status as a Hypocrisy Avoidance Tactic,* 63 ADMIN. SCI. Q. 130, 132–33 (2018).

Alternatively, indexer certifications could give private benefits to the managers of indexed firms. They may, for example, have "country club cachet" for officers and directors. There is evidence that, in at least some circumstances, index providers can have significant influence through private, non-pecuniary benefits for management, without direct economic incentives for firms (e.g., lower costs of capital) or individual managers (e.g., higher compensation). One recent study shows that the managers of Japanese firms were incentivized to make difficult management choices to improve return on equity in order to be included in a new equity index created in 2014 to highlight the "best-run" companies listed in Japan.[112] The authors estimate that the incentive for inclusion in the index caused firms around the cut-off for inclusion to increase return on equity proportionally by 41%, though they did not realize significant capital-market or product-market benefits from inclusion. They suggest that the reputational value of being included in the index created status incentives that motivated management, even without direct economic benefits for the managers or the firm.

C. Indexers as Gatekeepers

A final channel through which indexers might act as regulators is through a position as a gatekeeper to valuable markets or assets. As discussed below, gatekeepers derive their influence from granting access to important assets or markets that cannot otherwise be obtained. Private regulators acting as gatekeepers typically have some kind of market power. When considering whether indexers can exercise regulatory influence as a gatekeeper, the definition of the market and the market power of the indexers will be crucial.

1. Gatekeepers and Market Power

[112] Akash Chattopadhyay, Matthew D. Shaffer & Charles C.Y. Wang, *Governance Through Shame and Aspiration: Index Creation and Corporate Behavior*, 135 J. FIN. ECON. 704, 706 (2020).

A private regulator can have significant influence over the choices of other private actors if the private regulator has market power, or otherwise acts as a gatekeeper, with respect to valuable markets. If the private regulator has market power over a valuable market, parties seeking access to the market have high incentives to comply with the private regulator's rules for admission. If they do not have market power, there are significant incentives for defectors to challenge norms proposed by the private regulator and ignore the benefits of compliance, which may be significantly lower. The value of market power can be understood by reviewing the private regulatory functions of stock exchanges, credit rating agencies, and standard-setting organizations, all of which have benefitted from market power in one form or another, typically as gatekeepers guarding access to a valuable market with few, if any, substitutes.

a. Stock Exchanges

Stock exchanges such as the New York Stock Exchange and Nasdaq are private, non-governmental organizations that have the power to create and enforce rules for participation in the public capital markets. Historically, they have also regulated participants in the markets they create. Hence, they are referred to as self-regulatory organizations, or SROs.[113] The "self" in self-regulatory is somewhat misleading. Stock exchanges are required to register with the Securities and Exchange Commission (SEC) and their rules are subject to review and approval by the SEC. Exchanges cannot make material changes to listing standards without SEC

[113] Stock exchanges, such as the New York Stock Exchange, have been self-regulatory in part because in many cases they were created privately (typically as member-owned "mutual" organizations) and regulated equity markets before government agencies created by legislatures to regulate securities markets, such as the U.S. Securities Exchange Commission, existed. Stavros Gadinis & Howell E. Jackson, *Markets as Regulators: A Survey*, 80 S. CAL. L. REV. 1239, 1246 (2007). *See also* Paul G. Mahoney, *The Exchange as Regulator,* 83 VA. L. REV. 1453, 1460 (1997).

approval.[114] Nevertheless, they have significant autonomy in the development and enforcement of their rules.

The exchanges have private regulatory roles supervising members trading on their exchanges and establishing corporate governance and reporting rules for companies seeking a listing. The concept of self-regulation is premised upon an exchange's ability to use its market power for regulatory purposes, mainly by threatening individual members and listed issuers with termination of their contractual arrangements in case of noncompliance with the rules of the "club."[115]

In their roles as private regulators with respect to listed companies, SROs have the power to determine whether a company can participate in the public capital markets. Listing is the gateway to public markets and retail investors.[116] Exchange listing gives issuers access to the broad and deep retail equity markets, creating greater opportunities for successful subsequent issues of equity and debt securities for capital raising.[117] Thus, historically, stock exchanges have played a decisive role in capital formation and countries have established strict regulatory frameworks to safeguard the operations of their stock markets.[118] Generations of entrepreneurs and corporate directors have complied with the corporate governance and other requirements of U.S. stock exchanges in order to gain access to the massive pool of capital held by retail investors.[119]

[114] *See* 15 U.S.C. § 78s(b)(2)(C)(i) (2012). *See also* 17 C.F.R. § 240.19b-4 (2014) (establishing the process by which the SEC approves or disapproves of rule changes for SROs).

[115] Gadinis & Jackson, *supra* note 113, at 1254.

[116] *Id.* at 1249.

[117] Onnig H. Dombalagian, *Demythologizing the Stock Exchange: Reconciling Self-Regulation and the National Market System*, 39 U. RICH. L. REV. 1069, 1114 (2005).

[118] Gadinis & Jackson, *supra* note 113, at 1242.

[119] With the liberalization of rules relating to the aggregation and trading of private capital, which have permitted large companies to remain private much longer than they have in the past, it is possible that the role of SROs as gatekeepers to the public markets will have less importance as a source of regulatory power. Increasingly, companies can choose to remain

The ultimate sanction for failure to satisfy the disclosure or corporate governance requirements of a stock exchange in the U.S. is delisting.[120] Removal from listing is debilitating since it connotes fraud, shrinking market capitalization, or both. Delisting generally has severe adverse effects on the liquidity of delisted shares and adversely affects corporate access to capital due to the absence of alternative trading venues for shares in public companies.

b. Credit Rating Agencies

Credit rating agencies (CRAs) are private companies that provide credit ratings for securities issued by corporate and sovereign issuers based on information provided by the issuer. Issuers pay fees to the CRAs for the ratings on their securities. It is possible to issue securities without a rating, and ratings are used less frequently in some markets than others. U.S. regulators, though, have issued regulations that encourage investors to invest in rated securities and therefore encourage issuers to obtain ratings for their securities, at least in the United States. These incentives are sufficiently large to cause the management of companies issuing rated securities to make changes to their capital structure and corporate governance sufficient to obtain a higher rating, if necessary.

private instead of submitting to the corporate governance requirements of the exchanges. Many companies registered with the SEC under the Securities Exchange Act are not listed. Onnig H. Dombalagian, *Exchanges, Listless?: The Disintermediation of the Listing Function*, 50 WAKE FOREST L. REV. 579, 580, 587 n.50 (2015) ("According to a recent SEC release, there are approximately 7447 companies registered under Section 12 of the Exchange Act, including 4620 listed companies (of which 916 are smaller reporting companies or emerging growth companies and 602 are listed closed-end funds) and 2827 unlisted companies (of which 2220 are smaller reporting companies or emerging growth companies).") (internal citation omitted).

[120] *See generally* NYSE, NYSE Listed Company Manual § 801.00, https://nyseguide.srorules.com/listed-company-manual [https://perma.cc/NQ6K-LMX8]; NASDAQ, Nasdaq Stock Market Rules, § 5800, https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%205800%20Series [https://perma.cc/A895-BQJK].

Frank Partnoy has pointed out that the SEC has given the small number of firms it has approved as Nationally Recognized Statistical Rating Organizations (NRSROs) significant market power by promulgating rules that (1) identify certain parties as officially sanctioned credit ratings agencies and (2) create significant incentives for participants in the financial markets to invest only in securities that have obtained a credit rating above a certain level from an NRSRO.[121] Partnoy argues that instead of providing valuable credit information to the market, credit rating agencies sell regulatory licenses—valuable property rights associated with the ability of a private entity, rather than the regulator, to determine the substantive effect of legal rules. In this case, CRAs license the ability to market debt securities to investors who have regulatory incentives to purchase securities that have received a credit rating from an NRSRO.[122]

The government imprimatur received by credit-rating agencies significantly increase their influence in the market. As a result of the regulatory licenses, issuers of securities have a strong interest in satisfying the requirements to obtain an investment grade rating from the CRAs. This gives CRAs regulatory power; through their ratings criteria, CRAs can

[121] Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L. Q. 619, 623 (1999). U.S. regulators began to give credit rating agencies the power to grant regulatory licenses to issuers when the Federal Reserve, the Office of the Comptroller of the Currency, and state bank regulators issued rules for permissible bank assets in the 1930s. *Id.* at 668–703. They expanded exponentially in the 1970s when the SEC and state insurance regulators introduced rules creating incentives for broker-dealers, money market mutual funds, insurance companies, and other parties to invest in securities identified as "investment grade" by credit rating agencies and the SEC created the concept of NRSROs as approved credit rating agencies for purposes of the asset rules. *Id.*

[122] *Id.* at 623. CRAs have market power in the sale of regulatory licenses in the U.S. since the SEC has issued only a small number of licenses and has imposed costs on new raters that raise barriers to entry. It is unlikely that CRAs would have such market power if they were just providing information to the market without regulatory licenses. Investors care more about the regulatory stamp of approval provided by the credit rating than about the informational content of the rating. *Id.* at 684.

persuade issuers to change the way they do business to satisfy the ratings criteria. Poor ratings can drive up an issuer's borrowing costs or drive it out of business.[123] The stakes are high.

c. Standard-Setting Organizations

Private standard-setting organizations (SSOs) are private regulators that establish common standards and specifications for products and services that the members of the organization (and in some cases, all participants in an industry) are expected to follow in producing goods or providing services. The standards established by SSOs can be described as any set of technical specifications that either provide or are intended to provide a common design for products or processes.[124] Electric plugs and outlets are built to standards for voltage, impedance and plug shape. Other examples include telephone service, computer communication protocols, and automobile ignition and transmission systems.

Different standards play different roles in society. Some allow compatibility between products made by different manufacturers; others establish safety requirements that are sometimes endorsed and enforced by governments; and others establish minimum standards of qualifications, operations, or services to reflect the expectations of society regarding the conduct of business.[125] Though these standards may

[123] *Id.* at 622 n. 12.

[124] Starting with the first issuance of its legendary Boiler & Pressure Vessel Code in 1914, the American Society of Mechanical Engineers, or ASME, has established function and safety standards for nearly 600 technologies in a variety of industries, including pressure technology, nuclear plants, elevators and escalators, construction, engineering design and performance testing. *About ASME Standards and Certification*, ASME (last visited Sept. 26, 2024), https://www.asme.org/about-asme/standards [https://perma.cc/JD7F-DCQF]. The ASME describes its standards and certification mission as "[d]evelop[ing] the best, most applicable code, standards, conformity assessment programs, and related products and services in the world for the benefit of humanity." *Id.*

[125] Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CAL. L. REV. 1889, 1892–93 (2002).

sometimes be anti-competitive, they often promote other social-welfare interests by ensuring that imperfect information does not cause consumers to purchase unsafe products or unqualified services.[126] State bar associations in the United States are another kind of standard setting organization—they establish qualifications for becoming a member of the bar and ethical and other standards for practicing law. Doctors, lawyers, and other professionals must meet minimum licensing standards.[127]

For present purposes, the most important feature of standard-setting organizations is that some of them have sufficient market power to act like gatekeepers to the market—either you obtain the license required, satisfy the established safety requirements, use the technology specified, or you are effectively shut out of the market.[128] In some cases, SSOs may impede competition, acting as a cartel with the power to reduce output and consumer choice by excluding products that do not meet the standard established by the SSO.[129] This is a charge that is sometimes leveled against professional licensing organizations, such as state bar associations, as well. SSOs can facilitate innovation and protection of the public, but their standards are also subject

[126] *Id.* at 1897. Sometimes a group of companies in the same industry or related industries form an SSO to establish a single standard for interoperability, and if they collectively have significant market share, the adoption of the standard can cause the remainder of the industry or industries to adopt the same standard. *Id.* at 1898.

[127] *Id.* at 1897.

[128] Standards may be used to establish terms for inter-operability of technologies, such as inter-operability with the Microsoft Windows operating system software or application inter-operability with Apple iOS operating systems. In those cases, the standard does not determine access to the market—it is possible to ignore the standard and offer alternative products or services, but there is a significant market share penalty associated with ignoring the de facto market standard. *Id.* at 1896.

[129] Thomas A. Piraino, Jr., *A Proposed Antitrust Approach to Collaborations Among Competitors*, 86 IOWA L. REV. 1137, 1204 (2001); Elbert L. Robertson, *A Corrective Justice Theory of Antitrust Regulation*, 49 CATH. U. L. REV. 741, 760–63 (2000).

to abuse.[130] In fact, the gatekeeping power of some SSOs is sufficiently strong that they have historically been subject to significant scrutiny and occasional claims under antitrust laws.[131]

2. Indexers and Market Power

Unlike SROs, CRAs, and some SSOs, index providers are not market gatekeepers for corporations. As noted above, index providers segment public equity securities into investable baskets. Unlike SROs, which provide access to vast pools of retail capital available in public capital markets and CRAs, which provide access to debt investors that cannot invest in debt securities without a BBB or better rating from an NRSRO, index providers do not have the market power that comes with the keys to a vast, otherwise untappable, capital source. While index providers hold the keys to the gate accessing index investors, the latter presently hold only 13% of public market capital in the United States and less in other developed markets. Corporations can get the capital they need without accessing index investors.[132]

[130] Robert Pitofsky, *Antitrust and Intellectual Property; Unresolved Issues at the Heart of the New Economy*, 16 BERKELEY TECH. L.J. 535, 550 (2001).

[131] *See, e.g.*, Am. Soc'y of Mech. Eng'rs v. Hydrolevel Corp., 456 U.S. 556 (1982); Nat'l Soc'y of Pro. Eng'rs v. United States, 435 U.S. 679 (1978); Radiant Burners v. People's Gas Light & Coke Co., 364 U.S. 656 (1961). *See also* Herbert Hovenkamp, *Standards Ownership and Competition Policy*, 48 B.C. L. REV. 87 (2007); Sean P. Gates, *Standards, Innovation, and Antitrust: Integrating Innovation Concerns Into the Analysis of Collaborative Standard* Setting, 47 EMORY L.J. 583 (1998); James J. Anton & Dennis A. Yao, *Standard-Setting Consortia, Antitrust, and High-Technology Industries*, 64 ANTITRUST L J. 247 (1995); H.S. Gerla, *Federal Antitrust Law and Trade and Professional Association Standards and Certification*, 19 U. DAYTON L. REV. 471 (1994); Jonathan T. Howe & Leland Badger, *The Antitrust Challenge to Non-Profit Certification Organizations: Conflicts of Interest and a Practical Rule of Reason Approach to Certification Programs as Industry-Wide Builders of Competition and Efficiency*, 60 WASH. U. L.Q. 357 (1982).

[132] If the percentage of equity market capitalization held by index investors increases dramatically, the value of index inclusion could

On the other hand, index providers may have a role as gatekeepers with significant market power when it comes to the availability of foreign capital in emerging market economies. Index funds do not purchase shares of companies in emerging markets unless the market is included in an emerging markets index. Active funds benchmarked to indexes are also unlikely to purchase equities in emerging markets that are not included in an index. Furthermore, since the index inclusion criteria for emerging markets indexes focus on investability,[133] even active funds that are not benchmarking to an emerging markets index may take cues from index provider decisions about index inclusion, withholding investments from excluded markets until they are "certified" for investment by an index provider through index inclusion. When indexers add a country to a major emerging markets index or delete a country from an index, billions of dollars of investment can flow into or out of the companies listed on the stock markets of that country.[134] This

increase, but only if there are not enough ready buyers among active investors available to purchase any shares sold (or never purchased) by index investors. That would presumably require a very high level of market concentration among index investors. It has been suggested that even with as much as 60 to 70% passive ownership, active investors are still likely to be able to establish efficient prices for listed stocks. Fisch, Hamdani & Solomon, *supra* note 79, at 40. When considering the prospect of market gatekeeping by index providers, it is important to acknowledge that capital flows following indexing decisions are not limited to flows into passive index funds, however. Many active funds also use indices as performance benchmarks and invest in stocks following index decisions to decrease their risk of underperforming the benchmark index, much as passive funds purchase newly added securities to decrease their tracking error. Long-Short Manager, *China A-shares in MSCI Indices: A Big Deal*, SEEKING ALPHA (June 2, 2018, 9:25 AM ET) (on file with the Columbia Business Law Review), https://seekingalpha.com/article/4178987-china-shares-in-msci-indices-big-deal (noting that active managers are paid to manage money relative to a benchmark index and usually compensated based on their performance relative to an index, which gives index creators enormous power). However, managed assets benchmarked to indexes also are not sufficient to limit access to necessary capital for companies excluded from an index.

[133] *See supra* Section I.C.3.

[134] *See* discussion of China *infra* Section III.C.

aggregated impact can have macroeconomic implications and can presumably have more persuasive influence on the governments of emerging market countries than the limited capital pricing impact on individual corporations in highly liquid markets.

III. REGULATION BY INDEXATION IN PRACTICE

In this section, I will assess the prospects for index providers acting as private regulators through the three channels discussed in Section II. I will consider the Subsidizer role by exploring index inclusion in the context of benchmark equity indices, ESG indices and emerging markets indices. I will assess the Certifier role using the literature on ESG indices, and I will review the Gatekeeper role in the context of emerging markets indices.

A. Subsidy Failure

In this section, I examine the practical ability of index providers to act as subsidizing regulators by supplying (or denying) cost of capital benefits to corporations and possible compensation benefits in the form of stock options to managers of corporations that take steps (or do not take steps) to satisfy index inclusion criteria in three different settings: (1) corporate governance criteria for inclusion in benchmark equity indices, (2) ESG performance criteria for inclusion in ESG indices, and (3) investability criteria for inclusion of domestic stocks in a given nation in emerging markets indices. In all three cases, the empirical financial literature suggests that regulation through subsidization is ineffective, consistent with the expectations discussed in Section II.A. based on the impact investing theory of Brest, Gilson and Wolfson. Precisely because index providers license investment templates for the *public* capital markets, they cannot provide effective cost of capital incentives to corporate executives and sovereign governments.

1. Benchmark Equity Indices: Multi-Class Stock Exclusion

At the behest of institutional investors, two of the big three index providers changed the eligibility rules for their U.S. benchmark equity indices in 2017 to exclude, limit or underweight the listed shares of companies with multi-class stock structures, often referred to as "dual-class stock" companies. The intention of the investors and index providers was to discourage companies from adopting and retaining multi-class stock structures that give founders and other insiders uncontested control over the company through shares with significantly greater voting rights than the shares held by public shareholders.

Institutional investors have long had an antipathy towards multi-class stock structures, which give common stock held by corporate insiders more votes than stock held by public investors, preferring that public companies adopt the one-share, one-vote stock structures generally required by the NYSE until 1984.[135] They have tried to persuade Congress, the SEC, the NYSE and Nasdaq to prohibit companies from going public with multi-class stock structures for decades to no avail. Following Snap Inc.'s March 2017 initial public offering in which Snap listed and distributed only non-voting shares to new public investors, institutional investors turned to index providers to proffer a solution, calling on them to exclude non-voting shares from their benchmark equity indices.[136]

[135] *See* Andrew Winden, *Sunrise, Sunset: An Empirical and Theoretical Assessment of Dual-Class Stock Structures*, 2018 COLUM. BUS. L. REV. 852, 893, 899 (2018); Winden & Baker, *supra* note 17.

[136] Ronald Orol, *Activists Urge Exchanges to End No-Vote IPOs Like Snap*, THESTREET (February 28, 2017, 3:07 PM EST) https://www.thestreet.com/markets/activists-urge-exchanges-to-end-no-vote-ipos-like-snap-14019899 [https://perma.cc/2W3N-WCTT] ("[I]nstitutional investors have a multi-fold retaliation strategy that includes putting pressure on exchanges to change their listing rules prohibiting companies from listing with non-voting shares . . . [T]hey are also nudging indices that they base their investments on, such as the S&P 500 and the Russell 3000, to set up a new index they can follow that only lists corporations with voting share structures."); Michael Greene, *Snap*

The three largest index providers, S&P Dow Jones, FTSE Russell and MSCI, responded to the entreaties from their institutional investor clients by announcing the commencement of consultations regarding the eligibility of non-voting shares for inclusion in their benchmark equity indices.[137] Representatives of index providers noted that clients voiced concerns over the use of dual-class stock structures, and it was clear that investors wanted to exclude companies with very low voting rights from benchmark indices.[138]

Subsequently, in July 2017, FTSE Russell and S&P both announced decisions covering not only non-voting shares but all multi-class share structures. S&P Dow Jones Indices

IPO Gets Investors Fired Up Over Dual-Class Stock, BLOOMBERG BNA (Mar. 9, 2017) (reporting that the Council of Institutional Investors met with S&P Dow Jones Indices LLC and MSCI Inc. to persuade them to exclude companies with non-voting stock from their indices).

[137] Press Release, S&P Dow Jones Indices, S&P Dow Jones Indices Announces a Consultation on the Eligibility of Non-Voting Share Classes (Apr. 3, 2017), https://www.spglobal.com/spdji/en/documents/index-news-and-announcements/20170403-spdji-eligibility-non-voting-share-classes-consultation.pdf [https://perma.cc/3RHJ-9VKP]; Announcement, FTSE Russell, Eligibility of Securities with Zero Voting Rights (Apr. 3, 2017), http://www.ftse.com/products/index-notices/home/getmethodology/?id=2122858&_ga=2.231445913.723741020.1518917690-1383005857.1518917690 [https://perma.cc/6TAH-VNSG]; Ronald Orol, *Here Is Another Reason Why Blue Apron Is Facing an Investor Backlash*, THESTREET (July 18, 2017, 4:15 PM EDT), https://www.thestreet.com/markets/activism-spotlight-blue-apron-faces-hit-from-index-sponsor-14233149 [https://perma.cc/ZF27-UCCF]; Richard Teitelbaum, *Nonvoting Rights Questioned*, WALL ST. J., Apr. 10, 2017, at B9; Fox, *supra* note 11.

[138] Benjamin Robinson, Andrea Tan & Yuko Takeo, *Index Chiefs Say Dual-Class Shares are an 'Issue' for Investors*, BLOOMBERG (July 13, 2017, 7:08 PM PDT) (on file with the Columbia Business Law Review); Ross Kerber, *FTSE Russell Turns to Investors on Snap Voting Rights Quandary*, REUTERS (Mar. 8, 2017, 1:35 PM), https://www.reuters.com/article/technology/ftse-russell-turns-to-investors-on-snap-voting-rights-quandary-idUSL2N1GK1U0/ [https://perma.cc/P3HZ-5AZ9] (quoting Joti Rana, Americas director for governance and policy for FTSE Russell saying that client concerns about non-voting shares had to be taken on board).

announced that all companies with multi-class share structures would henceforth be ineligible for inclusion in its S&P Composite 1500 indices, including the S&P 500, though existing constituent members such as Facebook and Google would be grandfathered.[139] FTSE Russell announced that companies from developed markets must have at least 5% of their voting rights across all securities held by public investors to be eligible for inclusion in certain FTSE Russell equity indices, including the popular Russell 1000, 2000, and 3000 indices.[140] FTSE Russell grandfathered existing constituents for only five years rather than indefinitely.[141]

MSCI deliberated much longer than FTSE Russell and S&P before establishing a policy on dual-class companies. After spending 18 months engaging in multiple consultations with investors and other interested parties around the world,[142] MSCI finally announced that it would not exclude

[139] Press Release, S&P Dow Jones Indices, S&P Dow Jones Indices Announces Decision on Multi-Class Shares and Voting Rules (July 31, 2017), https://press.spglobal.com/2017-07-31-S-P-Dow-Jones-Indices-Announces-Decision-on-Multi-Class-Shares-and-Voting-Rules [https://perma.cc/E3GQ-UGBN].

[140] FTSE RUSSELL, FTSE RUSSELL VOTING RIGHTS CONSULTATION RESULTS 2, 3 (July 2017) (on file with the Columbia Business Law Review).

[141] *Id.* at 6.

[142] In November 2017, MSCI announced that it would broaden its review of non-voting share index eligibility to include *all* types of unequal voting structures, focusing on the theoretical and practical issues of the application of a "one share, one vote" principle to the investment opportunity set of international institutional investors. Press Release, MSCI, MSCI to Broaden the Consultation on the Treatment of Non-Voting Shares in Equity Benchmarks (Nov. 2, 2017), https://www.msci.com/documents/10199/02bacb99-1b53-4c91-b82d-2a1c64dc0825 [https://perma.cc/79PB-DQJB]. It also announced that it would exclude new companies with multi-class share structures from its benchmark indices pending resolution of its consultations and deliberations. *Id.* In January 2018, MSCI announced that it was reopening its consultation on the treatment of unequal voting structures and released a discussion paper regarding the consultation. Press Release, MSCI, MSCI Reopens the Consultation on the Treatment of Unequal Voting Structures and Releases a Discussion Paper (Jan. 31, 2018), https://www.msci.com/documents/10199/d4d619dd-ec0b-4cb3-8d9a-cef31b5d617b [https://perma.cc/5LQH-CZP6]. In its announcement and

dual-class (or other multi-class stock structure) companies from its benchmark equity indices.[143] MSCI concluded that excluding dual-class companies would misrepresent the universe of investment opportunities, the index would no longer be an accurate reflection of trends in the equity market, and investors in benchmark equity indices excluding such companies would miss out on any growth in that portion of the investable market.[144]

discussion paper, MSCI proposed to adjust the weights of stocks with unequal voting rights in its indices to reflect company level listed voting power in addition to free float. *Id. See also* MSCI, CONSULTATION ON THE TREATMENT OF UNEQUAL VOTING STRUCTURES IN THE MSCI EQUITY INDICES 7 (January 2018), https://www.msci.com/documents/1296102/8328554/Consultation_Voting+Rights.pdf/15d99336-9346-4e42-9cd3-a4a03ecff339 [https://perma.cc/MNC5-TH4C]; MSCI, SHOULD EQUITY INDICES INCLUDE STOCKS OF COMPANIES WITH SHARE CLASSES HAVING UNEQUAL VOTING RIGHTS? 12 (January 2018), https://www.msci.com/documents/1296102/8328554/Discussion+Paper_Voting+rights.pdf [https://perma.cc/E7FS-LB5E]; *Index Consultations*, MSCI (last visited Sept. 26, 2024), https://www.msci.com/index-consultations [https://perma.cc/2WYZ-JW3D]. Thus, MSCI proposed to include differential voting rights shares in its benchmark indices to maintain comprehensive coverage of the equity universe, while appropriately reflecting the reduced voting power characteristics of these securities in index weights.

[143] Press Release, MSCI, MSCI Will Retain the MSCI Global Investable Market Indexes Unchanged and Launch a New Index Series Reflecting the Preferences and Launch a New Index Series Reflecting the Preferences of Investors on Unequal Voting Structures (Oct. 30, 2018), https://www.msci.com/documents/10199/238444/PR_Voting_Results.pdf/0b548379-fbe7-71c7-b392-7140b2215cc9 [https://perma.cc/2VUY-JA9U]. Although MSCI was sympathetic with the principle of "one share one vote," it concluded that its benchmark equity indices "should aim to represent the broadest investment opportunity set available to international institutional investors based solely on the investability of the underlying markets. Investable market benchmarks should not be constrained by specific investor opinions, preferences or constraints including governance issues." *Id.*

[144] *Id.* MSCI chose instead to create alternative benchmark indices weighted by the value of the voting rights in the publicly traded shares for those investors who wanted to invest based on voting rights. But that was not a satisfying result for investors who hoped to use the leverage of index

Thus, the big three index providers each responded differently to entreaties from institutional investors to exclude dual-class companies from their benchmark indices. S&P excluded such companies going forward, but grandfathered dual-class companies already included in the S&P 500, such as Google. MSCI decided not to exclude dual-class companies at all. And FTSE Russell took a middle path, imposing a voting rights hurdle for eligibility to its benchmark equity indices.

Even though the S&P 500 is the most popular investment index in the world, S&P's effort to use the assumed market power of the S&P 500 to regulate entrepreneur's corporate governance choices was a failure. Despite the prospect of eternal exclusion from the S&P 500, more than 140 companies, including AirBnB, nonetheless chose to go public with a dual-class stock structure following the S&P 500 rule change in July 2017.[145] For the founders of those companies, the prospect of a capital pricing subsidy from index inclusion was not a sufficiently attractive benefit to outweigh the cost of losing control over their company post-IPO. In April 2023, S&P announced that it was reversing its policy excluding dual-class companies from the S&P500, ending its experiment in corporate governance regulation as a subsidizer denying capital pricing subsidies to firms that refused to comply with its index eligibility rules.[146]

S&P should have anticipated this failure. Despite the intuitive appeal of the notion that the ongoing increase in assets under management at passive index funds will perpetuate and increase the index inclusion effect, several

exclusion to convince start-up executives to give up dual-class stock structures before going public. Hirst & Kastiel, *supra* note 17.

[145] Hand-collected data based on information compiled by the Council on Institutional Investors and public filings (on file with the Columbia Business Law Review).

[146] Press Release, S&P Dow Jones Indices, S&P Dow Jones Indices Announces Results of S&P Composite 1500 Index Consultation on Share Class Eligibility Rules (Apr. 17, 2023), https://press.spglobal.com/2023-04-17-S-P-Dow-Jones-Indices-Announces-Results-of-S-P-Composite-1500-Index-Consultation-on-Share-Class-Eligibility-Rules [https://perma.cc/GRH2-7G62].

recent studies have shown that precisely the opposite trend is occurring. Increasing passive investment management is not increasing the index inclusion effect. On the contrary, the index inclusion effect appears to be diminishing to the vanishing point despite increased flows of capital into passive index fund investments.[147]

In their 2017 paper, *Extended Stock Returns in Response to S&P 500 Changes*, Nimesh Patel and Ivo Welch comprehensively review the S&P 500 index inclusion effect using more advanced abnormal return modelling techniques than were available for use in earlier papers. Utilizing these techniques to test the effect over longer time periods than prior papers, the authors conclude that the investor demand shift upon addition to the S&P 500 has always been temporary, not long-term, and firms should not expect

[147] Nimesh Patel & Ivo Welch, *Extended Stock Returns in Response to S&P 500 Changes*, 7 REV. ASSET PRICING STUD. 172, 173 (2017); Chan Wung Kim, Xiao Li & Timothy T. Perry, *Adaptation of the S&P 500 Index Effect*, 8 J. INDEX INV. 29, 33–34 (2017) (finding no evidence of a positive price drift between the announcement date and the effective date for newly added stocks from 2010 to 2013, nearly all of the price impact for newly added stocks occurred prior to the opening of the market on the day immediately following the announcement, and afterward stocks actually tended to drift downward); Konstantina Kappou, *The Diminished Effect of Index Rebalances* (Working Paper, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2971211 [https://perma.cc/PM99-CUV8] (finding there are currently no tradable abnormal returns between announcement and event dates, indicating smoother rebalancing by banks); Jan Schitzler, *S&P 500 Inclusions and Stock Supply*, 48 J. EMPIRICAL FIN. 341, 354 (2016) (finding that evidence from the most recent decade shows that any persistence of the index inclusion effect based on stock supply has disappeared); Cameron Scari, On the Changes to the Index Inclusion Effect with Increasing Passive Investment Management (2016) (B.S. dissertation, University of Pennsylvania), https://repository.upenn.edu/server/api/core/bitstreams/91f18b52-cbd5-4877-ab52-d427386da65e/content [https://perma.cc/BS7C-849D]. One explanation for the decline of the index inclusion effect while assets invested in index funds are growing dramatically is that the shift into passive index funds may primarily reflect movement from active funds benchmarked to an index to passive funds following the same index, with no net change in the demand for stocks included in indices. BLACKROCK, *supra* note 66, at 7.

meaningfully reduced costs of capital through index inclusion.[148] In contrast with prior studies, Patel and Welch also found that companies removed from the S&P 500 at the discretion of S&P (that is, not in connection with an M&A transaction or bankruptcy but rather, as a result of declining capitalization or other set-backs) actually experienced positive abnormal returns after an initial stock price setback.[149] More recent work by Greenwood and Sammon confirms the disappearance of the index inclusion effect for the S&P 500 despite the ongoing increase in the amount of assets held in S&P 500 funds.[150]

Market participants seemed to anticipate that index exclusion would not have adverse capital pricing effects for excluded companies. Following the FTSE Russell and S&P announcements of their exclusion policies, Andrew Baker and I conducted an event study, described in our paper, *Dual-Class Index Exclusion,* of the market prices of the shares of companies with multi-class structures on the dates surrounding the S&P announcement.[151] We found that none of the abnormal or cumulative abnormal returns in the trading prices of the shares of companies excluded from the S&P Composite 1500 were statistically significant at conventional levels, implying that exclusion would not be expected to

[148] Patel & Welch, *supra* note 147, at 173, 192, 207 ("[T]he data no longer suggests a cost-of-capital advantage for corporations when they are included in the S&P 500.").

[149] *Id.* at 173, 197.

[150] Greenwood and Sammon conclude that the disappearance of the index inclusion effect is a result of an increase in migrations from the mid-cap index to the S&P 500, an increase in the market's ability to provide liquidity to index changes, and possibly increased predictability of index changes. Robin Greenwood & Marco C. Sammon, *The Disappearing Index Effect* 3 (Nat'l Bureau Econ. Rsch., Working Paper No. 30748, 2022), https://www.nber.org/system/files/working_papers/w30748/w30748.pdf (concluding that the abnormal return on additions has fallen from an average of 3.4% in the 1980s and 7.6% in the 1990s to 0.8% from 2010 to 2020, and negative abnormal returns on deletions have fallen to 0.6% between 2010 and 2020). Sammon found a similar trend in the Russell 1000 and 2000 indices. *See* Chinco & Sammon, *supra* note 7, at 43.

[151] Winden & Baker, *supra* note 17.

materially adversely affect the cost of capital of excluded firms, and was not an adequate sanctioning mechanism to discourage multi-class stock listings.[152] Thus, we would expect to see little regulatory impact on corporate governance decisions by founders and their boards of directors.

2. ESG Index Inclusion

Due to the strong investor interest in ESG investment factors, executives may believe that being included in ESG indices such as the Dow Jones Sustainability Indicies ("DJSI") will generate financial benefits.[153] In fact, a number of studies suggest that management at many firms assume that external validation of their sustainability efforts can lead to higher corporate valuations and long-term value enhancement—and some of those studies suggest that ESG index inclusion leads to higher share prices.[154] They are not alone. Some investors also believe that companies satisfying ESG investment criteria can obtain lower costs of capital as

[152] *Id.* This result is consistent with Brest, Gilson and Wolfson's theory that it is very difficult to create governance incentives through the public capital markets.

[153] *See* Carlos & Lewis, *supra* note 111.

[154] John Peloza et al., *Sustainability: How Stakeholder Perceptions Differ from Corporate Reality*, 55 CAL. MGMT. REV. 74 (2012); Marc Orlitzky, Frank Schmidt & Sara Rynes, *Corporate Social and Financial Performance: A Meta-Analysis*, 24 ORG. STUD. 403 (2003) (concluding that executives understand the importance of sustainability to reputation but do not know how to use positive performance to differentiate themselves from competitors); Michael Robinson, Anne Kleffner & Stephanie Bertels, *Signaling Sustainability Leadership: Empirical Evidence of the Value of DJSI Membership*, 101 J. BUS. ETHICS, 493 (July 2011) (showing that addition to the DJSI results in a sustained increase in a firm's share price and concluding the benefits of inclusion outweigh the costs of complying with eligibility criteria); David J. Vogel, *Is There a Market for Virtue? The Business Case for Corporate Social Responsibility*, 47 CAL. MGMT. REV. 19 (Summer 2005) (finding little support for the claim that responsible firms are more profitable, but that corporate social responsibility makes business sense for some firms in some circumstances).

they are rewarded by investors for being "greener" than their peers.[155]

However, as discussed above, values-neutral investors can be expected to absorb most of the benefit from inclusion in or diminish the cost of exclusion from ESG indices to the extent such benefits and costs are inconsistent with the intrinsic value of the companies concerned. Thus, inclusion is unlikely to be a sufficient subsidy and exclusion is unlikely to be a sufficient cost to affect the choices of founders and/or managers. The economics should be similar to (but due to smaller amounts invested in ESG funds, even more attenuated than) inclusion in and exclusion from benchmark equity indices.

While some short-term studies in limited markets have suggested that inclusion in an ESG index can have positive effects for companies,[156] and exclusion from an ESG index can have negative price effects,[157] a more recent, broader study has cast doubt on the earlier studies. In a longitudinal financial event study of how investors react to the news about firms being added, deleted, or retained on the first globally representative sustainability index, the DJSI World Index from 1999 to 2015, Olga Hawn, Aaron K. Chatterji and Will Mitchell found evidence that investors do not consider additions to and deletions from ESG indices significant from an investment point of view.[158]

[155] PICTET ASSET MANAGEMENT, A SECULAR OUTLOOK 2018, 19 (2018).

[156] *See* Hartzmark & Sussman, *supra* note 107.

[157] Jonathan P. Doh, et al., *Does the Market Respond to an Endorsement of Social Responsibility? The Role of Institutions, Information and Legitimacy*, 36 J. MGMT. 1461 (2010) (concluding that deletion from the Calvert social index has an adverse effect on stock price of deleted firms).

[158] Olga Hawn, Aaron K. Chatterji & Will Mitchell, *Do Investors Actually Value Sustainability? New Evidence from Investor Reactions to the Dow Jones Sustainability Index (DJSI),* 39 STRAT. MGMT. J. 949 (2018) (examining investor reactions from 27 countries over 17 years to additions and deletions from the DJSI World Index and concluding DJSI events have only limited significance and/or materiality to investors, although there is some evidence that investors may be increasingly valuing continued listing in the DJSI).

On average, shareholders had a negative reaction to additions and continuations of listings in the first ten years of the study (1999–2009), but changed to a slightly positive reaction in the last five years (2010–2015),[159] although the effects are small (less than 1%) in all cases and the statistical significance is low for all but the negative result upon additions in the first five years (1999–2004) and the negative reactions to continuations in the first and second five-year periods. Additional regression analyses including relevant controls and comparisons to observationally equivalent firms beyond the index suggest that investor response to DJSI events is limited—there are no statistically significant cumulative abnormal returns in the market values of the firms affected by such events.[160]

Further regression results of the longitudinal DJSI study suggest that there is no market penalty paid by firms that are deleted from the ESG index.[161] On the other hand, it is

[159] The positive trend over time, though small in size and statistical significance, supports recent suggestions that evaluating sustainability is increasingly relevant for market valuation. *Id.* at 971 (citing McKinsey & Company, *When Sustainability Becomes a Factor in Valuation* (Mar. 23, 2017), http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/when-sustainability-becomes-a-factor-in-valuation.)

[160] Hawn et al., *supra* note 158, at 970–71. Like the Patel and Welsh study of the S&P 500, the Hawn, Chatterji and Mitchell study has been replicated and reconfirmed more recently. *See* Rodolphe Durand, Luc Paugam & Herve Stolowy, *Do Investors Actually Value Sustainability Indices? Replication, Development, and New Evidence on CSR Visibility*, 40 STRAT. MGMT. J. 1471 (2019) (finding no impact on stock price and trading volume incident to index changes but finding that additions to the DJSI lead to more analyst coverage of firms). *But see* Wanling Rudkin & Charlie K. Cai, *Information Content of Sustainability Index Recomposition: A Synthetic Portfolio Approach*, 88 INT'L REV. FIN. ANALYSIS 102676 (2023) (finding significant positive pre-announcement effects, as well as persistence of positive abnormal returns, for additions to the DJSI from 2005 to 2021, with a stronger affect for non-S&P 500 firms included in the DJSI, suggesting it is more important for firms with lower investor recognition).

[161] Hawn et al., *supra* note 158, at 972. *But see* Emil Lakkis, Real Effects of ESG Investing (unpublished manuscript) (on file with the Columbia Business Law Review) (finding that firms deleted from the MSCI ESG

possible that exclusion from an ESG index could have direct cost of capital consequences if it triggers a credit rating review. S&P has cited environmental risks as the main or contributing reason for 717 corporate rating revisions over a two-year period.[162] So there may be some indirect financial benefits from remaining in an ESG index based on the certifying role of the index. As discussed in Section II.A., it is this certifying role that may encourage corporate managers to satisfy index eligibility criteria.

3. Emerging Markets Index Inclusion

Governments of emerging markets countries could conceivably be willing to make changes to their financial markets rules necessary to obtain inclusion in an important emerging markets index if there were evidence that inclusion would deliver a cost of capital subsidy to the domestic companies listed on national stock markets in their country. The latest evidence from the financial literature, however, suggests that inclusion in emerging markets indices has price effects very similar to inclusion in developed market benchmark equity indices and ESG indices. In particular, there are no long-term capital cost benefits.

In a review of 17 reclassifications of countries into and out of MSCI's developed markets, emerging markets and frontier markets indices, Terence Burnham, Harry Gakidis and Jeffrey Wurgler found that, on average, the prices of stock in reclassified markets' substantially overshoot between the date the index change is announced and the effective date of

Leaders Index are more likely to increase toxic releases because they are subject to lower monitoring efforts by institutional investors).

[162] S&P Global Ratings, *How Environmental and Climate Risks Factor Into Global Corporate Ratings – An Update* (Nov. 9, 2017), https://www.spglobal.com/_assets/documents/ratings/research/how-environmental-and-climate-risks-and-opportunities-factor-into-global-corporate-ratings-an-update.pdf [https://perma.cc/A7WG-ZYT6].

the change.[163] The stock prices of companies listed in a country included in an index fall when the country moves from an index with more benchmarked ownership to one with less (such as emerging markets to frontier markets), and vice-versa, but the prices typically revert within a year.[164] While this is a significantly longer reversal time than in developed market indices such as the S&P 500, it is nonetheless notable that capital eventually returns to stocks abandoned by emerging markets indices and resettles corporate stock prices at intrinsic value.

This study suggests that any willingness of emerging market economy governments to make regulatory changes necessary to be included in emerging markets indices are based on a hope that local companies will obtain a cost of capital benefit. However, as discussed in Section III.C. below, it is possible that the prospect of attracting "new" capital, at least in the initial instance, when a market is opening to index investors for the first time, has appeal to finance ministers of emerging markets countries even in the absence of a cost of capital subsidy for domestic companies.

B. Certification Possibilities in ESG Indexes

While index investing has grown rapidly in recent years, ESG investing, including through ESG index funds, has grown even faster.[165] Investor interest in ESG investing has been driven by a combination of global alarm about climate change and a burgeoning academic literature suggesting that ESG investment strategies may outperform traditional investment strategies.[166] However, because ESG indices are

[163] Terence C. Burnham, Harry Gakidis & Jeffrey Wurgler, *Investing in the Presence of Massive Flows: The Case of MSCI Country Reclassifications*, 74 FIN. ANALYSTS J. 77 (2018).

[164] *Id.*

[165] *See supra* Section I.C.2.

[166] Many asset managers view ESG investment as primarily a client-relations issue and some are hesitant to speak about any efforts they make for fear of being criticized for either insufficient efforts or, in the case of

subject to the same public capital markets dynamics as benchmark indices, inclusion in an ESG index is unlikely to provide significant cost of capital benefits for included firms.[167] Nonetheless, it is possible that corporate managers will be motivated to satisfy ESG index eligibility criteria as a result of the rapidly increasing investor interest in ESG factors, under the incorrect impression that they can obtain a lower cost of capital through ESG index inclusion.[168] Alternatively, firms may believe that inclusion in a prominent ESG index would provide reputational benefits sufficient to justify efforts to satisfy the eligibility criteria for inclusion or to avoid exclusion. ESG index inclusion might be perceived as a credible signal of commitment to ESG goals.

ESG-skeptical clients, wrong efforts. Michael Cappucci, *The ESG Integration Paradox*, 30 J. APPLIED CORP. FIN. 22 (2018).

[167] *See supra* Section III.A.2. *See also*, Jan Fichtner, Robin Jasper & Johannes Petry, *Mind the ESG Capital Allocation Gap: The Role of Index Providers, Standard-Setting, and "Green" Indices for the Creation of Sustainability Impact*, 18 REGULATION & GOVERNANCE 479 (2024) (finding that broad ESG indices, which dominate ESG investing, do not meaningfully facilitate sustainability, although "dark green" indices might promote more capital allocation to sustainability).

[168] A recent study finds that firms receiving MSCI ESG ratings downgrades experience reductions in ownership by ESG funds that create negative abnormal returns in a one-year holding period. Florian Berg, Florian Heeb & Julian Kolbel, The Economic Impact of ESG Ratings (working manuscript) (on file with the Columbia Business Law Review), https://ssrn.com/abstract=4088545. *See also*, Rients Galema & Dirk Gerritsen, ESG Rating Score Revisions and Stock Returns (unpublished manuscript) (on file with the Columbia Business Law Review) (finding that negative ESG rating revisions lead to adverse stock price adjustments in the long term, showing annualized negative abnormal returns of approximately 3%), https://ssrn.com/abstract=4218969; Sahand Davani, The Power of ESG Labels (unpublished manuscript) (on file with the Columbia Business Law Review) (finding that firms with high MSCI ESG scores and better ESG labels and firms with low MSCI ESG scores and worse ESG labels have higher ownership among ESG institutional investors compared to similar firms with worse (better) ESG labels), https://ssrn.com/abstract=4889856. *But see*, Thomas Cauthorn, Maurice Dumrose, Julia Eckert, Christian Klein & Bernhard Zwergel, *Rating Changes Revisited: New Evidence on Short-Term ESG Momentum*, 54 FINANCE RESEARCH LETTERS (2023) (finding that ratings changes do not significantly affect stock prices in the short-term).

Corporate managers have noticed the trend towards ESG investing.[169] The number of public companies reporting ESG information grew from fewer than 20 in the early 1990s to more than 10,000 by 2020.[170] By 2023, 99% of S&P 500 companies were reporting ESG information.[171] According to KPMG, the GRI guidelines dominate global sustainability reporting, with 63% of the N100 (largest 100 companies by market capitalization in each country) referencing the GRI guidelines when reporting ESG measures, and 75% of the 250 largest companies globally referring to the guidelines.[172]

Sustainability has become one of the most important components of corporate reputation, which is a valuable asset of the firm—building brand potential.[173] Some studies have

[169] Corporate managers are increasingly aware of investor interest in ESG matters, and therefore at least some of them are increasingly interested in their ESG performance. From 2014 to 2018, the number of inquiries to MSCI from companies included in the MSCI ACWI Index regarding their ESG assessments almost tripled, suggesting that companies are much more interested in their ESG ratings than they have been in the past. *See* LINDA-ELING LEE & MATT MOSCARDI, MSCI ESG RESEARCH LLC, MSCI ISSUE BRIEF: 2018 ESG TRENDS TO WATCH 19 (2018).

[170] David Cifrino, *The Rise of International ESG Disclosure Standards*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (June 23, 2023) https://corpgov.law.harvard.edu/2023/06/29/the-rise-of-international-esg-disclosure-standards/ [https://perma.cc/C742-3J7K].

[171] CENTER FOR AUDIT QUALITY, https://www.thecaq.org [https://perma.cc/W3DY-3XQV] (last visited Sept. 26, 2024).

[172] KPMG, THE KPMG SURVEY OF CORPORATE RESPONSIBILITY REPORTING 2017, at 28 (2018), https://assets.kpmg.com/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf [https://perma.cc/567A-BSP6]. These percentages have grown over the last few years. KPMG reports that 68% of the N100 and 78% of the G250 are using GRI guidelines as of 2022. KPMG, SURVEY OF SUSTAINABILITY REPORTING 2022, at 24 (2022), https://assets.kpmg.com/content/dam/kpmg/se/pdf/komm/2022/Global-Survey-of-Sustainability-Reporting-2022.pdf [https://perma.cc/B7ZF-735H].

[173] Peloza et al., *supra* note 154, at 74; James O'Toole & David Vogel, *Two and a Half Cheers for Conscious Capitalism*, 53 CAL. MGMT. REV. 60, 62 (2011); John Peloza, *The Challenge of Measuring Financial Impacts from Investments in Corporate Social Performance*, 35 J. MGMT. 1518, 1529 (2009).

indicated that there is reputational, and possibly market, value in being included in ESG indices.[174] Poor ratings shame firms and threaten their legitimacy.[175] Thus, it is possible that corporate executives may covet inclusion in ESG indices for reputational reasons. They may perceive ESG index inclusion as a means of sending credible signals about their sustainability activities to financial and consumer markets.[176] A Google search of "Dow Jones Sustainability Index" reveals dozens of press releases from U.S., Japanese and European firms issued when they were included in the DJSI, including several firms noting that they have been included in the index for a number of years—DJSI inclusion appears to be a reputational badge of honor.[177] Several major corporations,

[174] *See, e.g.*, Isabel Costa Lourenço et al., *The Value Relevance of Reputation for Sustainability Leadership,* 119 J. BUS. ETHICS 17, 25 (2014); Craig Mackenzie, William Rees & Tatiana Rodionova*, Do Responsible Investment Indices Improve Corporate Social Responsibility? FTSE4Good's Impact on Environmental Management,* 21 CORP. GOVERNANCE, 495, 510 (2013*);* Michael Robinson, Anne Kleffner & Stephanie Bertels, *Signaling Sustainability Leadership: Empirical Evidence of the Value of DJSI Membership,* 101 J. BUS. ETHICS 493, 503–04 (2011); Chatterji & Toffel, *supra* note 102, at 918 (noting that firms respond positively to environmental ratings). *But see*, *e.g.*, Charles H. Cho et al.*, Do Actions Speak Louder than Words? An Empirical Investigation of Corporate Environmental Reputation,* 37 ACCT., ORG. & SOC'Y 14, 23 (2012); Steven Scalet & Thomas F. Kelly*, CSR Rating Agencies: What is Their Global Impact?,* 94 J. BUS. ETHICS 69, 77 (2009) (finding that being dropped from a corporate social responsibility ranking appears to do little to encourage firms to acknowledge and address problems related to their social and environmental performance).

[175] Chatterji & Toffel, *supra* note 102, at 918. *See also* Stavros Gadinis & Christopher Havasy, *The Quest for Legitimacy: A Public Law Blueprint for Corporate Governance*, 57 U.C. DAVIS L. REV. 1581, 1582 (2024), https://lawreview.law.ucdavis.edu/sites/g/files/dgvnsk15026/files/2024-02/57-3_Gadinis_Havasy.pdf [https://perma.cc/V4PX-AEB3].

[176] Douglas A. Schuler & Margaret Cording, *A Corporate Social Performance-Corporate Financial Performance Behavioral Model for Consumers,* 31 ACAD. MGMT. REV. 540, 542 (2006).

[177] The influence of index inclusion or exclusion from a corporate or management reputation perspective will depend upon the prominence of the index. When there are many ESG indices with many different eligibility criteria for inclusion, the incentive to satisfy the eligibility criteria for any

such as Hewlett-Packard, Ford Motor Company, and State Street have expressed the aspiration to be added to or continue being included in the DJSI.[178]

Thus, even if inclusion in a heavily followed ESG index does not provide cost-of-capital incentives for corporate executives to adopt the policies or governance structures required for index inclusion, it is possible the prospect of index inclusion influences executive choices for reputational reasons. However, in order to enhance reputation, any certification must be both credible and relevant.[179] Unfortunately, ESG index eligibility criteria are subject to some of the same questions about consistency and credibility that plague the ESG ratings community.[180] If that is not

one of them is reduced because the signaling power of any one index is reduced.

[178] Carlos & Lewis, *supra* note 111, at 140. For some other noteworthy social-environmental indices, *see ESG Indices,* MSCI (last visited Sept. 26, 2024), https://www.msci.com/esg-indices [https://perma.cc/38VW-GFEC]; *Euronext Eurozone ESG Large 80 Index*, EURONEXT, https://live.euronext.com/en/product/indices/FR0013468832-XPARdhanr [https://perma.cc/MM2R-H63L] (last visited Nov. 14, 2024); *Jantzi Social Index,* MORNINGSTAR INDEXES, https://indexes.morningstar.com/indexes/details/jantzi-social-FS0000ILMP?currency=USD&variant=TR&tab=overview [https://perma.cc/94WG-M52V] (last visited Sept. 26, 2024). The fact that the FTSE4Good and DJSI indices are not merely ranking exercises but also act as a central source of information for financial decisions makes them more influential.

[179] *See supra* Section II.B.

[180] Szilárd Erhart, *Take It with a Pinch of Salt – ESG Rating of Stocks and Stock Indices*, 83 INT'L REV. FIN. ANALYSIS 102308 (2022) (finding weak correlation of ratings among the same stocks in different stock exchange indices due to different methodologies among major ESG rating agencies (Refinitiv & Sustainalytics)); Sonakshi Agrawal, Lisa Yao Liu, Shiva Rajgopal, Suhas A. Sridharan, Yifan (Eva) Yan & Teri Lombardi Yohn, *ESG Ratings of ESG Index Providers* (Colum. Bus. Sch. Rsch. Paper No. 4468531, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4468531# [https://perma.cc/CV8Q-P4XP] (finding that ESG rating agencies with strong index licensing incentives tend to issue higher ESG ratings for firms with better stock return performance relative to raters with weaker licensing incentives).

successfully addressed, the value of ESG index inclusion decisions may be low.

In addition to assessing the value of the index inclusion certification, one must consider the cost of satisfying the criteria. Despite the significant attention paid to ESG issues by institutional investors in recent years, it is not clear whether corporate managers are sufficiently concerned about the reputational benefits of inclusion in ESG indices to make costly managerial changes. If the costs of sustainability measures outweigh the benefits of ESG index inclusion, corporate managers are unlikely to take steps to satisfy the eligibility criteria for index inclusion and the regulatory impact of ESG indices may be limited.[181] Firms with lower-cost improvement opportunities are more likely than others to make the investments needed to improve their ratings.[182]

Corporate management responses to ESG index addition and deletion choices is an understudied area, but there is one helpful empirical study investigating that dynamic.[183] When FTSE engaged with firms included in the FTSE4Good Index that were likely to be deleted as a result of new environmental

[181] Scholars have argued that firms take beyond-compliance actions (such as taking steps to improve their ESG scores) if the ESG actions either (1) improve processes that otherwise lead to sub-optimal financial results (e.g. efficient energy use) or (2) produce reputational gains that outweigh the associated costs. *See, e.g.*, Neil Gunningham, Robert A. Kagan & Dorothy Thornton, *Social License and Environmental Protection: Why Businesses Go Beyond Compliance,* 29 L. & SOC. INQUIRY 307 (2004) (investigating why some factories emit pollution at levels lower than legal limits and otherwise go beyond mere compliance with regulatory requirements). The interest in reputation improvement is probably primarily rooted in economic interests as opposed to altruism. Forest L. Reinhardt, Robert N. Stavins & Richard H. K. Vietor, *Corporate Social Responsibility Through an Economic Lens,* 2 REV. ENV'T ECON. POL'Y 219, 232 (2008) ("The bulk of the available evidence suggests that most firms view socially responsible actions in the same way that they view more traditional business activities, such as advertising and R&D. Instead of altruistically sacrificing profits, they engage in a more limited but more profitable set of socially beneficial activities that contributes to their financial goals.").

[182] Chatterji & Toffel, *supra* note 102, at 918, 920–22.

[183] Mackenzie et al., *supra* note 174, at 500.

management requirements added to the eligibility criteria in 2002, 49% of the 377 firms engaged by the index provider made the necessary changes while only 24% of 652 firms not engaged satisfied the new requirements.[184] Thus, the threat of deletion from the index and the active engagement process by the indexer appears to have had a material impact on firm choices, although it isn't clear what other costs and benefits were weighed by management in the effort to be compliant with the eligibility criteria.[185]

A more recent paper suggests that corporate managers may engage in ESG ratings management in response to ratings changes.[186] Firms' reported performance on ESG criteria improved when raters placed more emphasis on the criteria in their ratings. The authors found no evidence, however, that reported performance led to real changes in firms' ESG behavior, suggesting that improvements were intended to gain benefits from ratings increases without stronger commitments to sustainability. These efforts may ultimately backfire since efforts to obtain and publicize certifications can be perceived as hypocritical if they are inconsistent with other corporate actions.[187]

Finally, one important byproduct of ESG indexing may be the use of ESG index status in shareholder engagement

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[184] *Id.* at 501.

[185] *See also*, Florian Kissel & Jan Schnitzler, Do Firms Care About ESG Ratings? Evidence from Refinitiv's Scoring Adjustment (unpublished manuscript) (on file with the Columbia Business Law Review) (finding that firms with large negative ESG score revisions from Refinitiv showed significant subsequent improvements in their scores, typically by professionalizing ESG disclosures and processes, introducing sustainability reports, establishing CSR committees, and participating in ESG surveys), https://ssrn.com/abstract=4912669. *But see*, Berg et. al., *supra* note 168 (finding that there were no significant changes in firms' capital expenditures following ESG ratings upgrades or downgrades, even where those changes caused changes in abnormal returns in firm stock prices, and that firms only changed their practices after changes in governance ratings).

[186] Jess Cornaggia & Kimberly Cornaggia, ESG Ratings Management (unpublished manuscript) (on file with the Columbia Business Law Review), https://ssrn.com/abstract=4520688.

[187] Carlos & Lewis, *supra* note 111, at 132–33.

discussions between managers and shareholders. In this regard, index providers act as a source of third-party assessment or certification, which gives them some regulatory, or governance, influence. Both management and shareholders can conceivably utilize ESG indexing status as a rhetorical device in shareholder engagement around ESG issues. If a firm is included in prominent ESG indices, management can point to that fact if questioned by shareholders about the firm's ESG record. If a firm is excluded or deleted from an important ESG index, shareholders can point to that fact to demand sustainability improvements from management.

To the extent that corporate managers are making improvements in their ESG postures, it is not clear whether that is due to incentives related to inclusion in ESG indices or responses to the threat of active engagement or actual active engagement from institutional investors. In the last few years, investors focused on ESG issues have been proposing more shareholder resolutions on ESG matters and major institutional investors have started voting for some of them. The desire to avoid being on the wrong side of a successful shareholder resolution may be a stronger incentive for management to make operational changes than inclusion in one or more ESG indices.

C. Gatekeeping Success in Emerging Markets

The key to private regulators acting as gatekeepers to enforce compliance with expected norms is the presence or absence of market power.[188] As noted in Section I.D., index funds held 18% of all the equity in U.S. capital markets at the end of 2022. That may seem like a large number when it comes to corporate votes. However, for purposes of establishing market power, that is too small. Index providers do not have the power to act as gatekeepers to any otherwise unavailable critical source of capital in the United States and other advanced industrialized economies with deep, global capital

[188] *See supra* Section II.C.

markets. However, in the case of emerging markets, it is possible for index providers to play a gatekeeping role with respect to large pools of foreign capital that would not be available to the emerging market country without being included in an emerging markets index. The financial press has expressed concerns that emerging markets indices lead to large swings in capital available to different emerging market economies as countries are included and removed from emerging markets indices.[189]

In the case of sovereigns, the calculus is whether there is a durable increase in the amount of foreign capital invested in domestic companies due to index inclusion. The influence of inclusion in emerging market indices may depend on the extent to which the affected economies have alternative sources of capital. In other words, how important to the economy are the capital flows from index investors. In the absence of index funds, it is possible that asset allocation decisions would be executed via an alternative means, such as individual stocks or active funds, to the extent available in different markets. Drivers for asset allocation decisions include macroeconomic developments and interest rate policy, not just the choice of equity investment options.[190]

There have been several examples of countries changing their capital markets rules and related laws and infrastructure to satisfy the eligibility criteria for inclusion in emerging markets indices. In Section I.C.3., I describe emerging markets indices and the eligibility criteria used by the indexers to determine which country should be in which index. Saudi Arabia received multi-billion dollar flows of

[189] *Citi Says Emerging Markets Increasingly Reliant on ETF Flows*, BUS. TIMES (Aug. 17, 2017) http://www.businesstimes.com.sg/banking-finance/citi-says-emerging-markets-increasingly-reliant-on-etf-flows [https://perma.cc/FDS2-2JA2]; Robin Wigglesworth & Adam Samson, *EM Worries over Swelling Influence of ETF Flows*, FIN. TIMES (Aug. 16, 2017), https://www.ft.com/content/6f0350be-8295-11e7-a4ce-15b2513cb3ff [https://perma.cc/97QK-VG5F]; Chris Flood, *Record ETF Inflows Fuel Price Bubble Fears*, FIN. TIMES (Aug. 13, 2017) https://www.ft.com/content/8720939e-7e82-11e7-9108-edda0bcbc928 [https://perma.cc/EFT6-47K5].

[190] BLACKROCK, *supra* note 66.

foreign investment into its domestic capital markets in 2019 following successful negotiations with the three big index providers to include the country in their respective emerging markets indices pursuant to which it agreed to make significant changes in market access and liquidity.[191] China has also received massive foreign capital flows into its domestic equity capital markets in recent years. I describe the iterative process through which domestically listed companies in China gained inclusion in major emerging markets indices below.

1. Including China A-shares in Emerging Markets Indices

a. Background

The market for equity investments in Chinese companies is byzantine. Chinese companies issue different classes of equity shares depending on where they are incorporated, where they are listed, and which investors are allowed to own them.[192] Chinese companies incorporated and listed inside the People's Republic of China (PRC) issue A-shares, B-shares and H-shares. China A-shares are listed on domestic

[191] Steve Johnson, *Landmark for Saudi Stocks as Index Providers Become Kingmakers*, FIN. TIMES (Mar. 20, 2019), https://www.ft.com/content/69f5a8ec-4a3a-11e9-bbc9-6917dce3dc62 [https://perma.cc/NGM5-VRD3].

[192] The shares of Chinese companies incorporated and listed outside the PRC are generally referred to as "Red Chips," "P Chips," "S Chips," or "N Shares." Red Chips and P Chips are listed in Hong Kong and trade in Hong Kong dollars. Red Chips are substantially owned (at least 35%) by PRC state entities and have most of the revenue and assets derived from the PRC. Although incorporated outside the PRC, P Chips are controlled by PRC companies or individuals, originated in the PRC and have most revenues or assets in the PRC. S Chips are listed in Singapore and trade in Singapore dollars and N Shares are listed in the United States and trade in U.S. dollars. FTSE RUSSELL, GUIDE TO CHINESE SHARE CLASSES 3 (Sept. 2023), https://www.lseg.com/content/dam/ftse-russell/en_us/documents/policy-documents/guide-to-chinese-share-classes.pdf [https://perma.cc/9HJZ-SDRP].

exchanges in the PRC and trade in Chinese yuan. For many years they could only be traded by residents of the PRC. Now, they can also be traded by a Qualified Foreign Institutional Investor (QFII), by a Renminbi Qualified Foreign Institutional Investor (RQFIII) or through Stock Connect programs connecting the Hong Kong Stock Exchange with domestic exchanges in the PRC. B Shares are listed in the PRC and trade in U.S. dollars or Hong Kong dollars. They can be traded by non-residents of the PRC and residents of the PRC who have appropriate foreign currency dealing accounts. H-shares are listed in Hong Kong and trade in Hong Kong dollars. There are no restrictions on who can trade H-shares.

China's domestic stock market—the market for A-shares—is the second largest equity market by total market capitalization globally after the United States.[193] The Shanghai Stock Exchange is the fourth largest in the world, with a market capitalization of USD $5.2 trillion. The Shenzhen Stock Exchange is the eighth largest in the world, with a market capitalization of USD $3.7 trillion as of 2018.[194] Foreign investors have been cautiously interested in obtaining more access to the domestic Chinese markets as they have matured and grown.

But getting access to the domestic Chinese stock market was complicated. The China Securities Regulatory Committee (CSRC) supervises the stock exchanges, which are responsible for direct supervision over securities of listed companies trading on the exchanges' platforms. For foreign investors, approval of status as a QFII or a RQFII is determined by the

[193] PREPARING FOR CHINA'S INCLUSION 2.

[194] Kenneth Rapoza, *China A-shares Debut Still Rather Boring – and Risky*, FORBES (June 6, 2018, 9:49 AM), https://www.forbes.com/sites/kenrapoza/2018/06/06/china-a-shares-debut-still-rather-boring-and-risky/ [https://perma.cc/8WQ4-Y29P] (citing World Federation of Exchanges); Christopher Dhanraj, *The Case for Chinese Equities: A Shares Inclusion Update*, SEEKING ALPHA (Apr. 29, 2018, 5:35 A.M. EST), https://seekingalpha.com/article/4167304-case-for-chinese-equities-shares-inclusion-update?source=content_type%3Areact%7Csection%3ARelated (on file with the Columbia Business Law Review) (noting that China's domestic capital markets are the second largest in the world, as of April 2018).

CSRC, and investment quotas are set by the State Administration of Foreign Exchange (SAFE). In 2015, prior to the inclusion of Chinese A-shares in global emerging markets indices, qualifying as a QFII or a RQFII was challenging.[195]

b. Negotiating with FTSE and MSCI

The Chinese government lobbied FTSE and MSCI for years to have its domestic equities included in their benchmark emerging markets indices.[196] Recognition would help establish Shanghai and Shenzhen as global financial centers. China market experts noted that it would also put pressure on Chinese corporate managers to adopt global best practices in disclosure and insider transactions.[197] They also suggested that the Chinese government hoped to obtain foreign capital to replace domestic capital that had moved overseas. Dozens of funds, including the USD $68 billion iShares Core MSCI Emerging Markets ETF (EEM), track or are benchmarked to the MSCI's Emerging Markets Indices. As a result, fund managers were expected to invest billions into the Chinese equities traded on China's domestic Shanghai and Shenzhen exchanges, raising China's profile in global capital markets.[198]

FTSE and MSCI worked with the Chinese government over several years to agree to terms pursuant to which China

[195] To obtain a qualification as a QFII or a RQFIII investors were required to (1) apply for a license from the CSRC, (2) apply for an investment quota after obtaining a license, (3) establish a domestic PRC trading account, and (4) designate a local broker after injecting capital in the local trading entity. Eddie Pong, Jamie Perrett & Edwin Chan, *Preparing for China's Inclusion in Global Benchmarks*, 5 J. INDEX INV. 33 (2014). As of March 2015, there were still many restrictions on the approval process, lock-up period, and capital repatriation for foreign investors in China A-shares. Additionally, there were no clear rules guiding the quota size granted to successful applicants. PREPARING FOR CHINA'S INCLUSION 10–11.

[196] Keith Bradsher & Alexandra Stevenson, *China Will Be Part of a Popular Stock Index, Opening the Door to Foreign Money*, N.Y. TIMES (June 20, 2017) (on file with the Columbia Business Law Review).

[197] *Id.*

[198] Gondo, *supra* note 53.

A-shares could meet the eligibility requirements for inclusion in FTSE's and MSCI's emerging markets indices. The primary issues negotiated were (1) market access; (2) capital mobility;[199] (3) settlement and clearing systems; (4) stock market regulatory monitoring;[200] and (5) corporate governance issues, including transparency.[201] With respect to market access, the Chinese government increased the ownership quotas for QFIIs and RQFIIs and established direct trading links between the Hong Kong Exchange and the Shanghai and Shenzhen exchanges that did not require QFII or RQFII qualification for trades through the Hong Kong Exchange.[202] At the Boao Forum on April 10, 2018, Chinese

[199] This was primarily an issue of capital repatriation for foreign investors. PREPARING FOR CHINA'S INCLUSION 9.

[200] Foreign investors were concerned about the frequency with which the Chinese government instituted voluntary trading suspensions to stabilize trading. Kate Beioley, *Passive Investors No Choice but to Hold China Amid Rising US Tensions*, FIN. TIMES (May 2, 2018), https://www.ft.com/content/b198c9da-4c85-11e8-8a8e-22951a2d8493 [https://perma.cc/8F8C-LA78]. Market volatility in China's domestic stock markets related in part to the fact that they were dominated by retail investors, who tended to be more skittish than institutional investors. James Kynge, *MSCI Warns of Investors Facing Challenges over China A-shares*, FIN. TIMES (May 17, 2018), https://www.ft.com/content/ad7f5aec-599d-11e8-bdb7-f6677d2e1ce8 [https://perma.cc/2WLN-B4F3]. The government suspended trading in hundreds of stocks during a global market rout in 2015 and 2016, preventing investors from trading to stem further losses. As MSCI began including Chinese A-shares in its emerging markets indices, individual companies with an undue number of trading suspensions were excluded from the initial constituents. John Authers, Opinion, *China A-shares Offer Conflicting Bets over Time*, FIN. TIMES (May 16, 2018) https://www.ft.com/content/dca6a064-58e9-11e8-bdb7-f6677d2e1ce8 [https://perma.cc/VU9H-4ZDW].

[201] Key areas of concern for corporate governance in China included compensation and board composition issues (e.g., the absence of an independent chair and an independent board majority), controlling shareholder and related party transaction conflicts, and limited shareholder protection rights. MSCI, CORPORATE GOVERNANCE IN CHINA, at 2 (Sept. 2017), https://www.msci.com/documents/10199/1d443a3d-0437-4af7-aa27-ada3a2655f6d [https://perma.cc/EN33-D6MN].

[202] As an initial step towards liberalization, the Chinese government significantly increased the number of licenses and the total quota of trades available starting in early 2012, but access remained limited and

President Xi Jinping announced a number of policy reforms, including widening foreign access to Chinese financial markets by raising foreign equity caps, easing restrictions on foreign financial institutions and reducing limits on foreign investment in manufacturing industries.[203] To obtain inclusion of A-shares at 100% of their market capitalization, China would have to abolish its quota system for foreign ownership of Chinese equities, fully liberalize its capital mobility restrictions, and align international accessibility standards.[204]

Ultimately, FTSE Russell and MSCI agreed to a phased inclusion of China A-shares in their emerging markets indices, increasing the percentage of the total China A-shares market capitalization that would be included in their emerging markets indices over time.[205] By August 2020, the

cumbersome. Pong et al., *supra* note 195, at 35–36. ,. From the end of December 2011 to the end of March 2015, the QFII and RQFII quota available to foreign investors increased from USD $30 billion to USD $150 billion and from RMB 20 billion (USD $3.2 billion) to RMB 690 billion (USD $111 billion), respectively, and the total quota approved quadrupled to USD $125.3 billion. PREPARING FOR CHINA'S INCLUSION 5. To promote liquidity and grant more unrestricted access to domestically listed China A-shares, the Chinese authorities initiated the Shanghai-Hong Kong Stock Connect program in November 2014, and the Shenzhen-Hong Kong Connect in December 2016. Pong et al., *supra* note 195, at 36; Gondo, *supra* note 53; Bernice Napaoh, *MSCI Gets Ready to Add China A-shares to Select Indices*, THINKADVISOR (Mar. 19, 2018, 11:13 AM), https://www.thinkadvisor.com/2018/03/19/msci-gets-ready-to-add-china-a-shares-to-select-indexes/ [https://perma.cc/NK8Y-UZCL]. The QFII and RQFII quota schemes do not apply to purchases made through the Stock Connect programs, so all foreign investors can acquire interests in domestic Chinese stocks through brokers in Hong Kong, even without a QFII or RQFII license. The December 2016 expansion of the Stock Connect program to include Shenzhen-traded shares provided the breakthrough that global investors were seeking—a market that afforded open accessibility to all investors, albeit with daily quotas.

203 Chris Dhanraj, *The Case for Chinese Equities: MSCI A-Shares Inclusion Update*, BLACKROCK (Apr. 2018).

204 *Id.*

205 Bradsher & Stevenson, *supra* note 196. MSCI, for example, started by including 235 large-cap A-shares equities at 2.5% of their market capitalization on May 18, 2018, and increased it to 5% on August 18, 2018.

MSCI emerging markets index included 20% of the market value of A-shares in the Chinese domestic stock markets, and they comprised 5.1% of the total market value of the emerging markets index.[206]

c. Benefit of the Bargain

It appears that the Chinese authorities have obtained the benefit of their bargain with the global index providers. Significant additional flows of foreign capital entered the Chinese domestic stock markets following the decision of the index providers to include Chinese A-shares in their emerging markets indices. This is primarily a question of doing the math. If the MSCI Emerging Markets Index is used by funds with more than USD $1.3 trillion in assets under management, and the composition of the index is changed so that Chinese stocks represent 20% of the total market value

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MSCI, CONSULTATION ON FURTHER WEIGHT INCREASE OF CHINA A SHARES IN THE MSCI INDEXES 7 (Dec. 2018), https://www.msci.com/documents/1296102/8328554/Consultation_on_China_A_Shares_Inclusion_Sep_2018.pdf/a015ebd8-fb4b-2337-dec7-886556f12aa4 [https://perma.cc/C7LK-FEXE]; John Authers, Opinion, *China A-shares Offer Conflicting Bets over Time*, FIN. TIMES (May 16, 2018) https://www.ft.com/content/dca6a064-58e9-11e8-bdb7-f6677d2e1ce8 [https://perma.cc/VU9H-4ZDW]. If 50% of the A-shares were included, they would account for 9% of the Emerging Markets Index, and at 100% inclusion (by market capitalization), China A-shares would have represented 17% of the total value of the index, and all Chinese stocks, including those listed overseas (e.g., in Hong Kong, New York, and Singapore), would exceed 40% of the index. Dhanraj. Some commentators have suggested that buying a fund tracking the MSCI Emerging Markets Index is increasingly like buying China with a hedge to other emerging markets. Rapoza, *supra* note 194. When Chinese stocks were first included in the MSCI Emerging Markets Index in September 1996, they accounted for just 0.46% of the benchmark's value. As of March 2018, Chinese stocks made up 29.9% of the index's total market cap. Jackie Choy & Ben Johnson, *The Evolution of the Chinese Market*, MORNINGSTAR (July 11, 2018), https://www.morningstar.com/funds/evolution-chinese-market [https://perma.cc/Y5EW-BQRK].

[206] Zhen Wei, *China A Shares: What Have We Learned?*, MSCI (Oct. 30, 2020), https://www.msci.com/www/blog-posts/china-a-shares-what-have-we/02164045217 [https://perma.cc/HF6U-GNRY].

of the stocks in the index, there should be massive flows of capital into Chinese stocks and out of other emerging markets stocks as the funds rebalance their portfolios to reflect the new constituents of the index.[207] Economists have confirmed that is what has happened.[208] This is the expected result in a situation in which asset managers and investors that invested in index funds rebalance the asset mix in their portfolio to match or mirror the new basket of stocks included in the index as a result of the addition of the China A-shares. Inclusion of the China A-shares reduces the portion of the value of all the stocks in the index represented by stocks from other emerging markets.[209] That effect can be even more pronounced when managers of active funds benchmarked to the index also rebalance their portfolio to reflect the change.[210]

New capital may not have been the only benefit of global index inclusion for Chinese domestic stock markets. There is also evidence that inclusion in the MSCI emerging markets

[207] *Making China Simple Again*, MSCI (citing eVestment, Morningstar and Bloomberg reports of March 31, 2018) (accessed by the author on X 2023) (on file with the Columbia Business Law Review). This does not consider the impact of other emerging markets indices and index funds, some of which have already incorporated some China A-shares. FTSE Emerging Markets All Cap China A Inclusion Index—the market capitalization weighted benchmark of Vanguard Emerging Markets Stock Index Fund, including its ETF share class (Vanguard FTSE Emerging Markets ETF, VWO)—transitioned into A-shares beginning in 2015. *China's Markets Continue to Emerge*, VANGUARD (Aug. 25, 2017) (on file with the Columbia Business Law Review).

[208] Stefano Antonelli, Flavia Corneli, Fabrizio Ferriani & Andrea Gazzani, *Benchmark Effects from the Inclusion of Chinese A-shares in the MSCI EM Index*, 216 ECON. LETTERS 1 (2022).

[209] *Id.*

[210] *Id. See also* Rapoza, *supra* note 194; Bradsher & Stevenson, *supra* note 196; JPMorgan predicted that the addition of China A-shares to the MSCI Emerging Markets Index would add about US$40 billion of capital inflows to companies listed on China's domestic stock markets, including US$6.6 Billion of passive index investments and active flows as much as five times that amount. Zhang Yu & Denise Jia*, China Shares in Emerging Markets Index Will Attract $40 Billion: JPMorgan*, CAIXIN GLOBAL (May 7, 2018, 2:24 PM), https://www.caixinglobal.com/2018-05-08/china-shares-in-emerging-markets-index-will-attract-40-bln-jpmorgan-101245177.html [https://perma.cc/L6T2-KDK7].

index reduced the idiosyncratic risk of the China A-shares stocks that were selected for inclusion in the index, reducing the volatility of their stock prices and having a stabilizing effect on the stock market as a whole.[211] That may also be considered a benefit from the perspective of the Chinese authorities who agreed to liberalization measures to satisfy the index eligibility requirements.

CONCLUSION

The growth of index investing leads us to question the influence of index providers, who write the rules for indexing, in the global economy. Many ascribe significant power to index providers on the assumption that index inclusion leads to massive new flows of funds into the shares of companies newly added to an index. I have explained why, theoretically, flows into and out of index funds should not materially affect the cost of capital for companies in public stock markets. That theoretical assumption has been born out in numerous studies examining the effects of inclusion or deletion from equity indices, including benchmark indices, ESG indices and emerging markets indices. There is no statistically significant benefit of index inclusion or cost of index exclusion.

Still, some companies and sovereigns make efforts to be included in equity indices despite the dubious prospects for direct economic impacts. This may be due to a lack of information about the studies calling into question the effects

[211] Chenpeng Du, *The Impact of China's Capital Market Opening Up to Domestic Stock Idiosyncratic Risk,* 12 J. APPLIED FIN. & BANKING 83, 98 (2022). This result may be due in part to lower trading volumes because of more stable long-term indexed institutional investors acquiring positions in the indexed A-shares. *See* Hongbin Deng, *Does Trading Activity of China's A-share Improve After the Inclusion of China's A-share in the MSCI Index*, 14 J. SERV. SCI. & MGMT. 34, 43 (2021). *See also* Lennart Dekker, Jasmin Gider & Frank de Jong, *How Do Funds Deviate from Benchmarks? Evidence from MSCI's Inclusion of Chinese A-shares* 3 (Working Paper, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3937986 [https://perma.cc/FVR4-Y3N5] (noting that trading volume and volatility decline after inclusion, consistent with a hypothesis that volatile retail trading is reduced after index inclusion).

of index inclusion. It could also be due to the fact that index inclusion has important certifying effects that burnish reputations and increase the benefits of index inclusion to the point that they outweigh the costs of compliance with the eligibility criteria. Or it may be that the costs of compliance are very low because the relevant parties, whether corporate executives or sovereign governments, have other incentives to engage in compliant behavior so they will do so anyway. Deeper understanding of the precise motivations of parties complying with index eligibility criteria will require further research. Irrespective of parties' motivations, it is important to recognize the limits of indexation as regulation and the narrow circumstances in which controlling access to a market allows indexers to function as private regulators.