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Ownership and Control 2022 Global Equities Concentration on the Rise

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Key findings

- Controlled companies accounted for nearly 46% of all constituents of the MSCI ACWI Index by count, as of Feb. 1, 2022, a considerable increase from the 32% we reported in 2015. On the basis of market cap share, controlled companies accounted for 35% of the index, up from just 26% in 2015. The increase changes the governance risks faced by other investors in such companies, who face more principal than agent risks, as each type of risk is described below.
- In contrast, widely held companies dropped from representing 52% to 40% of index market cap, and the percentage of companies by count that were widely held dropped from 41% to just 23% another clear indicator of increased ownership concentration.
- We also found increased concentration among all index constituents that lacked a controlling shareholder, especially among U.S. listed companies. Among widely held and principal-shareholder companies globally, BlackRock held 5% or more of 638 index constituents, 458 of which were U.S. listed, and Vanguard held 5% or more of 424 index constituents, 395 of which were U.S. listed.
- Some of these changes are attributable to the more than 400 new Chinalisted constituents of the index, many of which are founder or state controlled, but the market cap share of U.S. listed companies also increased by 5% since 2015, confirming a more widespread increase in ownership concentration.

Global ownership in 2022

It is common practice to describe **corporate governance** as a set of structures and practices used to represent the interests of equity investors — shareholders— in publicly traded, limited-liability corporations. According to prevailing theory, absentee owners, i.e., **principals**, employ professional managers, i.e., **agents**, to manage the daily affairs of such corporations. The risks associated with this relationship can then commonly be described as **agent** or **agency risks**, and the associated costs — including CEO pay — are referred to collectively as **agency costs**.¹

But what if a dominant or controlling owner is not absent at all, but rather is actively involved in a company's management? In this case, the principal-agent relationship

¹ Nix, P. and Chen, J. *The Role of Institutional Investors in Corporate Governance: An Empirical Study.* Springer. 2013.

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as conventionally defined is shifted around, and the key risks to all other investors become mainly **principal risks**, which may require an entirely different approach to assessing and managing governance risk.²

Exhibit 1: Principal risk vs agent risk

PRINCIPAL RISK	AGENT RISK
CONTROLLED COMPANIES	WIDELY HELD COMPANIES
<<< MORE CONTROL	LESS CONTROL>>>
 Examples Strategic decisions that favor the controlling shareholder over other investors CEO pay practices designed to further enrich & empower the controlling shareholder Related party transactions involving the controlling shareholder Warning signs Control skew mechanisms Entrenched (controlling shareholder) board 	 Examples Governance provisions that limit board accountability to shareholders Strategic decision-making that prioritizes short-term gains over long-term sustainability CEO pay practices that are poorly aligned with long-term investor interests Warning signs Entrenched (CEO) board High count of active or ex-CEOs on board

Data as of May 2022. Source: MSCI ESG Research

Understanding these different risk profiles is important – particularly as the number and importance of controlled companies within the overall market is growing. Nearly 46% (1,317 of 2,870 companies) of all MSCI ACWI Index constituents were controlled as of Feb. 1, 2022, suggesting that the dominant type of governance risk faced by investors in these companies was actually principal risk.³ This represents a considerable increase from the 32% we reported in 2015.⁴

An understanding of the risks arising from concentrated ownership and control is important to investors. It impacts the ability of minority shareholders to influence the company's corporate governance, and their ability to hold the company's directors accountable for their decisions.

MSCI considers a company with one or more shareholders or shareholder blocks holding 30% or more of the company's voting shares a **controlled company**, and

² Goshen, Z. and Squire, R. 2017. "Principal Costs: A New Theory for Corporate Law and Governance." *Columbia Law Review*, Vol. 117, No. 3.

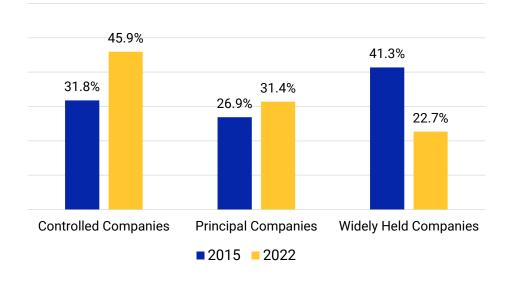
³ The MSCI ACWI Index captures large and mid-cap representation across 23 developed markets (DM) and 27 emerging markets (EM) countries, covering approximately 85% of the global investable equity opportunity set.

⁴ Marshall, R. 2015. "Ownership Forms and Governance Control." MSCI Methodology.



identifies such shareholders or shareholder blocks as **controlling shareholders**. This is similar, but not identical to the U.S. Securities Exchange Commission (SEC) concept of a **majority shareholder**, which is defined as holding 50% or more of a company's voting shares.⁵ We have adopted this standard because we have found the 30% cutoff to be more consistent with assessments of **effective control**, based on our own research, its frequent adoption as the threshold for mandatory takeover offers in many markets and input from our institutional investor clients.

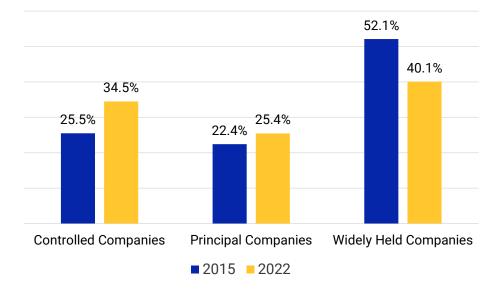
Exhibit 2: Increased ownership concentration & control, MSCI ACWI Index



By Company Count

⁵ See also, "*Control.* The term "control" (including the terms "controlling," "controlled by" and "under common <u>control</u> with") means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of <u>voting securities</u>, by contract, or otherwise." <u>17 CFR § 240.12b-2 - Definitions. | CFR | US Law | LII /</u> <u>Legal Information Institute (cornell.edu)</u>





By Total Market Cap

Principal-shareholder firms enjoy the benefit of having one or more sizeable – but not controlling – shareholders. Such principal shareholders – not to be confused with the use of **principals** and **principal risks** in the broader conceptual framework of **principal-agent theory** – are important because their holdings are large enough to signal a strongly vested interest in the firm's well-being, while at the same time small enough to fall short of establishing effective control. While the SEC requires that all investors holding 5% or more of a given class of any listed company's voting shares file beneficial owner reports, investors holding 10% or more of a company's voting shares are considered **insiders**, and, along with the company's executive officers and directors, are required to report most transactions involving the company's shares.⁶ They are also prohibited from short-selling the company's shares.

Founders, families and state entities are the most common shareholders within this group, as with controlled companies. From a corporate governance perspective, all are strategic investors.

Data as of Feb. 1, 2022. Source: MSCI ESG Research,.

⁶ While ownership reporting requirements vary globally from market to market, MSCI generally follows SEC standards in its own data collection practices.



Exhibit 3: MSCI's three-dimensional ownership framework

 Level of control dimension Level of voting power held by the largest owner(s)
Controlling – Largest shareholder or shareholder group holds 30% or more of the voting rights.
Principal – Largest shareholder or shareholder group holds between 10% and 30% of the voting rights.
Widely Held – No shareholder or shareholder group holds more than 10% of the voting rights.
2) Key owner type dimension Background & motivations of the largest owner(s)
Founder Firm — Founding owner continues to play an active role in managing the company.
Family Firm – Family holds 10% or more of voting rights and at least one seat on the board of directors.
SOE — State-owned enterprise; state or sovereign entity directly or indirectly controls 10% or more of the voting rights.
Other Types – Includes subsidiaries, externally managed companies, mutual companies, etc.
3) Control skew dimension Misalignment between voting power and capital investment
Multiple Equity Classes with Unequal Voting Rights — e.g., Dual-class shares
Single Equity Class with Unequal Voting Rights — e.g., Loyalty shares
Control via Cross Shareholdings – Controlling group controls counterparty board(s) and/or gains voting control.
Control via Stock Pyramid – Control exercised via a chain of controlled companies.
Data as of May 2022. For additional information, see the April 2022 MSCI ESG Ratings Methodology Source: MSCI ESG Research.

But the identity of the investor or investors asserting control is equally important. If they are **strategic investors** - i.e., if they are motivated by and manage their equity holdings on the basis of objectives that extend beyond the pursuit of optimal



investment returns, potentially in conflict with the interests of non-principal shareholders – the implications for a company's board and other corporate governance mechanisms become especially important.⁷

MSCI considers an understanding of a company's ownership essential to assessing the effectiveness of its corporate governance. In some markets, we found that principal risks were dominant in 2022. In **India**, for example, 92 of 106 MSCI ACWI Index constituents (86.9%) were controlled companies, and 34 of those (32.1%) were considered by MSCI to be family controlled. The percentages for **Brazil** were similar. In **China**, the overall percentage of controlled companies was somewhat lower at 73.6%. However, founder or family-controlled companies accounted for approximately 32% of the market, by both company count and market cap, while state owned enterprises (SOEs) accounted for 31% of index constituents, or 37.5% by market cap.⁸ This data indicates a high level of controlled companies in China.

The figures for China are especially important because they highlight changes made in the MSCI ACWI Index as a result of the addition of more than 420 new Chineselisted constituents in 2018 and 2019.⁹ When we studied the MSCI ACWI Index in 2015, it had 2,433 constituents. As of February 2022, this number had increased to 2,870. More importantly, the total market cap value of the index had nearly doubled, rising from just over USD 46 trillion to almost USD 92 trillion, with an overall average market cap of just under USD 33 billion per company. The Chinese-listed companies added in 2018-2019 resulted in China becoming the second-largest market within the overall index. At the same time, however, the U.S. listed market cap share of the Index increased by 5%, growing from USD 19.6 trillion in 2015 to USD 43.2 trillion, or just over 47% of the overall index (Exhibit 4). In terms of ownership concentration, less than 2% of Chinese-listed companies were widely held, in marked contrast to companies listed in the United States, where widely held companies are most common.

⁷ OECD Corporate Governance Factbook - 2021. OECD. From p.143: "The role of independent directors in controlled companies may be considered as different than in dispersed ownership companies, since the characteristic of the agency problem is different (e.g. the vertical agency problem is less common and the horizontal agency problem presents a greater risk in controlled companies)."

⁸ Source: MSCI, Inc. and MSCI ESG Research LLC. All figures cited are as of Feb. 1, 2022. See Appendix II for a more detailed breakdown of control level and key owner type distributions by market and sector.

⁹ Lord, J. "MSCI to increase China A shares weight in EM and ACWI indices." 2019. ETF Strategy.



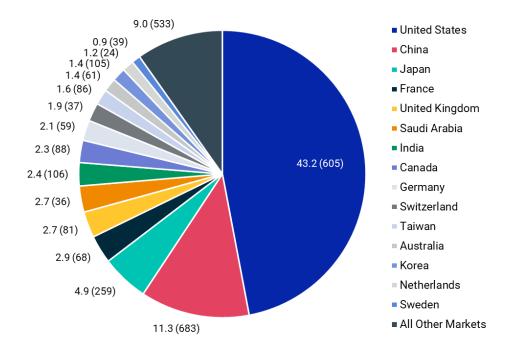


Exhibit 4 MSCI ACWI Index market cap share by home market in 2022

Data as of Feb. 1, 2022. The figures shown represent each market's total market capitalization in USD trillions, with the total number of MSCI ACWI Index constituents listed in each market in parenthesis. Source: MSCI ESG Research

The trend toward greater concentration in terms of both size and level of control is apparent in a comparison of the size and ownership characteristics of the 10 largest companies for each period in our study. In 2022, the 10 largest index constituents accounted for 15.5% of total index market cap, versus just 7.3% in 2015. Four of the 10 largest companies in 2022 were controlled companies, and two more had principal shareholders, versus just two controlled companies in 2015. The number of widely held companies within the top 10 plummeted from eight to four.

In 2022, the three most common types of strategic shareholders that we track – founders, families and state entities – were either controlling or principal shareholders at nearly 50% of all MSCI ACWI Index constituents. This is nearly twice as high a percentage as we reported in 2015. By comparison, the percentage of index constituents that were widely held declined from 41% to just 23%, dropping from 52% of total index market cap to 40%, despite remaining the dominant ownership form in the United States and certain other developed markets.



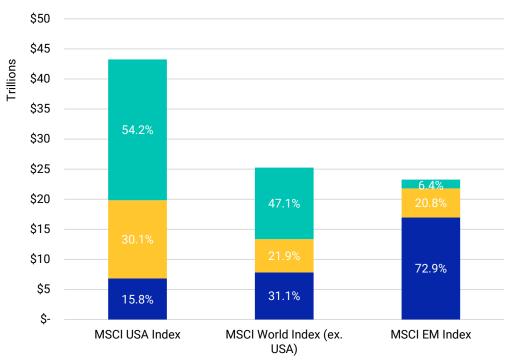


Exhibit 5: Control level groups by index market groups

Controlled Companies Principal Shareholder Companies Widely Held Companies

Data as of Feb. 1, 2022, based on the percentages of total market cap in USD. Together these three regional index groups comprise the full MSCI ACWI Index. Source: MSCI ESG Research

We found evidence of increased concentration of ownership among these companies as well. Of the 902 companies we classified as principal-shareholder companies, 230 had at least two principal-level shareholders, and 39 had at least three principal-level shareholders, making effective control by just two or three shareholders possible at 112 of these principal-shareholder companies.¹⁰

Increased concentration has also occurred among the widely held companies we examined. We noted an increase in the size and number of reported holdings of two large asset managers in particular: The Vanguard Group Inc. and BlackRock Inc. Both firms are invested in essentially the entire market through various index-based funds

¹⁰ OECD researchers arrived at similar findings in their own recent survey of global ownership trends. See, De La Cruz, A., Medina, A. and Tang, Y. "Owners of the World's Listed Companies." 2019. OECD Capital Market Series, Paris, <u>www.oecd.org/corporate/Owners-of-the-Worlds-Listed-Companies.htm</u>



and portfolios, and thus hold relatively small positions in thousands of companies.¹¹

The prominence and importance of these large asset managers is highlighted in Exhibits 6, 7 and 8, which list the 10 largest index global and U.S. listed constituents in each of these two control level groups.

Company	Market Cap (USD Trill.)	MSCI ACWI Index Share	GICS Sector ¹²	Largest Shareholders
				Vanguard – 7.68%
Apple Inc	2.85	3.1%	Information Technology	BlackRock – 6.47%
			. comology	Berkshire Hathaway – 5.56%
Microsoft	2.31	2.5%	Information	Vanguard - 8.18%
wiicrosoft	2.31	2.5%	Technology	BlackRock – 6.87%
				Vanguard – 7.71%
Nvidia Corp	0.62	0.7%	Information Technology	BlackRock – 7.20%
			reennology	FMR - 7.03%
тѕмс	0.59	0.6%	Information Technology	National Development Fund – 6.38%
	0.51	0.6%	Information Technology	Vanguard – 8.50%
Visa Inc				BlackRock – 7.50%
				Vanguard – 8.66%
Johnson & Johnson	0.45	0.5%	Health Care	BlackRock – 7.20%
Comison				State Street - 5.47%
JPMorgan	0.45	0.5%	5% Financials	Vanguard – 7.99%
Chase	0.45	0.5%		BlackRock - 6.30%
				Vanguard – 8.34%
UnitedHealth	0.44	0.5%	Health Care	BlackRock - 7.50%
				FMR - 5.61%
	0.00	0.40	Consumer	Vanguard – 8.30%
Home Depot	0.39	0.4%	Discretionary	BlackRock - 6.70%
Procter &	0.00	0.4%	Consumer	Vanguard – 8.97%
Gamble	0.38	0.4%	Staples	BlackRock – 6.67%

Exhibit 6: Largest shareholders at the 10 largest widely held companies

Data as of Feb. 1, 2022. Source: MSCI ESG Research

¹¹ According to their most recent reports on stewardship and engagement, both investors vote annually in approximately 14,000 annual meetings. For example, see BlackRock. 2022. *Investment Stewardship Annual Report January* 1 – *December* 31, 2021, and Vanguard. 2022. 2021 Investment Stewardship Annual Report.

¹² Global Industry Classification Standard (GICS®) is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.



Exhibit 7: Largest shareholders at the 10 largest MSCI ACWI Index principal
shareholder companies

Company	Market Cap (USD Trill.)	MSCI ACWI Index Share	GICS Sector	Largest Shareholders
			0	Jeffrey P. Bezos - 14.00%
Amazon.com	1.53	1.7%	Consumer Discretionary	Vanguard – 6.40%
			Diodictionary	BlackRock – 5.50%
				Elon Musk – 23.10%
Tesla Inc	0.04	1.0%	Consumer	Vanguard – 5.90%
resia inc	0.94	1.0%	Discretionary	BlackRock – 5.10%
				Capital Ventures – 5.00%
Samsung			Information	Lee Family – 21.17%
Electronics	0.41	0.4%	Technology	National Pension Service – 9.74%
				BlackRock – 5.03%
	0.00	0.49	Information	Mastercard Foundation – 11.00%
Mastercard	0.39	0.4%	Technology	Vanguard – 7.10%
				BlackRock – 6.80%
	0.38	0.4%	Financials	Berkshire Hathaway – 12.80%
Bank of America				Vanguard – 7.30%
			Consumer	BlackRock – 6.20%
Alibaba Group	0.32	0.3%	Discretionary	SoftBank – 24.84
ASML Holding	0.27	0.3%	Information Technology	Capital Research and Management Company – 15.81%
				Capital World – 10.20%
		0.3%	Information Technology	Capital International – 8.50%
Broadcom	0.24			Vanguard - 8.30%
				Capital Research – 8.10%
				BlackRock – 6.60%
				Lilly Endowment – 11.60%
Eli Lilly & Co	0.24	0.3%	Health Care	Vanguard – 7.20%
	0.24	0.3 %		BlackRock - 6.10%
				PNC Financial – 5.40%
				Mitchell & Steven Rales – 11.10%
Danaher	0.21	0.2%	Health Care	Vanguard – 6.8%
		0.2 /0	Health Cafe	BlackRock – 6.70%
				State Street - 7.40%

Data as of Feb. 1, 2022. Source: MSCI ESG Research



Company	Market Cap (USD Trill.)	MSCI ACWI Index Share	GICS Sector	Largest Shareholders
			0	Jeffrey P. Bezos – 14.00%
Amazon.com	1.53	1.7%	Consumer Discretionary	Vanguard – 6.40%
			Discretionary	BlackRock – 5.50%
				Elon Musk – 23.10%
			Consumer	Vanguard - 5.90%
Tesla Inc	0.94	1.0%	Discretionary	BlackRock - 5.10%
				Capital Ventures - 5.00%
				Mastercard Foundation – 11.00%
Mastercard	0.39	0.4%	Information Technology	Vanguard – 7.10%
			rechnology	BlackRock – 6.80%
				Berkshire Hathaway – 12.80%
Bank of	0.38	0.4%	Financials	Vanguard – 7.30%
America				BlackRock – 6.20%
				Capital World – 10.20%
	0.24	0.3%	Information Technology	Capital International – 8.50%
Broadcom				Vanguard – 8.30%
				Capital Research – 8.10%
				BlackRock - 6.60%
				Lilly Endowment - 11.60%
	0.04	0.00		Vanguard – 7.20%
Eli Lilly & Co	0.24	0.3%	Health Care	BlackRock - 6.10%
				PNC Financial – 5.40%
				Mitchell & Steven Rales – 11.10%
Danaher	0.21	0.2%	Health Care	Vanguard – 6.8%
				BlackRock - 6.70%
				MUFG – 21.60%
Morgan	0.19	0.2%	Financials	State Street – 7.40%
Stanley	0.19	0.2%	FilialiCidis	Vanguard - 6.70%
				BlackRock – 6.10%
				Berkshire Hathaway – 18.87%
American	0.14	0.2%	Financials	Vanguard – 5.84%
Express				BlackRock - 5.80%
				Wellington – 5.17%
				Cascade - 10.00%
Deere & Co	0.12	0.1%	Industrials	Vanguard - 7.50% BlackRock - 5.90%
				Wellington – 5.30%

Exhibit 8: Largest shareholders at the 10 largest US principal-shareholder companies

Data as of Feb. 1, 2022. Source: MSCI ESG Research



Vanguard and BlackRock were among the largest shareholders at all of the U.S. listed companies in these lists, which together represented just over 15% of the total MSCI ACWI Index market cap, and just over 30% of total MSCI USA Index market cap. They also held 5% or more of voting shares at many other index constituents. Among widely held and principal shareholder companies, BlackRock held 5% or more of 638 index constituents, 458 of which were U.S. listed, with an average holding size of 7.5%. Vanguard held 5% or more of 424 index constituents, 395 of which were U.S. listed, with an average holding size of 9.4%.

These figures are significant because they confirm the extent to which ownership interests and voting power at principal shareholder and widely held companies have become more concentrated in the hands of a relatively small number of large investors. While other researchers have reported similar findings, much of the academic scholarship in this area has focused on the social and political implications of these shifts, and concerns regarding the possibility of these large institutions exercising too much – or too little – influence over the companies in which they invest.¹³

It may be more helpful to think of such large asset managers as **universal managers**, in a refinement of the concept of the **universal owner** first formulated by Monks & Minow in 1995.¹⁴ By explicitly acknowledging that such investors are typically not the ultimate beneficial owners of these companies, perhaps we can better understand the nature of their role in the overall equity market ecosystem.

Implications

In 2015, we noted that ownership forms can and should be expected to change over time, with many companies listing as founder firms and evolving into family-, principally, and widely held companies. The diagram in Exhibit 9 illustrates what we considered just seven years ago to be the natural evolution of listed companies, typically from founder to family to widely held, which frequently also involved an evolution from greater to lesser control, especially in those developed markets where widely held firms were the dominant form. At many new firms, the transition from closely held IPO to widely held status, and from greater to lesser control, had often been carefully orchestrated. In many cases one or more venture capital or private

¹³ Bebchuk, Lucian A. and Hirst, Scott. "The Specter of the Giant Three" (May 9, 2019). Boston University Law Review, Vol. 99, 2019, pp. 721-741, Harvard Law School John M. Olin Center Discussion Paper No. 1004, European Corporate Governance Institute (ECGI) - Finance Working Paper No. 608/2019, Available at SSRN: <u>https://ssrn.com/abstract=3385501</u> or <u>http://dx.doi.org/10.2139/ssrn.3385501</u>

¹⁴ Monks, Robert A.G. and Minow, Nell. *Corporate Governance*, Cambridge, Mass: Basil Blackwell, 1995; and, Williams, Andrew; Hawley, James. 2000. "The Emergence of Universal Owners," *Challenge*.



equity firms would maintain effective control via a shareholder agreement during the early years of the newly listed firm's existence, but ultimately relinquish control once their holdings had been reduced to a pre-defined level, based on carefully defined sunset provisions. The gradual evolution of many listed companies from private, founder-led enterprises to mature, widely held corporations seemed well understood and accepted.

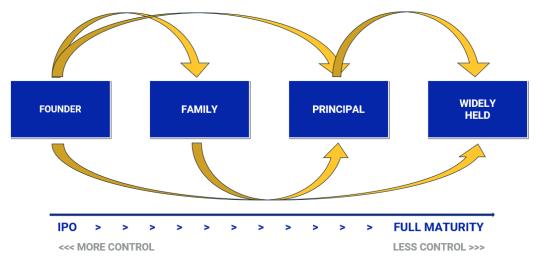


Exhibit 9: Historical evolution of ownership over time

Data as of May 2022. Source: MSCI ESG Research

Our findings suggest that ownership changes have followed a different pattern in recent years. The dominant trend in ownership has been toward more concentrated ownership, especially toward more controlled companies. Among the largest companies we examined, which have also grown much larger than they were in 2015, concentrated ownership has become the rule rather than the exception, shifting the focus of corporate governance increasingly toward principal risks from agency risks.

What factors have led to this shift? Among controlled companies, much of the increase in concentration has occurred in the healthcare, information technology and communication sectors, where the number of companies with strategic shareholders in all three of the main groups that we track, i.e., founders, families and SOEs, have increased most dramatically since 2015.¹⁵ The same is also true for principal-shareholder companies. But we can't say exactly why this increase has occurred. Has the relatively strong stock market performance of these sectors made them more attractive to such investors? Or was it the involvement of such strongly vested shareholders that made these companies more successful?

¹⁵ More detailed 2022 distribution data by both sector and home market is included in the appendix.



Among widely held companies, a number of factors seem likely to have contributed. Steady market growth over the past few years has played a role, with essentially all of the large institutional investors we examined having reported a considerable increase in assets under management. For investment managers whose allocations lean more toward index funds, a gradual increase in concentration may be inevitable in such a market, but we can see that the rules for fund management do vary considerably. For example, while BlackRock holds many more 5%+ positions than Vanguard, Vanguard holds nearly four times as many 10%+ positions. We also noted a possible relationship between the widely held and principal-shareholder companies exhibiting the greatest degree of concentration and the highest combined cash dividend and share buyback payouts, over the same historical periods, suggesting that fund-level policies regarding dividend and buyback reinvestments may also have played a role.¹⁶

But that's just the what and how, the more difficult question is *why*? Why are more and more strategic investors insisting on retaining and asserting control over the companies in which they are invested? In 2020 we posed the question "What if public companies stay privately controlled?" as part of our *10 Questions that May Shape the Decade* data visualization.¹⁷ At the time, we were focused on the use of various control-skew mechanisms in the assertion of disproportionate control at new IPOs, a much more limited case. However, our recent research suggests that this question may prove to be relevant for a larger set of situations and companies.

Is this where global equity markets are headed? Possibly, at least in the case of controlled companies. But anticipating future directions for widely held and principal shareholder companies is more complex. Last year's announcement by BlackRock that they will allow certain of their institutional clients to cast their own proxy votes, effective in 2022, provides an example of one possible future direction for these firms, a direction that explicitly acknowledges the importance of their clients' ability to assert their shareholder rights.¹⁸

It also suggests that the apparent ownership concentration we observed may really just reflect a new way of achieving – and managing – more widely dispersed ownership. If we think of BlackRock and Vanguard and their numerous smaller **universal manager** cousins not as monolithic owners but rather as complex

¹⁶ Marshall, R, Seretis, P, Grunfeld, A. "Taking Stock: Share Buybacks and Shareholder Value." MSCI Thematic Research. 2018.

¹⁷ MSCI ESG Research. "10 Questions that May Shape the Decade." MSCI.com 2020. <u>https://www.msci.com/10-questions-that-may-shape-the-decade</u>

¹⁸ Posner, Cydney S. "BlackRock to Permit Some Clients to Vote." 2021. Harvard Law School Forum on Corporate Governance. <u>https://corpgov.law.harvard.edu/2021/10/25/blackrock-to-permit-some-clients-to-vote/</u>



mechanisms whereby their many individual and institutional clients may ultimately exercise their shareholder rights and responsibilities more efficiently and effectively, then what we are seeing is not greater ownership concentration but its opposite.



Appendix I: Additional Data

MSCI ownership groups by home market - 15 largest markets

MSCI Home Market	Ownership Group ¹⁹	Companies (#)	Total Market Cap (USD Bill.)	Percentage of Home Market	Percentage of Index
United States	All Groups	605	\$43,244.5	100.00%	47.12%
	Family Controlled	27	\$2,248.7	5.20%	2.45%
	Family Principal	20	\$734.5	1.70%	0.80%
	Founder Controlled	36	\$4,061.7	9.39%	4.43%
	Founder Principal	54	\$4,310.2	9.97%	4.70%
	Other Controlled	13	\$514.8	1.19%	0.56%
	Other Principal	264	\$7,956.3	18.40%	8.67%
	Widely Held	191	\$23,418.4	54.15%	25.52%
China	All Groups	683	\$11,334.3	100.00%	12.35%
	Family Controlled	121	\$1,132.1	9.99%	1.23%
	Family Principal	25	\$268.0	2.36%	0.29%
	Founder Controlled	97	\$2,491.0	21.98%	2.71%
	Founder Principal	54	\$1,042.1	9.19%	1.14%
	Other Controlled	73	\$740.4	6.53%	0.81%
	Other Principal	35	\$243.1	2.14%	0.26%
	SOE Controlled	212	\$4,248.4	37.48%	4.63%
	SOE Principal	56	\$915.9	8.08%	1.00%
	Widely Held	10	\$253.4	2.24%	0.28%
Japan	All Groups	259	\$4,870.9	100.00%	5.31%
	Family Controlled	14	\$176.2	3.62%	0.19%
	Family Principal	18	\$367.8	7.55%	0.40%
	Founder Controlled	1	\$6.3	0.13%	0.01%
	Founder Principal	7	\$124.9	2.56%	0.14%
	Other Controlled	30	\$447.1	9.18%	0.49%
	Other Principal	15	\$274.6	5.64%	0.30%
	SOE Controlled	8	\$273.4	5.61%	0.30%
	SOE Principal	1	\$14.2	0.29%	0.02%
	Widely Held	165	\$3,186.4	65.42%	3.47%
France	All Groups	68	\$2,895.8	100.00%	3.16%

¹⁹ The ownership groups provided here are based on a combination of our level of control and key owner type classifications.

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	Family Controlled	15	\$1,105.1	38.16%	1.20%
	Family Principal	7	\$124.9	4.31%	0.14%
	Founder Controlled	1	\$86.1	2.97%	0.09%
	Other Controlled	4	\$116.2	4.01%	0.13%
	Other Principal	15	\$380.2	13.13%	0.41%
	SOE Controlled	5	\$118.6	4.10%	0.13%
	SOE Principal	6	\$251.6	8.69%	0.27%
	Widely Held	15	\$713.1	24.63%	0.78%
United Kingdom	All Groups	81	\$2,685.0	100.00%	2.93%
	Family Controlled	4	\$64.4	2.40%	0.07%
	Family Principal	2	\$18.6	0.69%	0.02%
	Founder Principal	4	\$42.2	1.57%	0.05%
	Other Controlled	1	\$12.0	0.45%	0.01%
	Other Principal	17	\$543.3	20.23%	0.59%
	SOE Controlled	1	\$37.5	1.40%	0.04%
	Widely Held	52	\$1,967.1	73.26%	2.14%
Saudi Arabia	All Groups	36	\$2,650.8	100.00%	2.89%
	Family Controlled	3	\$25.1	0.95%	0.03%
	Family Principal	2	\$15.9	0.60%	0.02%
	Founder Controlled	1	\$15.4	0.58%	0.02%
	Other Controlled	4	\$41.8	1.58%	0.05%
	Other Principal	5	\$32.8	1.24%	0.04%
	SOE Controlled	11	\$2,347.2	88.55%	2.56%
	SOE Principal	2	\$43.1	1.63%	0.05%
	Widely Held	8	\$129.5	4.89%	0.14%
India	All Groups	106	\$2,351.4	100.00%	2.56%
	Family Controlled	53	\$1,170.2	49.77%	1.28%
	Family Principal	5	\$44.8	1.90%	0.05%
	Founder Controlled	4	\$51.3	2.18%	0.06%
	Founder Principal	3	\$158.9	6.76%	0.17%
	Other Controlled	19	\$436.4	18.56%	0.48%
	Other Principal	2	\$36.7	1.56%	0.04%
	SOE Controlled	16	\$241.0	10.25%	0.26%
	-	3	\$150.1	6.38%	0.16%
	SOE Principal	5			
	SOE Principal Widely Held	1	\$62.1	2.64%	0.07%
Canada	· · ·		\$62.1 \$2,345.3	2.64% 100.00%	0.07% 2.56%
Canada	Widely Held	1			

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	Founder Principal	5	\$52.5	2.24%	0.06%
	Other Controlled	4	\$56.9	2.43%	0.06%
	Other Principal	14	\$359.8	15.34%	0.39%
	SOE Controlled	1	\$15.4	0.66%	0.02%
	Widely Held	44	\$1,383.8	59.00%	1.51%
Germany	All Groups	59	\$2,070.5	100.00%	2.26%
	Family Controlled	10	\$424.6	20.51%	0.46%
	Family Principal	1	\$13.7	0.66%	0.01%
	Founder Controlled	2	\$18.2	0.88%	0.02%
	Founder Principal	5	\$219.9	10.62%	0.24%
	Other Controlled	12	\$288.2	13.92%	0.31%
	Other Principal	5	\$90.4	4.37%	0.10%
	SOE Controlled	2	\$110.8	5.35%	0.12%
	SOE Principal	3	\$95.6	4.62%	0.10%
	Widely Held	19	\$809.2	39.08%	0.88%
Switzerland	All Groups	37	\$1,916.7	100.00%	2.09%
	Family Controlled	8	\$548.1	28.59%	0.60%
	Family Principal	1	\$26.3	1.37%	0.03%
	Founder Principal	2	\$60.1	3.14%	0.07%
	Other Controlled	1	\$7.0	0.37%	0.01%
	Other Principal	7	\$191.9	10.01%	0.21%
	SOE Controlled	1	\$29.5	1.54%	0.03%
	Widely Held	17	\$1,053.8	54.98%	1.15%
Taiwan	All Groups	86	\$1,559.9	100.00%	1.70%
	Family Controlled	14	\$200.3	12.84%	0.22%
	Family Principal	20	\$197.1	12.63%	0.21%
	Founder Controlled	1	\$10.6	0.68%	0.01%
	Founder Principal	4	\$73.4	4.71%	0.08%
	Other Controlled	6	\$42.7	2.73%	0.05%
	Other Principal	3	\$20.8	1.33%	0.02%
	SOE Controlled	4	\$63.8	4.09%	0.07%
	SOE Principal	6	\$73.5	4.71%	0.08%
	Widely Held	28	\$877.7	56.27%	0.96%
Australia	All Groups	61	\$1,393.4	100.00%	1.52%
	Family Controlled	1	\$7.0	0.51%	0.01%
	Family Principal	1	\$9.8	0.70%	0.01%
	Founder Controlled	2	\$53.9	3.87%	0.06%
	Founder Principal	3	\$42.4	3.04%	0.05%

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	Other Principal	18	\$288.3	20.69%	0.31%
	Widely Held	33	\$965.4	69.28%	1.05%
Korea	All Groups	105	\$903.4	100.00%	1.48%
Korea					
	Family Controlled	45	\$388.5	28.54%	0.42%
	Family Principal	8	\$70.5	5.18%	0.08%
	Founder Controlled	2	\$14.4	1.06%	0.02%
	Founder Principal	4	\$70.9	5.21%	0.08%
	Other Controlled	22	\$136.4	10.02%	0.15%
	Other Principal	17	\$620.9	45.62%	0.68%
	SOE Controlled	3	\$22.6	1.66%	0.02%
	SOE Principal	3	\$20.6	1.51%	0.02%
	Widely Held	1	\$16.3	1.20%	0.02%
Netherlands	All Groups	24	\$1,212.9	100.00%	1.32%
	Family Controlled	3	\$201.5	16.61%	0.22%
	Founder Controlled	3	\$33.8	2.79%	0.04%
	Founder Principal	1	\$10.7	0.88%	0.01%
	Other Controlled	3	\$331.5	27.33%	0.36%
	Other Principal	4	\$313.4	25.84%	0.34%
	SOE Controlled	1	\$15.5	1.28%	0.02%
	Widely Held	9	\$306.4	25.26%	0.33%
Sweden	All Groups	39	\$854.1	100.00%	0.93%
	Family Controlled	7	\$191.4	22.41%	0.21%
	Family Principal	5	\$139.0	16.27%	0.15%
	Founder Controlled	1	\$10.8	1.26%	0.01%
	Founder Principal	3	\$73.7	8.62%	0.08%
	Other Controlled	6	\$60.5	7.08%	0.07%
	Other Principal	14	\$338.8	39.67%	0.37%
	SOE Controlled	1	\$16.2	1.90%	0.02%
	Widely Held	2	\$23.6	2.77%	0.03%
TOTALS		2337	\$82,746.7		





GICS Sector	Ownership Group	Companies (#)	Total Market Cap (USD Bill.)	Percentage of GICS Sector	Percentage of Index
Communication Services	All Groups	173	\$7,901.7	100.00%	8.6%
	Family Controlled	26	\$588.6	7.45%	0.6%
	Family Principal	6	\$86.2	1.09%	0.1%
	Founder Controlled	26	\$3,785.0	47.90%	4.1%
	Founder Principal	14	\$325.5	4.12%	0.4%
	Other Controlled	36	\$610.9	7.73%	0.7%
	Other Principal	24	\$567.0	7.18%	0.6%
	SOE Controlled	17	\$575.1	7.28%	0.6%
	SOE Principal	3	\$49.2	0.62%	0.1%
	Widely Held	21	\$1,314.1	16.63%	1.4%
Consumer Discretionary	All Groups	294	\$11,326.5	100.00%	12.3%
	Family Controlled	77	\$2,261.4	19.97%	2.5%
	Family Principal	17	\$252.5	2.23%	0.3%
	Founder Controlled	28	\$1,146.4	10.12%	1.2%
	Founder Principal	26	\$3,243.9	28.64%	3.5%
	Other Controlled	29	\$720.7	6.36%	0.8%
	Other Principal	44	\$798.6	7.05%	0.9%
	SOE Controlled	12	\$201.1	1.78%	0.2%
	SOE Principal	2	\$19.6	0.17%	0.0%
	Widely Held	59	\$2,682.2	23.68%	2.9%
Consumer Staples	All Groups	236	\$7,234.7	100.00%	7.9%
	Family Controlled	77	\$1,933.3	26.72%	2.1%
	Family Principal	13	\$166.8	2.31%	0.2%
	Founder Controlled	13	\$157.2	2.17%	0.2%
	Founder Principal	6	\$49.1	0.68%	0.1%
	Other Controlled	40	\$758.9	10.49%	0.8%
	Other Principal	25	\$482.3	6.67%	0.5%
	SOE Controlled	18	\$796.3	11.01%	0.9%
	SOE Principal	3	\$45.4	0.63%	0.0%
	Widely Held	41	\$2,845.4	39.33%	3.1%
Energy	All Groups	105	\$5,862.6	100.00%	6.4%
	Family Controlled	10	\$334.5	5.71%	0.4%
	Family Principal	3	\$41.7	0.71%	0.0%
	Founder Controlled	1	\$6.2	0.11%	0.0%
	Founder Principal	2	\$42.9	0.73%	0.0%

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	Other Controlled	9	\$84.9	1.45%	0.1%
	Other Principal	18	\$674.1	11.50%	0.7%
	SOE Controlled	37	\$3,029.1	51.67%	3.3%
	SOE Principal	2	\$21.7	0.37%	0.0%
	Widely Held	23	\$1,627.5	27.76%	1.8%
Financials	All Groups	441	\$14,235.5	100.00%	15.5%
	Family Controlled	38	\$1,435.7	10.09%	1.6%
	Family Principal	16	\$227.1	1.60%	0.2%
	Founder Controlled	12	\$261.0	1.83%	0.3%
	Founder Principal	13	\$326.2	2.29%	0.4%
	Other Controlled	43	\$624.5	4.39%	0.7%
	Other Principal	77	\$2,261.9	15.89%	2.5%
	SOE Controlled	75	\$2,270.8	15.95%	2.5%
	SOE Principal	42	\$921.9	6.48%	1.0%
	Widely Held	125	\$5,906.2	41.49%	6.4%
Health Care	All Groups	273	\$9,139.7	100.00%	10.0%
	Family Controlled	56	\$941.8	10.30%	1.0%
	Family Principal	13	\$352.0	3.85%	0.4%
	Founder Controlled	12	\$165.7	1.81%	0.2%
	Founder Principal	30	\$570.6	6.24%	0.6%
	Other Controlled	32	\$702.4	7.69%	0.8%
	Other Principal	50	\$1,332.5	14.58%	1.5%
	SOE Controlled	10	\$90.4	0.99%	0.1%
	SOE Principal	4	\$38.1	0.42%	0.0%
	Widely Held	66	\$4,946.3	54.12%	5.4%
Industrials	All Groups	423	\$8,651.4	100.00%	9.4%
	Family Controlled	73	\$913.5	10.56%	1.0%
	Family Principal	26	\$441.2	5.10%	0.5%
	Founder Controlled	15	\$217.3	2.51%	0.2%
	Founder Principal	11	\$160.5	1.86%	0.2%
	Other Controlled	35	\$348.5	4.03%	0.4%
	Other Principal	71	\$1,688.7	19.52%	1.8%
	SOE Controlled	63	\$756.3	8.74%	0.8%
	SOE Principal	13	\$347.0	4.01%	0.4%
	Widely Held	116	\$3,778.5	43.67%	4.1%
Information Technology	All Groups	362	\$17,839.5	100.00%	19.4%
	Family Controlled	25	\$519.4	2.91%	0.6%
	Family Principal	21	\$408.7	2.29%	0.4%

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	Founder Controlled	43	\$1,212.2	6.80%	1.3%
	Founder Principal	41	\$1,222.5	6.85%	1.3%
	Other Controlled	31	\$453.7	2.54%	0.5%
	Other Principal	75	\$2,701.2	15.14%	2.9%
	SOE Controlled	18	\$182.1	1.02%	0.2%
	SOE Principal	16	\$201.1	1.13%	0.2%
	Widely Held	92	\$10,938.5	61.32%	11.9%
Materials	All Groups	292	\$5,064.3	100.00%	5.5%
	Family Controlled	59	\$730.7	14.43%	0.8%
	Family Principal	10	\$98.5	1.94%	0.1%
	Founder Controlled	11	\$171.4	3.38%	0.2%
	Founder Principal	11	\$148.3	2.93%	0.2%
	Other Controlled	31	\$391.3	7.73%	0.4%
	Other Principal	54	\$1,203.4	23.76%	1.3%
	SOE Controlled	48	\$590.1	11.65%	0.6%
	SOE Principal	7	\$67.3	1.33%	0.1%
	Widely Held	61	\$1,663.4	32.85%	1.8%
Real Estate	All Groups	135	\$1,900.4	100.00%	2.1%
	Family Controlled	32	\$332.3	17.49%	0.4%
	Family Principal	6	\$140.0	7.37%	0.2%
	Founder Controlled	5	\$62.9	3.31%	0.1%
	Founder Principal	11	\$329.2	17.32%	0.4%
	Other Controlled	4	\$41.5	2.19%	0.0%
	Other Principal	36	\$515.7	27.14%	0.6%
	SOE Controlled	16	\$185.0	9.74%	0.2%
	SOE Principal	4	\$57.5	3.02%	0.1%
	Widely Held	21	\$236.3	12.44%	0.3%
Utilities	All Groups	136	\$2,617.4	100.00%	2.9%
	Family Controlled	17	\$265.5	10.14%	0.3%
	Founder Controlled	1	\$7.7	0.29%	0.0%
	Founder Principal	2	\$14.8	0.56%	0.0%
	Other Controlled	7	\$83.2	3.18%	0.1%
	Other Principal	28	\$585.3	22.36%	0.6%
	SOE Controlled	50	\$699.6	26.73%	0.8%
	SOE Principal	5	\$120.3	4.59%	0.1%
	Widely Held	26	\$841.0	32.13%	0.9%
ALL SECTORS	ALL GROUPS	2870	\$91,773.6		

Data as of Feb 1, 2022. Source: MSCI ESG Research



Appendix II: Data Used or Referenced in this Report

Factor Name in ESG Manager	Short Name
Ownership Category	OWNERSHIP_CATEGORY
Founder Firm	FOUNDER_FIRM
Family Firm	FAMILY_FIRM
State Owned Enterprise	STATE_OWNED_ENTERPRISE
Variable Interest Entities	VARIABLE_INTEREST_ENTITIES
Dominant Shareholder (%)	DOMINANT_SHAREHOLDER_PCT
gm.TopShareholders	gm.TopShareholders
Controlling Shareholder	CONTROLLING_SHAREHOLDER
Controlling Shareholder (%)	CONTROLLING_SHAREHOLDER_PCT
Controlling Shareholder Concerns	CONTROLLING_SHAREHOLDER_CONCERNS
Multiple Equity Classes with Different Voting Rights	ONE_SHARE_ONE_VOTE
Cross Shareholdings	CROSS_SHAREHOLDINGS
Controlled via Stock Pyramid	CONTROLLED_VIA_STOCK_PYRAMID
Shareholder Rights Concerns	SHAREHOLDER_RIGHTS_CONCERNS
Voting Rights Limits Residency	VOTING_RIGHTS_LIMITS_RESIDENCY
Voting Rights Limits Shares Held	VOTING_RIGHTS_LIMITS_SHARES_HELD
Golden Shares	GOLDEN_SHARES
Government Intervention Concerns	GOVERNMENT_INTERVENTION_CONCERNS
Dispersed Ownership Concerns	DISPERSED_OWNERSHIP_CONCERNS
MarketCap USD	MarketCap_USD
Home Market	GM_HOME_MARKET
GICS Sector	GICS_SECTOR
MSCI Index	MSCI_INDEX

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