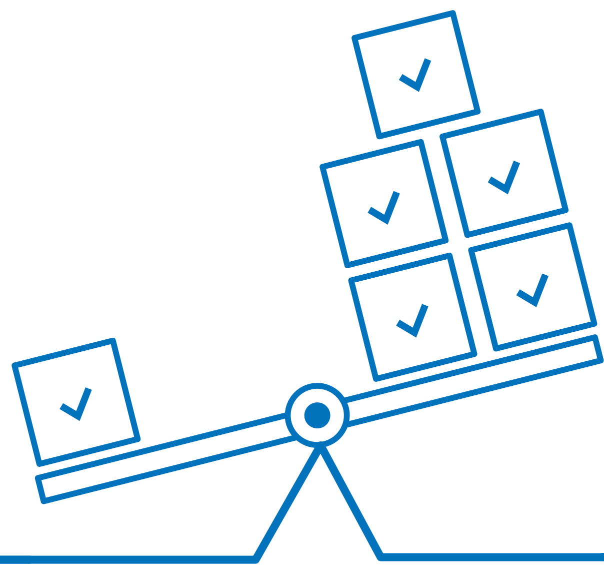
FCLTGLOBAL
FOCUSING CAPITAL ON THE LONG TERM



REPORT

Power Play

THE LONG-TERM IMPACT OF MULTI-CLASS SHARES

FCLTGlobal is dedicated to rebalancing investment and business decision-making towards the long-term objectives of funding economic growth and creating future savings.

FCLTGlobal is a not-for-profit dedicated to developing practical tools and approaches that encourage long-term behaviors in business and investment decision-making. It takes an active and market-based approach to achieve its goals. By conducting research and convening business leaders, FCLTGlobal develops tools and generates awareness of ways in which a longer-term focus can increase innovation, and create value. FCLTGlobal was founded in 2016 by BlackRock, CPP Investments, The Dow Chemical Company, McKinsey & Company, and Tata Sons out of the Focusing Capital on the Long Term initiative. Its membership encompasses asset owners, asset managers and corporations from around the world.

MEMBERS

Aberdeen Standard Investments, Baillie Gifford, Barclays, BlackRock, Bloomberg, Bridgewater, bp, The Carlyle Group, CDPQ, Cisco, CPP Investments, De Brauw Blackstone Westbroek, Dow, DSM, Edelman, EY, Federated Hermes, Fidelity Investments, futurefund, GIC, gsk, Glencore, Hillhouse Capital, Hong Kong Monetary Authority 香港金融管理局, HSBC, Kempen, KPMG, McKinsey & Company, MFS, MSCI, Nasdaq, Natixis Investment Managers, Neuberger Berman, nuveen A TIAA Company, NZ Superfund Te Kaitiaki Tahua Penihana Kaumātua o Aotearoa, Ontario Teachers' Pension Plan, PSP Investissements Investments, Russell Reynolds Associates, Schroders, State Street Global Advisors, Sullivan & Cromwell LLP, Tata, Temasek, Trinity Industries, Unilever, Wachtell Lipton Rosen & Katz, Walmart, Washington State Investment Board, Wellington Management

Table of Contents

Foreword

Asset owners, asset managers, and corporations from around the world created FCLTGlobal as a nonprofit research organization to encourage a longer-term focus in business and investment decision-making. At the heart of our work is a focus on the financial needs and ambitions of everyday savers, whose own long-term goals—whether saving for a home, an education, or retirement—too often are lost in the complexity of the financial markets. By working across the investment value chain, emphasizing the practical nudges and initiatives that all market participants can take, FCLTGlobal makes long-term practices the norm, not the exception.

Power Play: The Long-term Impact of Multi-class Shares brings this practicality to the subject of corporations issuing shares with different voting rights. For the first time ever, this research presents empirical facts about the long-term and global performance of these shares. Investors and corporations can use these facts to frame their decisions about issuing and holding these shares.

Dr. Pedro Matos, Dr. Ting Xu, and Dr. Jinhee Kim of the University of Virginia's Darden School of Business made these groundbreaking empirical findings possible with their data, methodology, and analysis. FCLTGlobal conducted this research in full collaboration with their Richard A. Mayo Center for Asset Management within the Darden School.

Research about the performance of shares with different voting rights previously has been frustrated by data that is limited to single national markets or to short time periods. Dr. Matos, Dr. Xu, and Dr. Kim resolved this challenge the hard way, by scrubbing nearly the entire MSCI ACWI constituency of companies, according to individual share-issuance structure, for well over a decade's time horizon. This process was intensely methodical, and it produced the first and only data set fit for addressing the performance of shares with different voting rights globally over the long term. FCLTGlobal sought out the Mayo Center—and, in particular, Dr. Matos, Dr. Xu, and Dr. Kim—because of this invaluable insight.

FCLTGlobal often seeks to provide translational insight, and this is an example. In addition to creating and owning the data on which these findings depend, our partners at the Mayo Center originated the methodology for this work and conducted most of the analysis. FCLTGlobal's focus has been on translating it into institutional investing and capital allocation terms so that asset owners, asset managers, and corporations can put the core findings to work.

As in everything that FCLTGlobal does, our members were integral participants in this translation process. I and FCLTGlobal would like to thank Caisse de dépôt et placement du Québec in particular for hosting our working group of members as part of this effort.

The result of this teamwork is powerful and tangible. Institutional investors and corporations now can know the facts about how shares with different voting rights perform globally over the long-term, and they also have a taxonomy to identify additional points of consideration. I am confident that this research will advance long-term behavior in the capital markets. I commend it to you with deep gratitude to Dr. Matos, Dr. Xu, Dr. Kim, the Richard A. Mayo Center for Asset Management, the Darden School of Business, and the University of Virginia.

Sarah K. Williamson

Sarah K. Williamson
CEO, FCLTGlobal

Executive Summary

Not all shareholders are created equal—at least when it comes to voting rights. While some companies take a "one share, one vote" approach to shareholder decision-making, others give disproportionate voting rights to founders or choose to offer multiple share classes, each with different voting power.

Companies have been offering shares with different voting rights for decades. Multi-class shares are common around the world, not just a phenomenon of Silicon Valley.

Strong arguments can be made on both sides of this issue: in favor and against the practice of offering shares with differential voting rights. Ensuring that founders and key decision-makers have extra voting heft might insulate them from short-term market demands[1], thus helping them focus on long-term goals. Yet, concentrating voting power in a few hands could also become a way for insiders to entrench their positions and suppress legitimate concerns from other owners.[2]

FCLTGlobal is particularly interested in testing the oft-used argument that multi-class shares promote long-term behavior and outperformance. Absent definitive evidence, arguments on this topic often focus disproportionately on the most high-profile, recent examples of companies using multiple share classes, which makes it hard to appreciate the full breadth, history, and market impact of differential voting rights.

To enrich the debate, FCLTGlobal partnered with researchers at the University of Virginia's Darden School of Business, who have a unique dataset covering companies that issue shares with different voting rights.

We found that:

- **Offering shares with different voting rights doesn't meaningfully affect companies' long-term performance**—whether in terms of shareholder returns, return on invested capital, or firm survival.
- While some analytic approaches do show a modest benefit for differential share classes, **the effect is due to the size and success of a single company, Alphabet**.
- **Total shareholder return (TSR) and return on invested capital (ROIC) on a global, 10-year basis aren't the only considerations when it comes to multiple share classes.** Investors, companies, and regulators need to think carefully about the implications for trust, governance, reputation, and beyond.

This paper, *Power Play: The Long-term Impact of Multi-class Shares* provides a fuller explanation of these findings, beginning with a broader look at the practice of issuing multiple share class—and followed by a detailed account of FCLTGlobal's statistical approach and findings.

Power Play: The Long-term Impact of Multi-class Shares

There is no commonplace word or phrase that encompasses all the ways companies deviate from the "one share one vote" approach. We are focused on any arrangement that involves a difference in voting rights, whether that involves two, three, or more share classes. For clarity of expression, we use a small number of interchangeable phrases to refer to all cases such cases, including "multi-class shares," "multiple share classes," and "shares with differential voting rights."

Because it's the "differential" factor that's key, we ignore instances where companies issue multiple share classes (say, on different exchanges) with equivalent voting rights.[3]

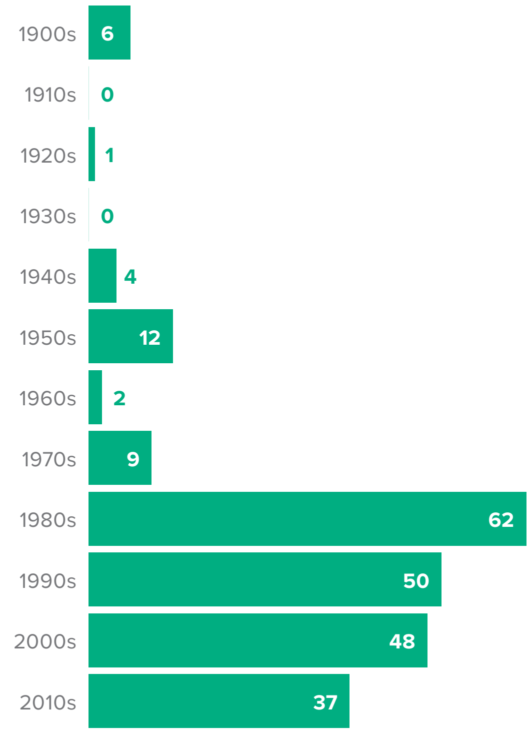
Whatever you call them, these arrangements have a long, and geographically expansive history—partly because they can serve a variety of different functions. At various times, companies have offered multiple share classes as economic protection against foreign investors (Ericsson)[4], for editorial independence (NYT, CBS)[5], or to prevent misuse of their product (Cyberdyne.)[6]

And if today's tech companies seem to have a special affinity for differential share classes, there have been other such clusters, including in consumer discretionary stocks in the 1980s.

Taking the broad view, multi-class shares have been in use for more than a century. In fact, fully two-thirds of all outstanding multi-class shares traded in 2018 were issued before 2000 (see Figure 1).

What's more, there are companies all around the globe who take this approach, opting to issue shares with differing voting rights. Brazil has the highest share of these companies, followed by Scandinavia. The US doesn't even crack the top 10.

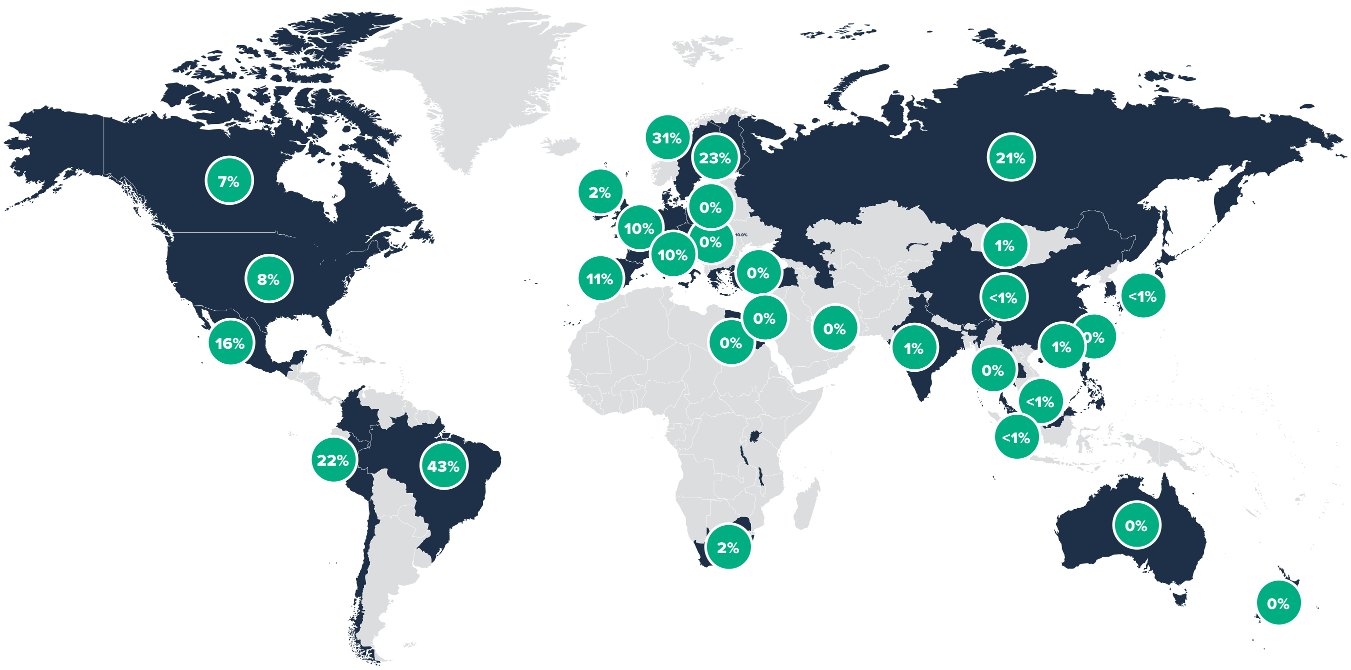
Figure 1. Cumulative volume of multi-class shares traded, MSCI ACWI, 2018. (billions of shares)



Source: MSCI's All-Country World Index (ACWI); Refinitiv Eikon.

Still, while it's possible to find companies in nearly all regions of the globe using multi-class shares, they are still a distinct minority. Year after year, the overwhelming majority of global companies opt for ownership arrangements that follow the "one share one vote" standard, with multi-class structures making up only 2 to 6 percent of global IPOs. And while multi-class shares are more common in the US in recent years (up to 19% in 2018)[7], many of the most prominent companies mentioned in the media today, such as Snapchat and Lyft, are too new to have a long-term performance record.

Figure 2. Companies' use of multiple share classes by country.



Source: Kim, Matos, and Xu. " Multi-class Shares around the world," University of Virginia (unpublished draft as of Nov. 2018).

MULTI-CLASS SHARES IN SILICON VALLEY

While multi-class shares are more common in the US in recent years (up to 19% in 2018)[8], many of the most prominent companies mentioned in the media today, such as Snapchat and Lyft, are too new to have a long-term performance record.

	IPO Year	Years in Sample	Headquarters
Alphabet	2004	10	California
Groupon	2011	5	Illinois
Facebook	2012	4	California
Workday	2012	4	California
Yelp	2012	4	California
GoPro	2014	2	California
Wayfair	2014	2	Massachusetts
Square	2015	1	California

	IPO Year	Years in Sample	Headquarters
Blue Apron	2017	N/A	New York
Pinterest	2017	N/A	California
Snapchat	2017	N/A	California
Dropbox	2018	N/A	California
Eventbrite	2018	N/A	California
Zuora	2018	N/A	California
Lyft	2010	N/A	California

Comparing performance

Figuring out whether companies who use differential share classes outperform—or underperform—would be extremely valuable to a number of key players in the investment value chain. That includes:

- Late-stage private CEOs deciding how to structure their listing
- Asset owners or asset managers making investment decisions
- Index providers structuring their offerings
- Advisors on upcoming IPOs
- Exchanges who want to set listing standards
- Regulators and other intermediaries between companies and investors

Until recently, this effort has been hampered by data limitations, as there are few long-term sources of information about share class issuance that cover global capital markets. Research to date has primarily focused more narrowly on the US experience, while media attention and public discourse often focuses on select, high-profile examples.[9]

However, thanks to a bespoke dataset painstakingly assembled by researchers at the University of Virginia's Darden School of Business, FCLTGlobal has completed a more comprehensive analysis.

What we learned is that companies with multiple share classes perform almost exactly like those who take the "one share, one vote" approach, with one glaring exception—Alphabet.

Our analysis focused on companies in the MSCI All Country World Index (ACWI) that issued shares between 1998 and 2016. That totaled 5,886 firms across 21 countries, after excluding regulated companies in the financial and utility industries, companies in Pakistan and the United Arab Emirates where data is sparse, and small firms that could distort the analysis.

Of those 5,886 global firms, a small but non-trivial 180 offered shares with different voting rights (roughly 3 percent.)

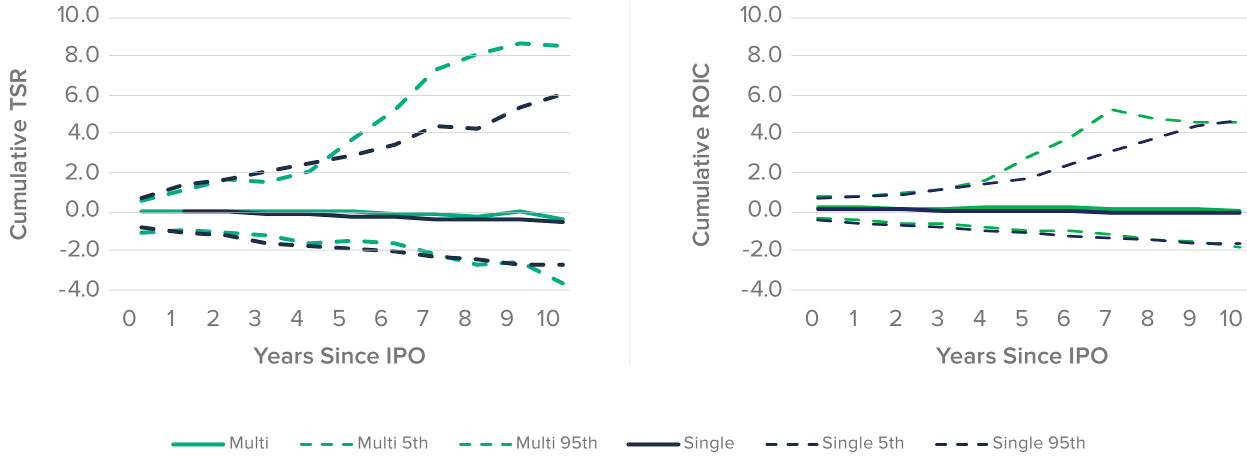
In addition to the global dataset, our work primarily differs from existing research in three ways:[10]

- We normalize all company performance to their issuing year, as opposed to measuring a specific period in time, regardless of firm age.
- We look at the cumulative 10-year performance of companies, as opposed to year-on-year inflection points.
- We measure performance by total shareholder return (TSR) and return on invested capital (ROIC), which are more common in the investor community, as opposed to Tobin's Q. **See page 11 to learn more about the methodology behind this report.**

Weighting each of these firms equally, and tracking their performance for ten years following IPO, we found:

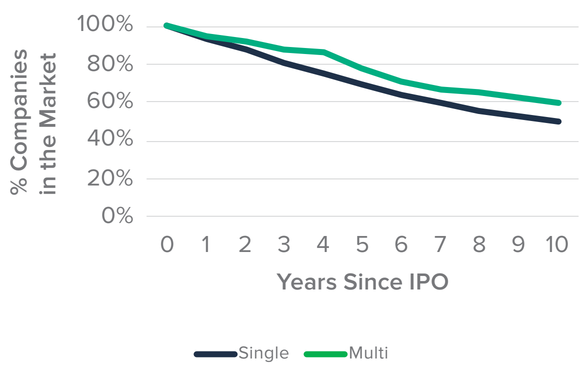
- **No statistically significant performance differences in cumulative 10-year returns since IPO.** Companies with multi-class shares did not clearly outperform—or clearly underperform—those with equal voting rights, whether in terms of total shareholder return or return-on-invested-capital.
- **Little evidence of superstar effects or greater variability among companies with multi-class shares.** Even if the average performance of companies with multiple share classes matches that for companies with uniform shares, that average might hide a broader variation. Perhaps companies with multiple share classes are more prone to bimodal, "boom or bust" results, where you see an unusual number of high performance and a similarly unusual number of dramatic failures. However, our data does not bear that out. The worst-performing companies with differential share classes perform very much like those with uniform shares. And while the best-performing multi-class companies may have a slight edge in terms of shareholder returns, that doesn't hold for return-on-invested capital.

Figure 3. TSR and ROIC, multi-class shares vs. single-class shares.



- **No meaningful difference in survival rates.** By year ten, somewhere between 50% and 60% of firms are still in our sample, whether they started off with multiple share classes or just one. The rest have either been acquired, ceased to operate, or changed their structure. While the lines in Figure 4 look distinctive, there is no statistical difference between the two share classes.[11]

Figure 4. Survival rates of multi-class shares vs. single-class shares.



THE ALPHABET EFFECT

The analysis above weights all firms equally, as a way to answer the question: "do companies that offer differential share classes outperform those with uniform share?" (short answer: no.)

But from an investor's perspective, the opportunity set changes and more often tracks cap-weighted indices, not equal-weighted indices. Portfolios often look to mimic market indices, many of which are cap-weighted. It's important to recognize that in such cap-weighted indices, large, successful companies that account for the bulk of return make up a disproportionate portion of the pie compared to smaller firms. "As such, investors' overall return is driven more by what they earn from the few massive successes than what they lose from the many smaller failures."

Analytically, this translates to a slightly different question: would investors gain an advantage—or face a disadvantage—by preferentially holding shares from companies with multiple share classes, in amounts that roughly reflect their market cap? With that lens, companies with multi-class shares fare significantly better than their counterparts.

This effect is entirely due to a single company: Alphabet. Its massive success offsets the shortcomings of many smaller multi-class companies. Without it, there is no statistically significant performance difference between companies with multi-class shares and those who take the "one share one vote" approach, even with cap weighting.

ON SUNSETTING

One response to the rise of multi-class shares has been a call for sunset provisions, giving founders some protection in early years—when the business is most fragile—but then encouraging them to revert to the "one share, one vote" model thereafter. This approach assumes that differential shares allow founders and insiders to make strategically vital moves in those early years, whereas our analysis did not find any early boost in cumulative performance among companies with multiple share classes—nor was there any cumulative drop-off in later years, relative to companies with just one share class.[12]

Returns aren't everything

Depending on where people sit in the investment value chain—company, investor, regulator—they often have different reasons to care about the impact of multi-class shares. Valuable as it is to know that companies with multi-class shares perform similarly to those with uniform shares, 10-year cumulative TSR or ROIC on a global basis aren't the only reasons to care about their use.

Indeed, there are a wide number of legitimate, non-performance-dependent reasons one might favor—or resist—the use of multi-class shares, depending on where you sit in the investment value chain. Here's a limited sample:

COMPANY-SPECIFIC CONSIDERATIONS

Idiosyncratic values: *Who* may be a lot more predictive than *how*. Investors must do their own due-diligence to determine whether or not they think the founder is a superstar and buy in to their vision. Not everyone can be the next Google.

Succession planning: Multi-class shares leave important decisions such as succession planning in the hands of few key individuals. Such a structure requires a high amount of trust that those individuals have both the right intentions and abilities.

Corporate takeovers: Understanding any conflicts of interests during corporate takeovers is crucial. On one hand, investors face key-person decision risk since the votes of one or two people override that of everyone else. On the other hand, these same few people may have the clearest vision for the future of the company, and will be the most well-informed on any potential deal.

Resilience in crisis situations: When multi-class firms are healthy, there can be a lot of public demand. What happens when a recession hits? Do companies with multi-class shares rebound faster or slower in crisis situations?

Effect on qualitative risks: Are multi-class firms more or less likely to be in the news for the wrong things? Is there more inherent reputational and ESG risk in a multi-class company or a single-class company? Does being multi-class compound potential problems?

The difference in ratios between the classes: Our analysis provides a quick yes/no answer, but reality may be more nuanced. How different is a 6:1 voting ratio compared to a 100:1 voting ratio? Some minimal amount of influence can still help sway management and boards.

MARKET-WIDE ISSUES

Rights and responsibilities of investors: Who should own the vote, and are uneven voting rights just as bad as empty voting? Like multi-class shares, empty voting and securities lending are problematic governance issues where there is a disconnect between who owns the shares and who owns the vote. We believe this is an important question for further research.[13]

Difference in different markets: Are multi-class shares the same or different between developed and developing markets? Different rules in different markets can make issuances so idiosyncratic that they are not generalizable into a single bucket.

Managerial entrenchment risks: Concentrating voting power runs the risk of managerial entrenchment, where the interests of the controlling shareholders and other minority shareholders can diverge, resulting in a principal-agent problem.

Separating economic exposure and voting control: Multi-class shares are the most prominent example of a difference in economic exposure and voting control, but there are many others like loyalty shares and pyramid structures. Loyalty shares (e.g. Fiat Chrysler, Spotify) give shareholders who have held shares throughout a certain holding period additional voting rights. Pyramid structures give a company at the top of the pyramid (e.g. the German State and Deutsche Telekom) significant voting rights to a company at the bottom of the pyramid (e.g. T-Mobile) while having minimum economic interest overall. For more on the concept of control skew, see MSCI's whitepaper on the subject.[14]

Effect on broader health of public markets: If multi-class listings weren't allowed on local exchanges, might some late-stage private companies choose to list on foreign public markets, or never choose to go public altogether? Not everyone has the opportunity to invest in private companies, and indices themselves may have differing views.[15]

In each of these cases, there is ample room for disagreement, productive debate, and further research.

Conclusion

Companies that use shares with different voting rights do not perform differently in TSR or ROIC terms on a global basis during the ten years following issuance. Firms that issue multiple share classes perform just like those with a single share class—no better, no worse.

That's true not just on average but across various, more granular measures. For instance, companies with multi-class shares don't seem likelier to become superstars, or more prone to collapse. And there's no evidence that their performance evolves differently, with a stronger start or a later-year drop-off.

What's more, while a first-pass, cap-weighted analysis does suggest that an index of companies with multi-class shares might outperform a comparable index of firms who take the "one share one vote" approach, the effect is entirely dependent on the impact of Alphabet.

One takeaway—for market participants who are primarily focused on performance—is that it might be worth attending to other issues proven to be more predictive of long-term returns, such as R&D spending, board diversity, overdistribution of capital, and ESG controversies.[16]

Contentious and attention-grabbing as the issue of multi-class shares may be, in the end it doesn't seem to affect performance.

Using this Report

THE DEFINITION OF "LONG-TERM"

For the purposes of this research, we define "long-term" in this study as the ten years following a company's issuance of shares.

Accordingly, we standardize all company performance to the issuing year. For instance, this dataset will contain Alphabet Year 1, Year 2, . . . Year 10. It then tests the performance difference between Alphabet Year 1 and other companies' Year 1, and so forth.

This differs from other studies' evaluation of fixed time periods, such as 2000-09, irrespective of how companies' maturation varies within that time period. We chose this approach to avoid any bias related to companies' lifecycle.

THE DEFINITION OF "CUMULATIVE"

To measure total long-term wealth creation, we look at the cumulative 10-year performance of companies, as opposed to year-on-year inflection points. Our question is whether companies that use shares with different voting rights perform differently globally over the long term—not whether they perform differently in a lot of one-year increments.

For example, a multi-class company can significantly outperform its counterpart in years 1-3, but slightly underperform in year 4. It may be true that the multi-class company underperformed its single-class peer in year 4 alone, but cumulatively, the multi-class company has outperformed in years 1-4.

MEASURING PERFORMANCE

We measure performance by total shareholder return (TSR) and return on invested capital (ROIC). TSR and ROIC are more common measures of performance in the investor community, while Tobin's Q is more common among scholars.

TSR and ROIC also offer complementary financial and economic perspectives, respectively. That is important for studies like this one because it allows us to explore contending hypotheses. One hypothesis is that these companies do well economically, perhaps because of a founder's vision, but are discounted in the financial markets because of a blanket aversion to this share-class structure. Another is that these companies do well financially, perhaps because of a founder's superstar effect, without justification from the underlying economics.

EQUAL-WEIGHTING

We look at equal-weighted performance in our main research question, as opposed to value-weighting.

This looks at the potential results and opportunity set from the perspective of a late-stage private company instead that of an investor, where overall performance may be skewed by superstars.

Methodology

UNIVERSE

Companies publicly listed in an MSCI All-Country World Index (ACWI) country with at least 2 companies that have issued shares with different voting rights between 1998-2016. All industries were included except for utilities (Standard Industrial Classification (SIC) codes 4900-4999) and financials (SIC codes 6000-6999). To mitigate the influence of very small firms in the analysis, we restrict the sample to firms with an initial market cap above US $100 million. Our final sample consists of 5,886 firms across 21 countries: 180 with multi-class shares and 5,706 with single class shares. Each company-year observation is treated as a unique data point. The following 21 countries are represented in our dataset: United States, Canada, Italy, France United Kingdom, China, Denmark, Japan, Russia, South Korea, Brazil, Chile, Netherlands, Belgium, Mexico, Sweden, Finland, Germany, Philippines, Colombia, and Peru.

SOURCE

FactSet, Refinitiv Datastream, MSCI ACWI, Refinitiv Eikon, manually cleaned dataset from the University of Virginia's Darden School of Business

DEFINITION OF "MULTI-CLASS SHARES"

A company is considered to be multi-class in our dataset if it has two or more share classes with different voting rights on the same exchange. This includes companies with non-voting preferred shares and voting common shares (i.e. Petrobras), but excludes companies with multi listings on multiple stock exchanges with the same voting rights (i.e. Unilever). We do not look at other forms of separation of economic ownership and voting control (i.e. loyalty shares, family firms) in this study.

Y VARIABLE

TSR and ROIC. Cumulative performance (TSR and ROIC) was regressed on multiple variables and levels of fixed effects.

STATISTICAL SIGNIFICANCE

Determined by multivariable regression at the 95 percent confidence interval.

MISSING/TRUNCATED DATA

All companies are standardized to their IPO year, with performance measured annually up to 10 years out from issuance. If a company only had partial data for the sample period, then it would remain in the sample up to the last available year of the sample period (i.e. Facebook appears in our sample for years 0-4, but drops out in years 5-10 because the company is not old enough yet).

OUTLIERS

Potentially unbounded values winsorized at the 2.5% tail level to mitigate the influence of outliers.

Controls include:

- Year
- IPO Year
- Country
- Industry (by 2-digit SIC code)

Fixed Effects include:

- Country x Year
- Country x IPO Year
- Industry x Year
- Industry x IPO Year

Acknowledgments

MATTHEW LEATHERMAN, *Lead Author*
FCLTGlobal

ALLEN HE, *Lead Author*
FCLTGlobal

VICTORIA TELLEZ
FCLTGlobal

EDWARD ALLEN
MSCI Inc.

AMMA ANAMAN
Nasdaq

ALAN BRETT
MSCI Inc.

THONG CHIE SHANG
GIC

GERT DIJKSTRA
APG Asset Management

LARS DIJKSTRA
Kempen Capital Management

MARIANNE HARPER GOW
Baillie Gifford

JEAN-LUC GRAVEL
Caisse de dépôt et placement du Québec

LYSANNE GRAY
Unilever

MARGARET GUNAWAN
BlackRock

ROBERT HALL
Hermes Investment Management

DANIEL HARRIS
The Carlyle Group

INGRID HOLMES
Hermes Investment Management

RANDALL HOPKINS
Nasdaq

JINHEE KIM
University of Virginia - Darden School of Business

DUNCAN LAMONT
Schroders plc

ISABELLE LAPRISE
Caisse de dépôt et placement du Québec

HYUN-WOO LEE
GIC Private Limited

RIC MARSHALL
MSCI Inc.

PEDRO MATOS
University of Virginia - Darden School of Business

DIMITRIS MELAS
MSCI Inc.

SCOTT MILLER
Sullivan & Cromwell, LLP

CLAUS BERNER MØLLER
ATP

ADRIANA MORRISON
CPP Investments

BRIDGET MURPHY
Washington State Investment Board

RÉJEAN NGUYEN
Caisse de dépôt et placement du Québec

MARK OUD
Kempen Capital Management

GAVIN RALSTON
Schroders plc

PAUL SCHNEIDER
Ontario Teachers' Pension Plan

MICHAEL SHAVEL
Wellington Management Company

MIEKELA SINGH
Ontario Teachers' Pension Plan

MICHAEL VIOLA
AT&T Inc.

CLAUS WIINBLAD
ATP

KATIE WU
CPP Investments

TING XU
University of Virginia - Darden School of Business

Endnotes

1 See, e.g., Alphabet Inc., Form S-1 Registration Statement, p. iii. https://www.sec.gov/Archives/edgar/data/1288776/000119312504073639/ds1.htm.

2 See, e.g., "Proxy Voting Principles and Guidelines," CPP Investment Board, December 10, 2018, p. 13. https://cdn1.cppinvestments.com/wp-content/uploads/2019/09/CPPIB_Proxy_Voting_Principles_and_Guidelines_EN_2019.pdf.

3 An example of this is Unilever NV, which is listed both on both the London Stock Exchange and the Euronext Amsterdam. However, since both share classes are worth exactly the same in voting power, we do not consider Unilever NV a multi-class company in our dataset.

4 See, Ericsson 2017 Annual Report, p. 116. https://www.ericsson.com/assets/local/investors/documents/2017/ericsson-annual-report-2017-en.pdf#page=116.

5 See, e.g., Nocera, Joe, "How Punch Protected The Times," The New York Times, October 1, 2012. https://www.nytimes.com/2012/10/02/opinion/nocera-how-punch-protected-the-times.html.

6 See Cyberdyne's IR page on stock information. Cyberdyne uses multi-class shares "for the purpose of ensuring the [c]ompany's advanced technologies are used for peaceful purposes, and preventing the misuse of these technologies to harm humans or to create military weapons. https://www.cyberdyne.jp/english/company/IR.html.

7 Ritter, Jay, "Initial Public Offerings: Multi-Class IPOs," University of Florida, December 31, 2018. https://site.warrington.ufl.edu/ritter/files/2019/04/IPOs2018DualClass.pdf.

8 Ritter, Jay, "Initial Public Offerings: Multi-Class IPOs," University of Florida, December 31, 2018. https://site.warrington.ufl.edu/ritter/files/2019/04/IPOs2018DualClass.pdf.

9 Of the existing literature, several like Gompers et. al., (2010), Matos (2017) show that multi-class shares underperform their single-class counterparts in country-specific markets within a short sample period. Several others like Bohmer et al. (1996), the IRRC (2012) and Kim & Michaely (2019) show a trend that MCS firms first outperform, then underperform their counterparts on a year-by-year comparison. Finally, others like Adams & Ferreira (2008), Venturozzo (2015) and Berger & Hodrick (2018) state that existing literature is inconclusive, and it is hard to generalize about economic performance of the mechanism due to the rarity of the phenomenon and short study periods. Overall, before Kim et. al (2018), statements about MCS performance generalized from mainly shorter-term, year-over-year, country specific (primarily US) studies.

10 We acknowledge that using a different dataset, time-period, and methodology could yield different results, but we see our work as the first uniquely comprehensive, global, and long-term study in examining the performance of multi-class shares.

11 P-value from the logrank test was 0.06.

12 While Jackson (2018) found this to be true in a comparison between US multi-class firms with and without sunset provisions, we did not find the same drop-off in our sample and methodology.

13 For an example of an institutional investor's considerations on governance issues, see "2020 Proxy Voting Policy," *Kempen*, December 2018.

14 Brett, Alan, "Assessing Control," MSCI, April 2019. https://www.msci.com/documents/10199/a7c17b59-10de-9849-9f7c-1f70abece5da.

15 See, "The Promise of Market Reform: Reigniting America's Economic Engine," *Nasdaq*, April 2018, and Shavel, Michael "Dual-class shares: How will new index treatment affect investors?" *Wellington Management Company*, August 2018.

16 Mirchandani et. al., "Predicting Long-term Success: for corporations and investors worldwide," FCLTGlobal, September 2019. https://www.fcltglobal.org/docs/default-source/publications/predicting-long-term-success-for-corporations-and-investors-worldwide.pdf?sfvrsn=8f00228c_6.

FOCUSING CAPITAL
ON THE LONG TERM

FCLTGLOBAL

31 Saint James Avenue, Suite 880A, Boston, MA 02116 USA | +1 617 203 6599 | www.fcltglobal.org