

Global Industry Profit Pools

Visualizing Value Creation for an Industry

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Credit Suisse HOLT

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Introduction

Automobiles

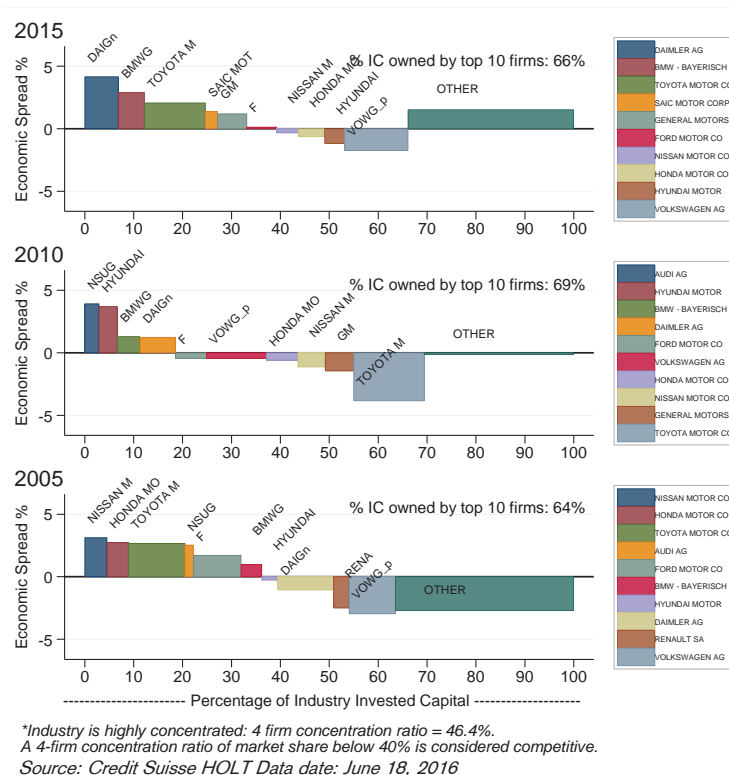
Count of firms: 94

2015 FY reporting percentage: 73%

Sustainable value creation is of prime interest to investors and corporate executives. The industry is a sensible place to begin this analysis. Profit pools are one of the most useful tools available for assessing an industry.¹ A profit pool shows how an industry's value creation is distributed at a point in time. Examination of profit pools over time allows investors and corporate executives to see how the distribution of economic profits has changed. This handbook shows detailed profit pools for 65 global industries over a ten-year period.

At a glance, a profit pool shows how large companies are (width of the rectangle) and how much value they create or destroy (height of the rectangle). The horizontal axis is the percentage of the industry, typically measured as invested capital or sales, and the vertical axis is the economic profit spread, or the return on invested capital minus the cost of capital. As a result, the area of each rectangle—the product of invested capital and economic profit spread—is the total value added, or economic profit, for that industry or company. For example, a company that has \$100 million of invested capital and an economic profit spread of 5 percentage points generates \$5 million in economic profit (\$100 million x 0.05 = \$5 million). The total profit pool for the industry is the sum of the economic profit of all the companies.²

To understand the overall profitability of an industry, it is useful to analyze the average profitability over a full business cycle, which is generally three to five years.³ But average profitability doesn't reveal how value has migrated over time. Profit pools are particularly effective because they allow you to trace the increases or decreases in the components of the value-added pie. In this handbook we look at profit pools from ten years ago, five years ago, and the most recent year to see how results have changed.



The exhibit shows profit pools for the automobile industry for 2005, 2010, and 2015, including active and inactive companies.⁴ The horizontal axis represents 100 percent of the capital invested in the industry by public companies. The vertical axis shows a firm's economic profit spread. We calculate this as Cash Flow Return on Investment (CFROI®) minus the discount rate.⁵

The exhibit shows the top 10 firms by market capitalization and the remaining companies are in the "Other" category. For example, there were 94 companies in the sample for 2015 and 84 companies were in the category of "Other." The automobile industry is highly concentrated, with 4 firms accounting for more than 46% of industry sales. When examined by investment, 10 firms account for 66 percent of the industry's total invested capital.

Introduction

Automobiles

Count of firms: 94

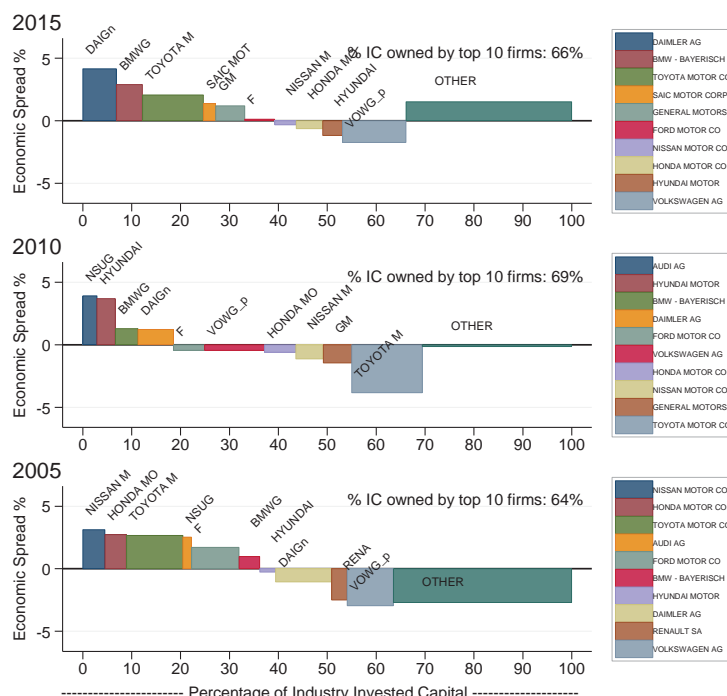
2015 FY reporting percentage: 73%

The industry is clearly cyclical. Most of the automakers, both big and small, destroyed value in 2010 as the economy was still coming out of a deep recession. But the overall picture reveals that the industry does not define a company's destiny. Even the industries that create the most value include companies that destroy value, and the industries that destroy the most value have companies that create value. That some companies buck the economics of their industry provides insight into the potential sources of economic performance.

Creating a narrative to explain the rise and fall of the various competitors can provide important clues about what it takes to sustain value creation. The profit pool of the automobile industry reveals that since 2010 the luxury automakers have outperformed automakers that compete in the main part of the market. For example, Daimler (Mercedes) and BMW are creating considerable value and show up on the left side of the exhibit.

The companies that focus more on the non-luxury segment, including Ford, General Motors, and Nissan, improved their economic spread but still lag the luxury automakers. In addition, their share of the industry's total invested capital also declined. Toyota and Hyundai have followed divergent paths. Toyota's returns improved alongside strength in its luxury Lexus brand and in the resurgent SUV space, whereas Hyundai's results were hurt by exposure to a slowing China. And Volkswagen's returns deteriorated considerably since the company got embroiled in a scandal related to vehicle emissions.

Profit pools also provide a quick view of industry concentration. Researchers have shown a reliable link between industry concentration and profitability. Concentrated industries earn above-average profits and less concentrated industries earn below-average profits.⁶



*Industry is highly concentrated: 4 firm concentration ratio = 46.4%.
A 4-firm concentration ratio of market share below 40% is considered competitive.
Source: Credit Suisse HOLT Data date: June 18, 2016

Profit pools are a valuable tool for assessing the attractiveness of an industry and how it changes. This handbook allows investors and executives to assess the attractiveness of 65 industries and to gain some insight into how those industries have changed over time.

References:

- Orit Gadiesh and James L. Gilbert, "Profit Pools: A Fresh Look at Strategy," *Harvard Business Review*, May-June 1998, 139-147; Orit Gadiesh and James L. Gilbert, "How To Map Your Industry's Profit Pool," *Harvard Business Review*, May-June 1998, 149-162.
- We present HOLT's economic profit framework, which is now a standard feature of HOLT Lens®, in this report: "Introducing HOLT Economic Profit", September 2014.
- Michael E. Porter, "The Five Competitive Forces that Shape Strategy," *Harvard Business Review*, January 2008, 78-93.
- Industries classified by MSCI GICS 6-digit codes (level 3).
- We use an adjusted CFROI. See appendix for details.
- Kewei Hou and David T. Robinson, "Industry Concentration and Average Stock Returns," *Journal of Finance*, Vol. 61, No. 4, August 2006, 1927-1956.

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Industry profitability changes over past 5 years



Largest Increase in Economic Profit Spread	Economic Profit Spread 2010	Economic Profit Spread 2015	Change
Thriffs & Mortgage Finance	-14.2	6.2	20.4
Consumer Finance	-1.9	6.3	8.2
Biotechnology	2.6	8.3	5.7
Health Care Technology	2.0	6.7	4.6
Life Sciences Tools & Services	4.0	8.2	4.2

Largest Decline in Economic Profit Spread	Economic Profit Spread 2010	Economic Profit Spread 2015	Change
Internet & Catalog Retail	7.8	6.5	-1.2
Multi-Utilities & Unreg. Power	-0.1	-1.2	-1.1
Pharmaceuticals	4.5	3.7	-0.8
Machinery	1.7	1.0	-0.7
Commercial Banks	0.7	0.1	-0.6

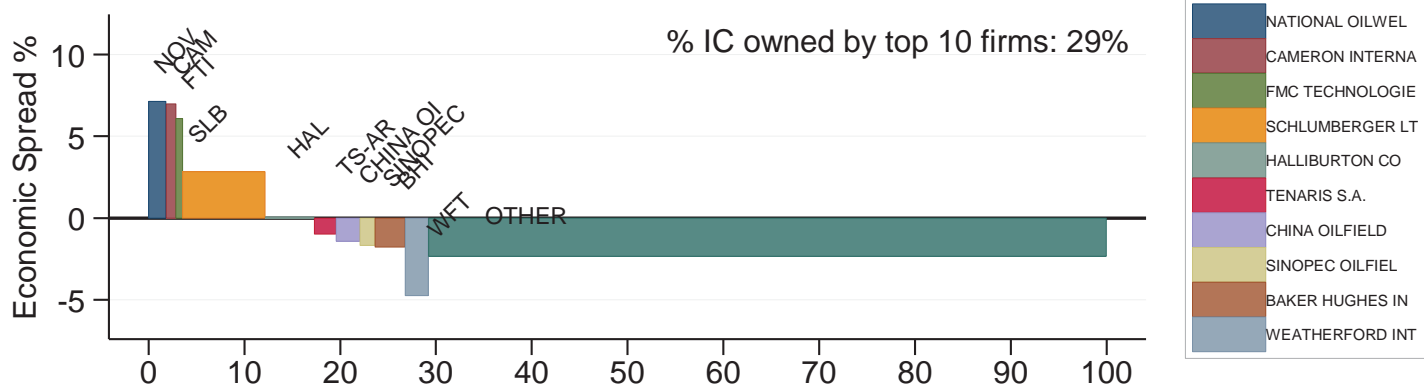


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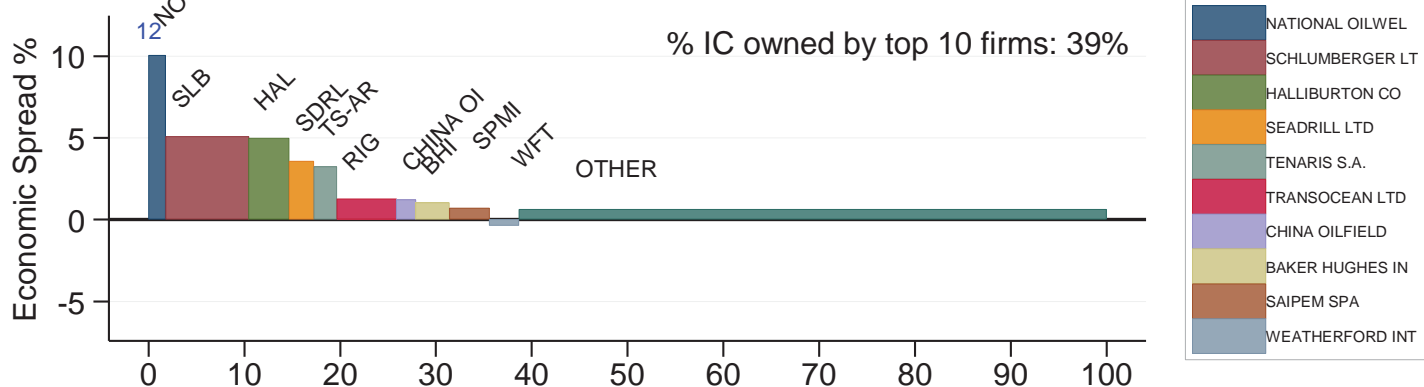
Count of firms: 325

2015 FY reporting percentage: 58%

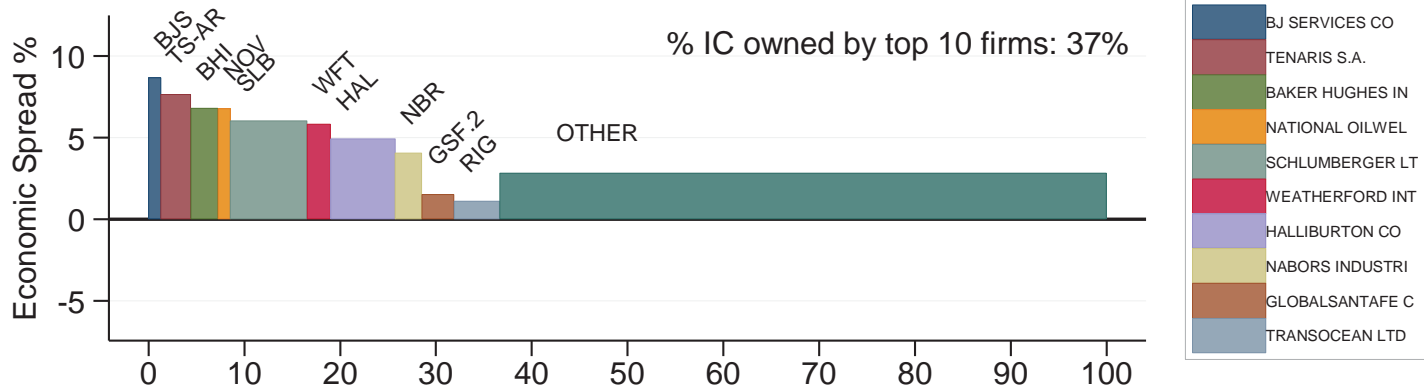
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 25.5%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

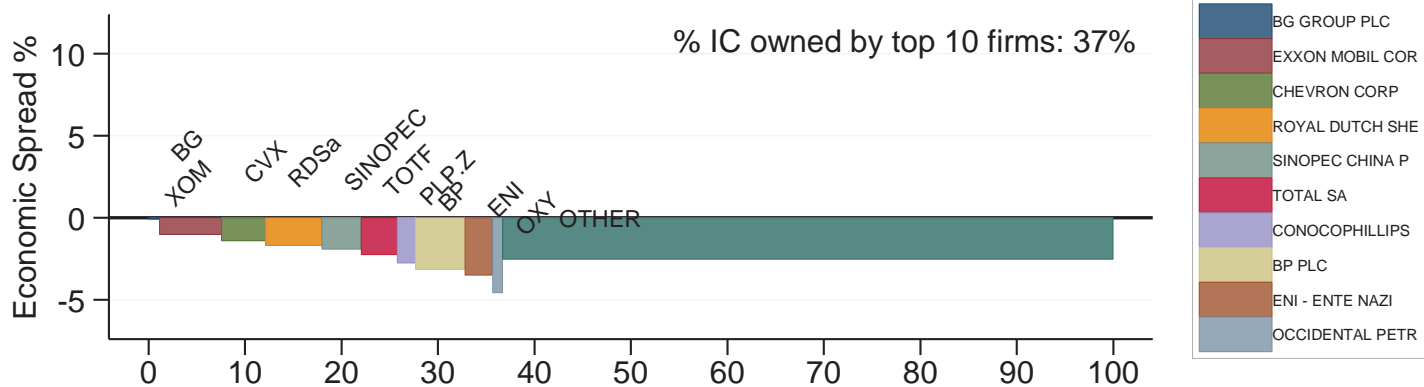


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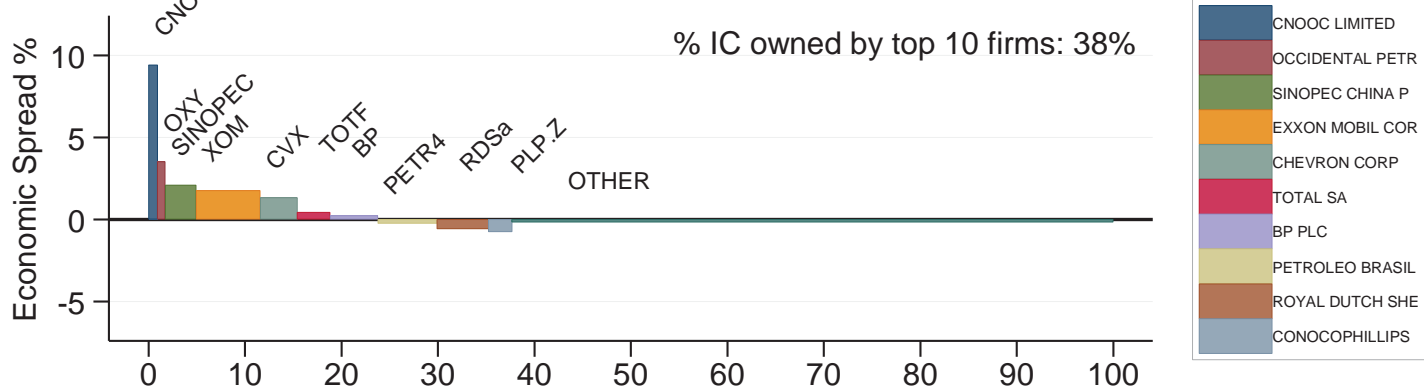
Count of firms: 987

2015 FY reporting percentage: 58%

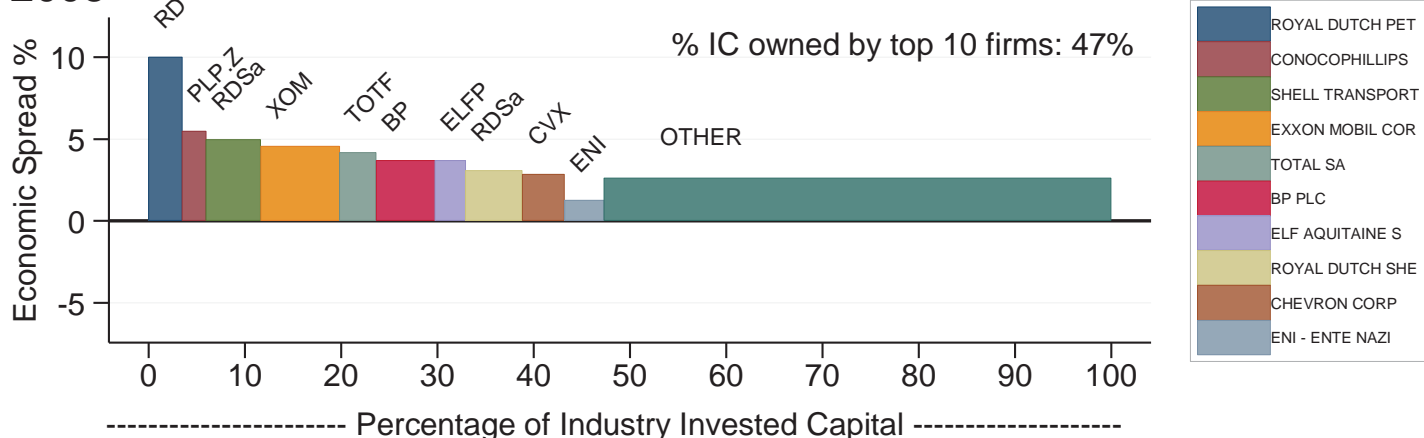
2015



2010



2005



*Industry is considered competitive: 4 firm concentration ratio = 30.6%.

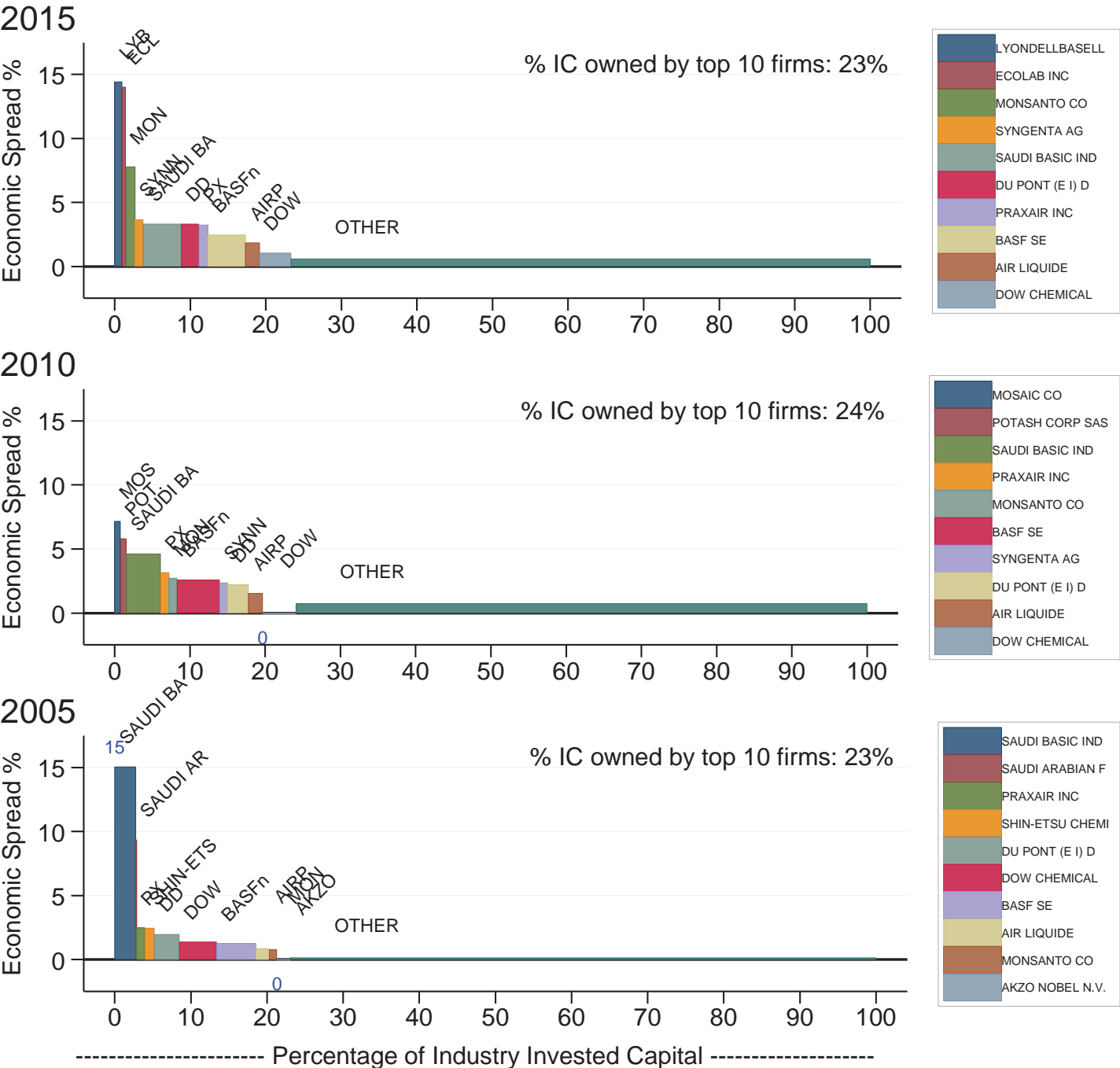
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 151010

Count of firms: 1048

2015 FY reporting percentage: 53%



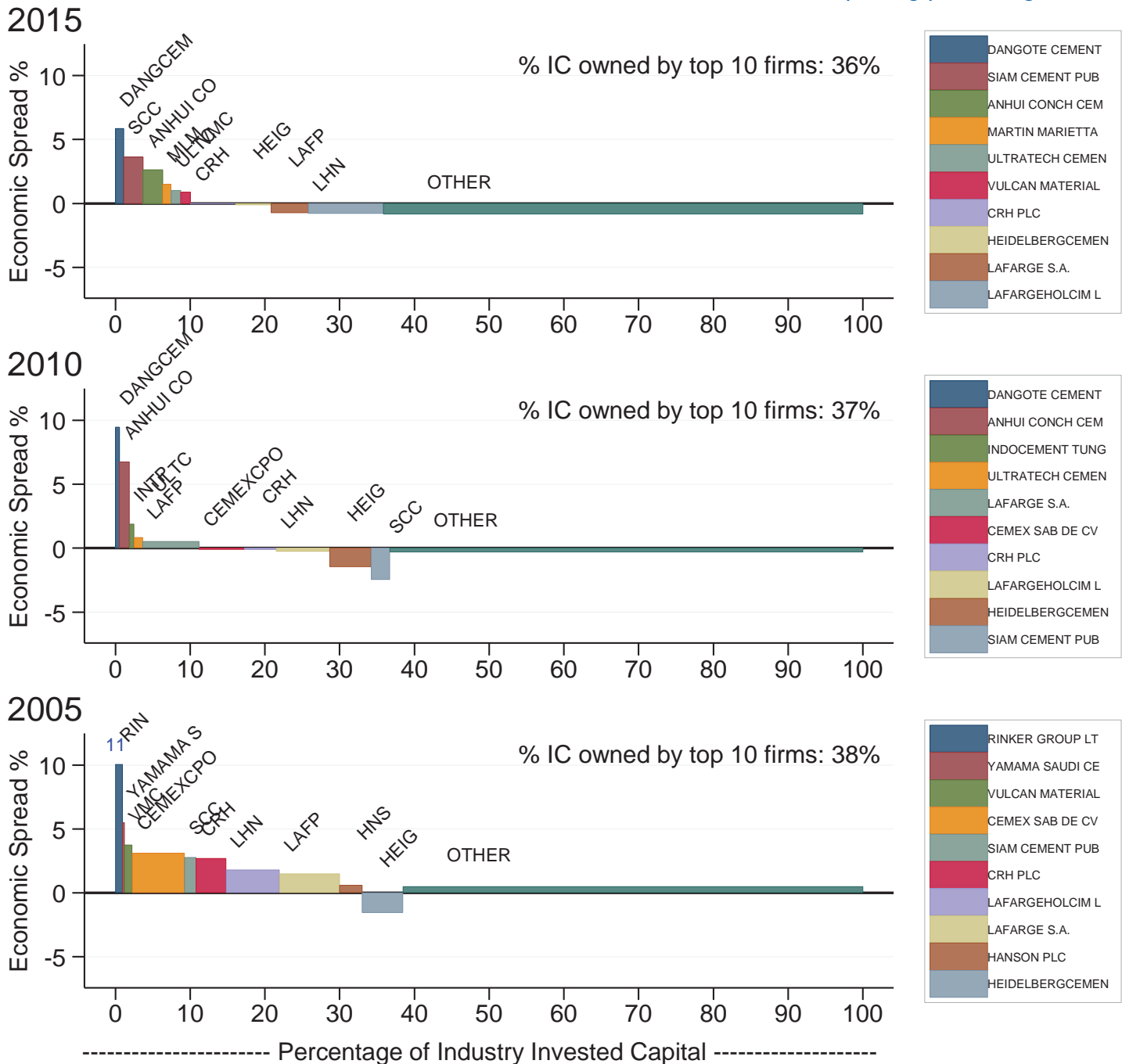
*Industry is considered competitive: 4 firm concentration ratio = 14.3%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 151020

Count of firms: 307

2015 FY reporting percentage: 58%



*Industry is considered competitive: 4 firm concentration ratio = 30.2%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

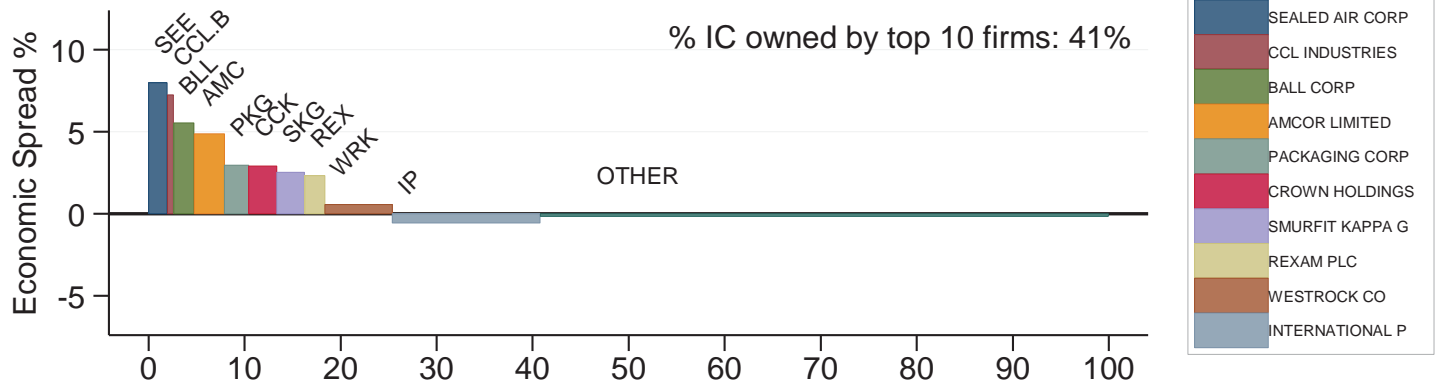


MSCI GIC: 151030

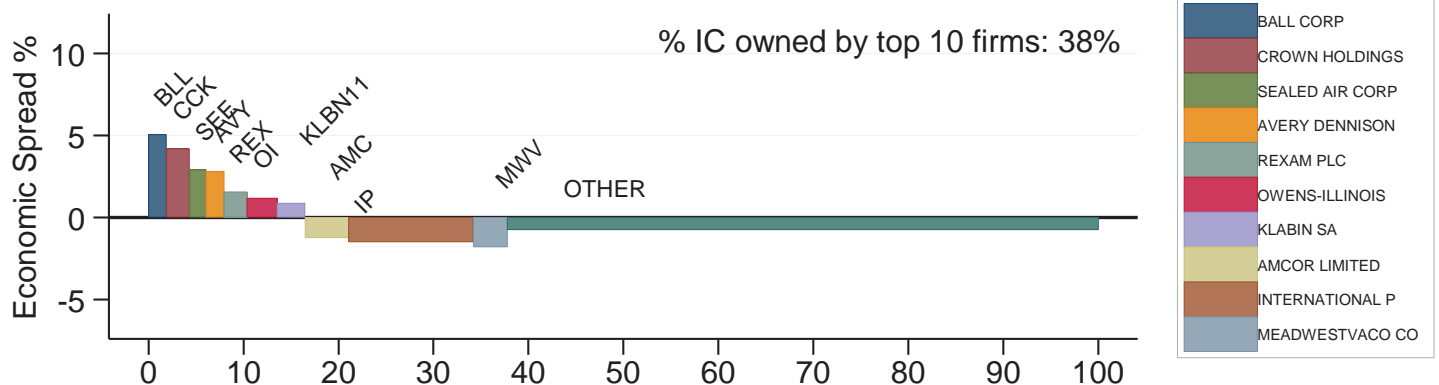
Count of firms: 282

2015 FY reporting percentage: 44%

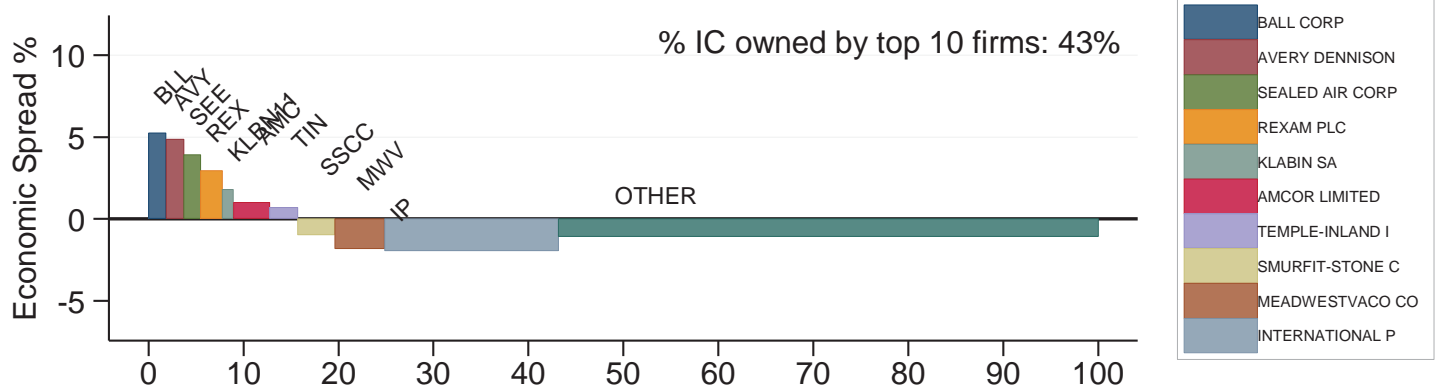
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 26.7%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

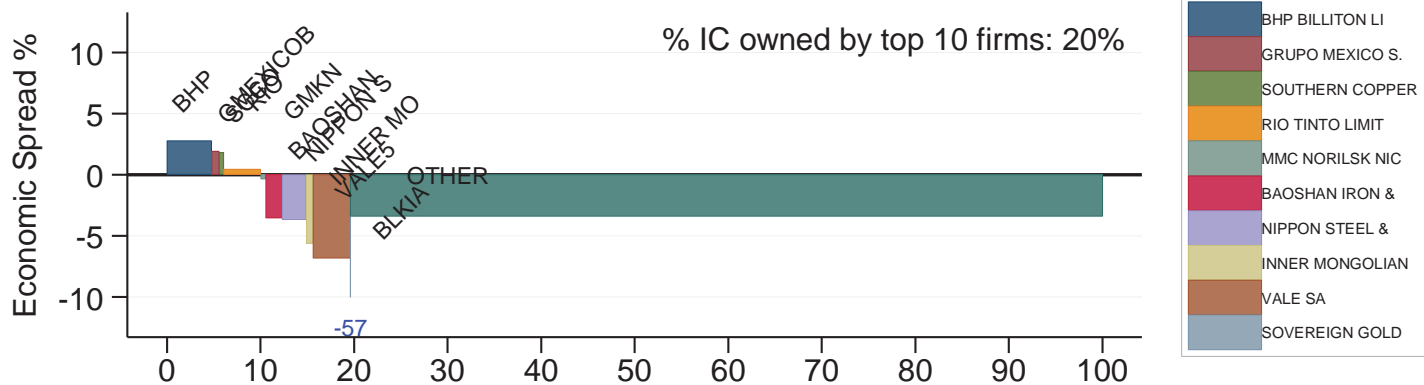


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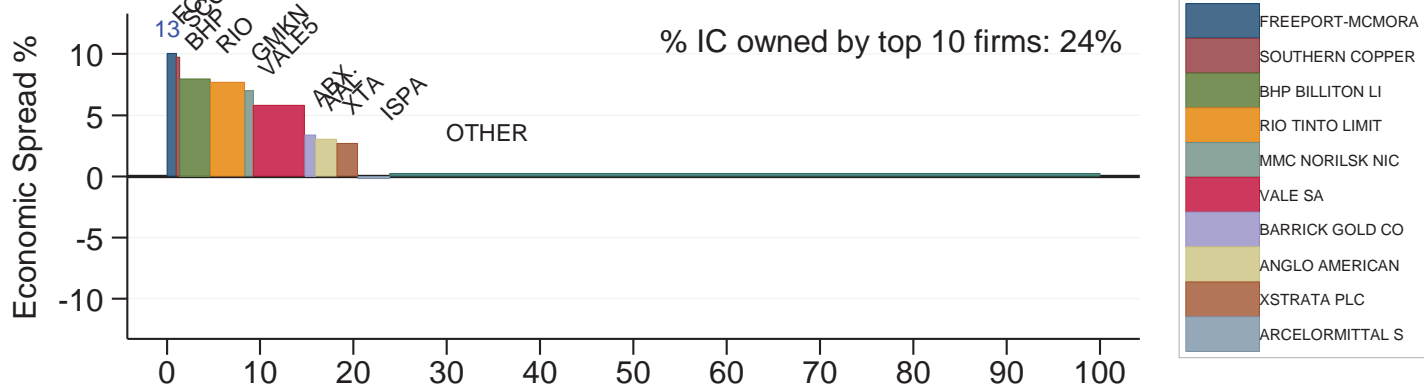
Count of firms: 1481

2015 FY reporting percentage: 61%

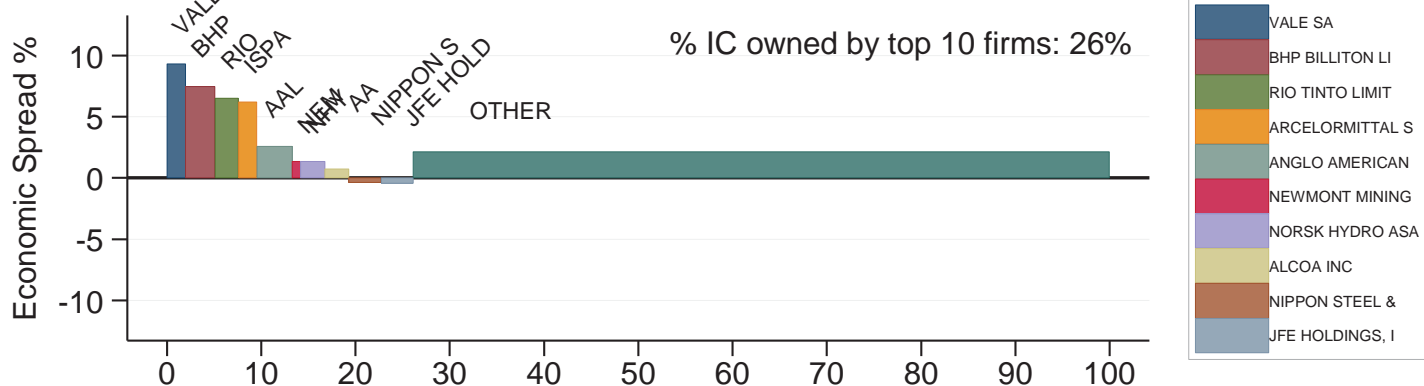
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 8.2%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

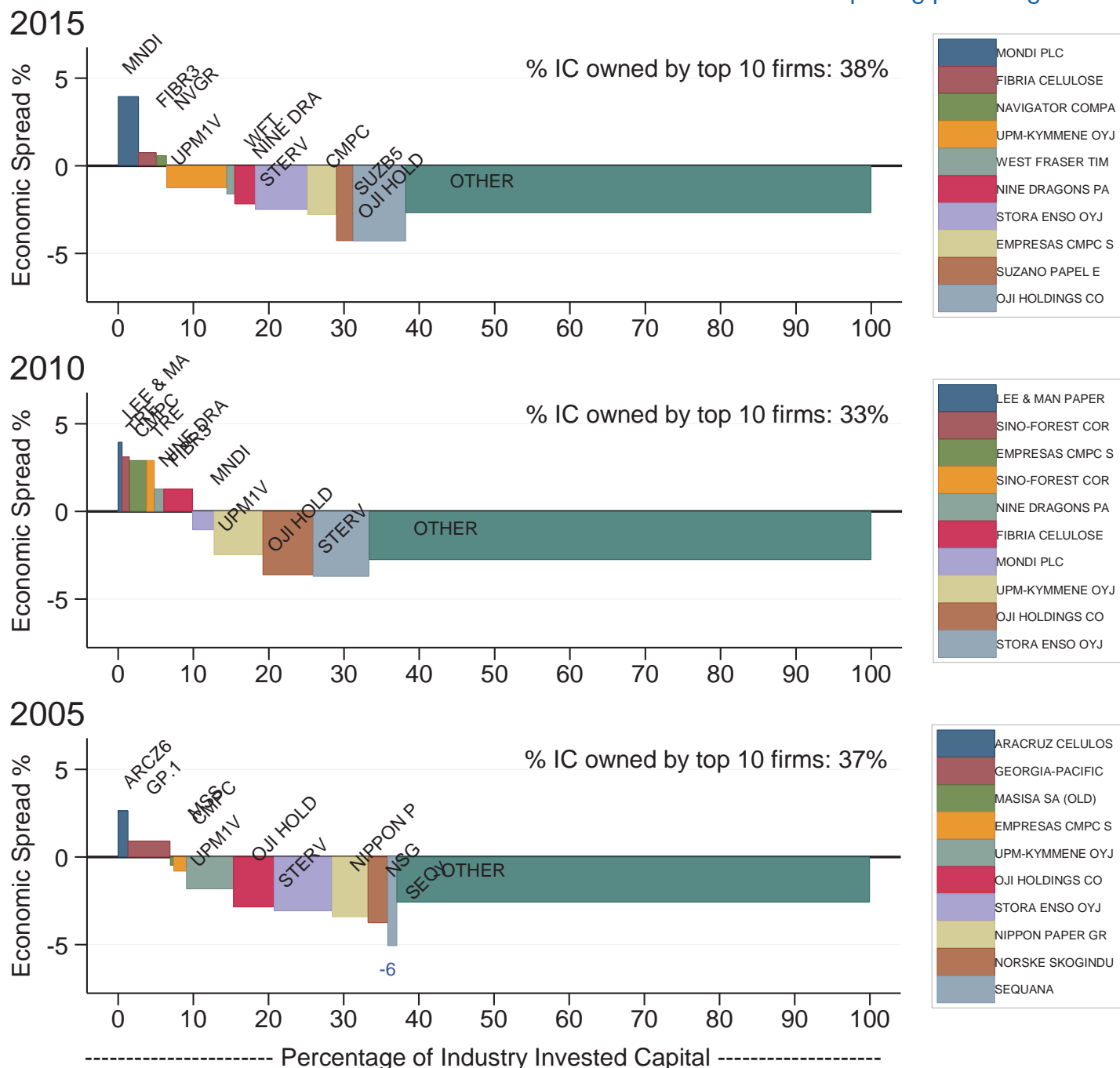
Paper & Forest Products



MSCI GIC: 151050

Count of firms: 231

2015 FY reporting percentage: 49%



*Industry is considered competitive: 4 firm concentration ratio = 32.4%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

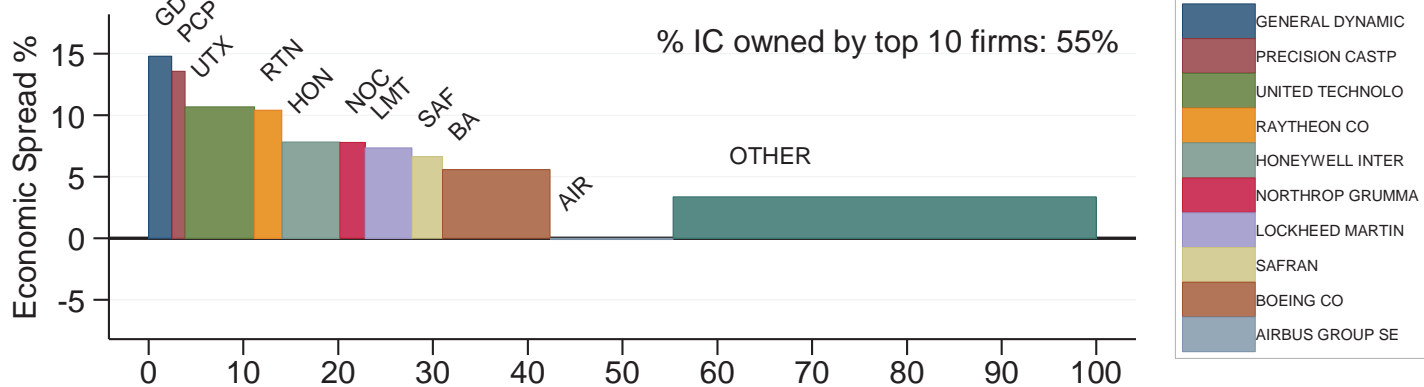


MSCI GIC: 201010

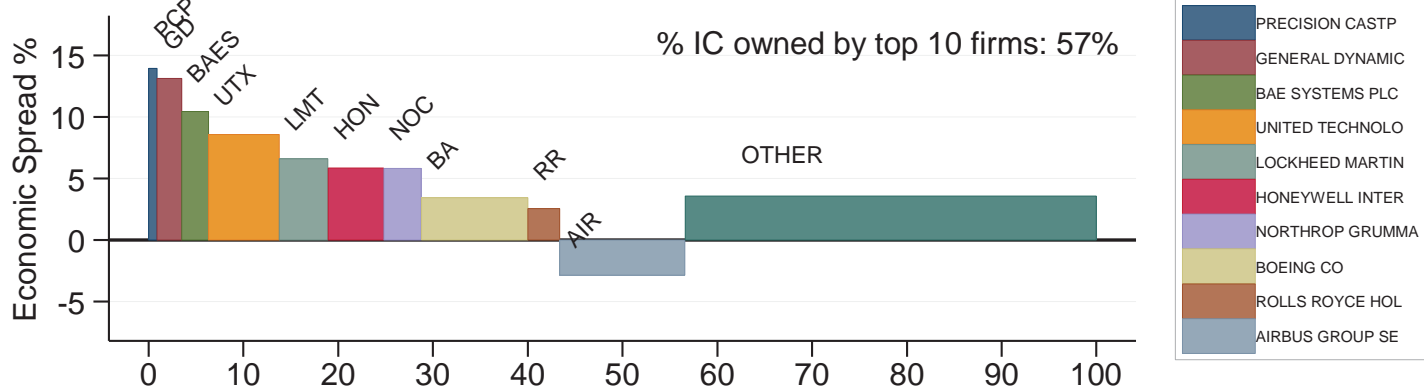
Count of firms: 174

2015 FY reporting percentage: 66%

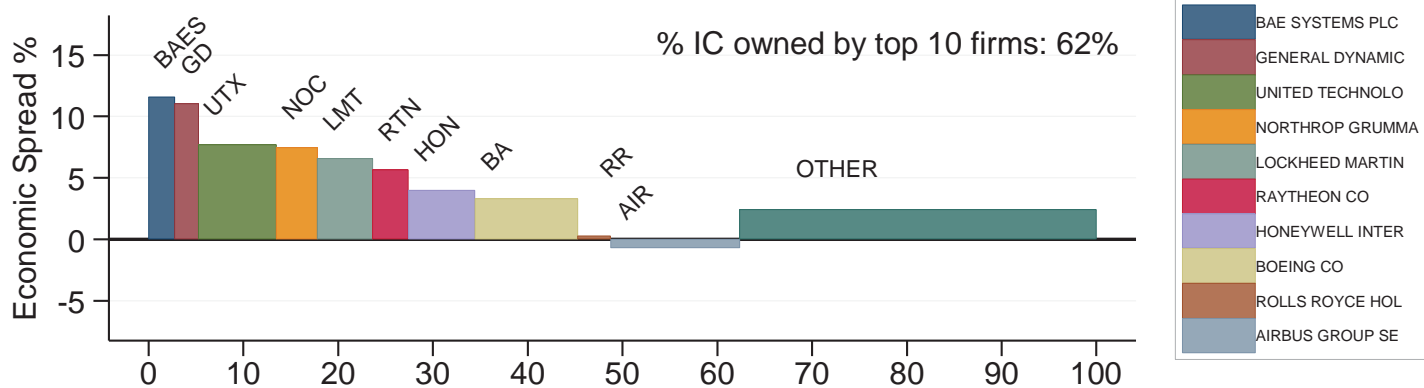
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 38.2%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

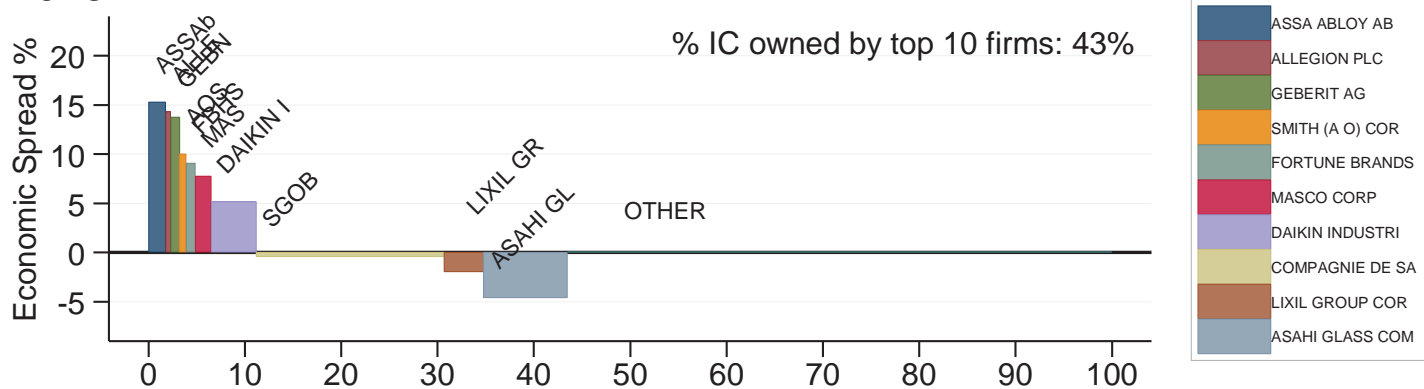


MSCI GIC: 201020

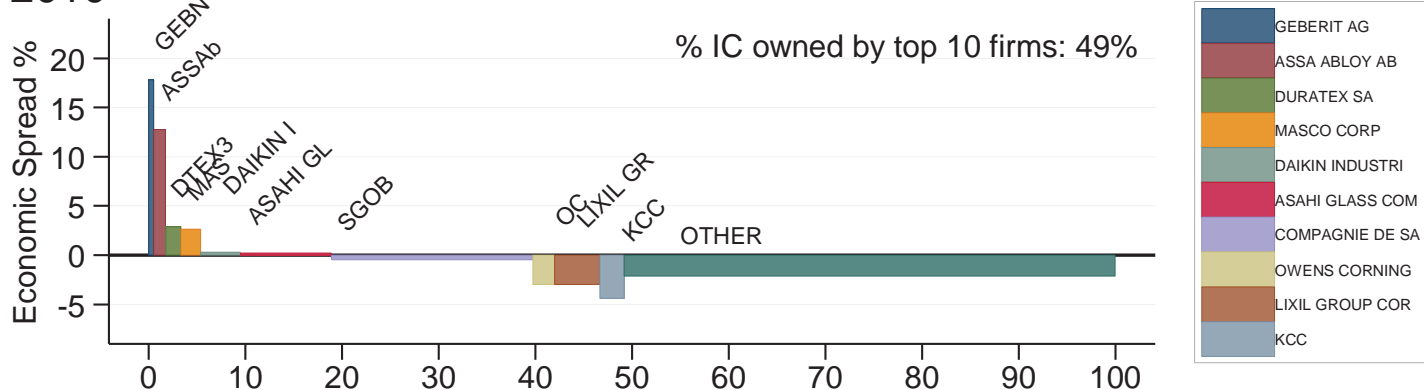
Count of firms: 317

2015 FY reporting percentage: 60%

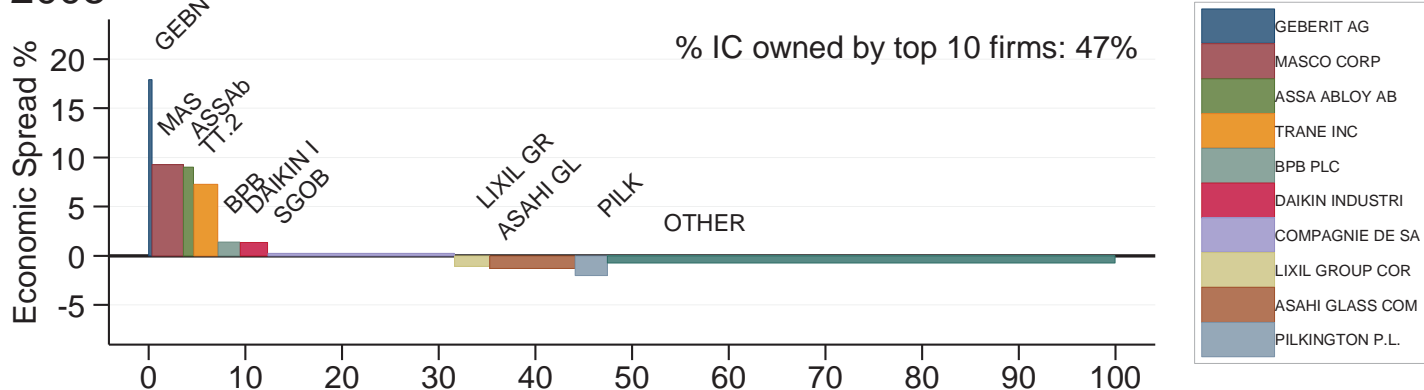
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 34.7%.

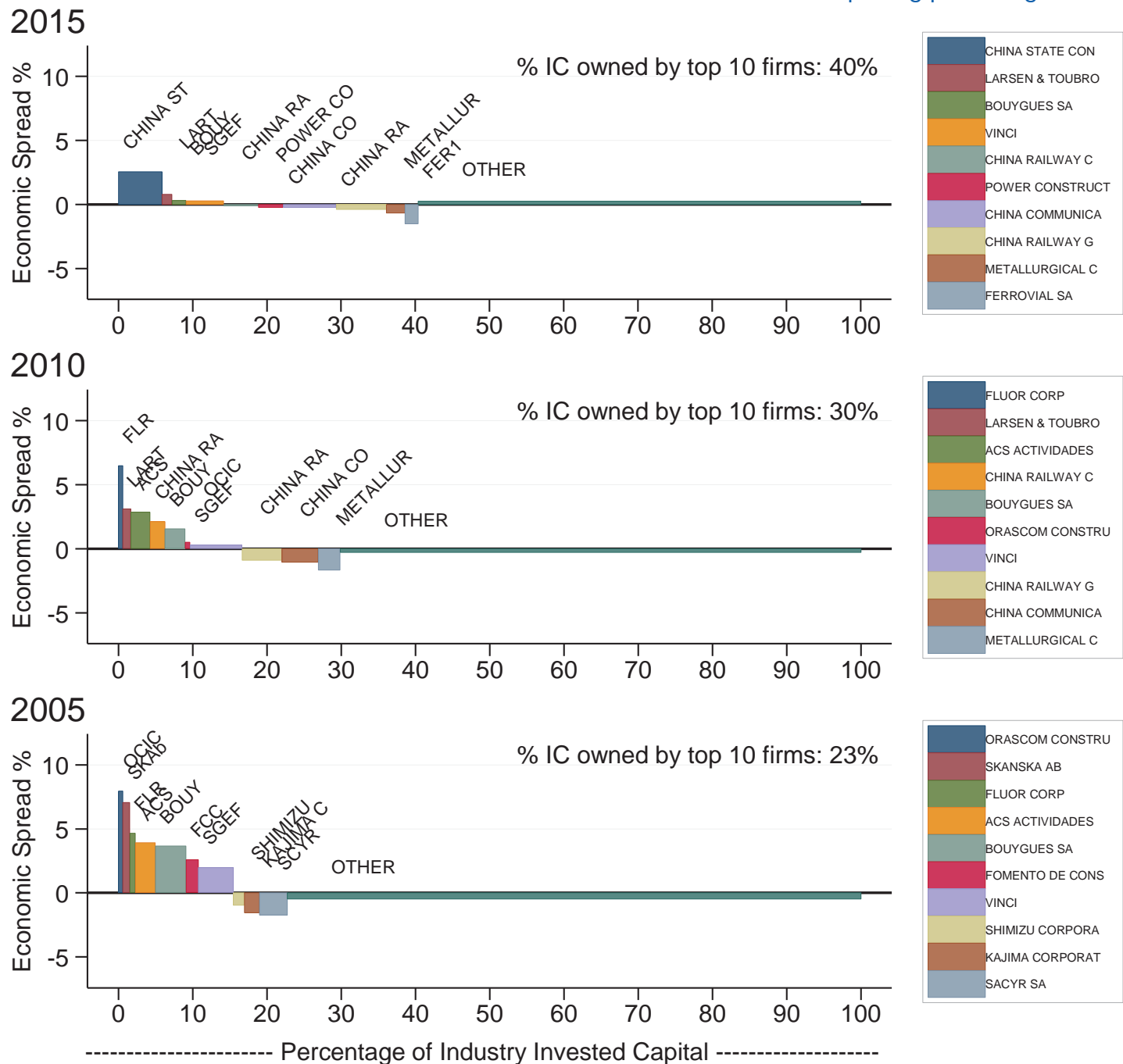
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 201030

Count of firms: 797

2015 FY reporting percentage: 56%



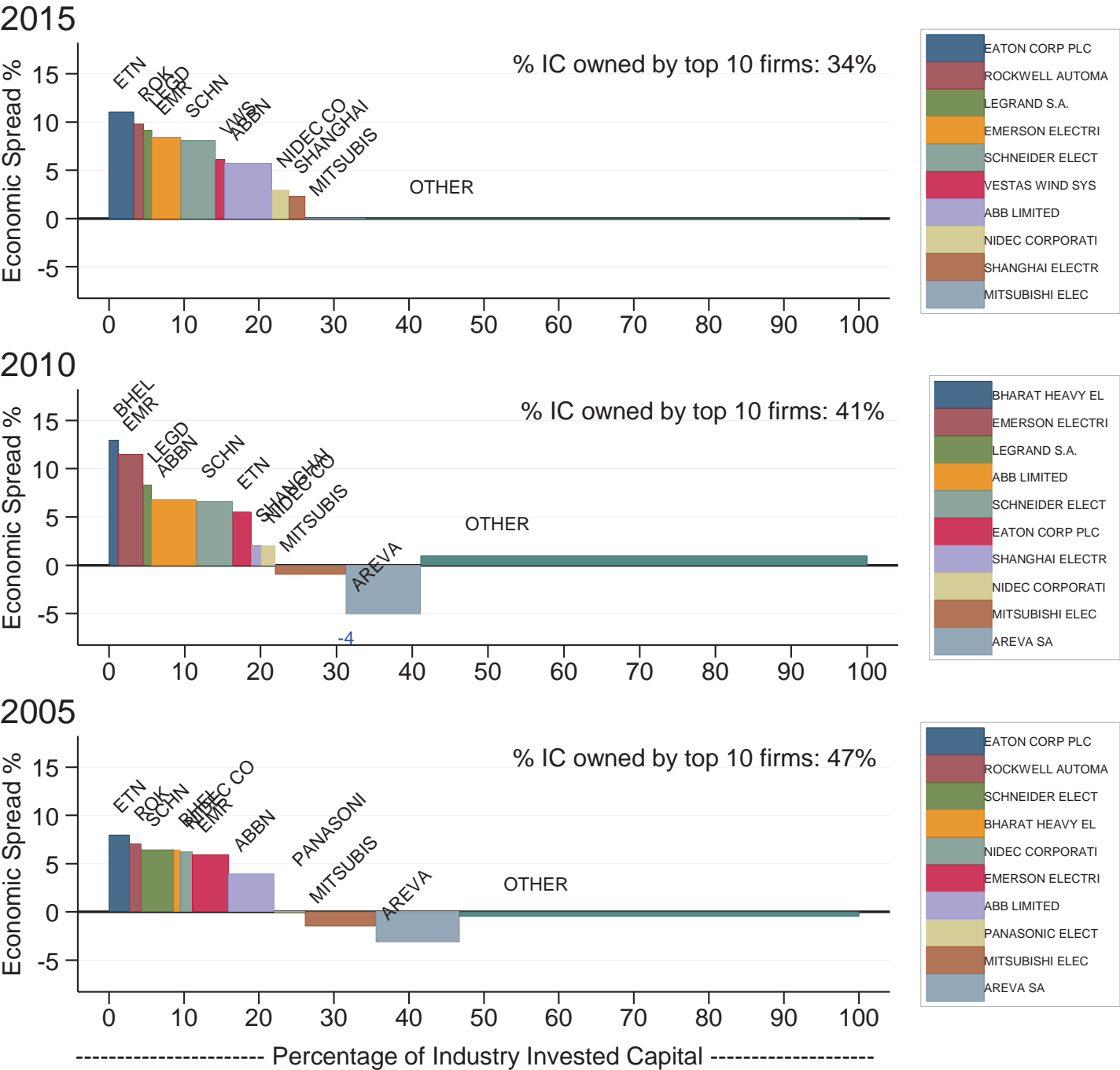
*Industry is considered competitive: 4 firm concentration ratio = 13.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 201040

Count of firms: 557

2015 FY reporting percentage: 49%



*Industry is considered competitive: 4 firm concentration ratio = 28.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

Industrial Conglomerates

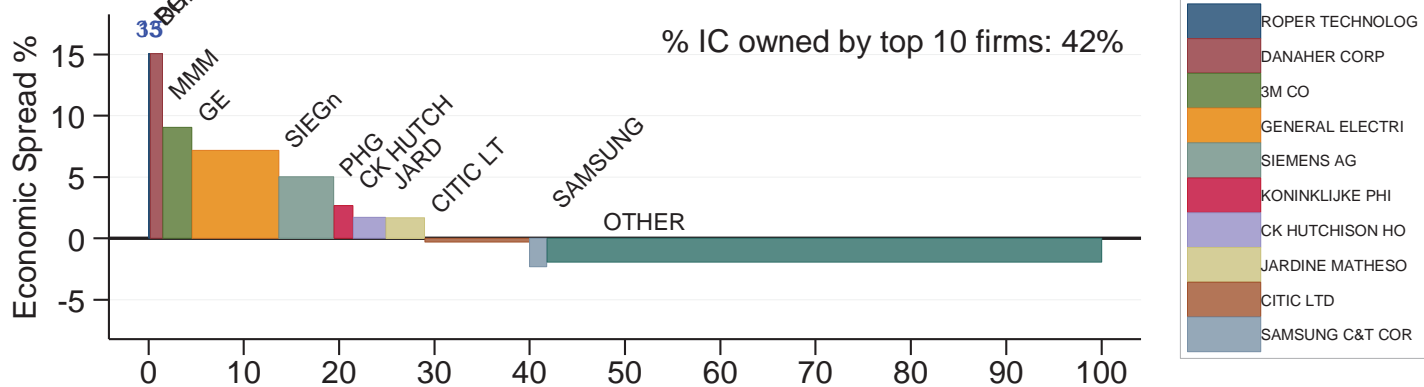


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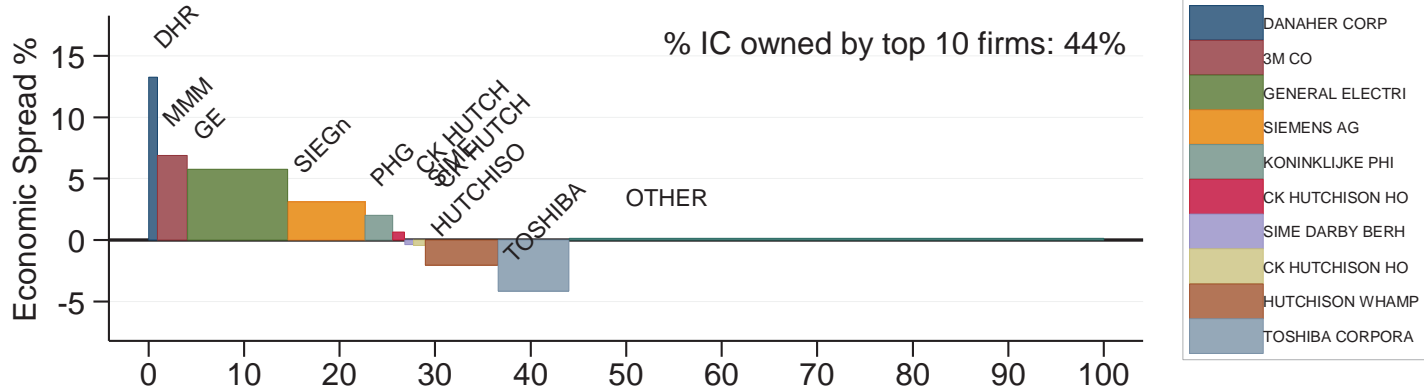
Count of firms: 176

2015 FY reporting percentage: 61%

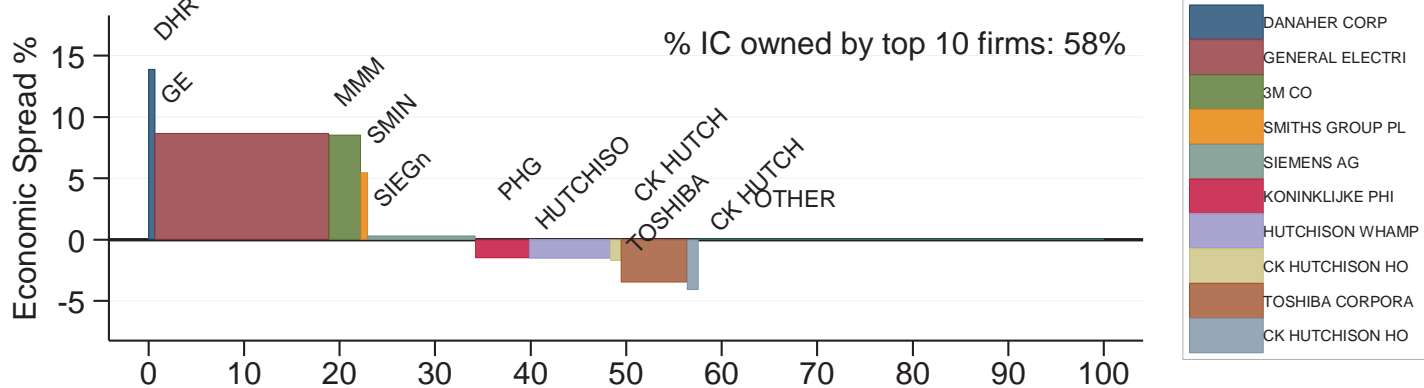
2015



2010



2005



----- Percentage of Industry Invested Capital -----

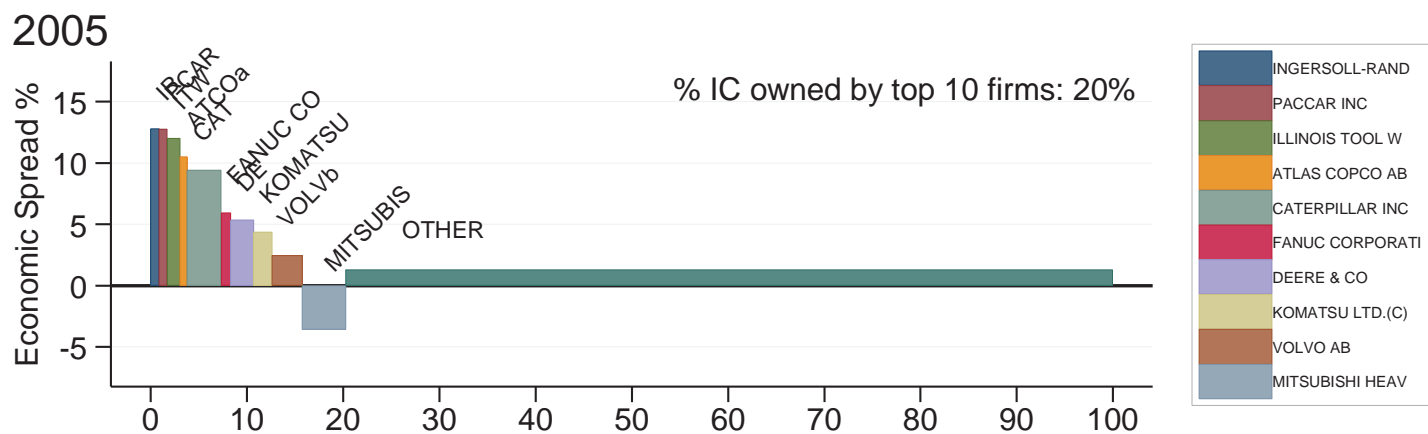
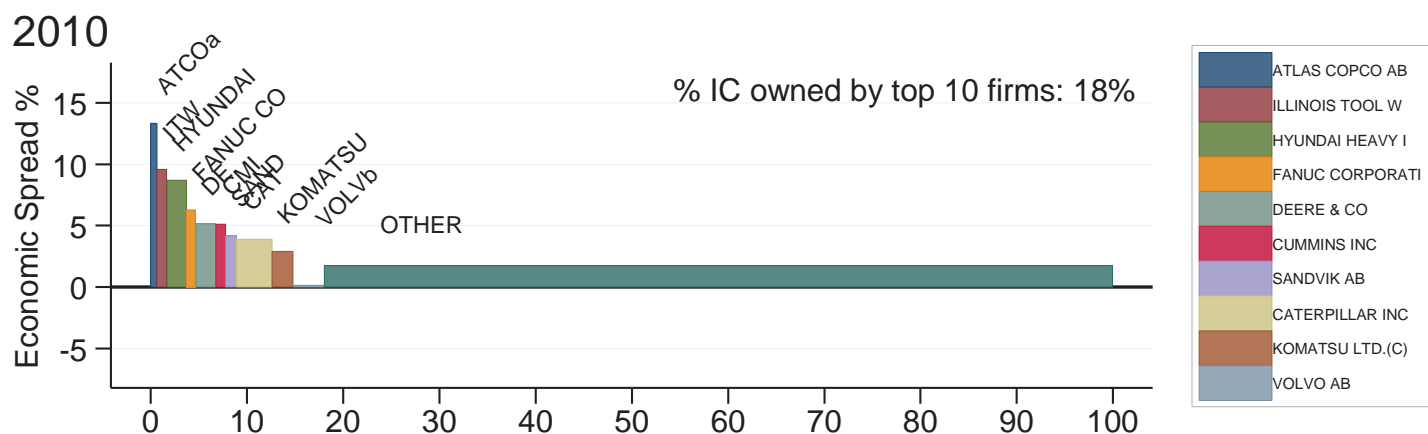
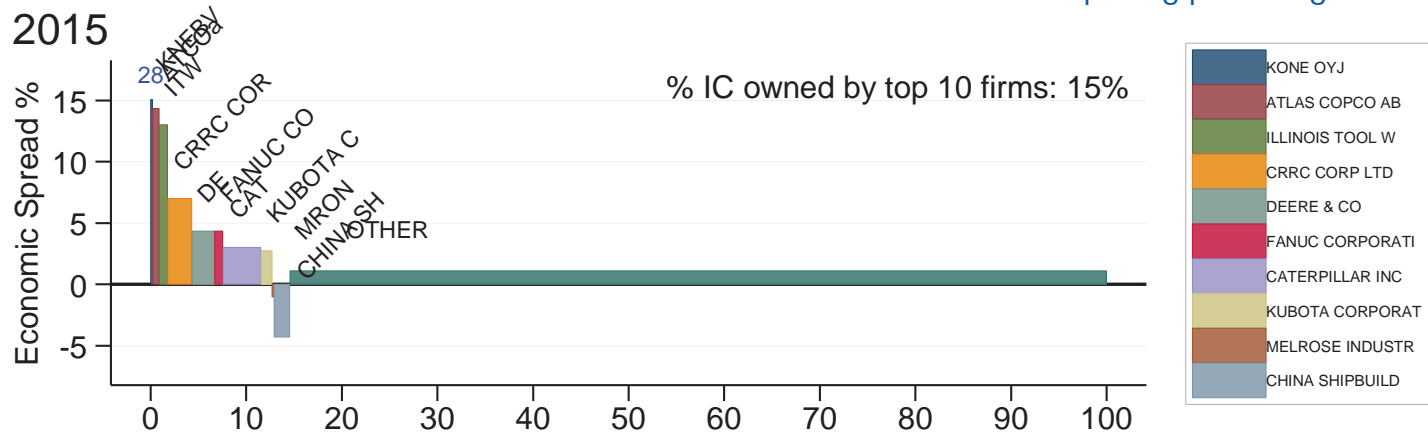
*Industry is highly concentrated: 4 firm concentration ratio = 51.9%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 201060

Count of firms: 1141

2015 FY reporting percentage: 60%



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 13.6%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

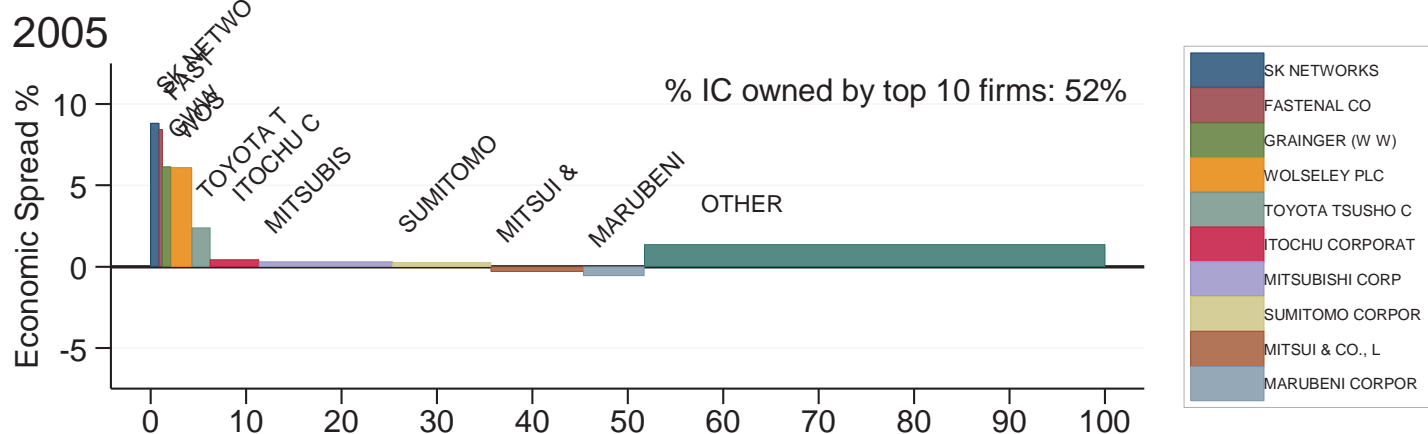
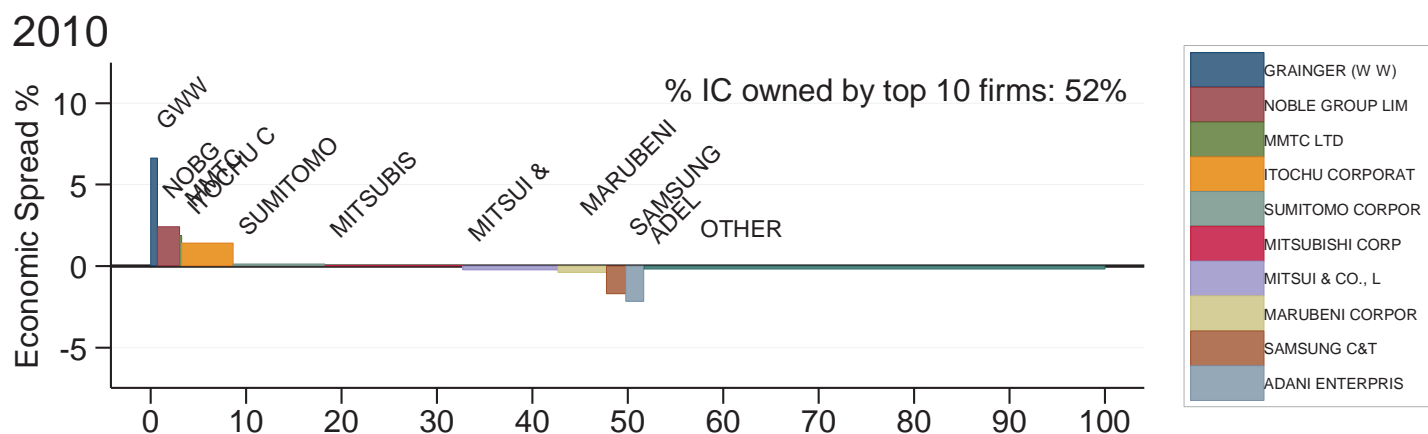
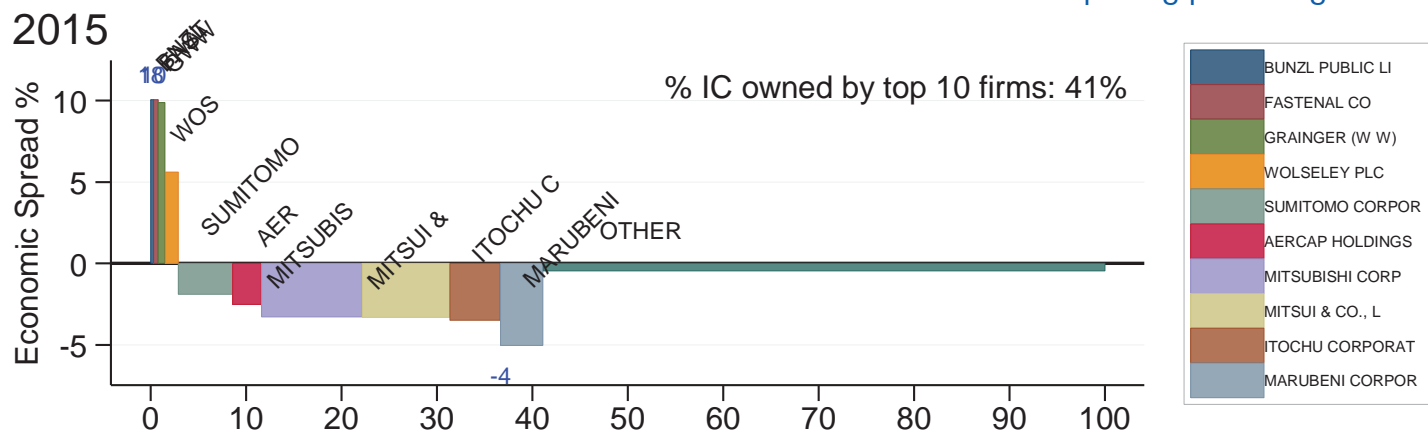
Trading Companies & Distributors



MSCI GIC: 201070

Count of firms: 481

2015 FY reporting percentage: 53%



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 23.2%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

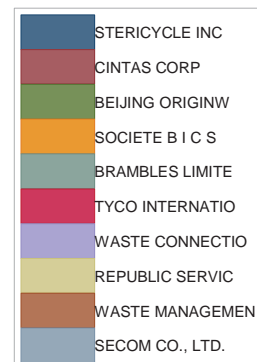
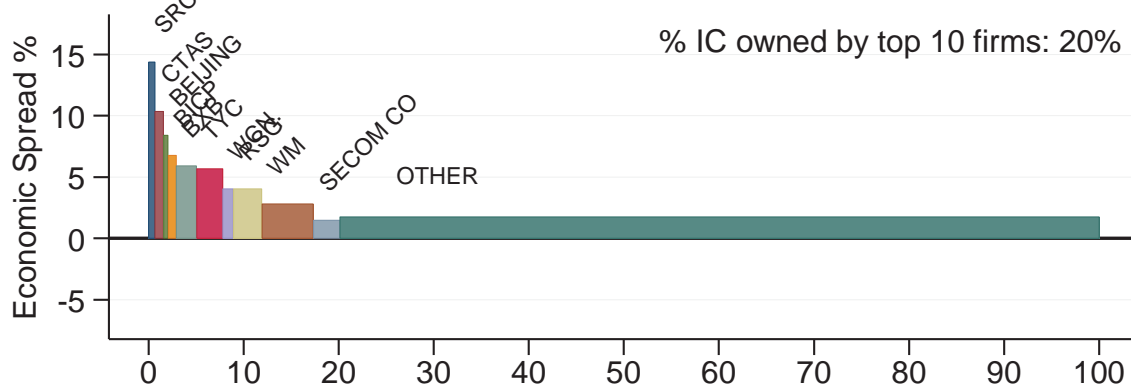


MSCI GIC: 202010

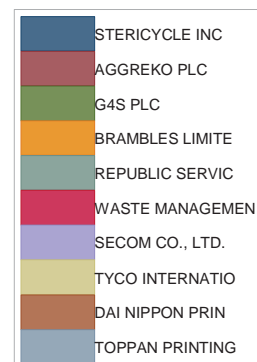
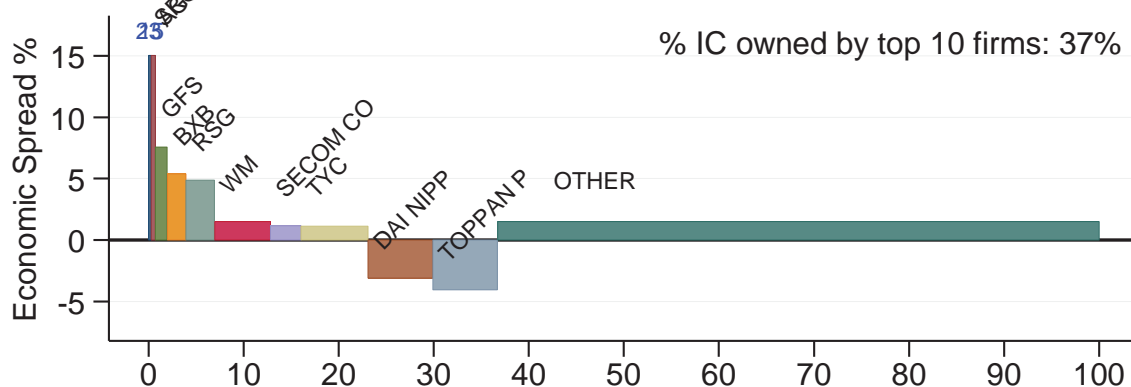
Count of firms: 606

2015 FY reporting percentage: 55%

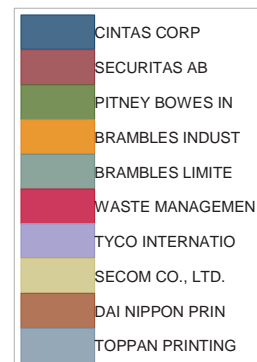
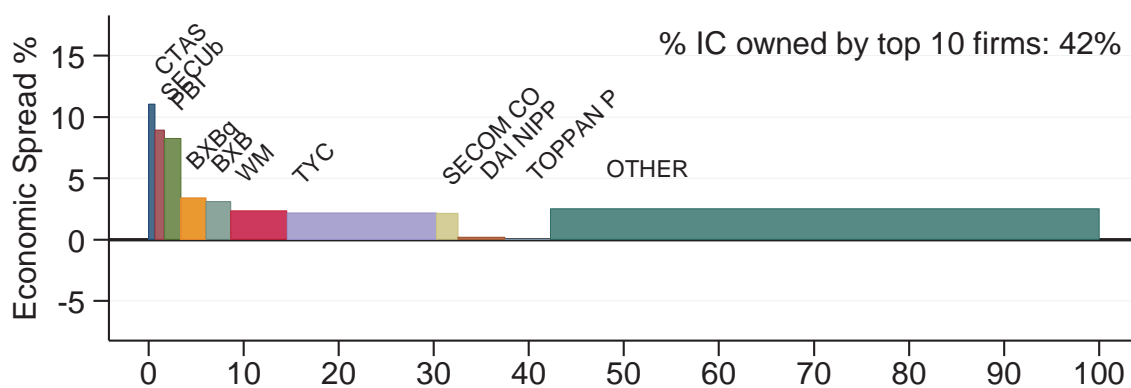
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 22.2%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

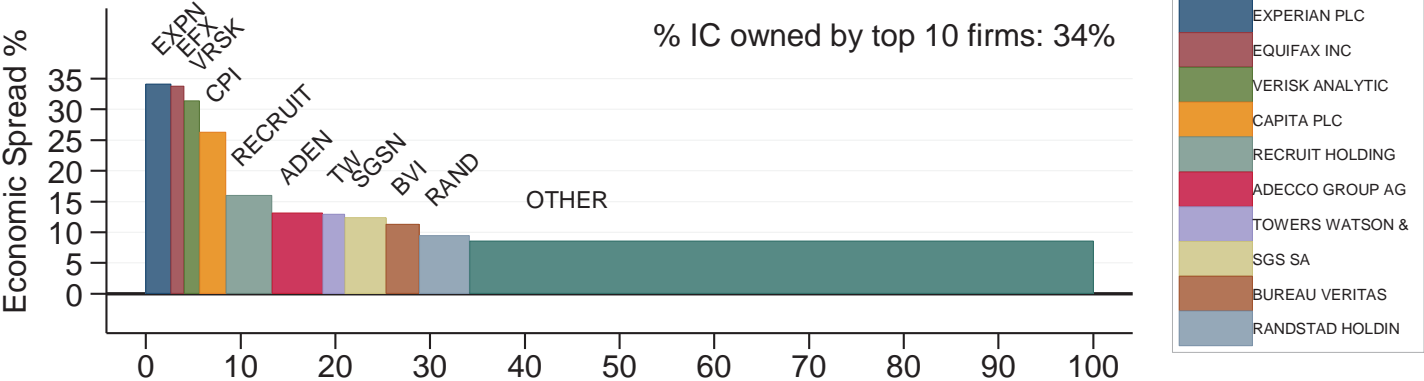


MSCI GIC: 202020

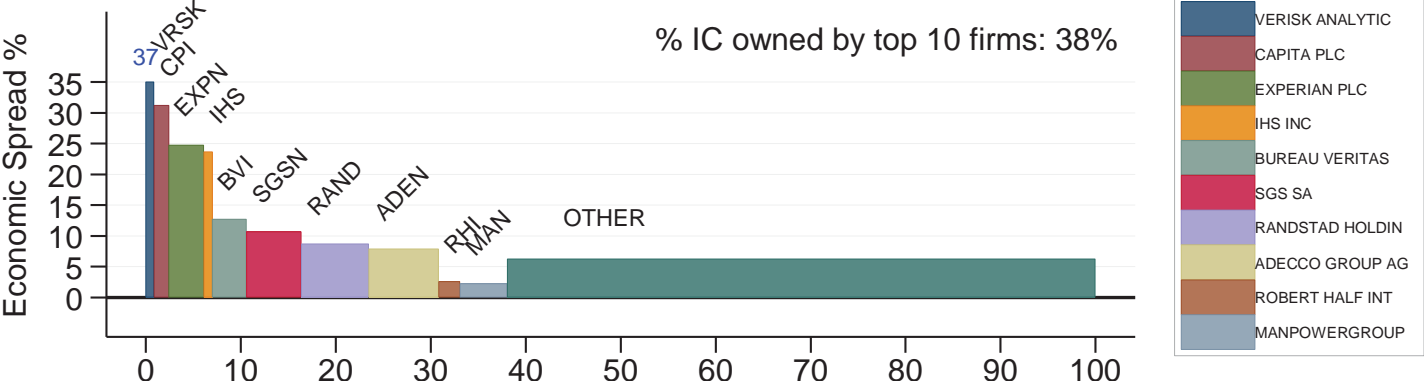
Count of firms: 275

2015 FY reporting percentage: 57%

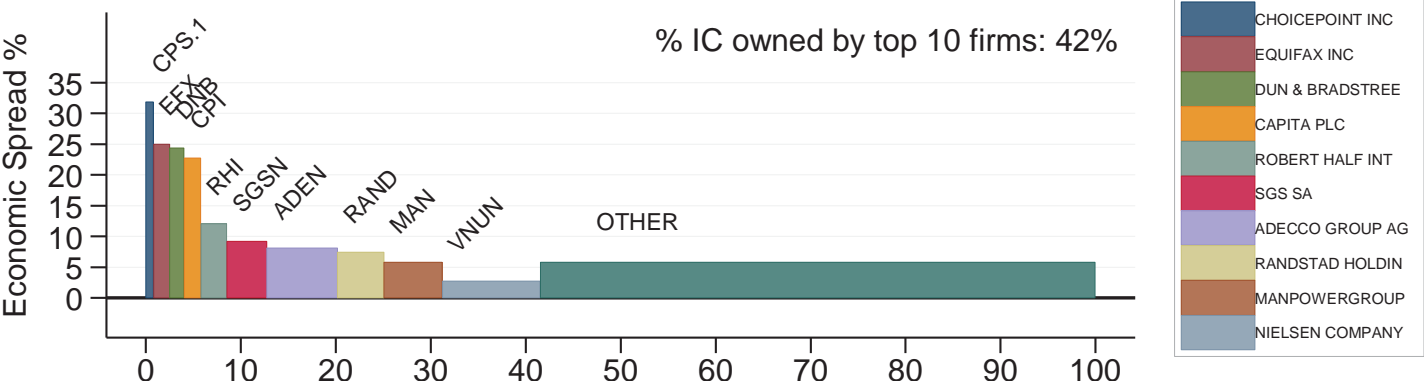
2015



2010



2005



----- Percentage of Industry Invested Capital -----

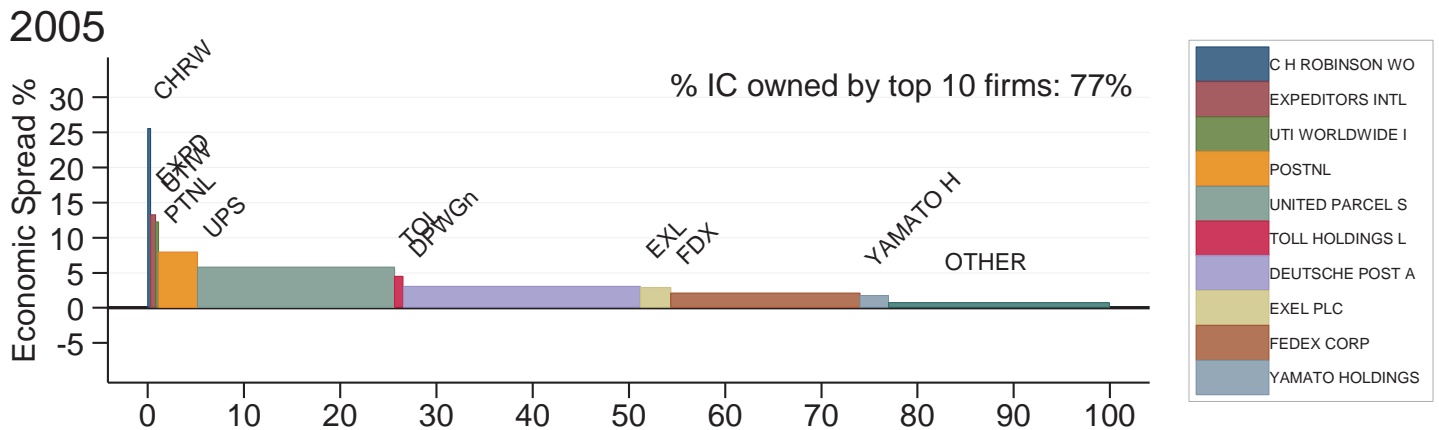
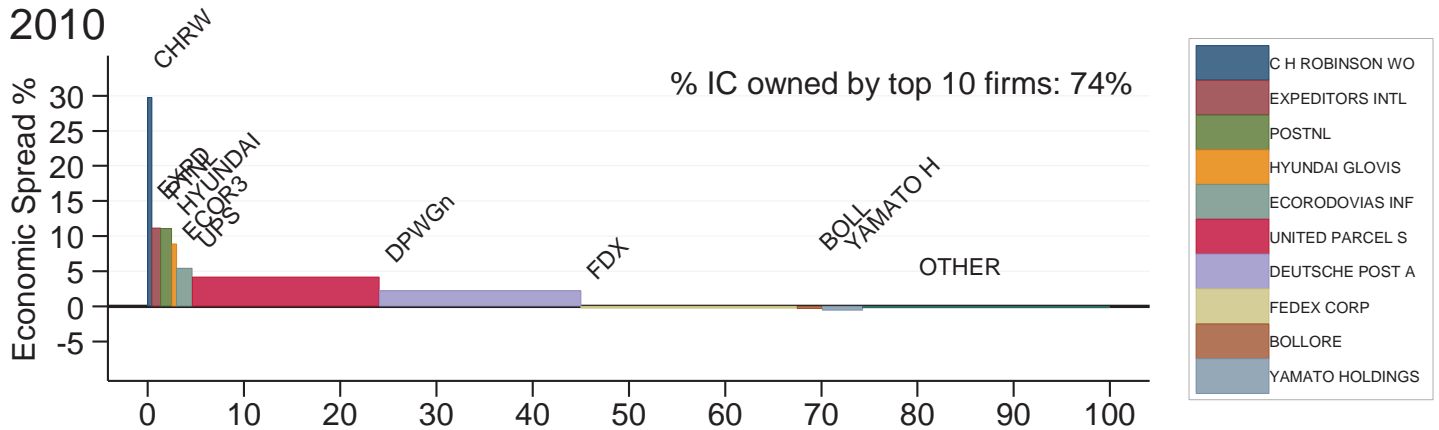
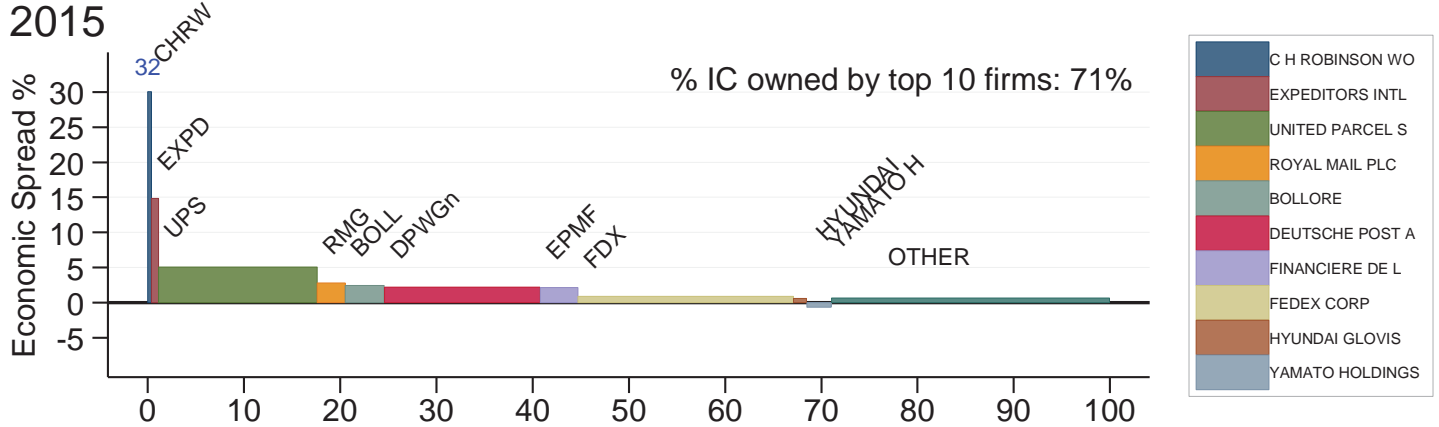
*Industry is considered competitive: 4 firm concentration ratio = 39.6%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 203010

Count of firms: 123

2015 FY reporting percentage: 49%



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 53.8%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

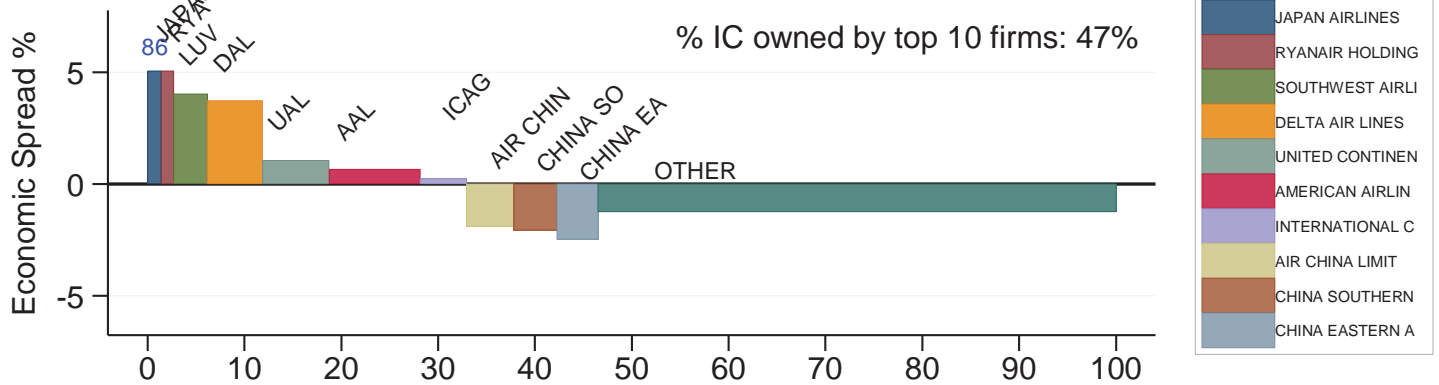


MSCI GIC: 203020

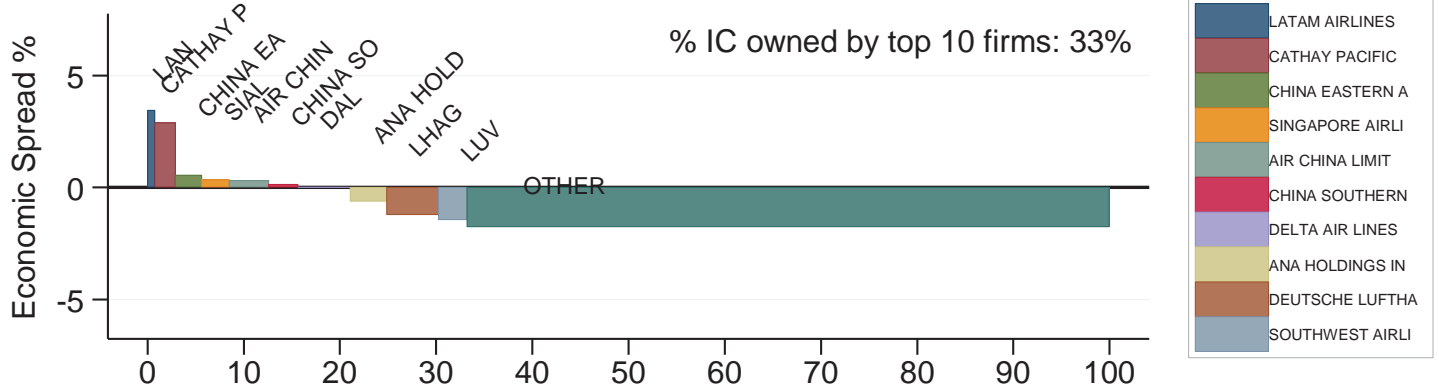
Count of firms: 86

2015 FY reporting percentage: 71%

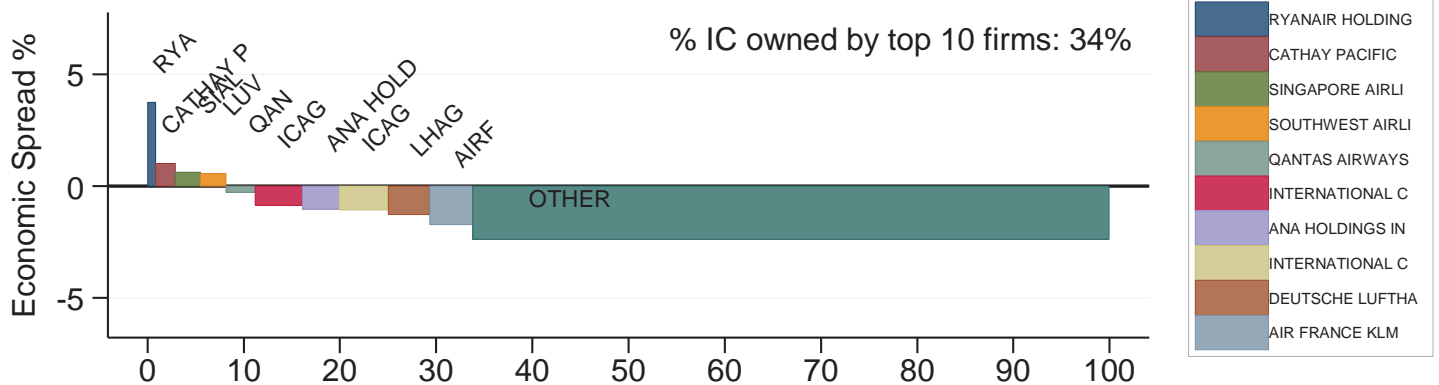
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 26.4%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

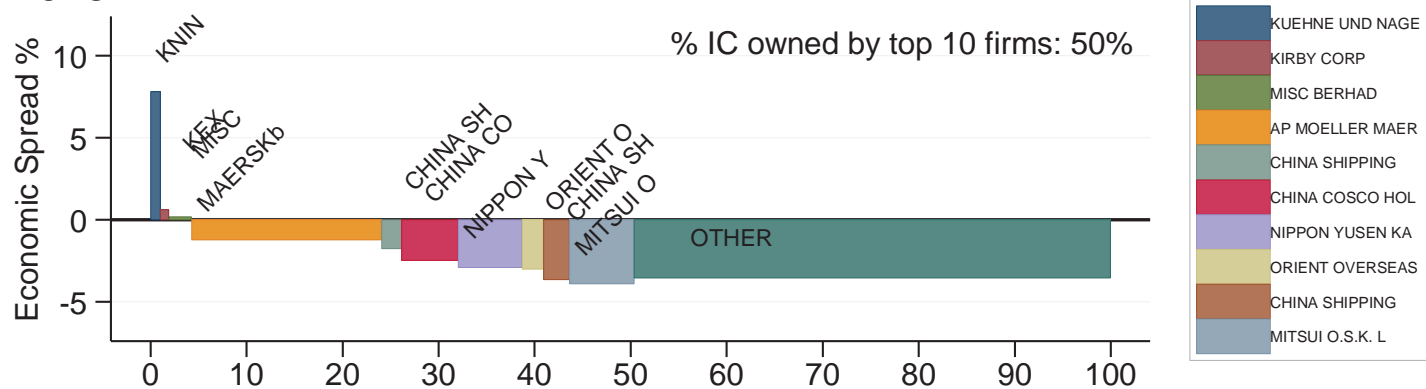


MSCI GIC: 203030

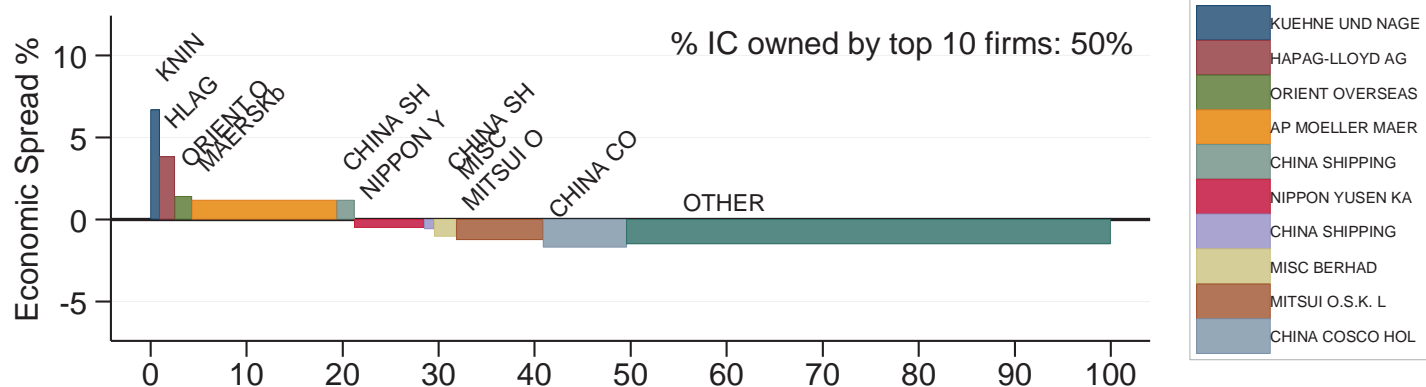
Count of firms: 190

2015 FY reporting percentage: 54%

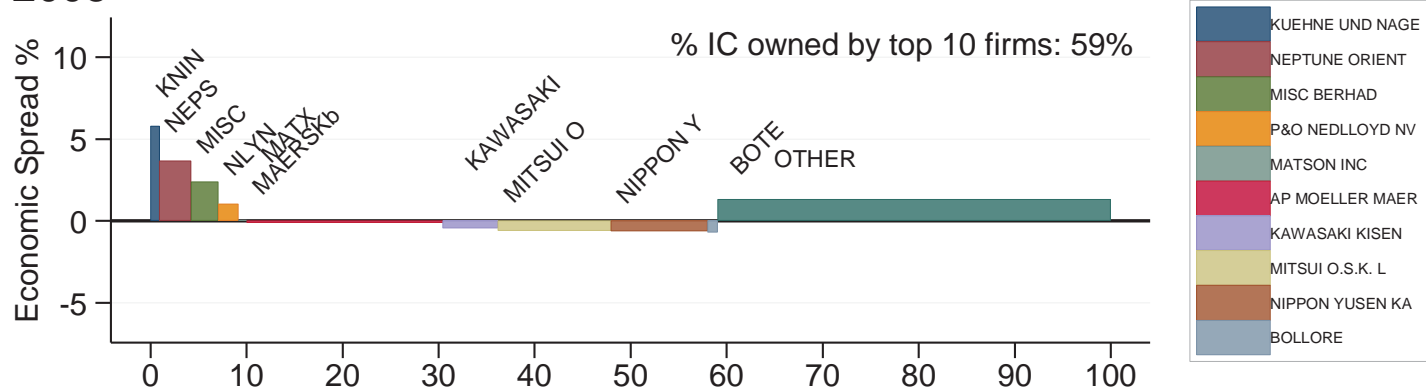
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 41.6%.

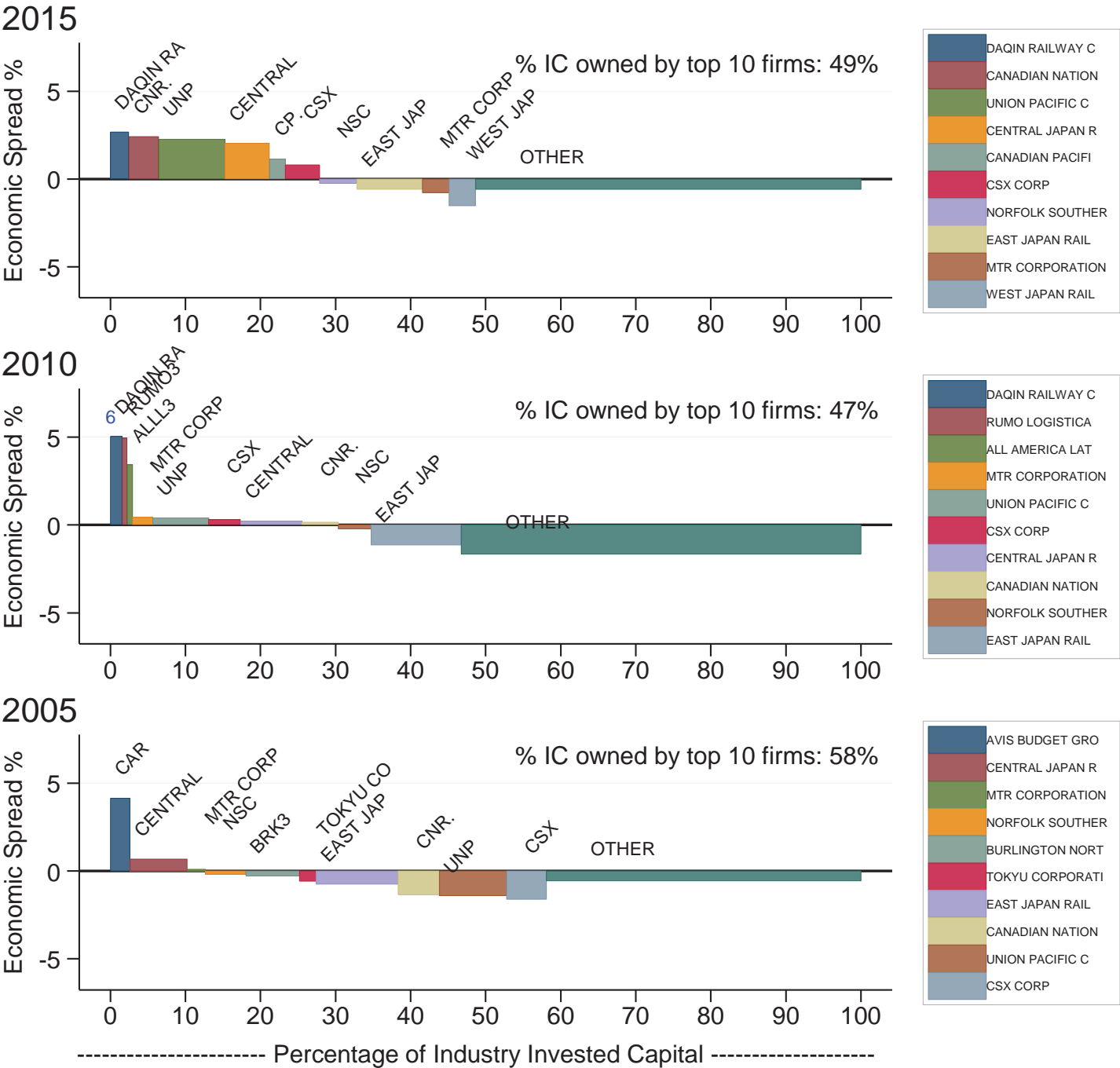
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 203040

Count of firms: 210

2015 FY reporting percentage: 66%



*Industry is considered competitive: 4 firm concentration ratio = 21.9%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

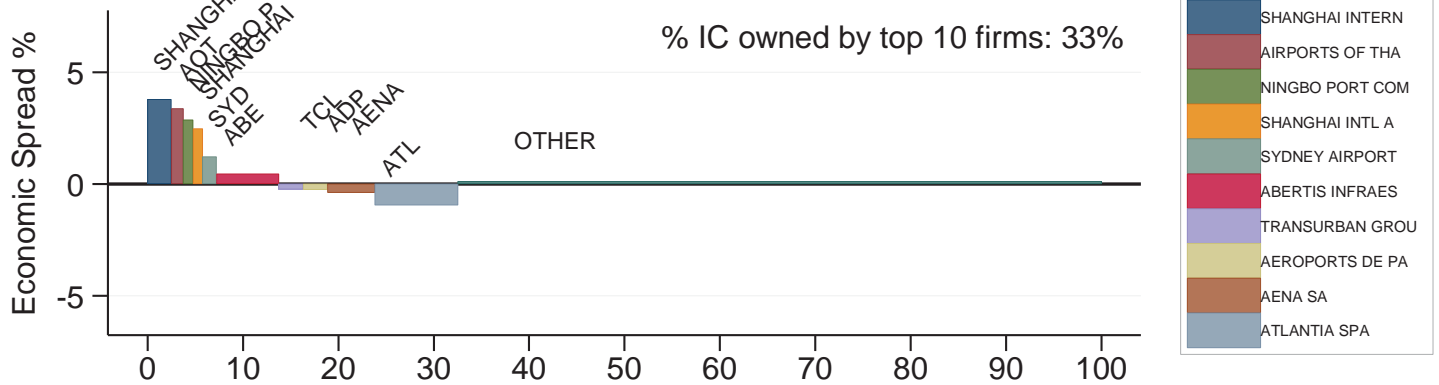


MSCI GIC: 203050

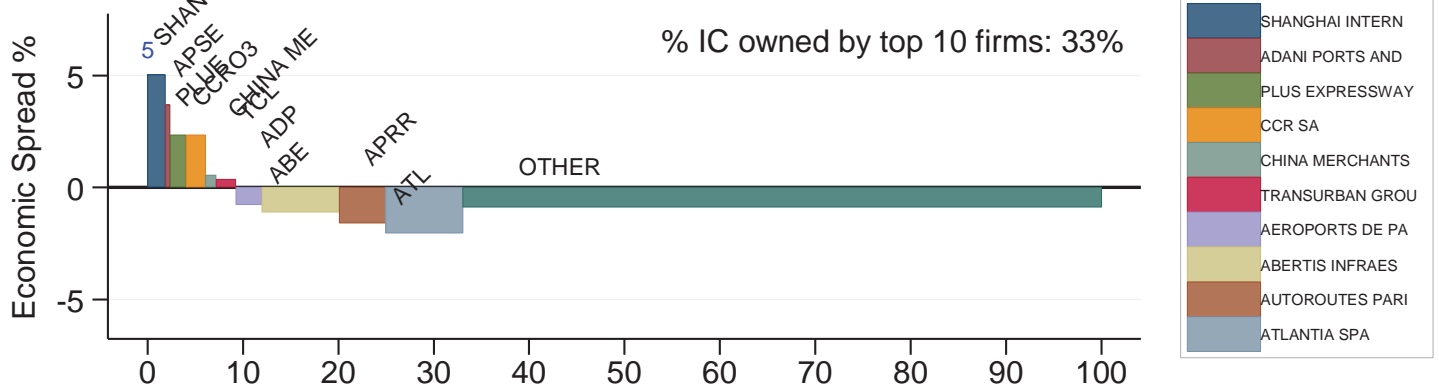
Count of firms: 196

2015 FY reporting percentage: 66%

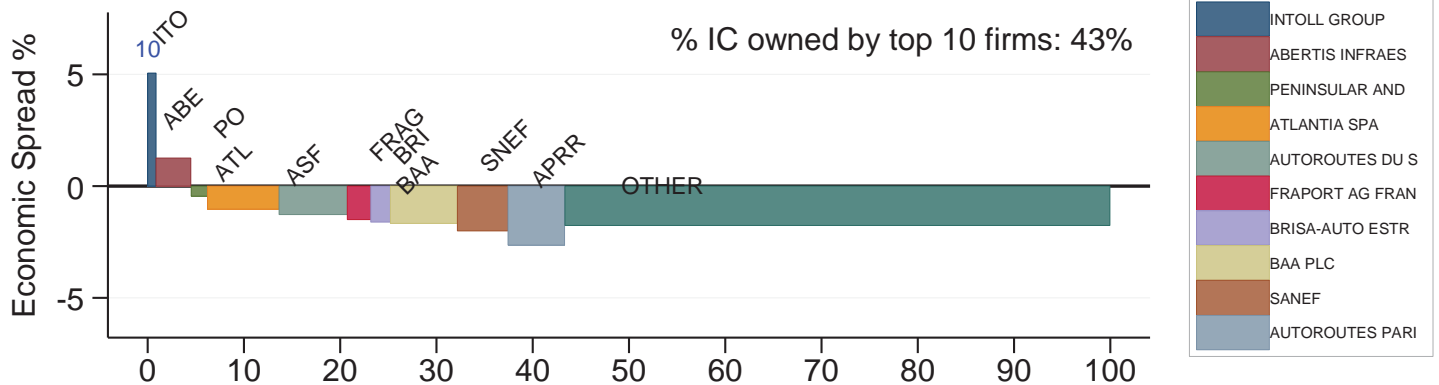
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 22.4%.

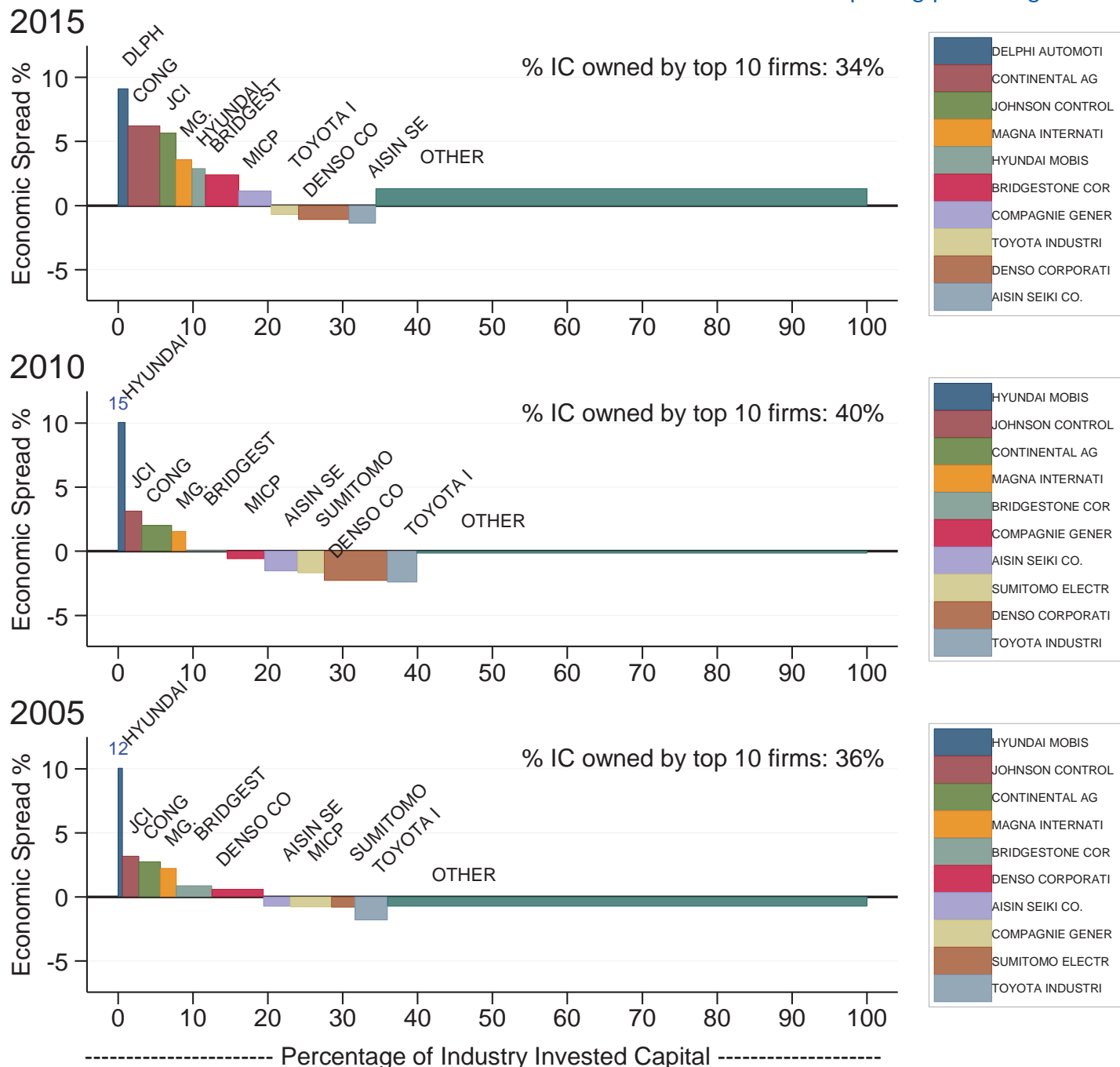
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 251010

Count of firms: 554

2015 FY reporting percentage: 59%



*Industry is considered competitive: 4 firm concentration ratio = 18.0%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

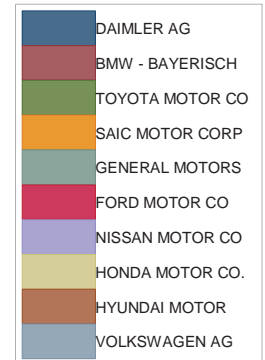
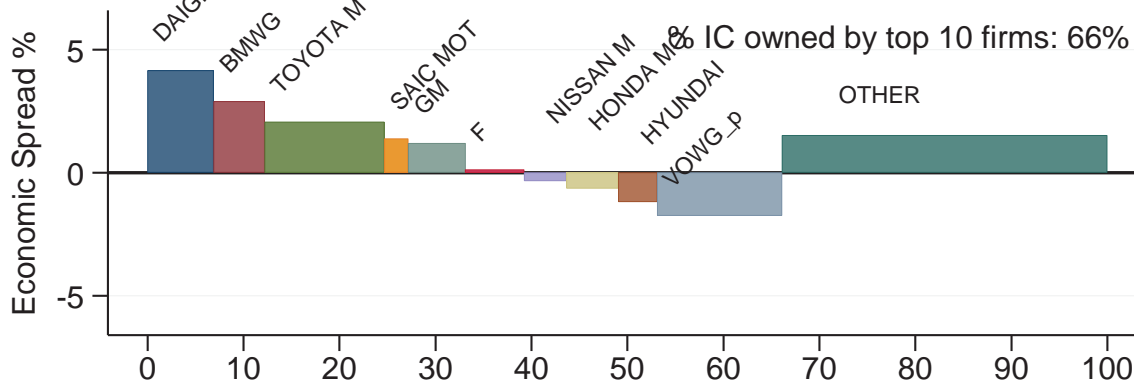


MSCI GIC: 251020

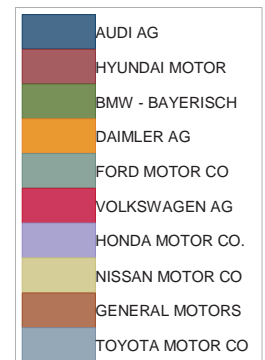
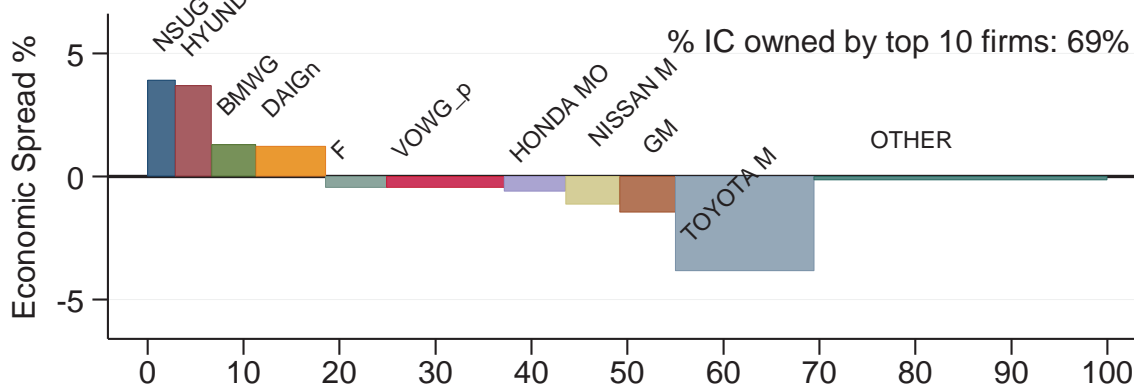
Count of firms: 94

2015 FY reporting percentage: 73%

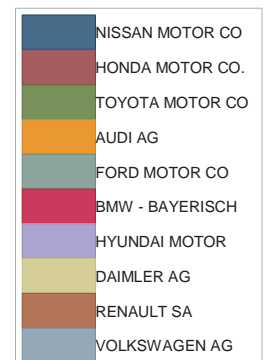
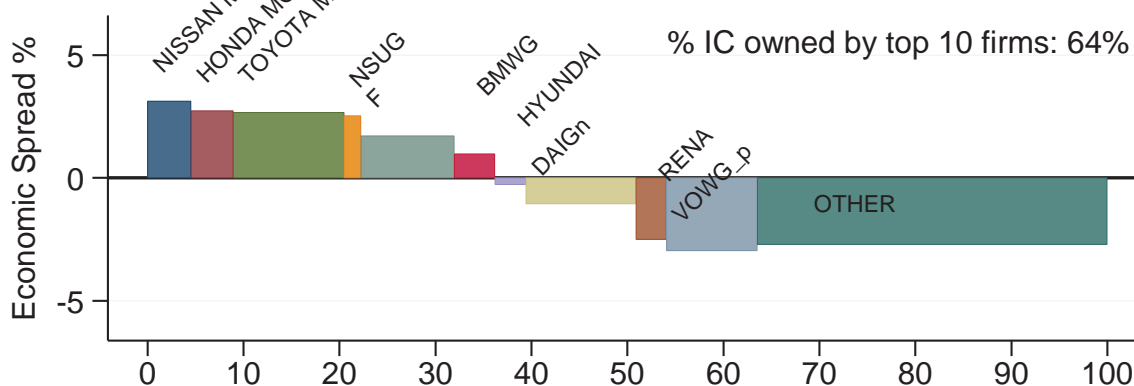
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 46.4%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

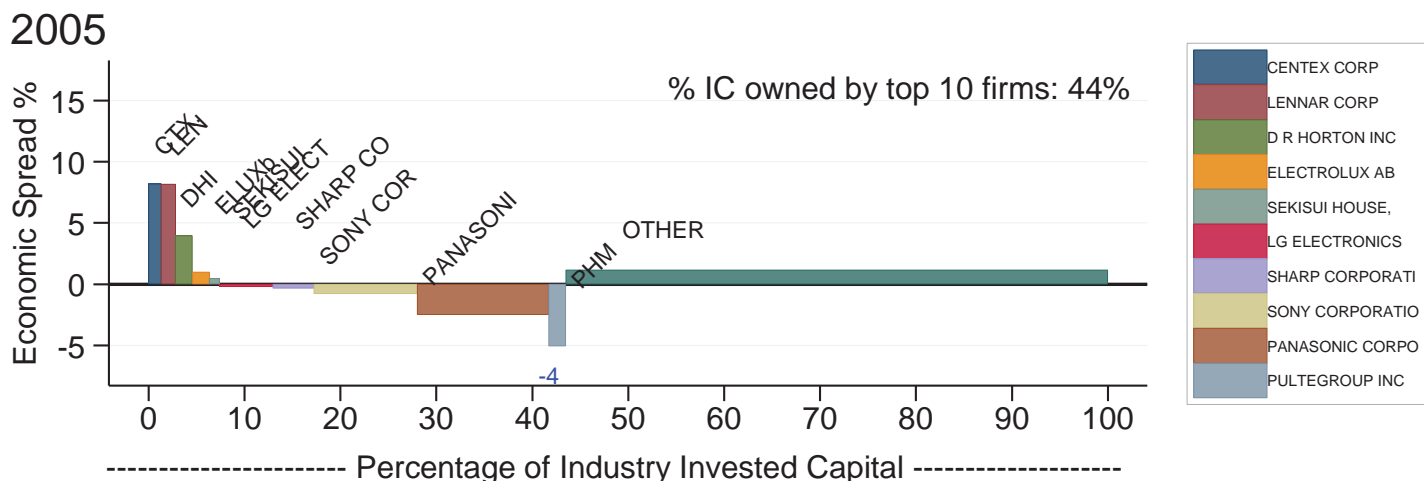
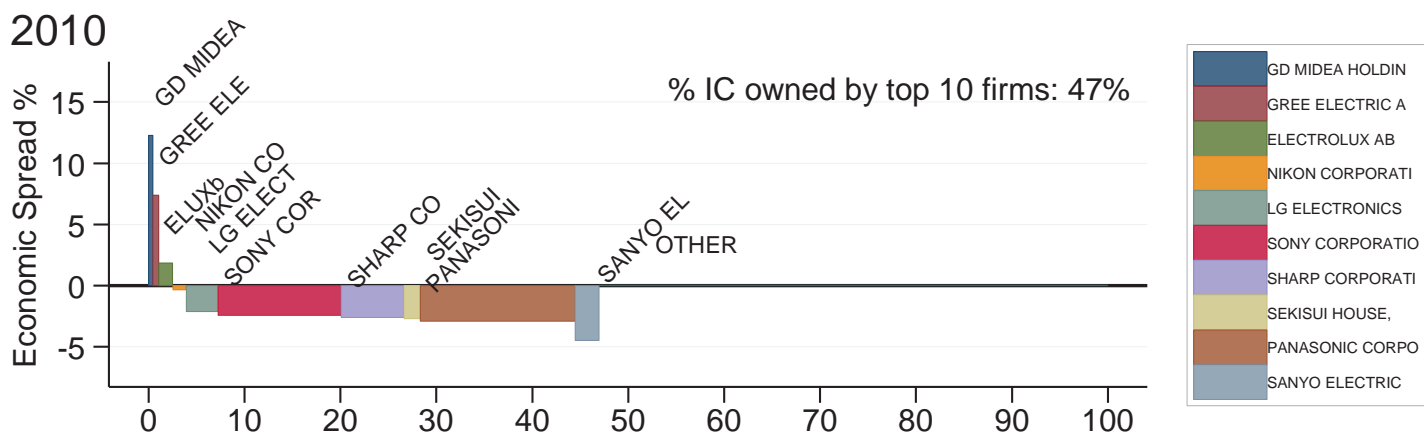
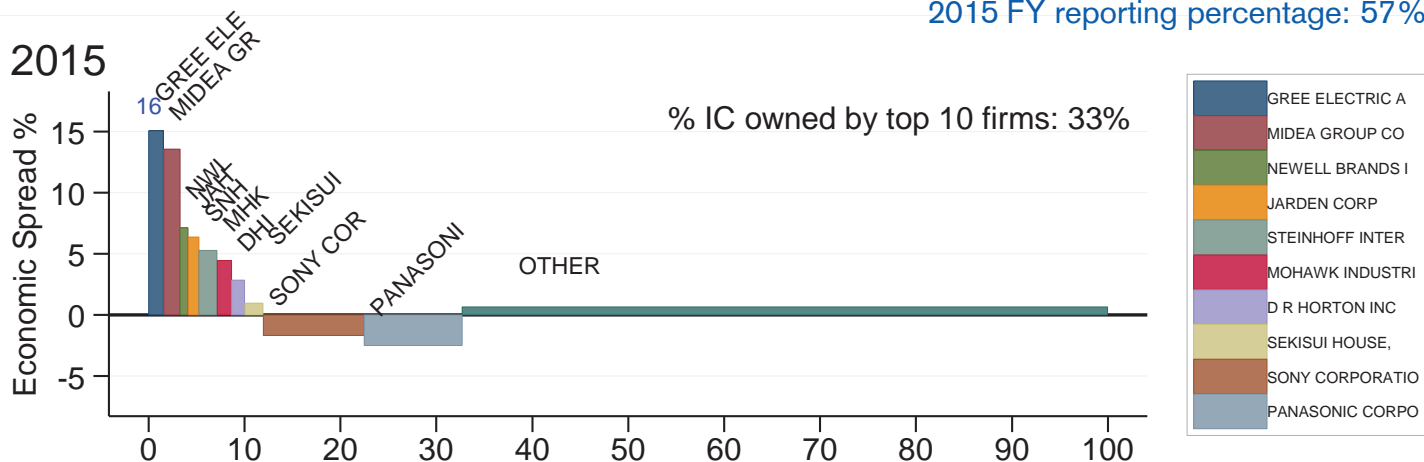
Household Durables



MSCI GIC: 252010

Count of firms: 526

2015 FY reporting percentage: 57%



*Industry is considered competitive: 4 firm concentration ratio = 29.2%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

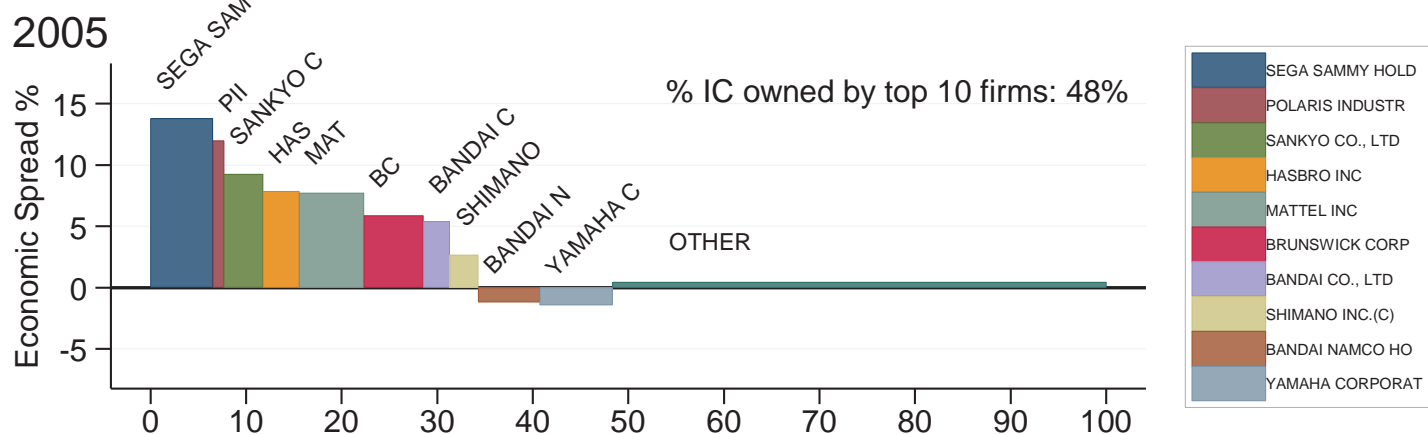
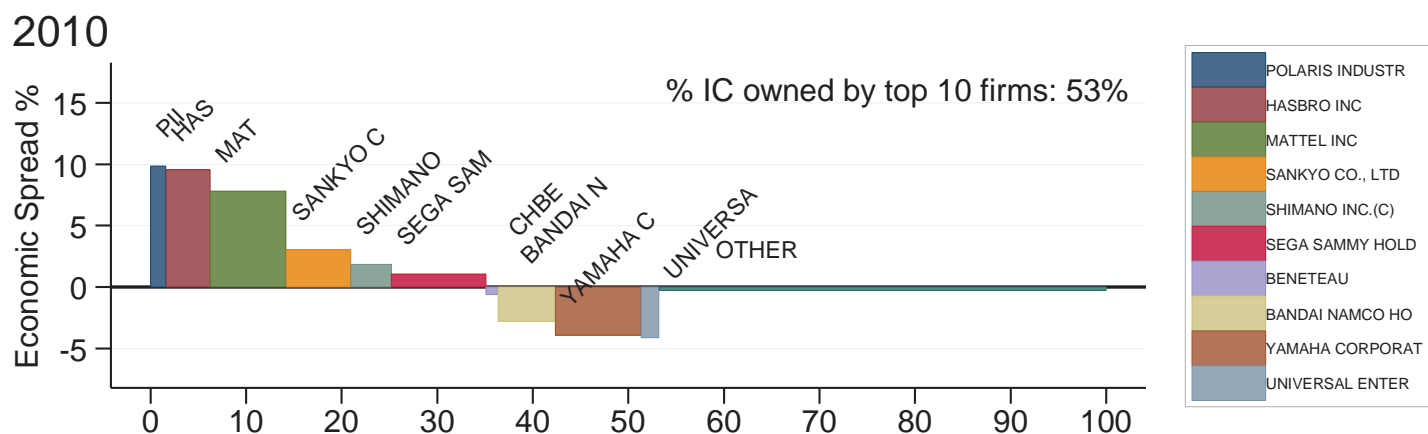
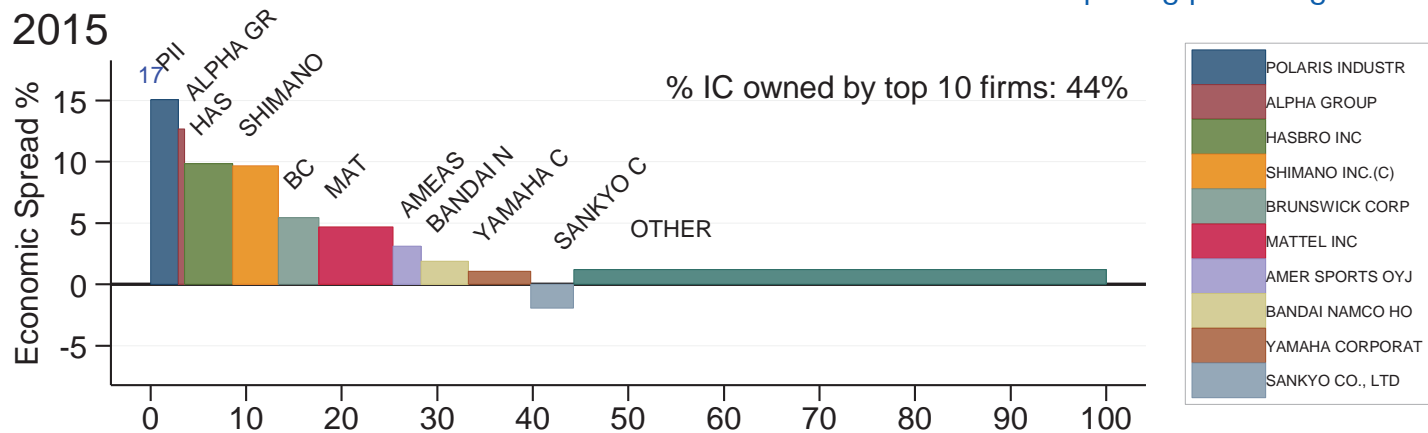
Leisure Equipment & Products



MSCI GIC: 252020

Count of firms: 132

2015 FY reporting percentage: 55%



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 28.1%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

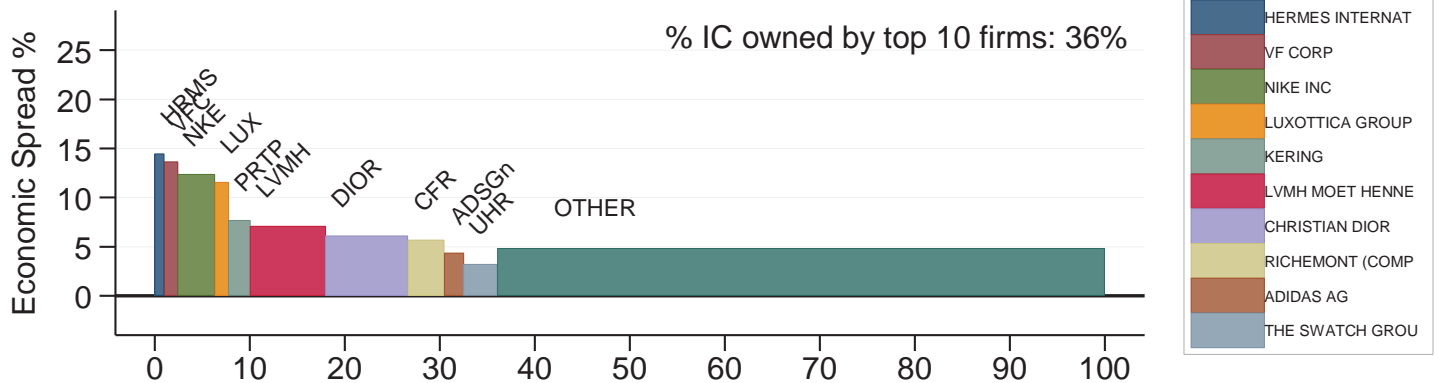


MSCI GIC: 252030

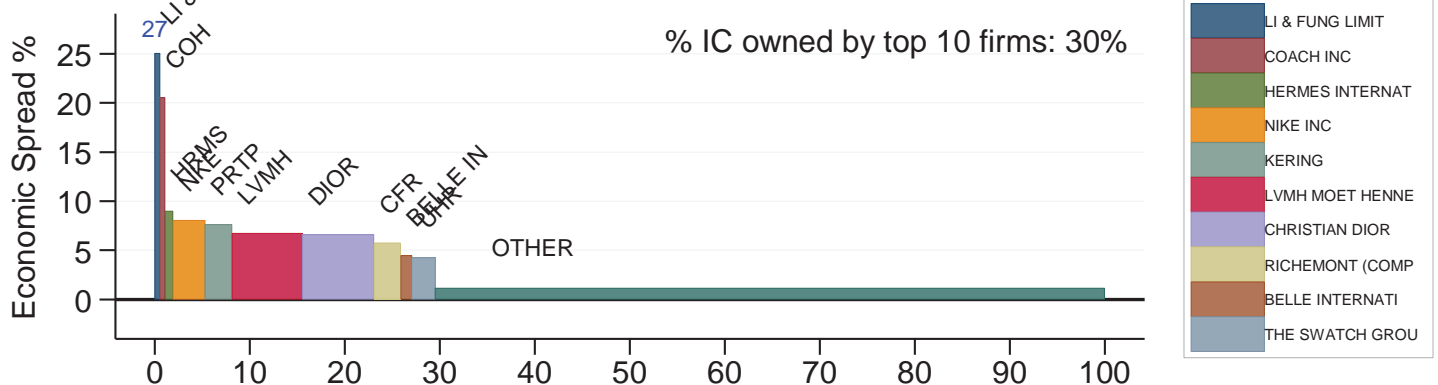
Count of firms: 861

2015 FY reporting percentage: 39%

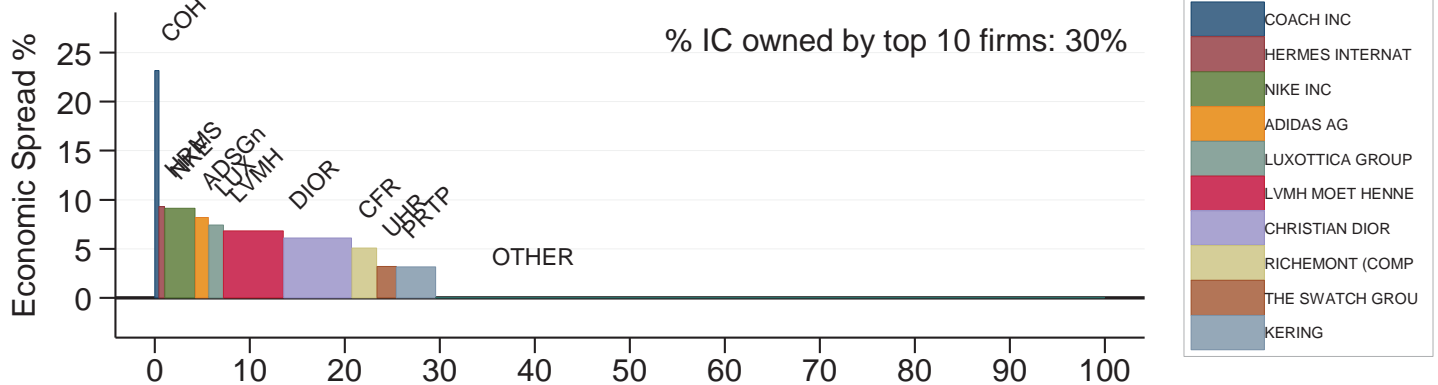
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 18.9%.

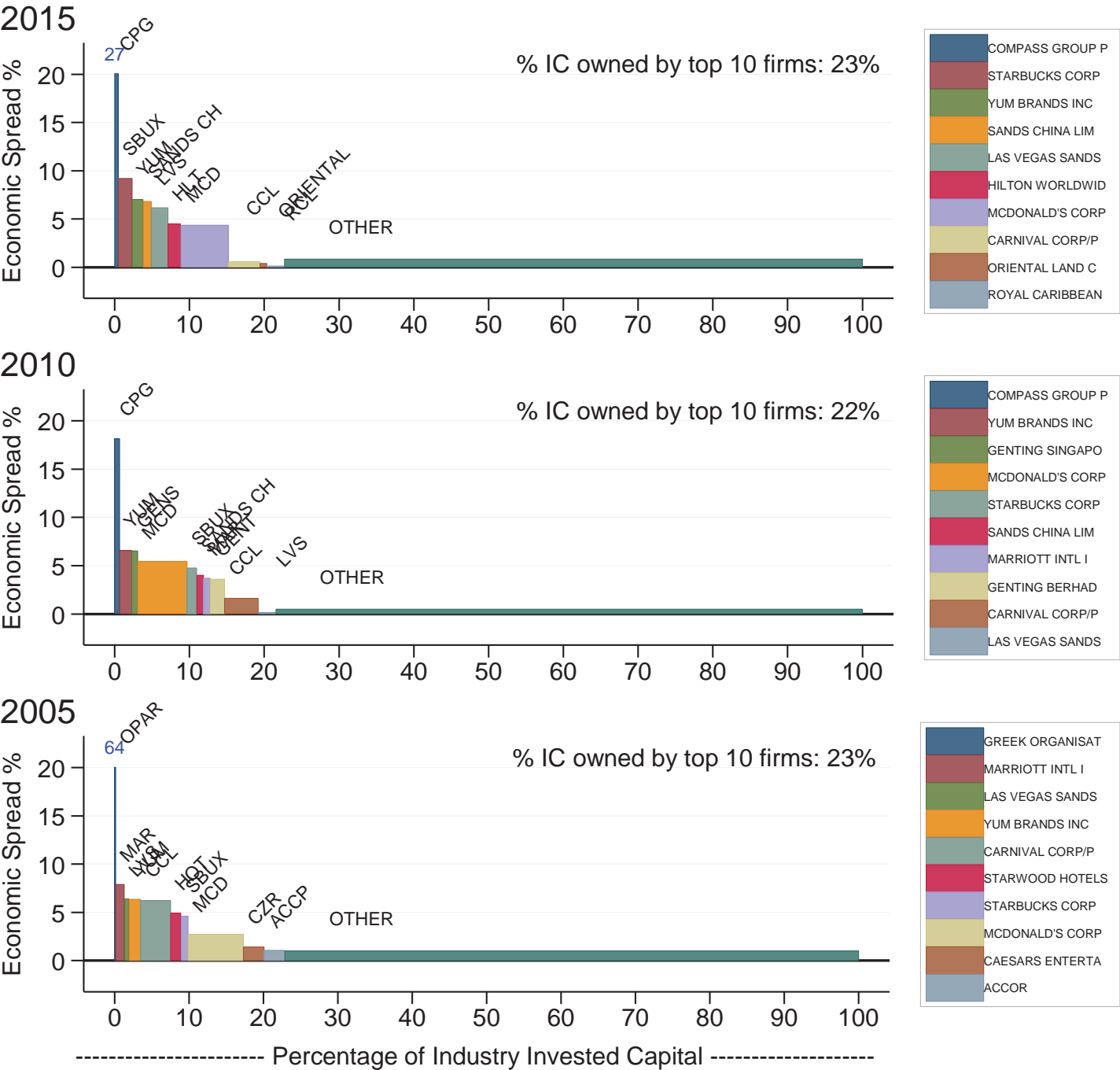
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 253010

Count of firms: 803

2015 FY reporting percentage: 58%



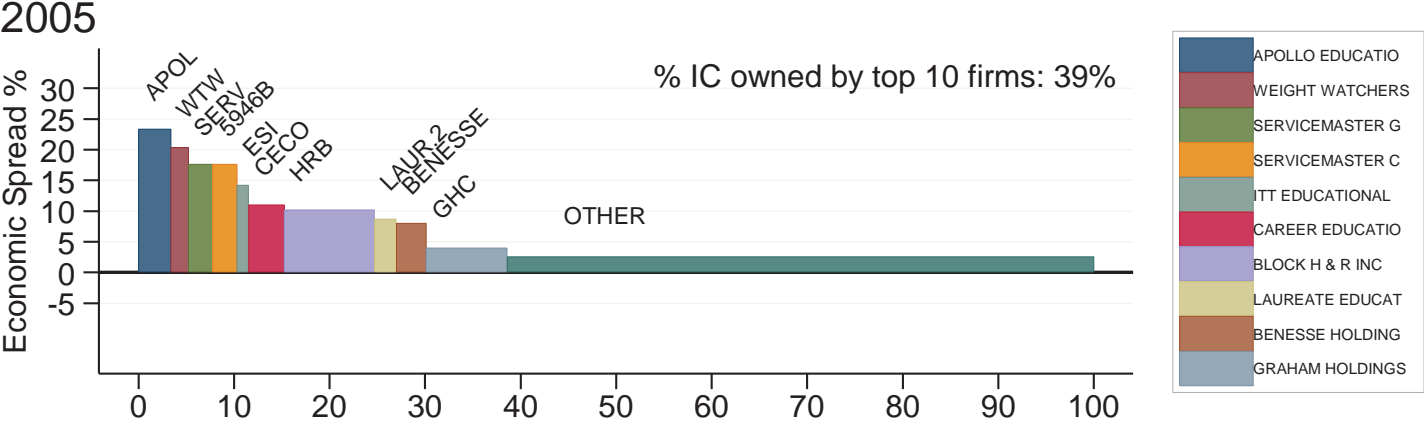
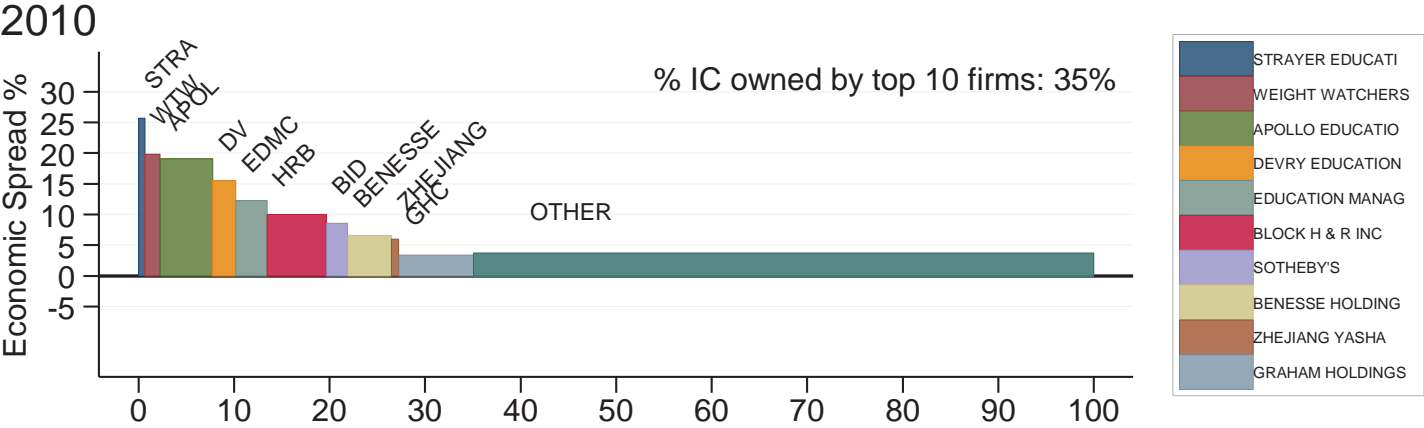
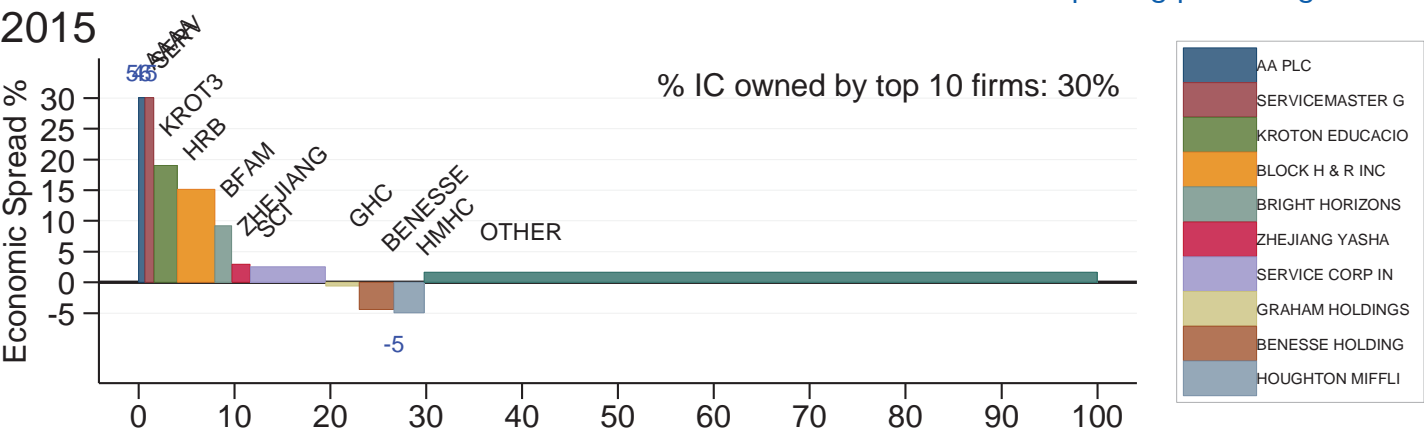
*Industry is considered competitive: 4 firm concentration ratio = 15.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 253020

Count of firms: 208

2015 FY reporting percentage: 60%



----- Percentage of Industry Invested Capital -----

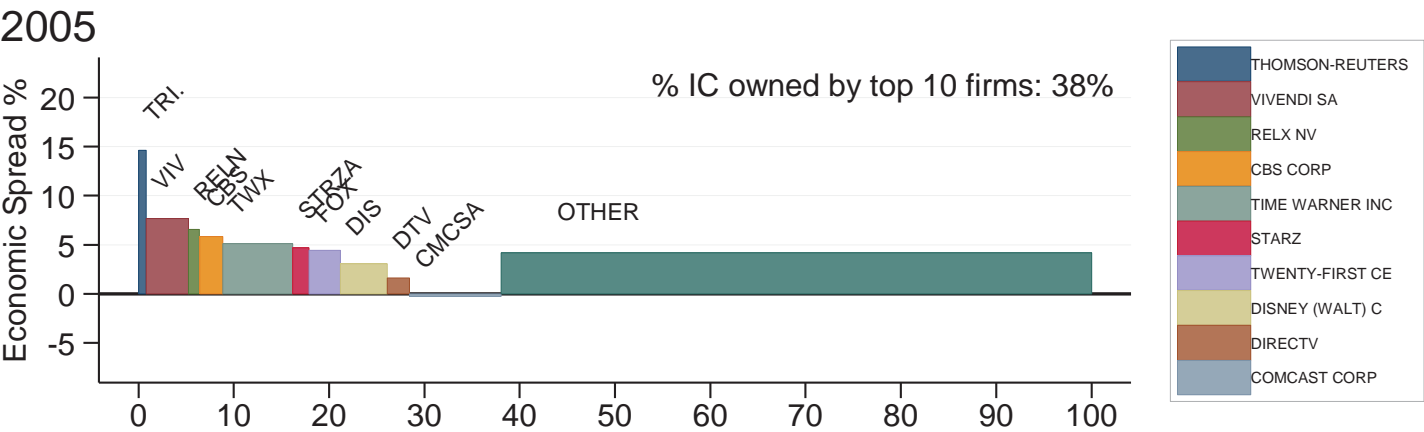
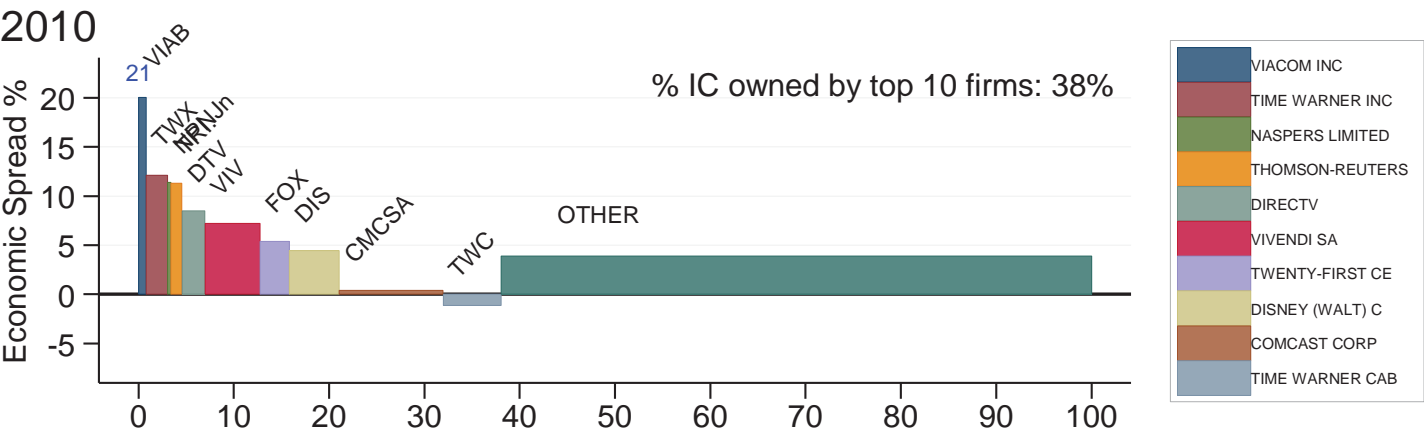
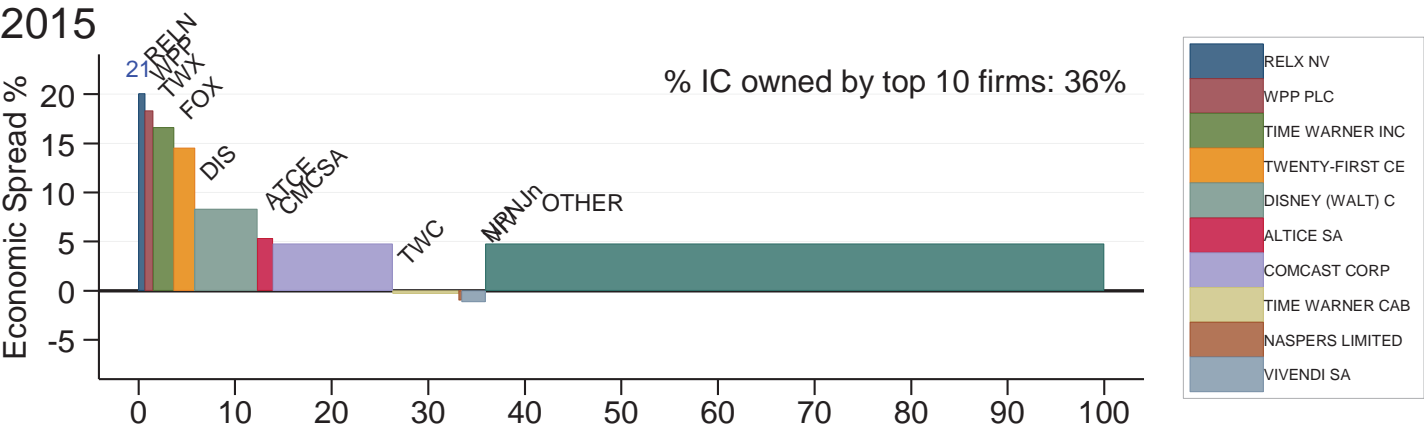
*Industry is considered competitive: 4 firm concentration ratio = 31.2%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 254010

Count of firms: 748

2015 FY reporting percentage: 58%



*Industry is considered competitive: 4 firm concentration ratio = 19.7%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

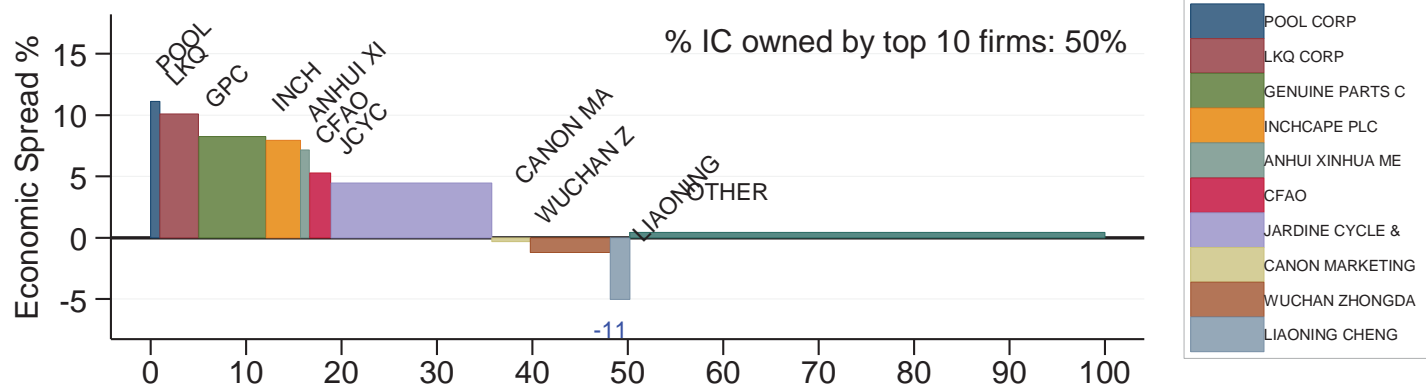


MSCI GIC: 255010

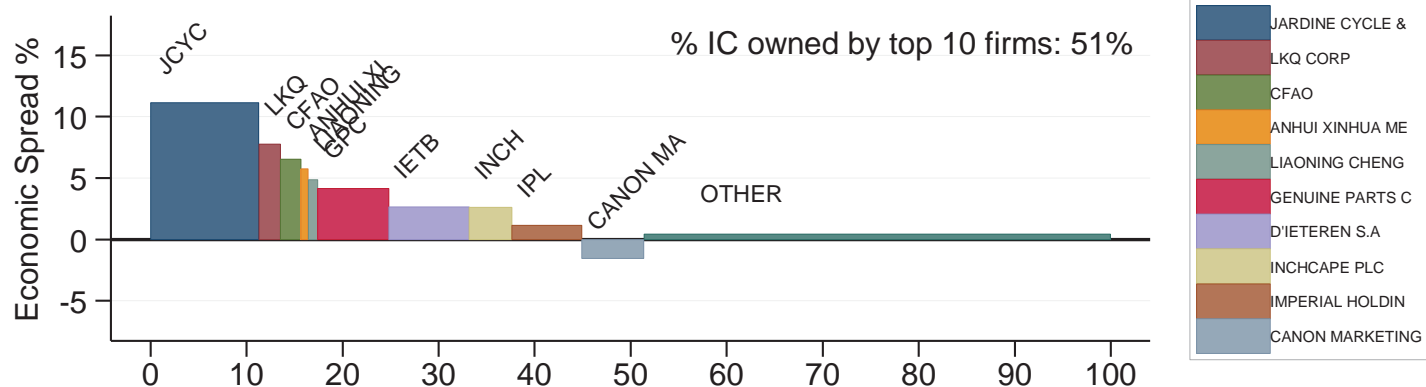
Count of firms: 184

2015 FY reporting percentage: 53%

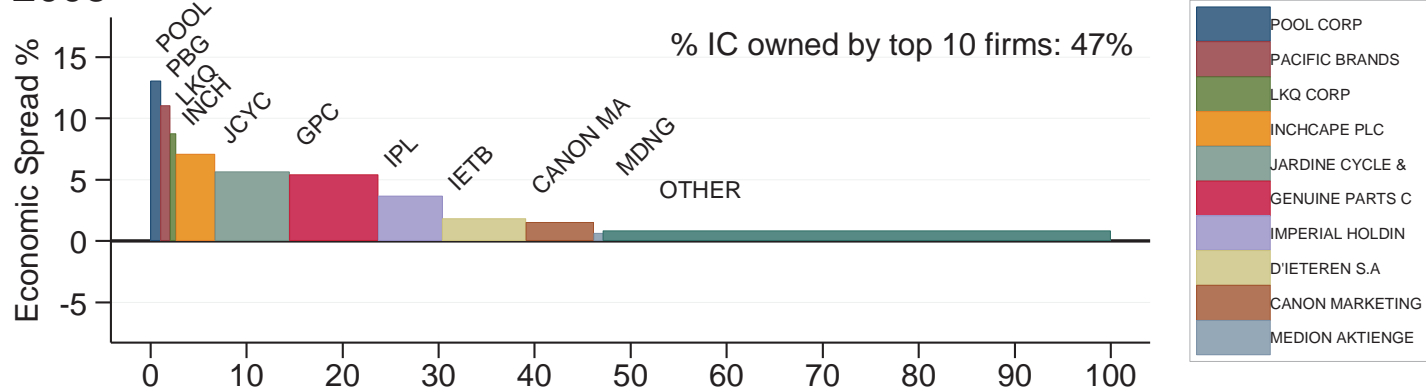
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 27.7%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

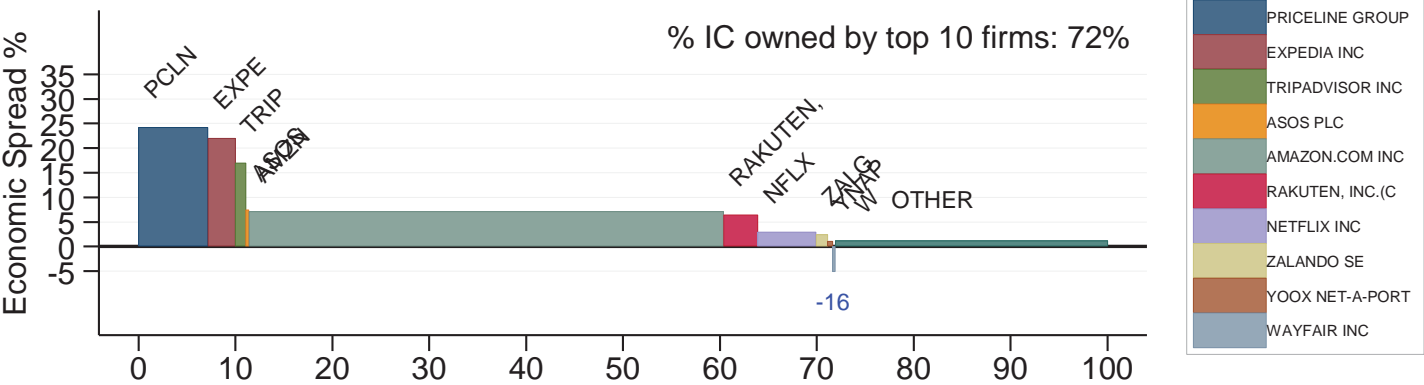


MSCI GIC: 255020

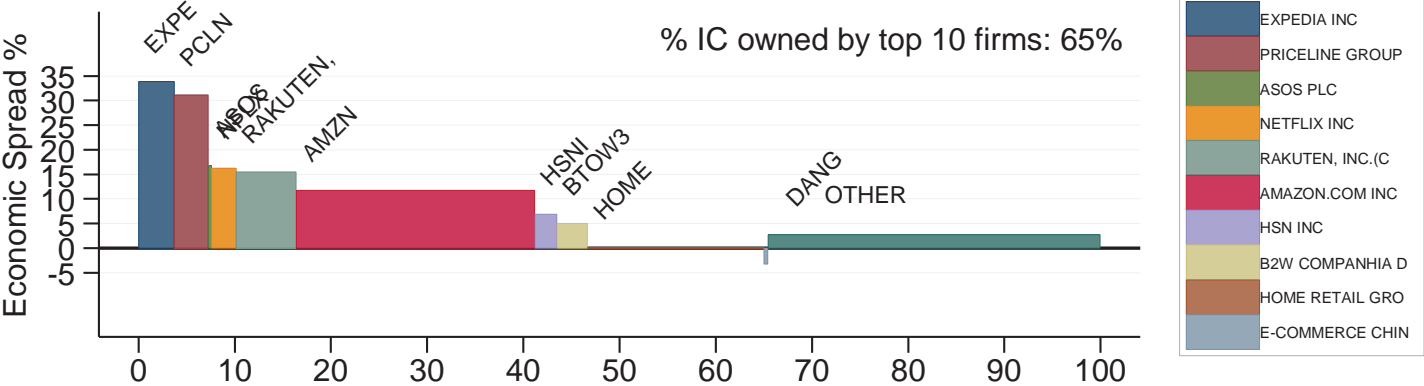
Count of firms: 121

2015 FY reporting percentage: 71%

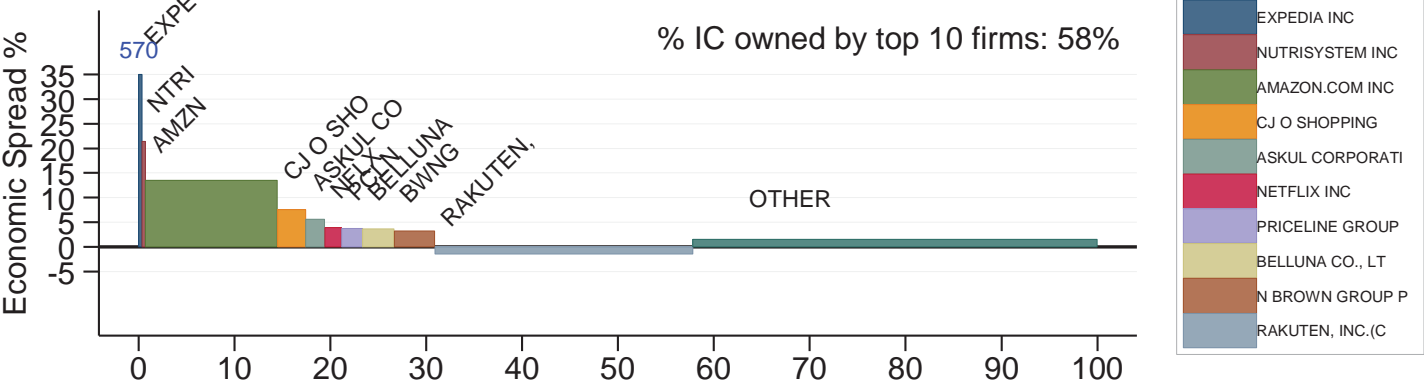
2015



2010



2005



----- Percentage of Industry Invested Capital -----

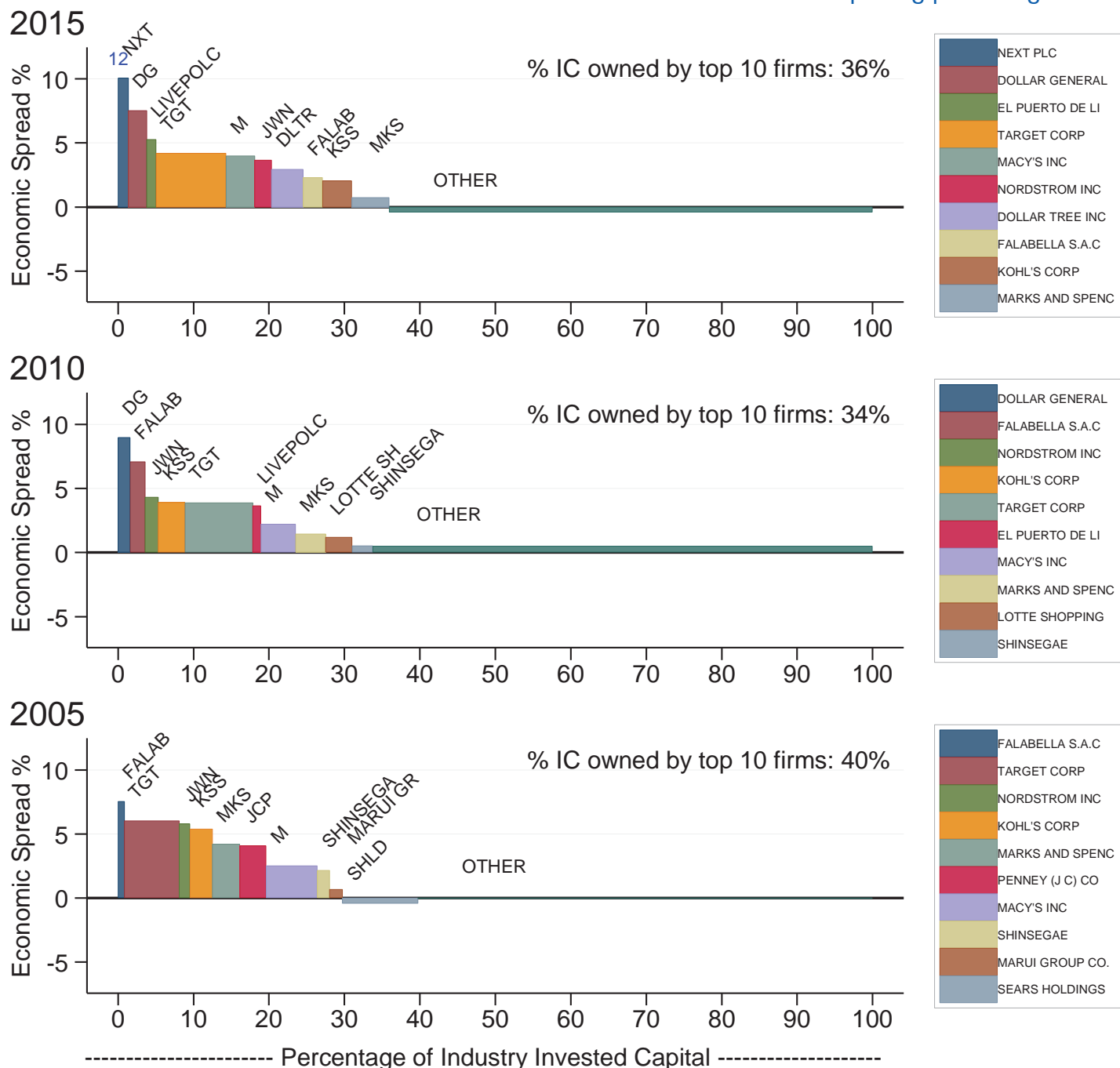
*Industry is considered competitive: 4 firm concentration ratio = 38.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 255030

Count of firms: 150

2015 FY reporting percentage: 77%



*Industry is considered competitive: 4 firm concentration ratio = 32.8%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

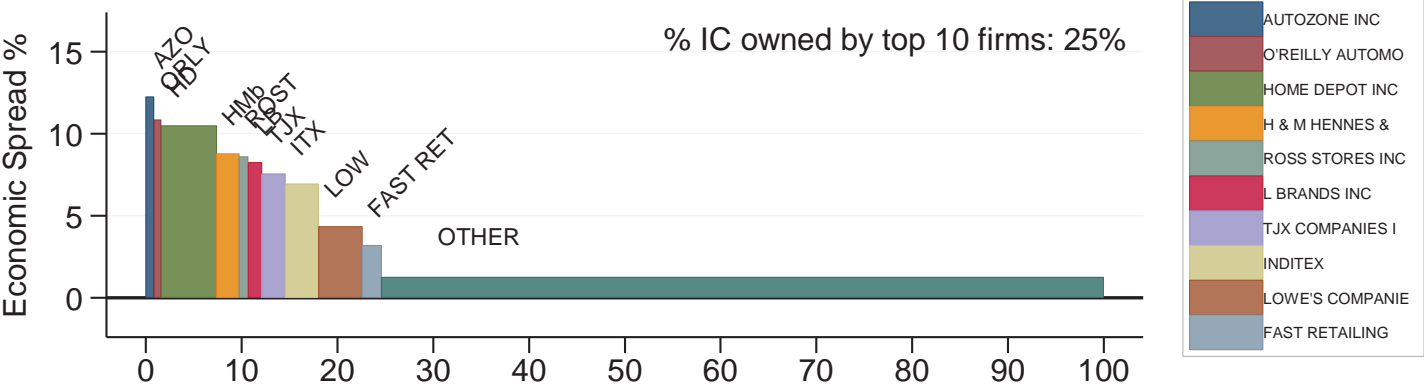


MSCI GIC: 255040

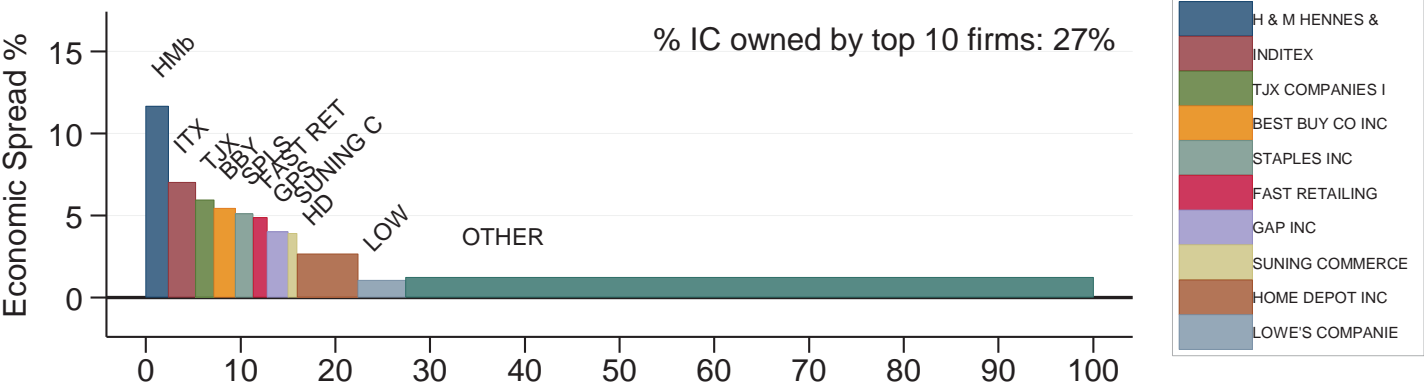
Count of firms: 518

2015 FY reporting percentage: 71%

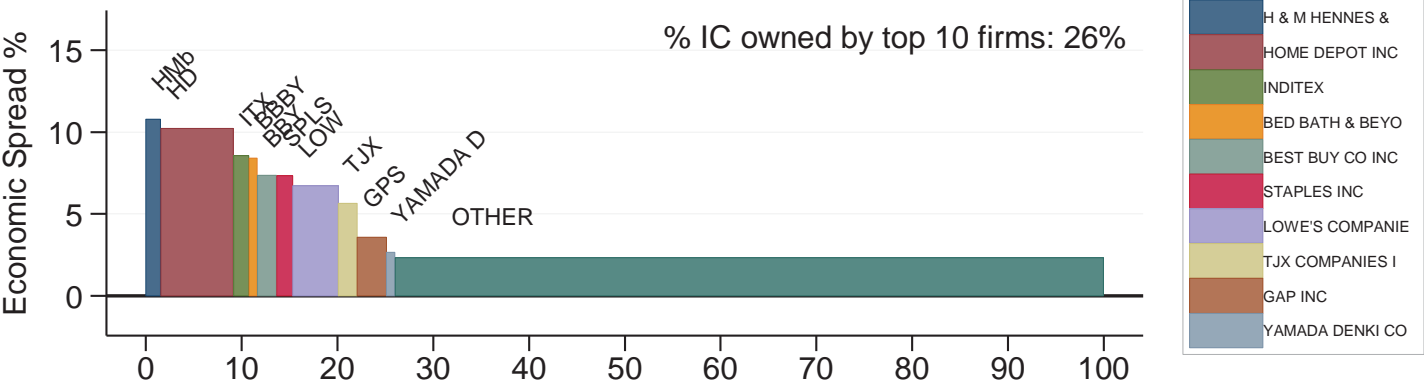
2015



2010



2005



----- Percentage of Industry Invested Capital -----

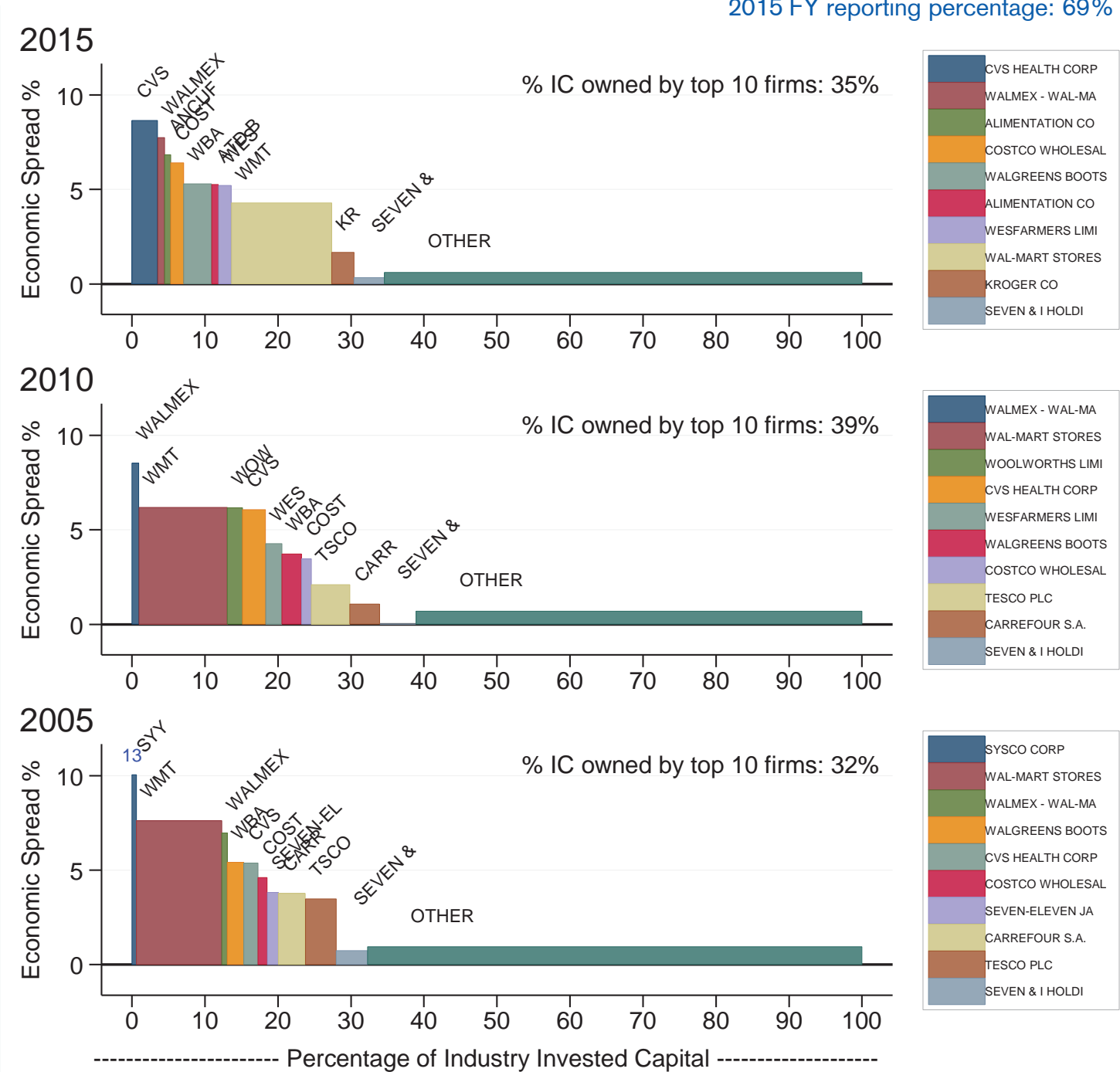
*Industry is considered competitive: 4 firm concentration ratio = 23.3%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 301010

Count of firms: 322

2015 FY reporting percentage: 69%



*Industry is considered competitive: 4 firm concentration ratio = 29.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

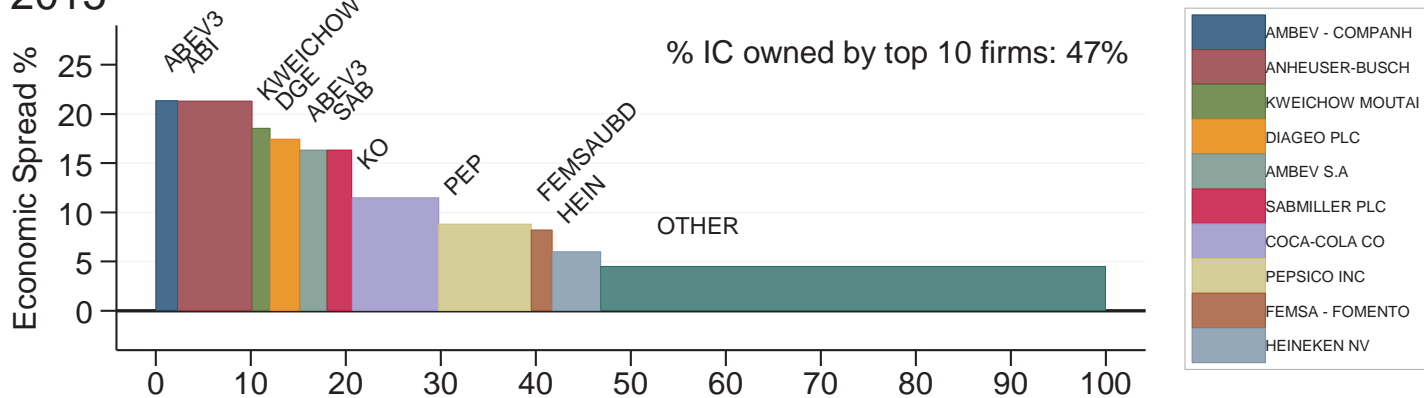


MSCI GIC: 302010

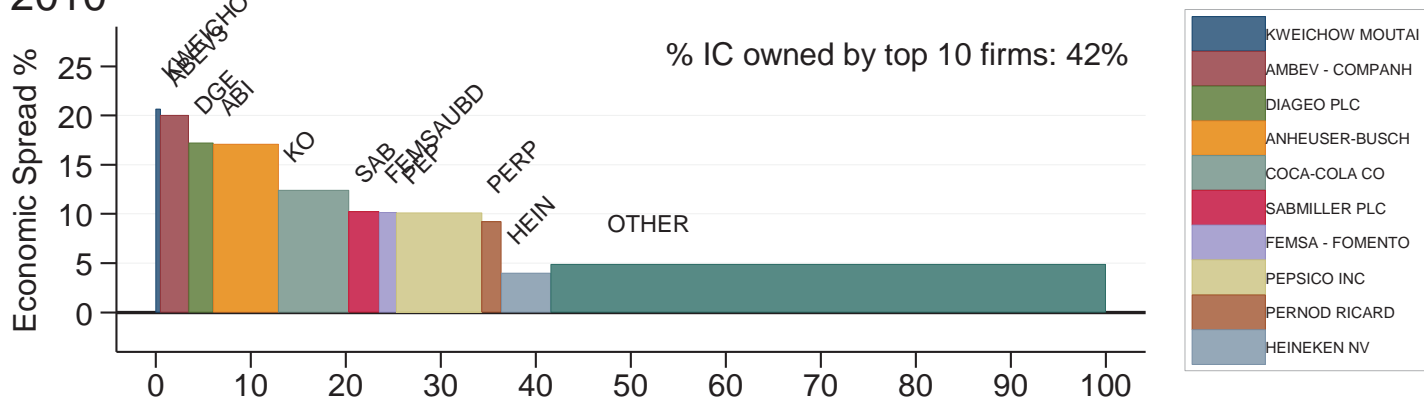
Count of firms: 230

2015 FY reporting percentage: 58%

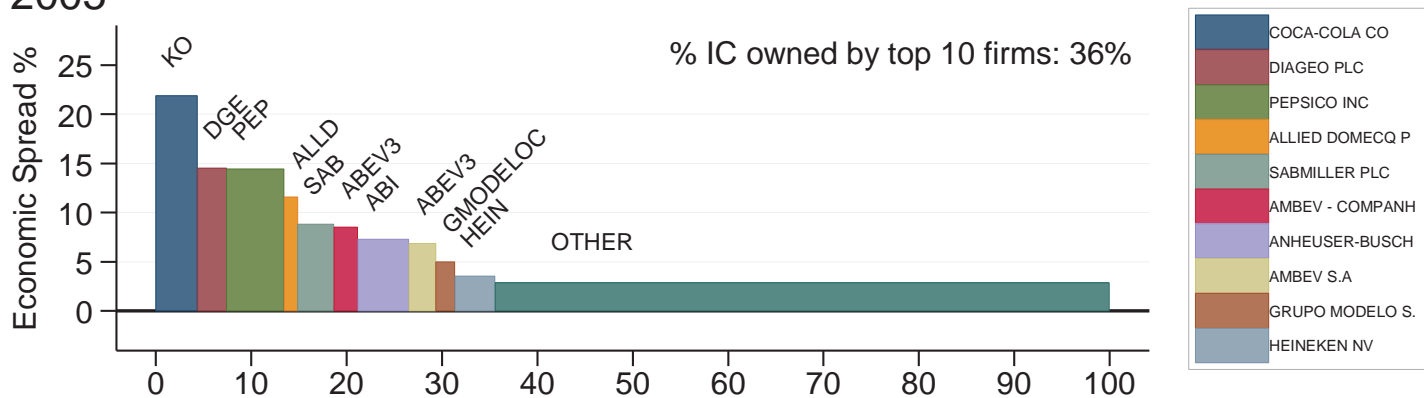
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 24.6%.

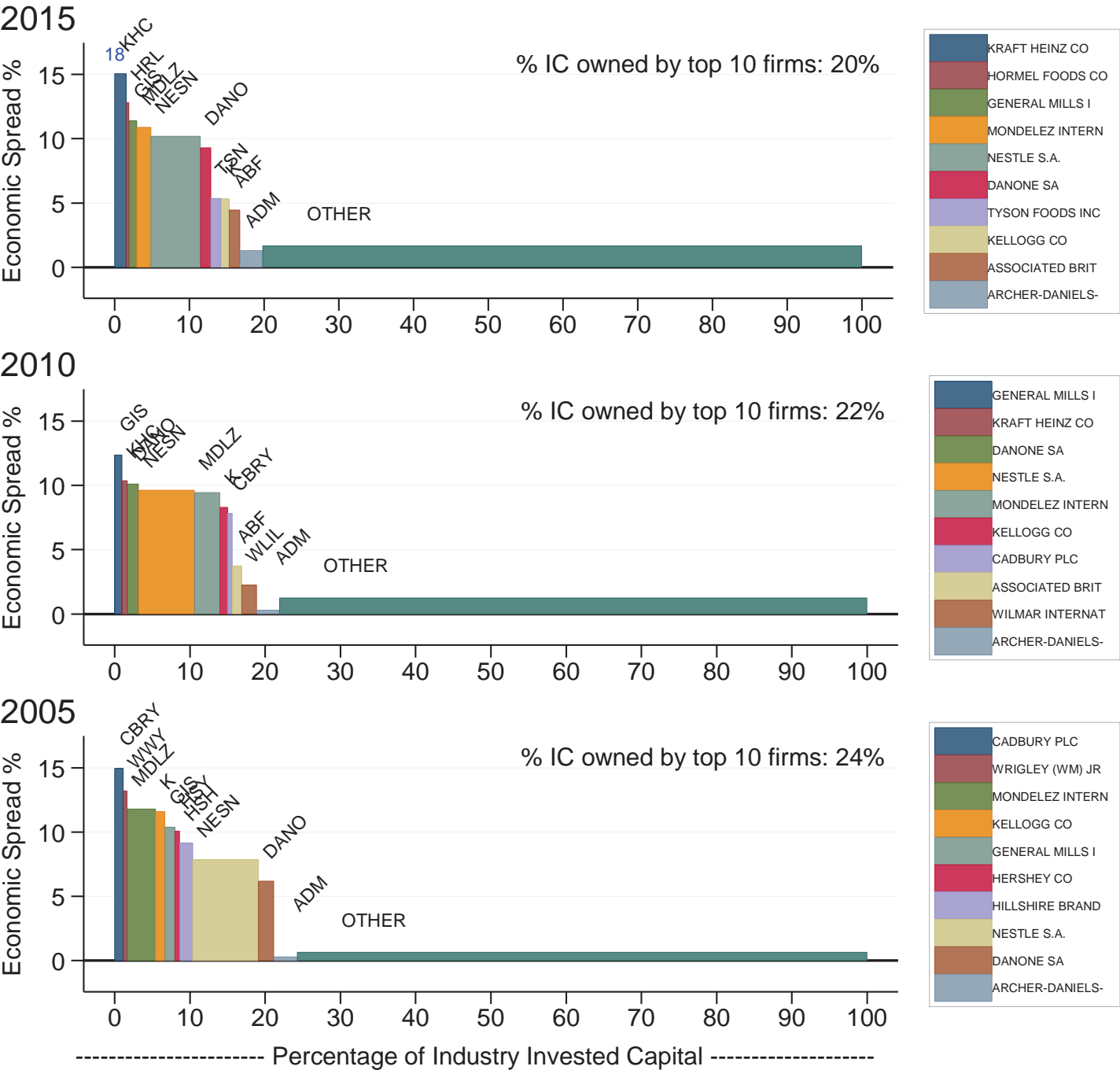
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 302020

Count of firms: 1117

2015 FY reporting percentage: 52%



*Industry is considered competitive: 4 firm concentration ratio = 20.0%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

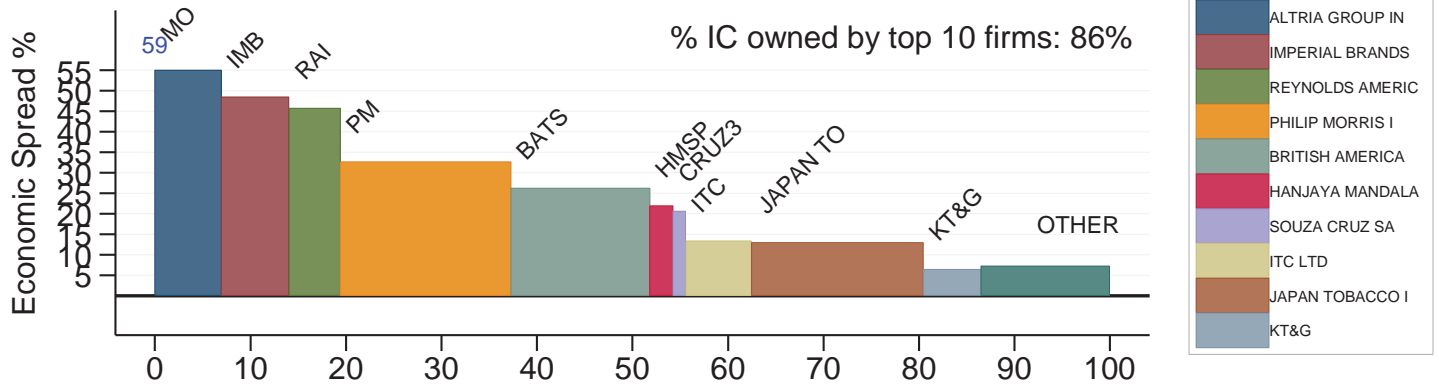


MSCI GIC: 302030

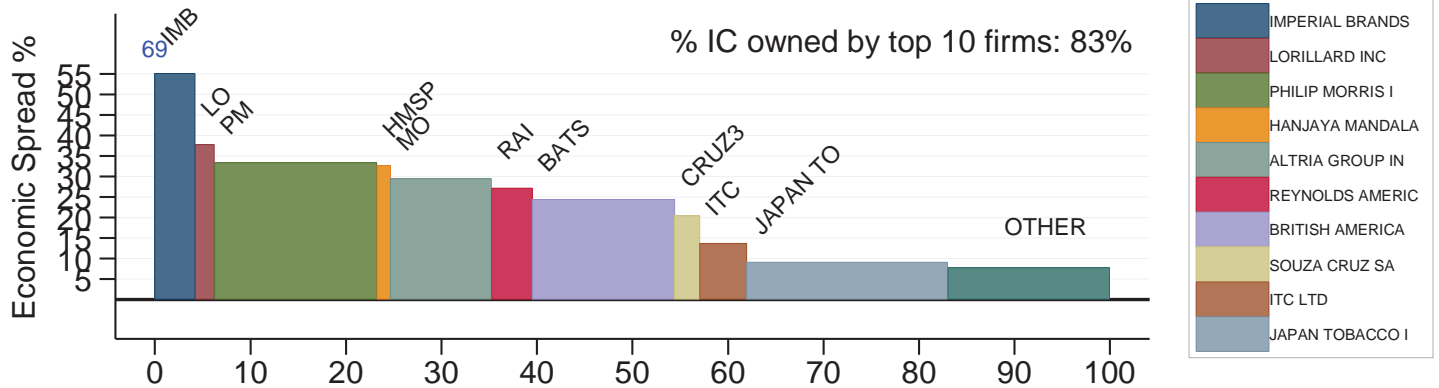
Count of firms: 37

2015 FY reporting percentage: 54%

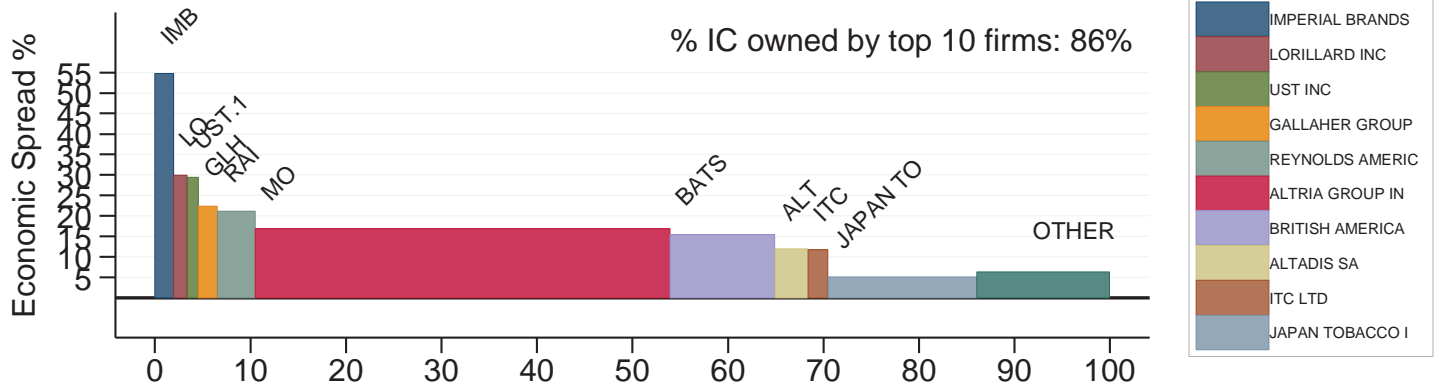
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 71.8%.

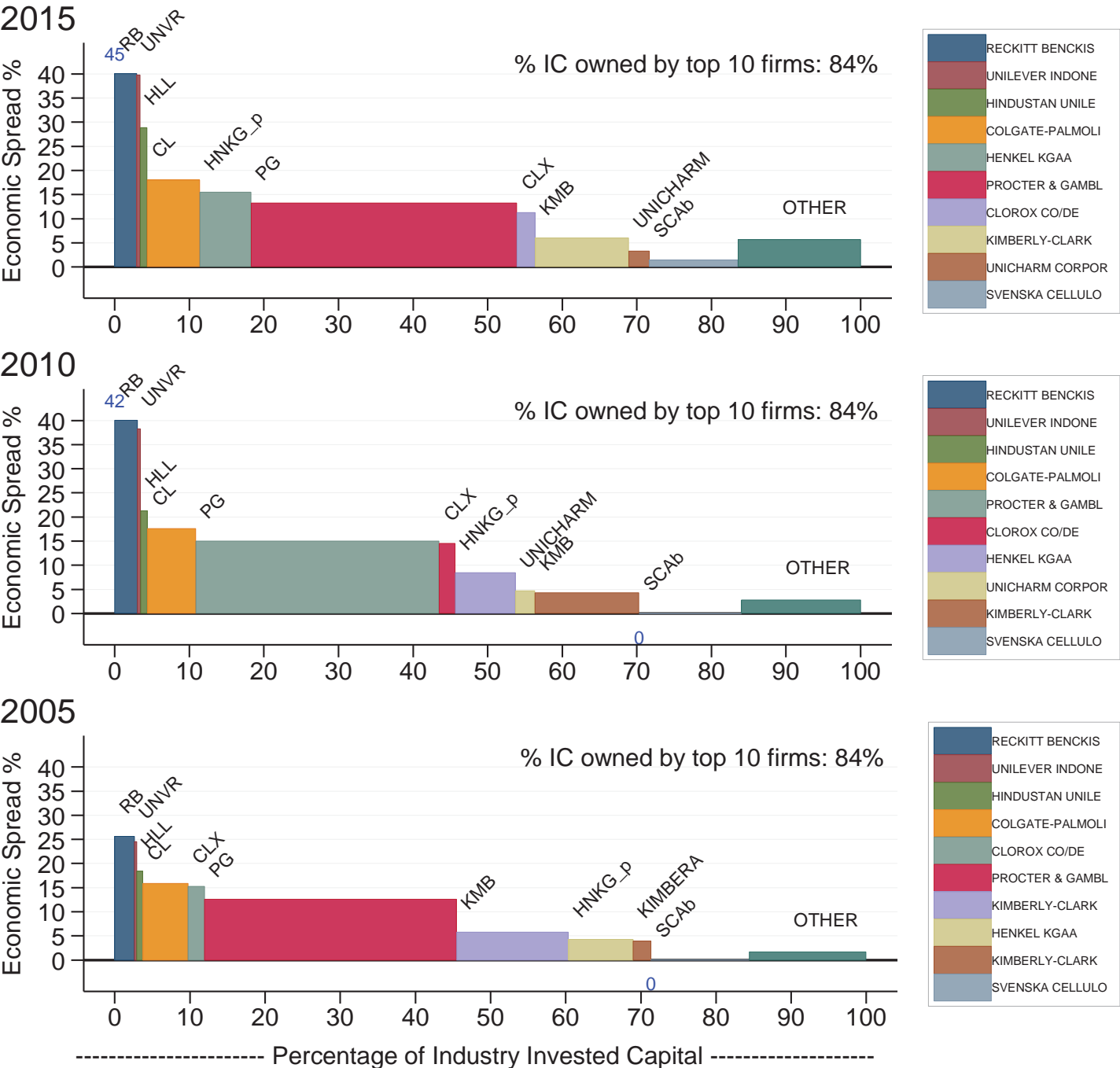
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 303010

Count of firms: 69

2015 FY reporting percentage: 61%



*Industry is highly concentrated: 4 firm concentration ratio = 65.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

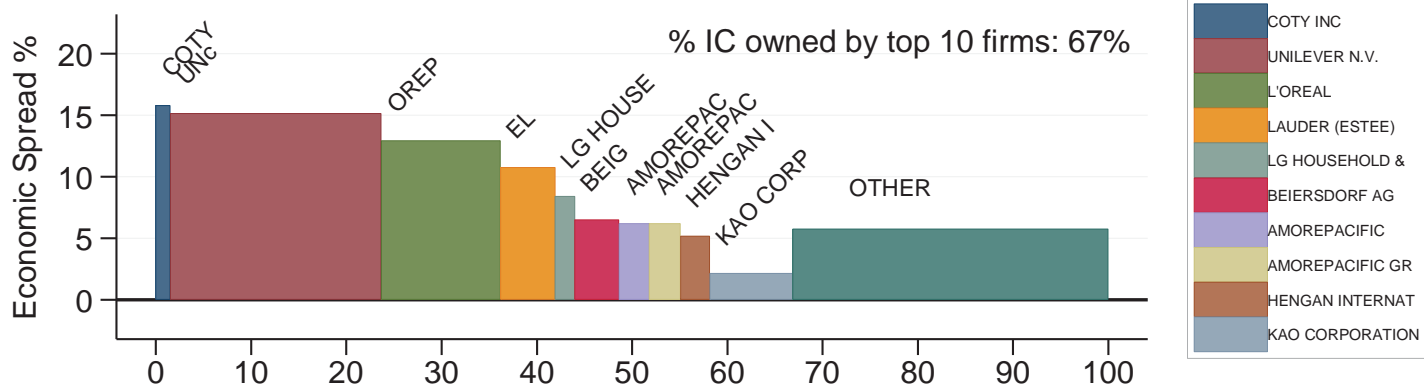


MSCI GIC: 303020

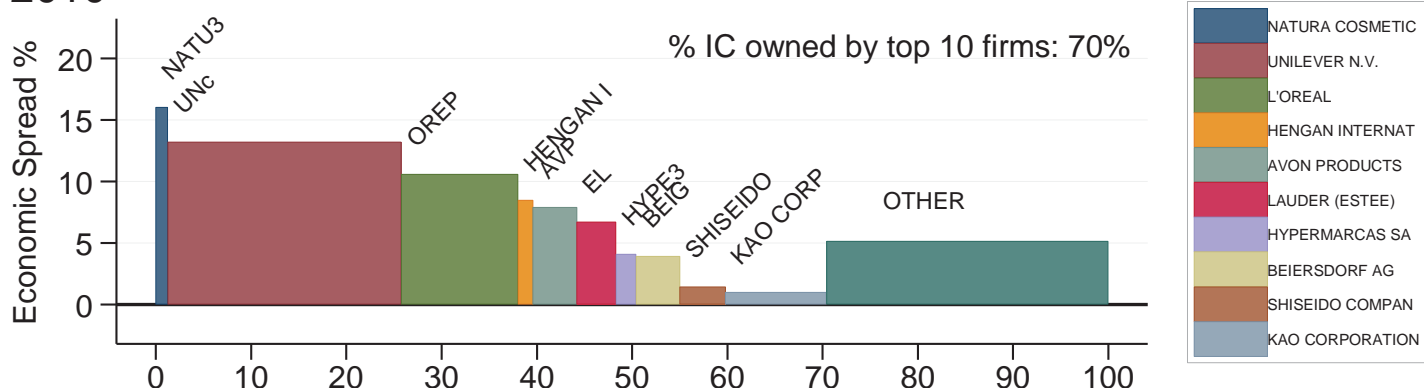
Count of firms: 182

2015 FY reporting percentage: 59%

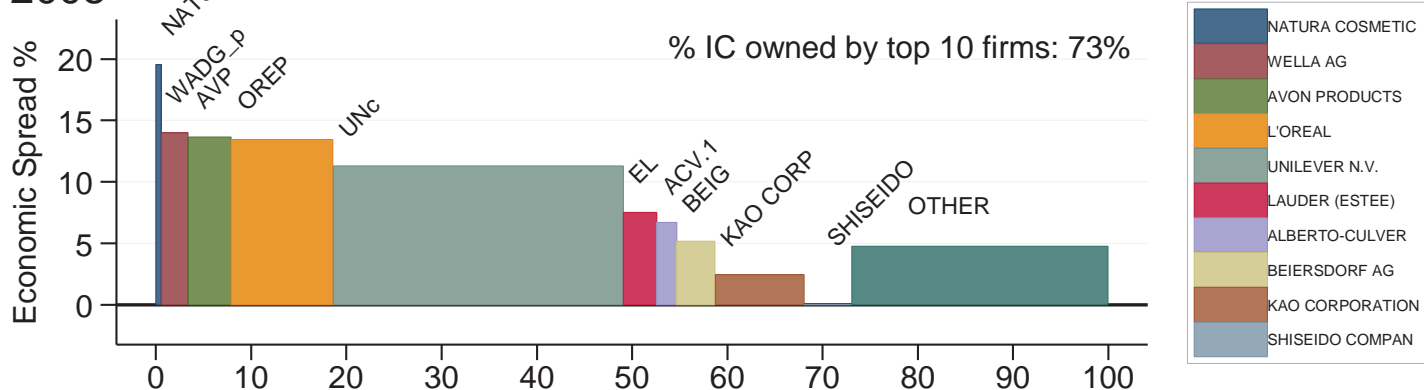
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 56.3%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

Health Care Equipment & Supplies

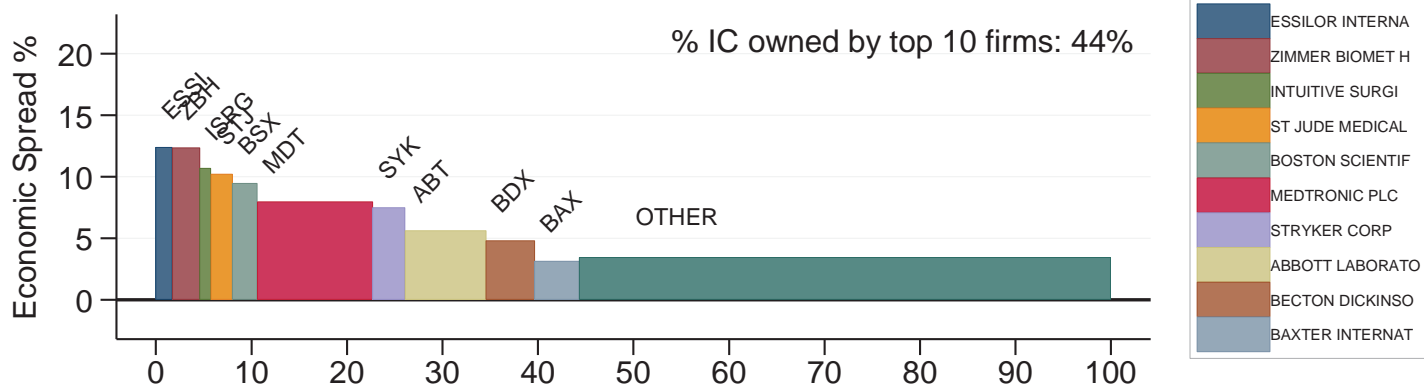


MSCI GIC: 351010

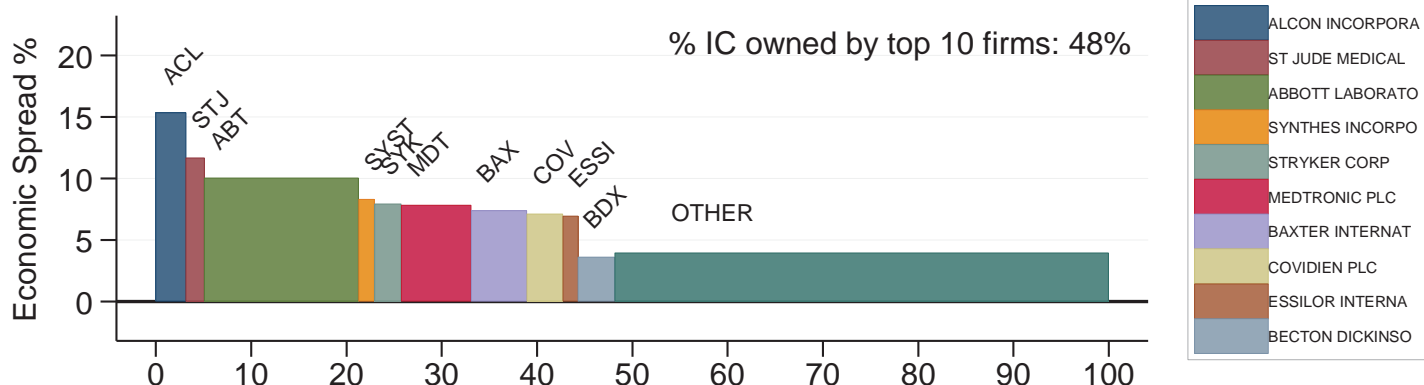
Count of firms: 445

2015 FY reporting percentage: 59%

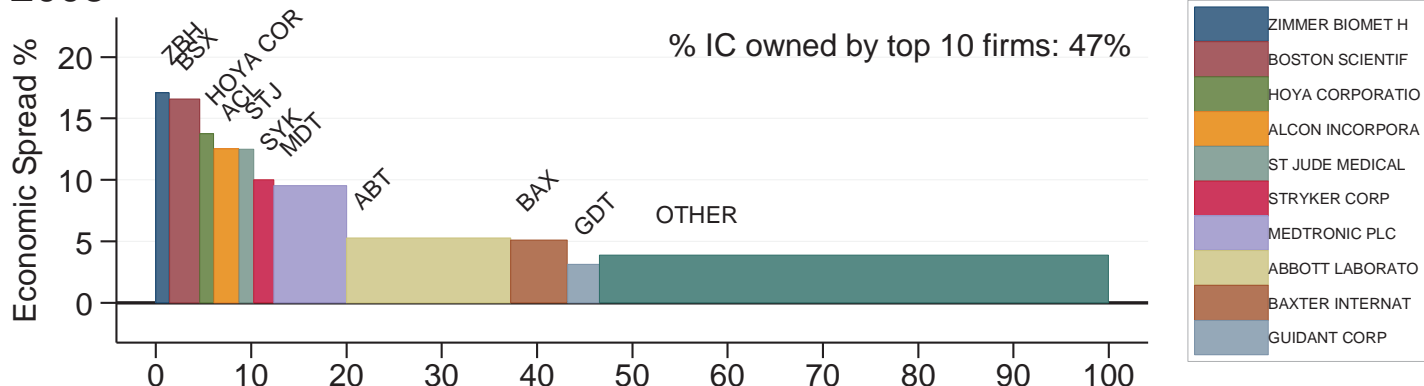
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 30.4%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

Health Care Providers & Services

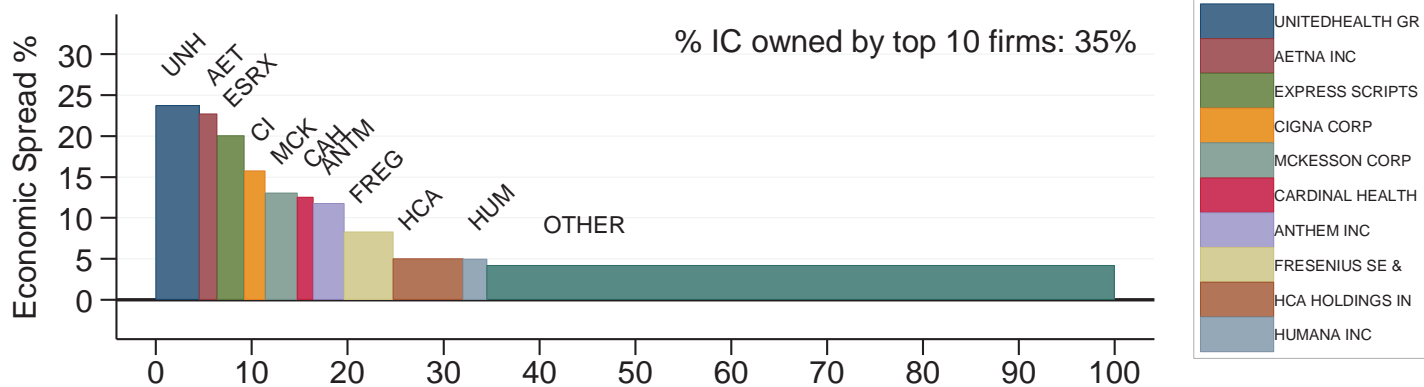


MSCI GIC: 351020

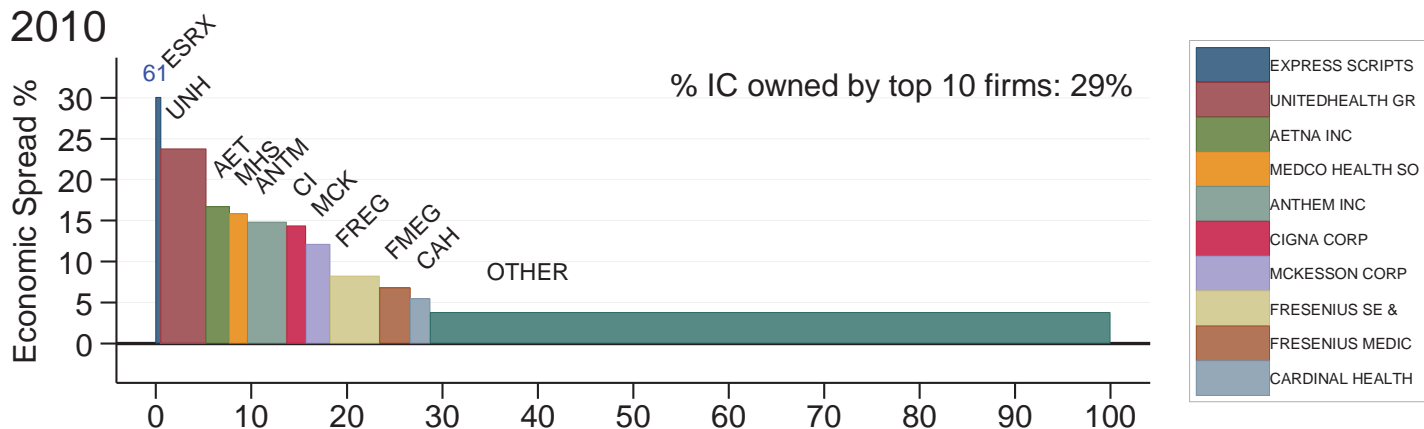
Count of firms: 393

2015 FY reporting percentage: 63%

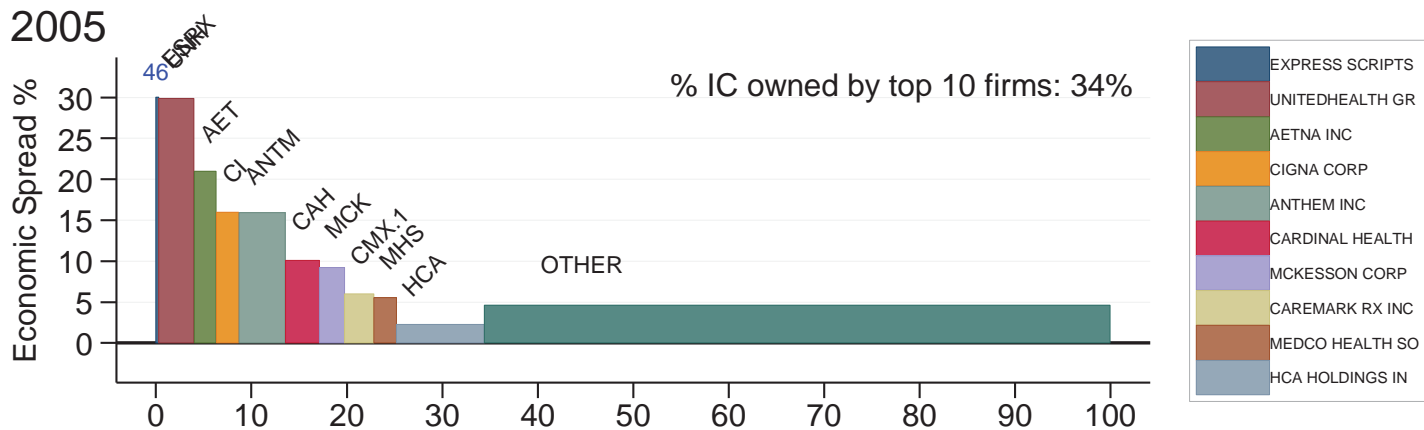
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 33.9%.

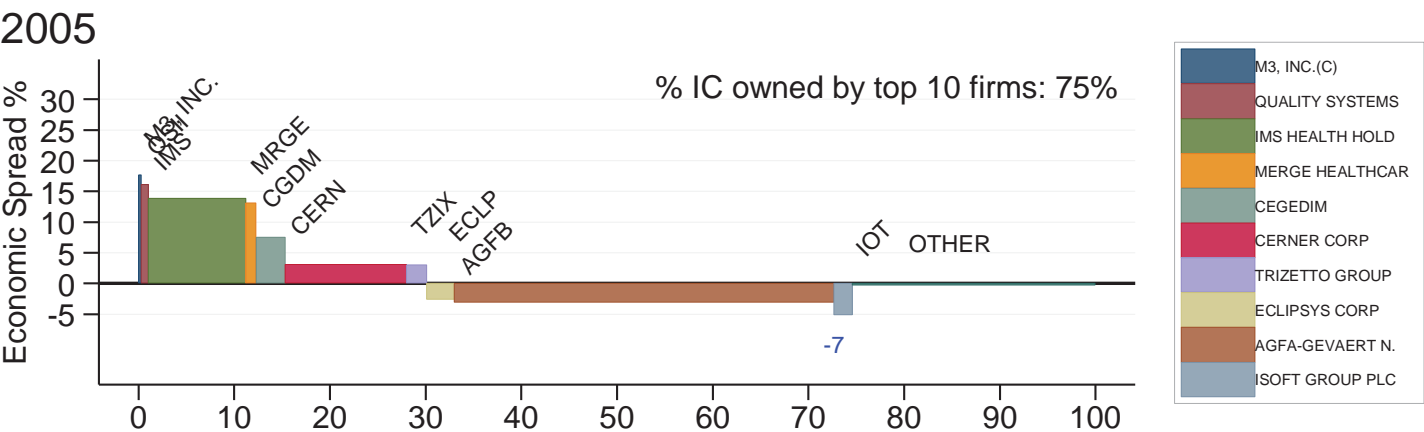
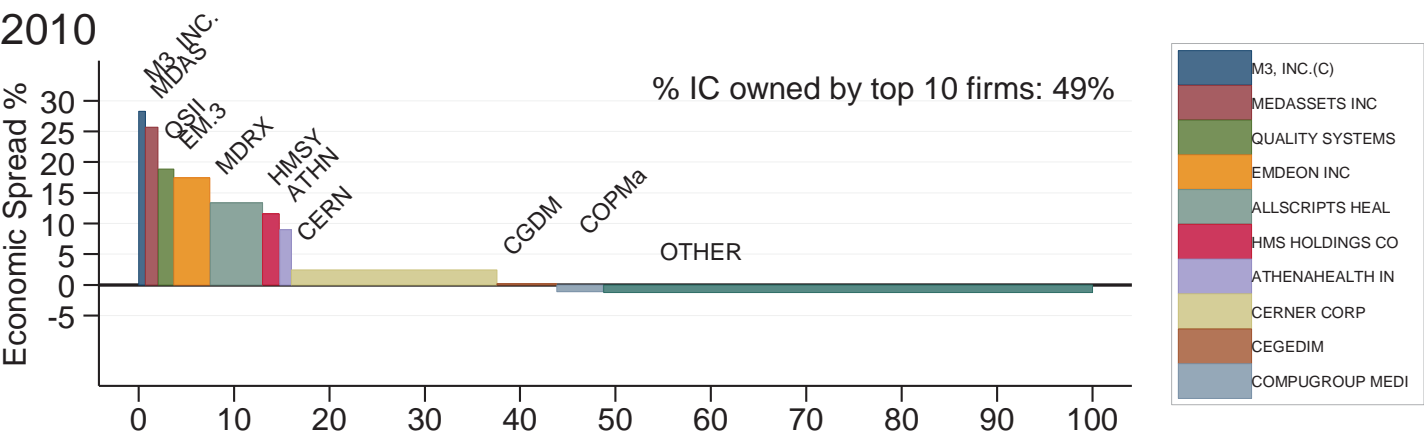
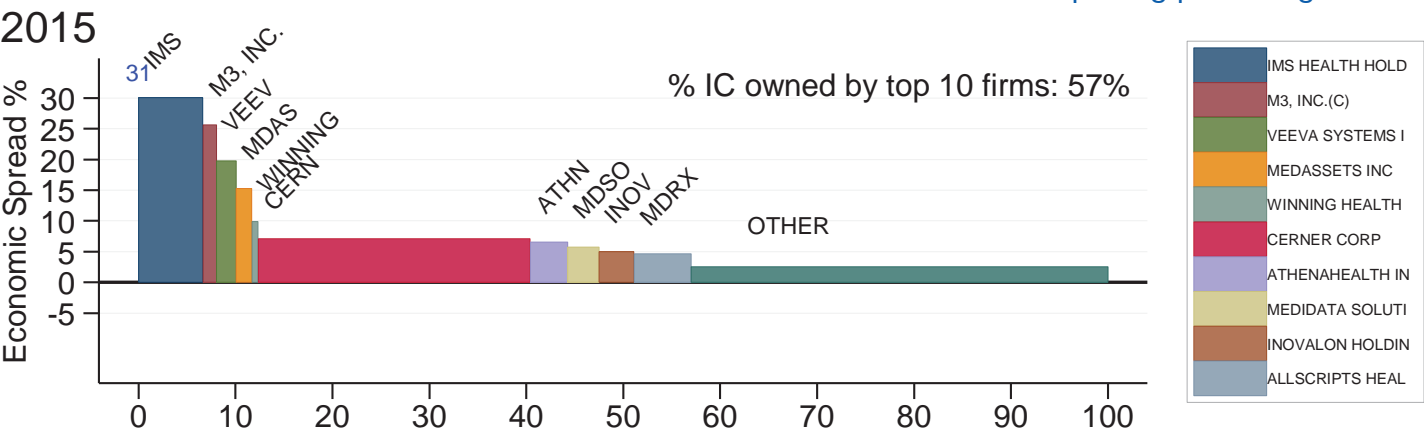
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 351030

Count of firms: 77

2015 FY reporting percentage: 57%



----- Percentage of Industry Invested Capital -----

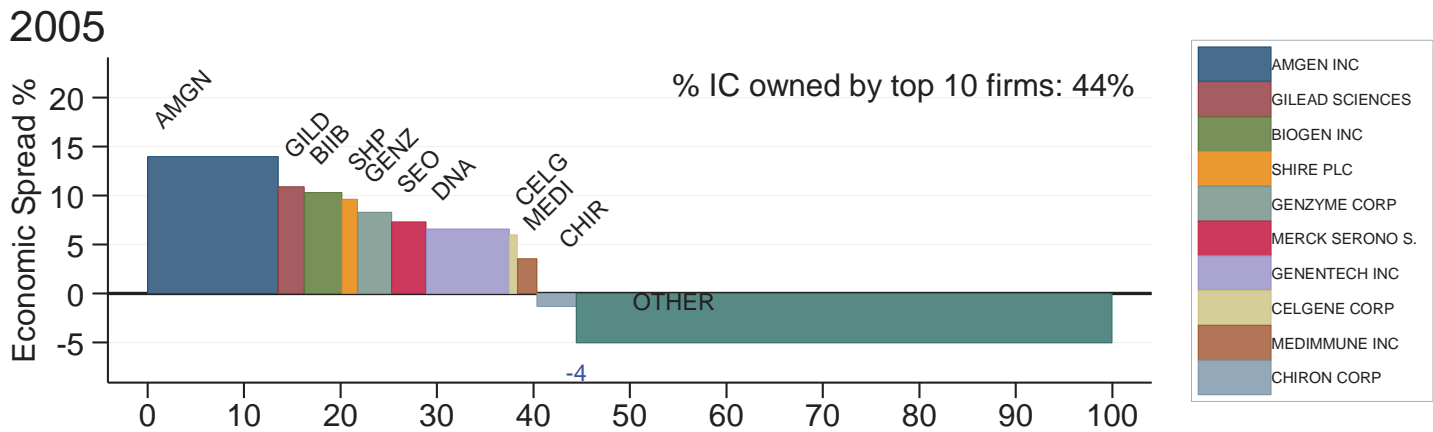
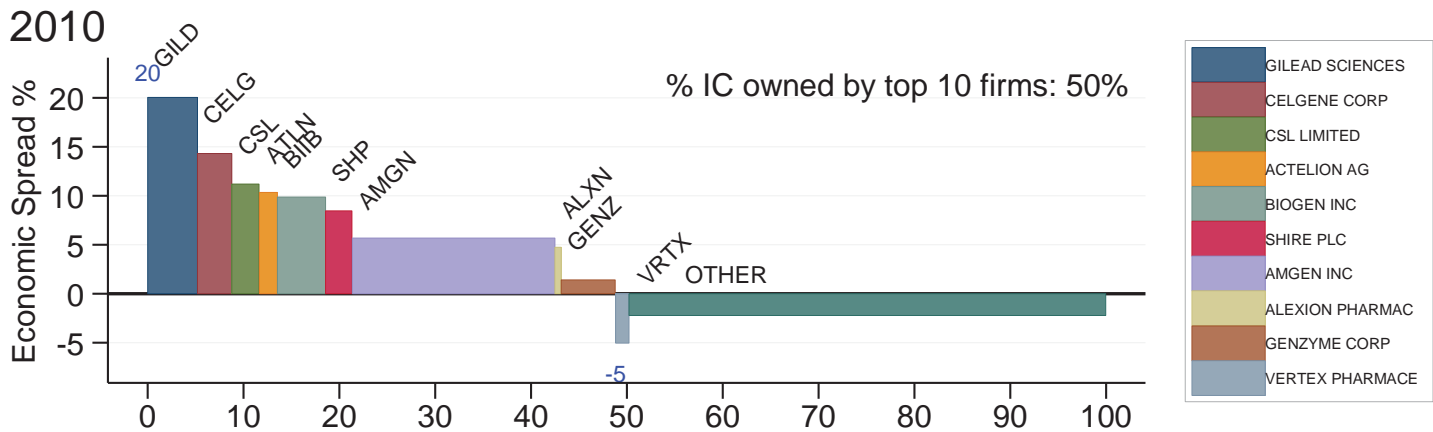
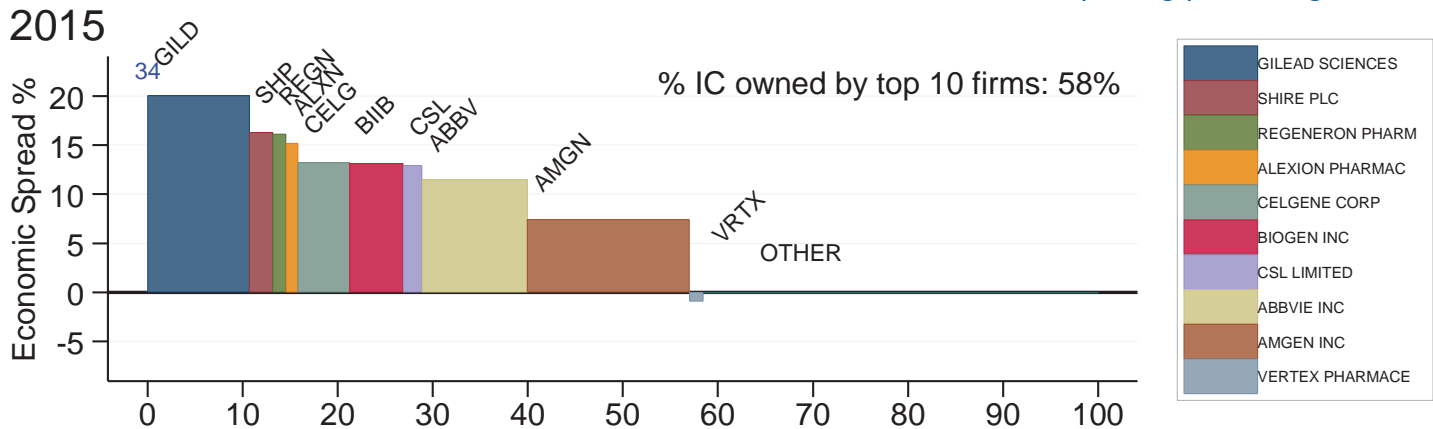
*Industry is highly concentrated: 4 firm concentration ratio = 63.6%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 352010

Count of firms: 479

2015 FY reporting percentage: 65%



----- Percentage of Industry Invested Capital -----

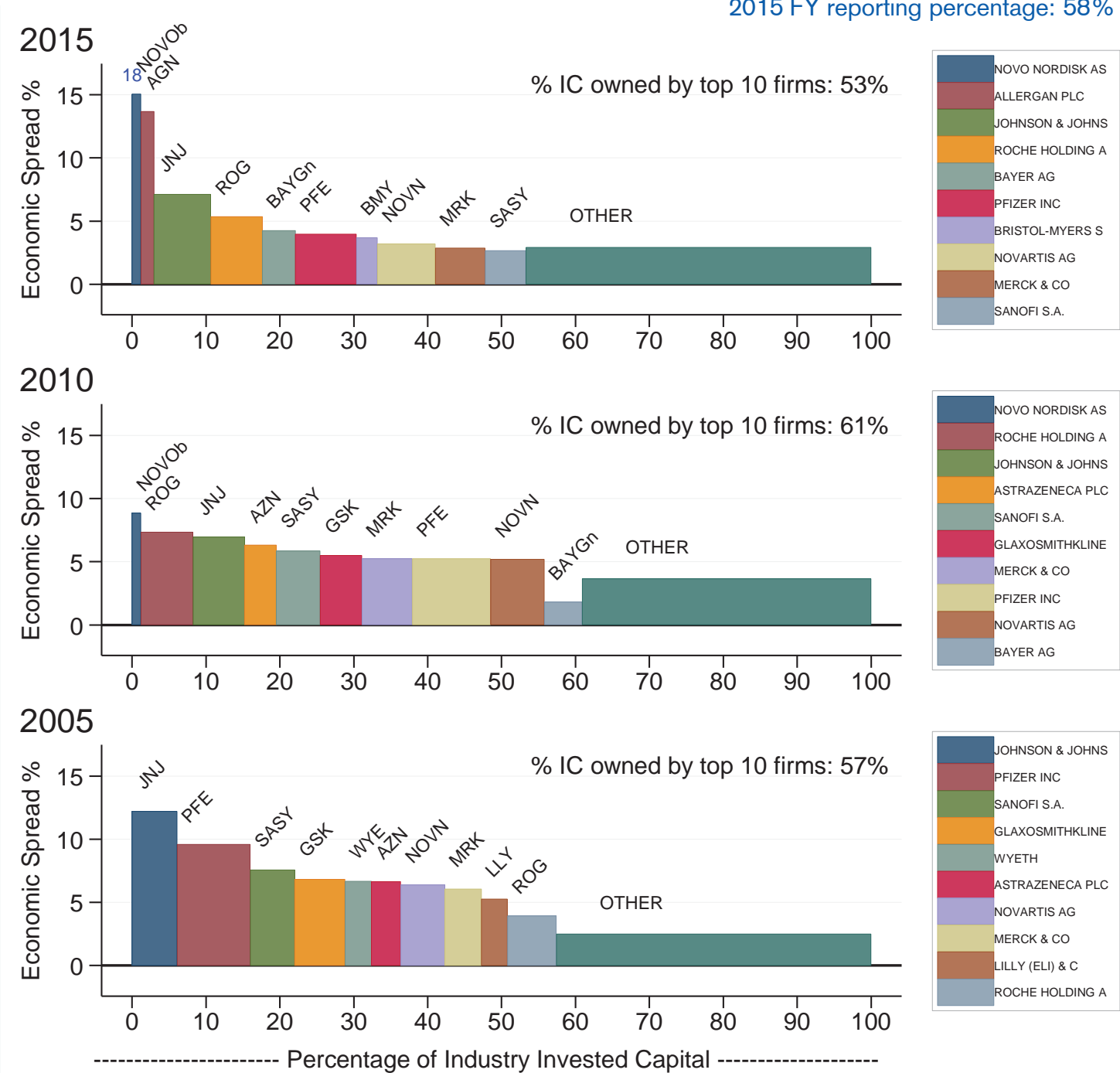
*Industry is highly concentrated: 4 firm concentration ratio = 49.3%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 352020

Count of firms: 581

2015 FY reporting percentage: 58%



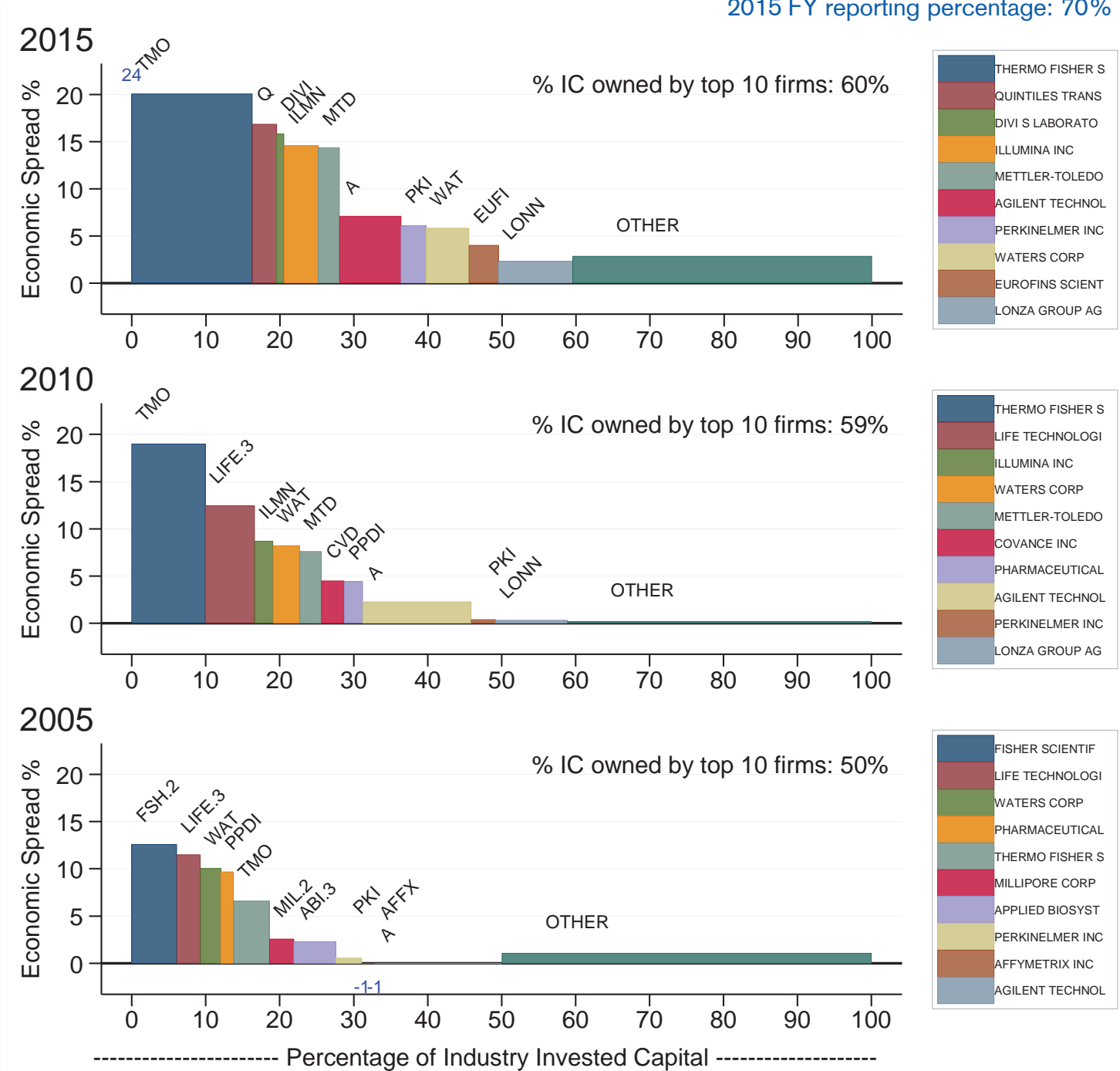
*Industry is considered competitive: 4 firm concentration ratio = 31.1%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 352030

Count of firms: 114

2015 FY reporting percentage: 70%



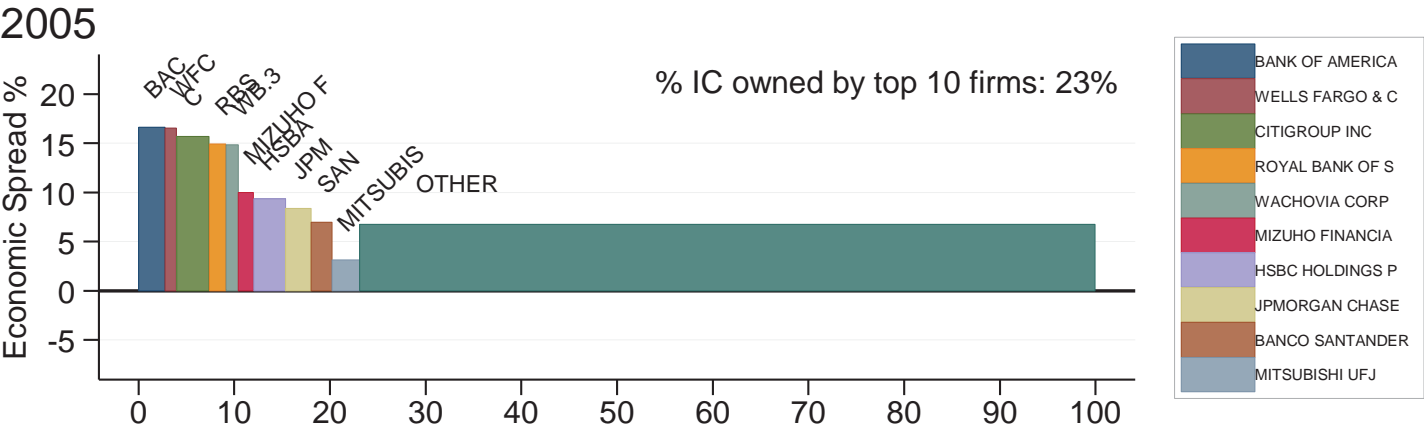
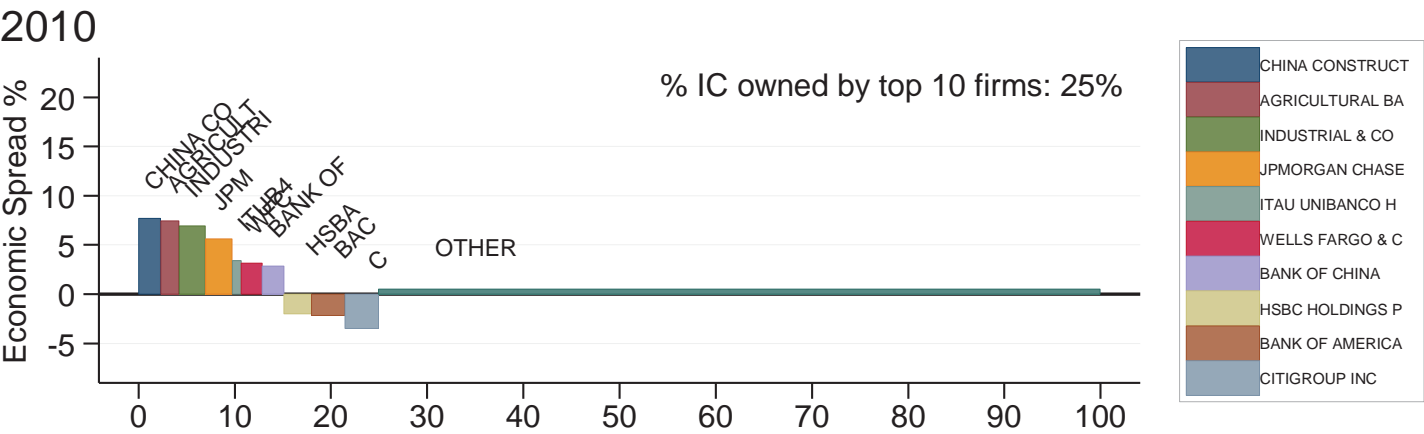
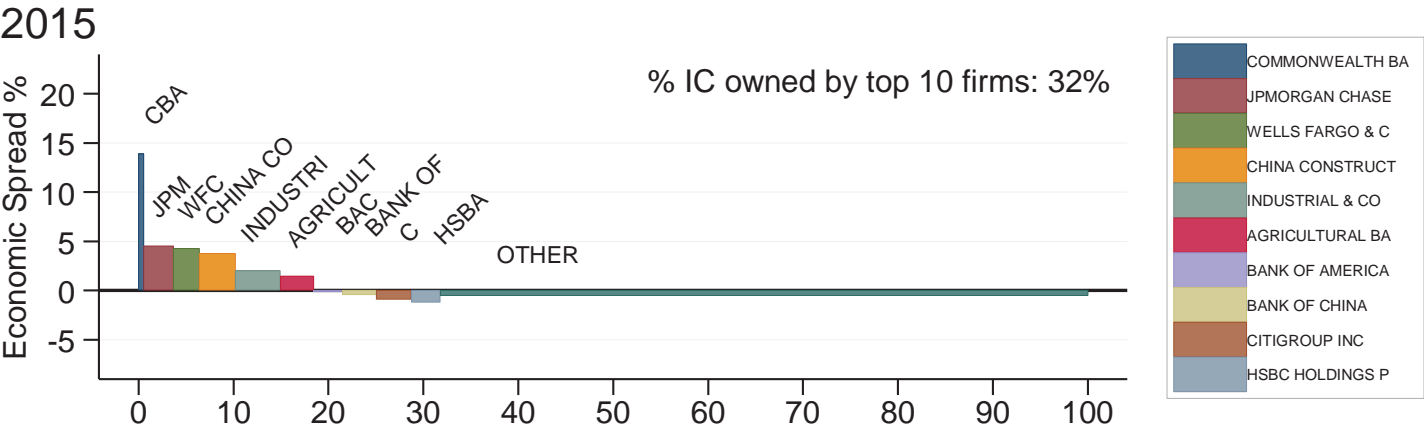
*Industry is considered competitive: 4 firm concentration ratio = 39.1%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 401010

Count of firms: 1114

2015 FY reporting percentage: 69%



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 15.6%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

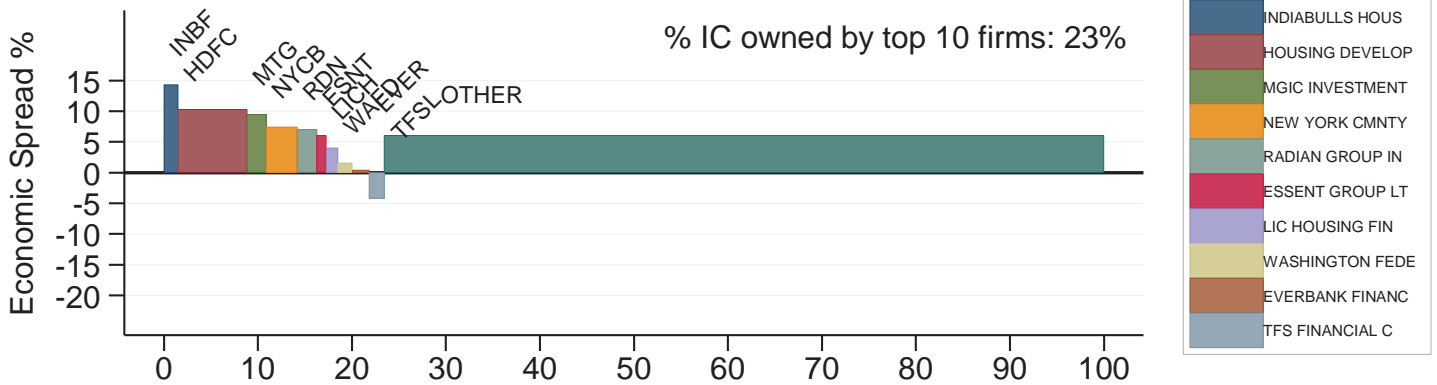


MSCI GIC: 401020

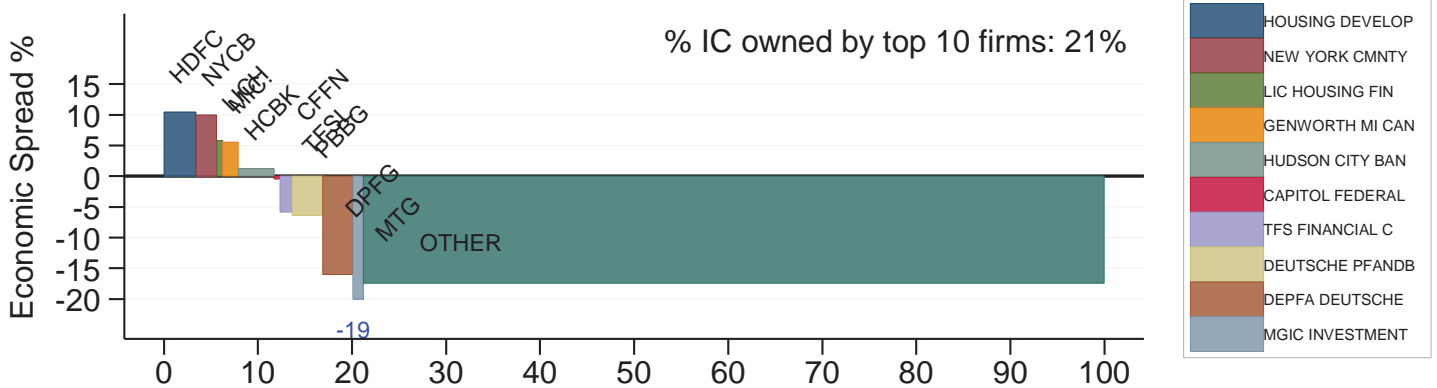
Count of firms: 186

2015 FY reporting percentage: 72%

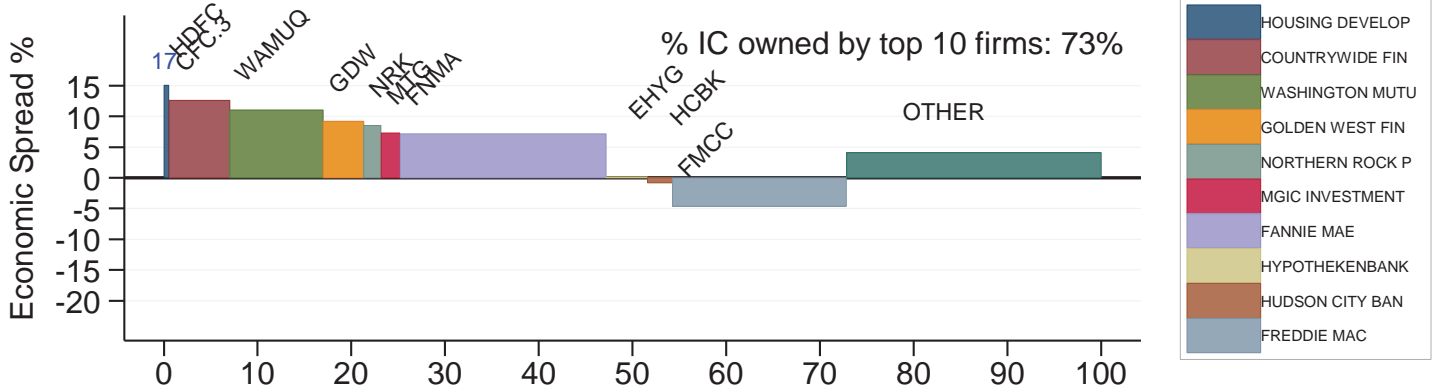
2015



2010



2005



----- Percentage of Industry Invested Capital -----

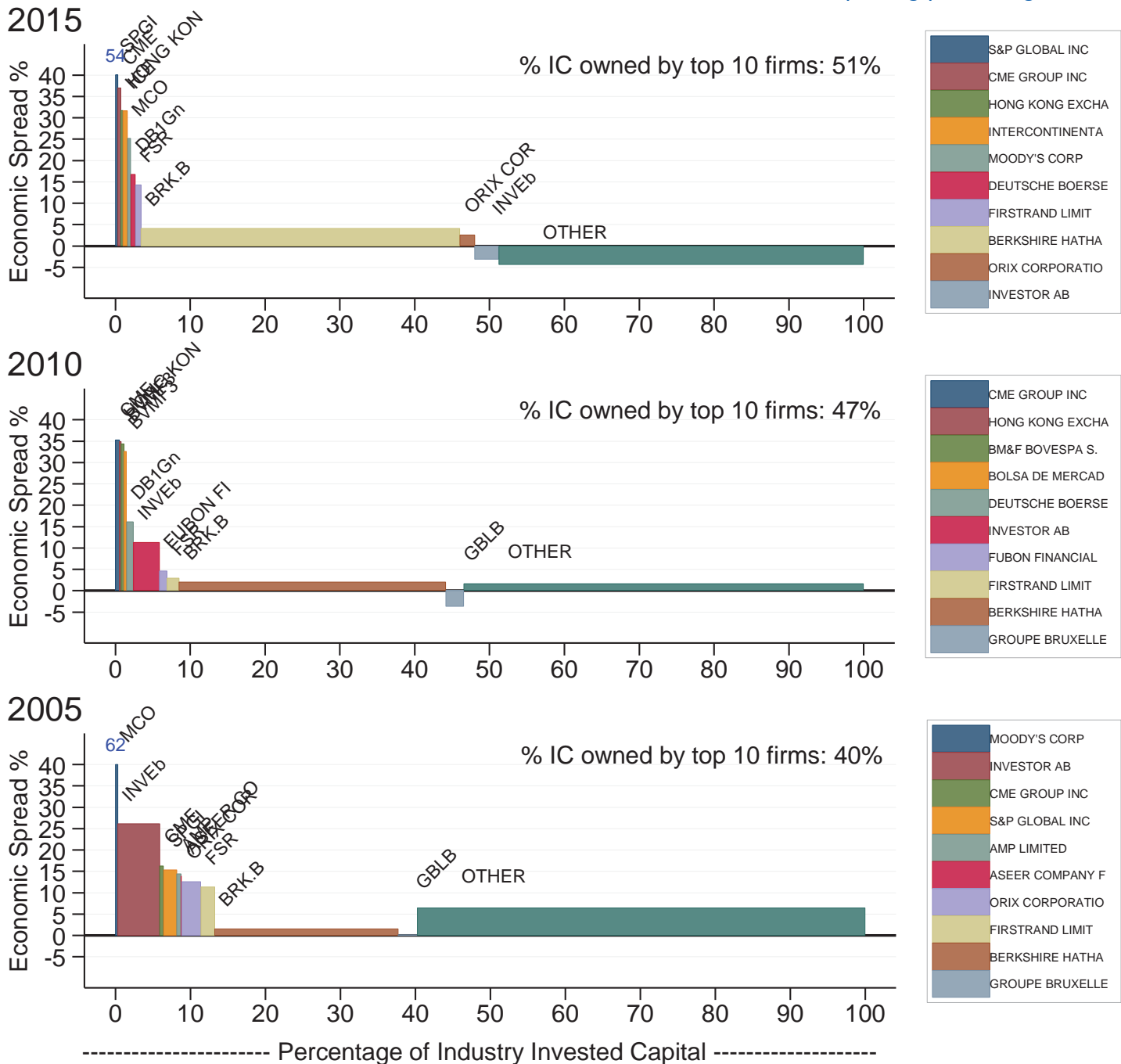
*Industry is highly concentrated: 4 firm concentration ratio = 60.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 402010

Count of firms: 320

2015 FY reporting percentage: 52%



*Industry is highly concentrated: 4 firm concentration ratio = 46.9%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

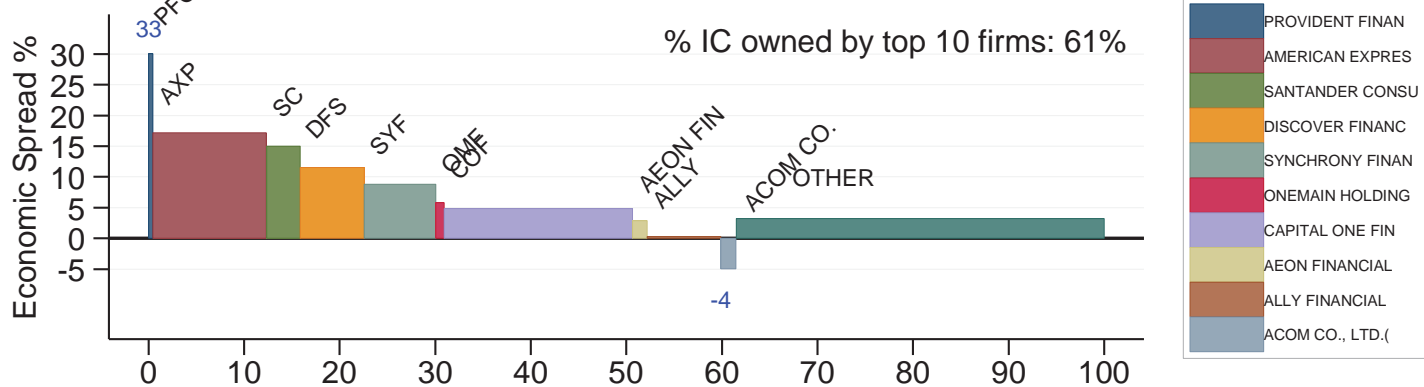


MSCI GIC: 402020

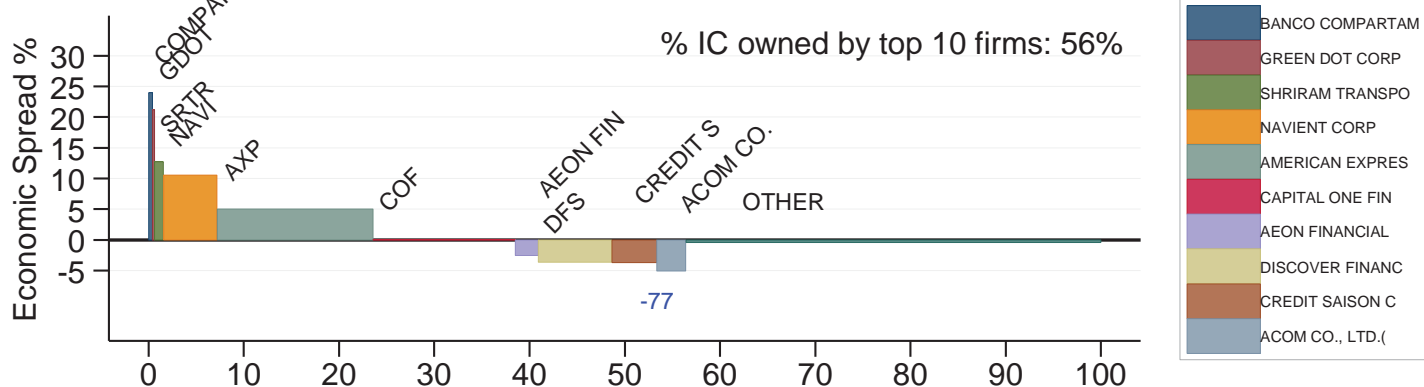
Count of firms: 190

2015 FY reporting percentage: 47%

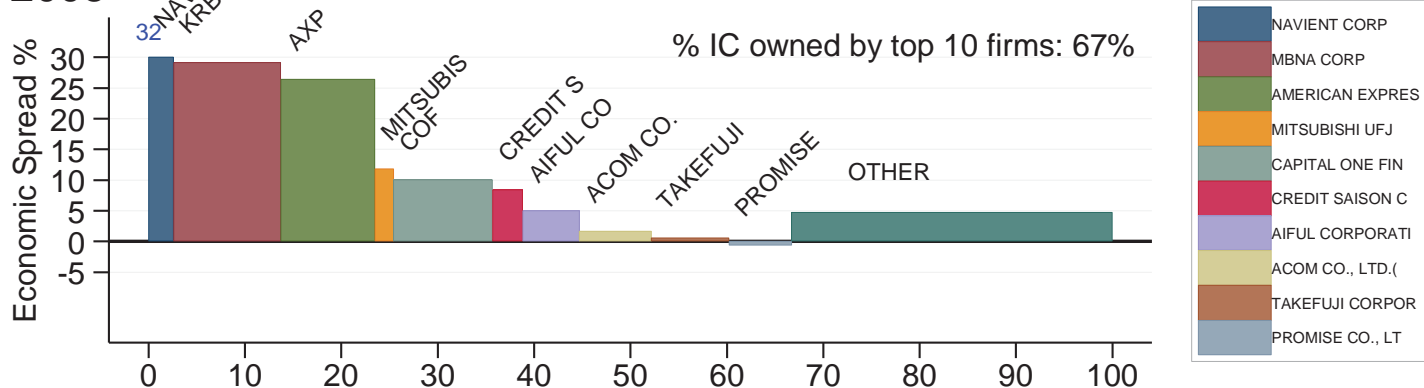
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 53.4%.

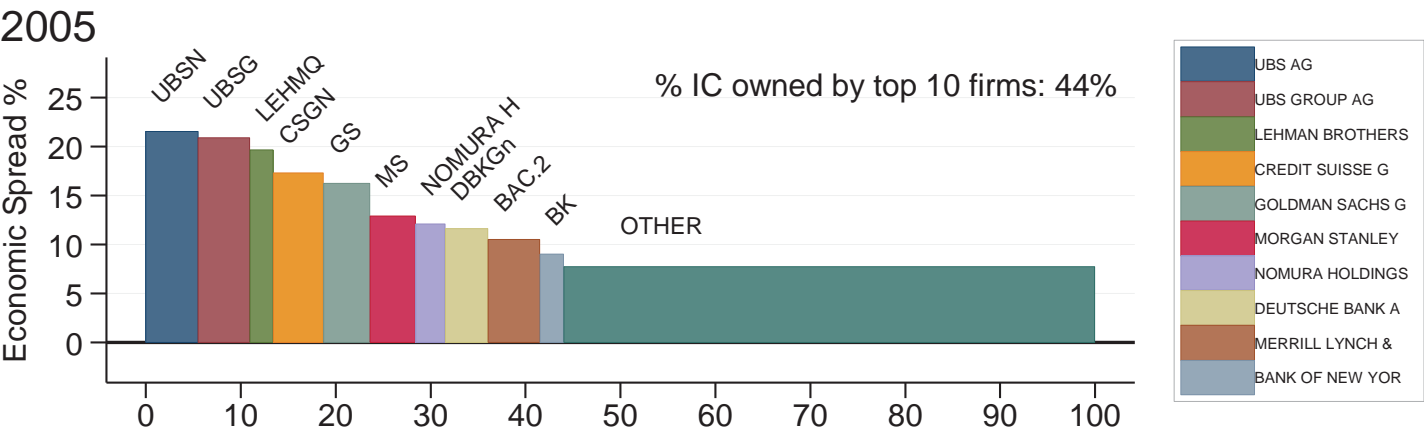
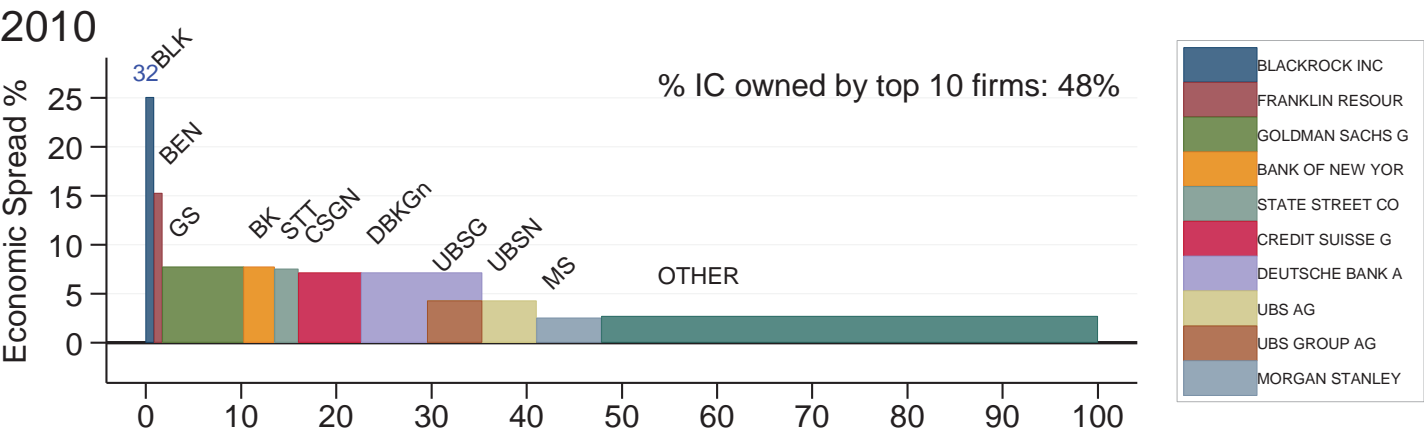
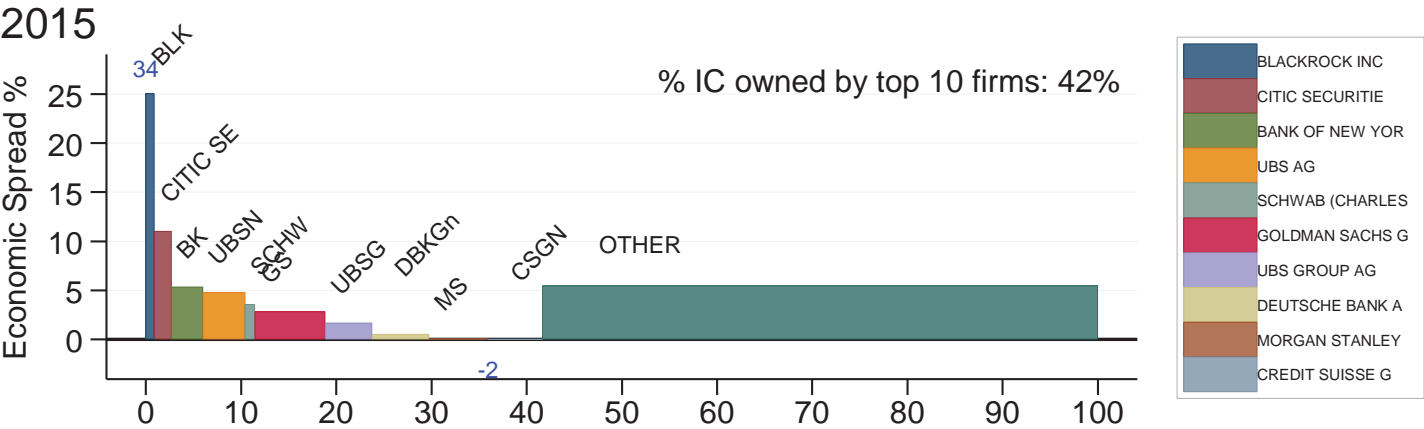
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 402030

Count of firms: 994

2015 FY reporting percentage: 45%



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = -0.0%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

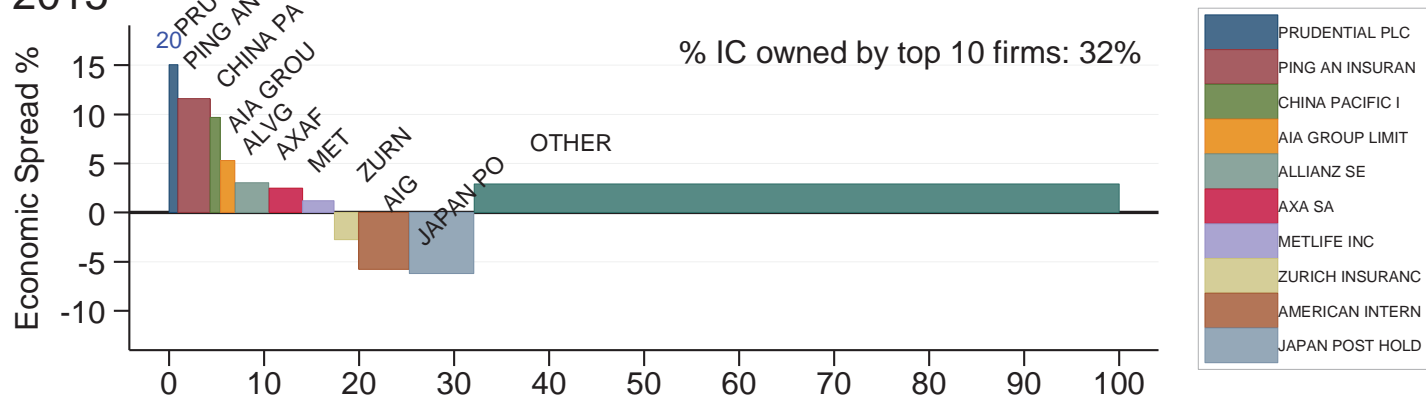


MSCI GIC: 403010

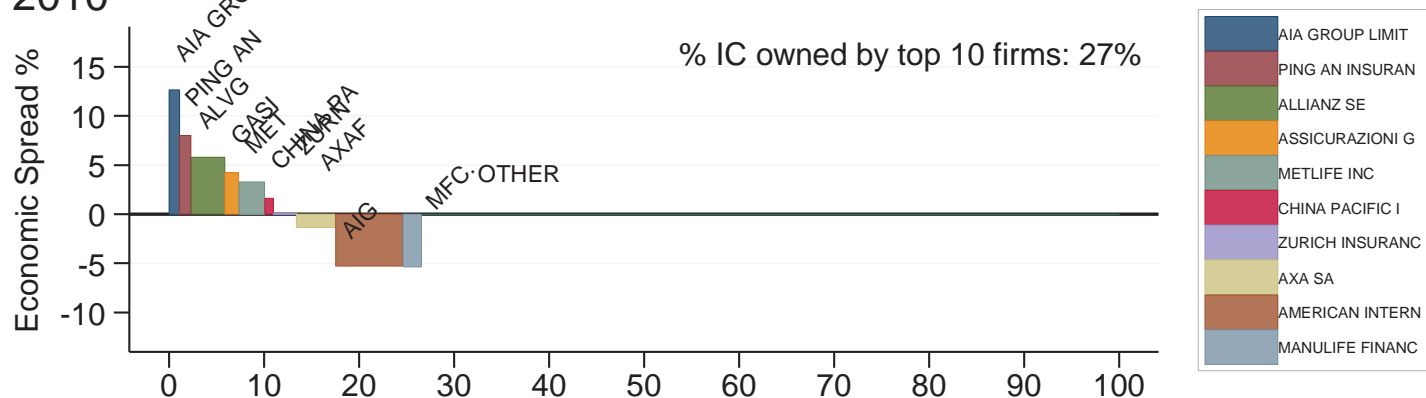
Count of firms: 441

2015 FY reporting percentage: 59%

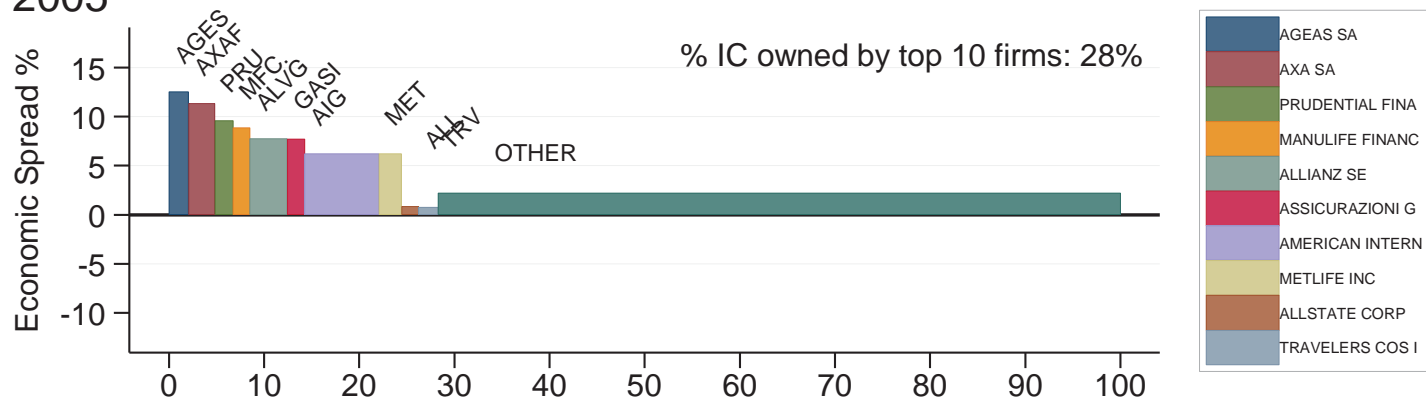
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 19.9%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

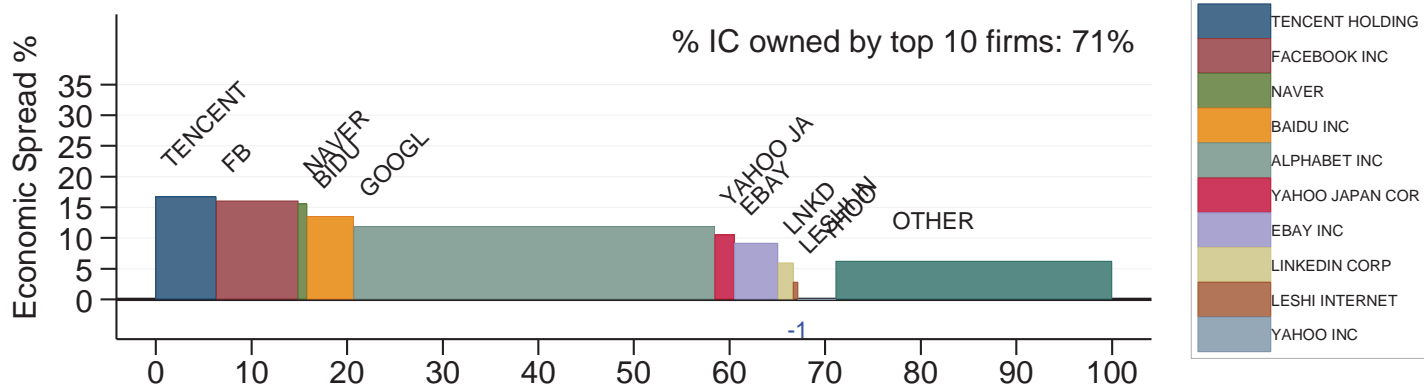


MSCI GIC: 451010

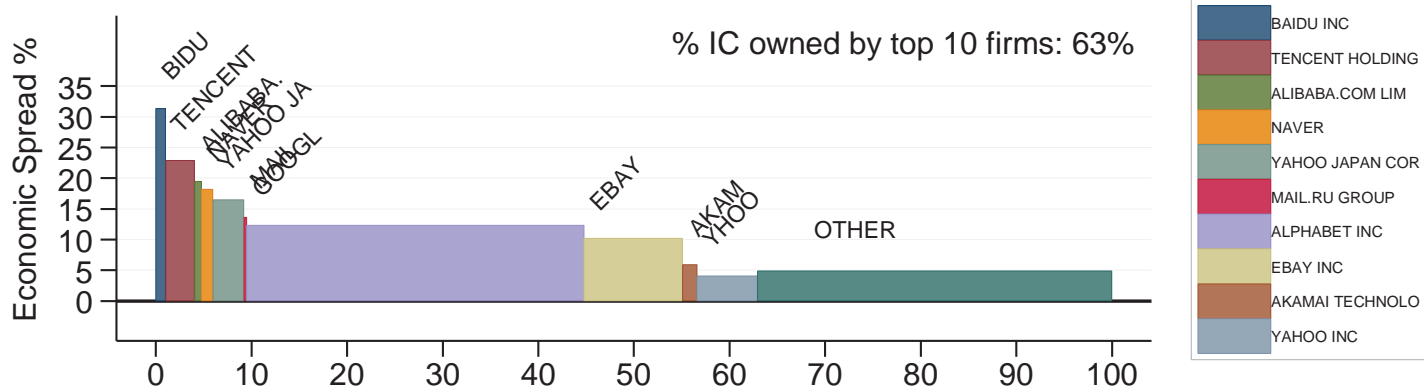
Count of firms: 439

2015 FY reporting percentage: 64%

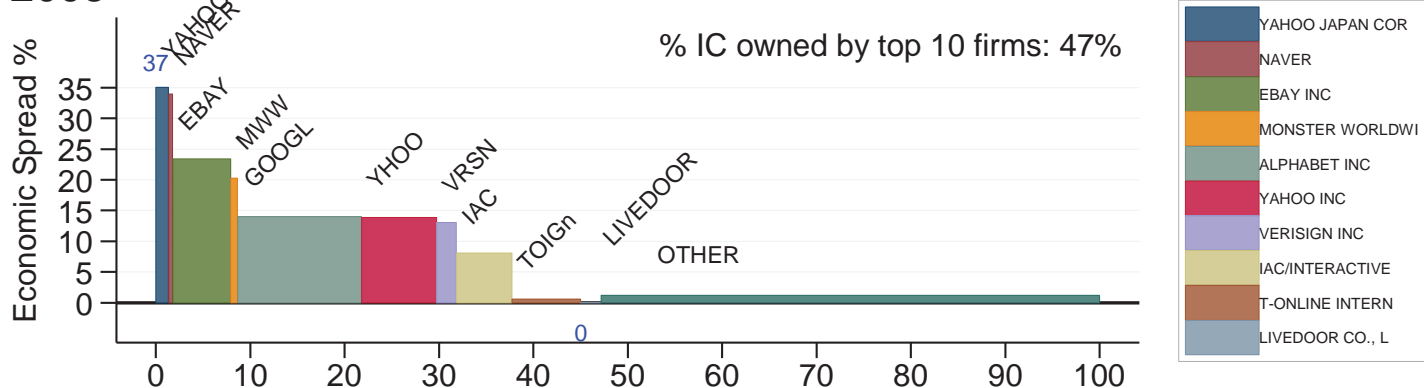
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 33.1%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

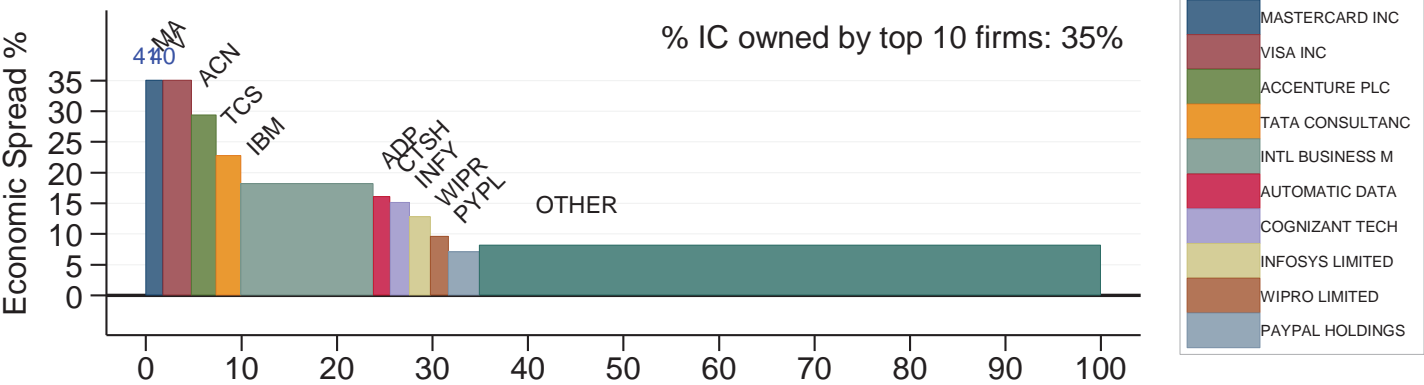


MSCI GIC: 451020

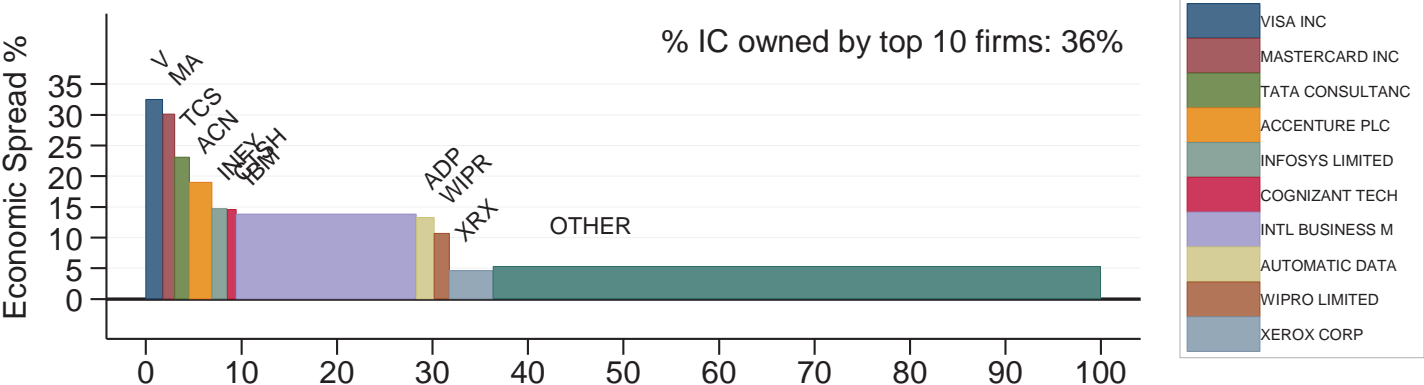
Count of firms: 618

2015 FY reporting percentage: 54%

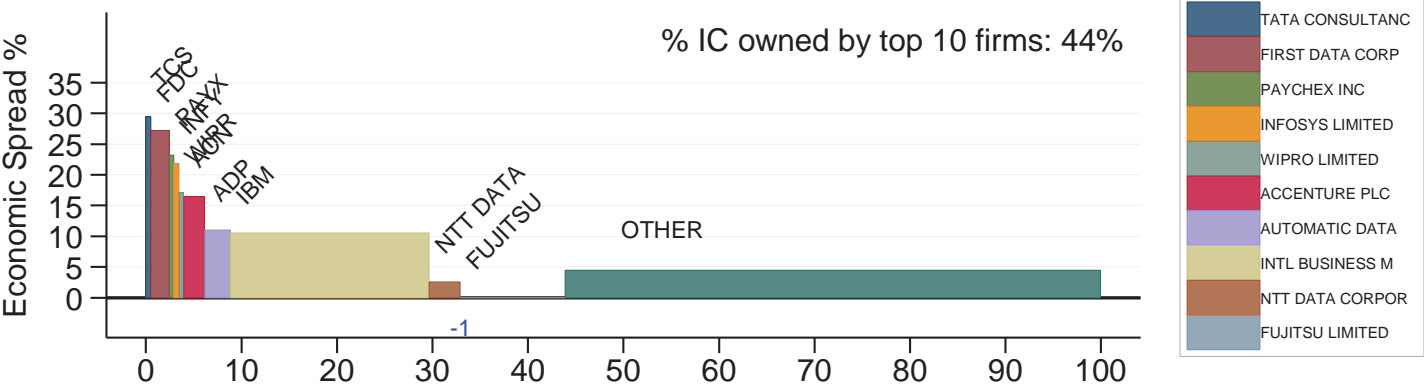
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 37.7%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

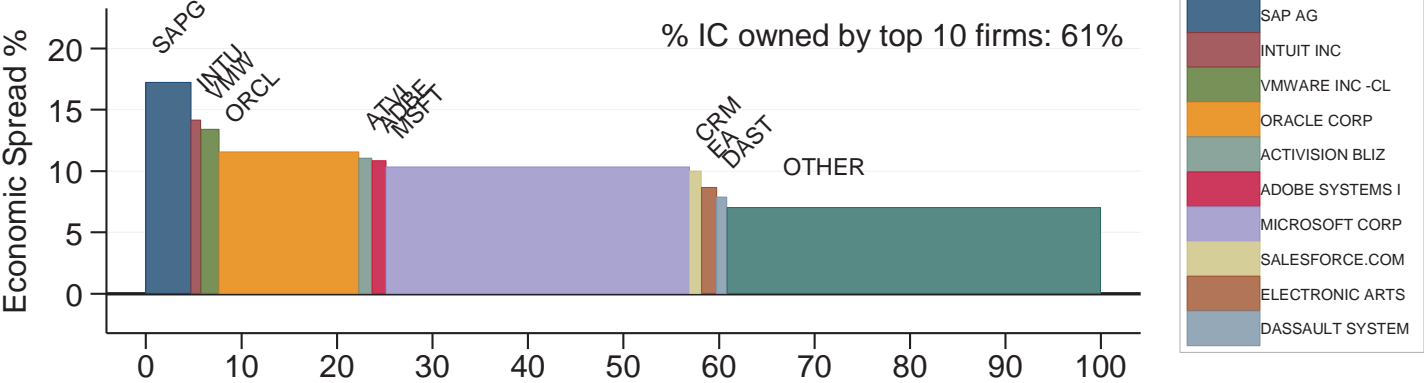


MSCI GIC: 451030

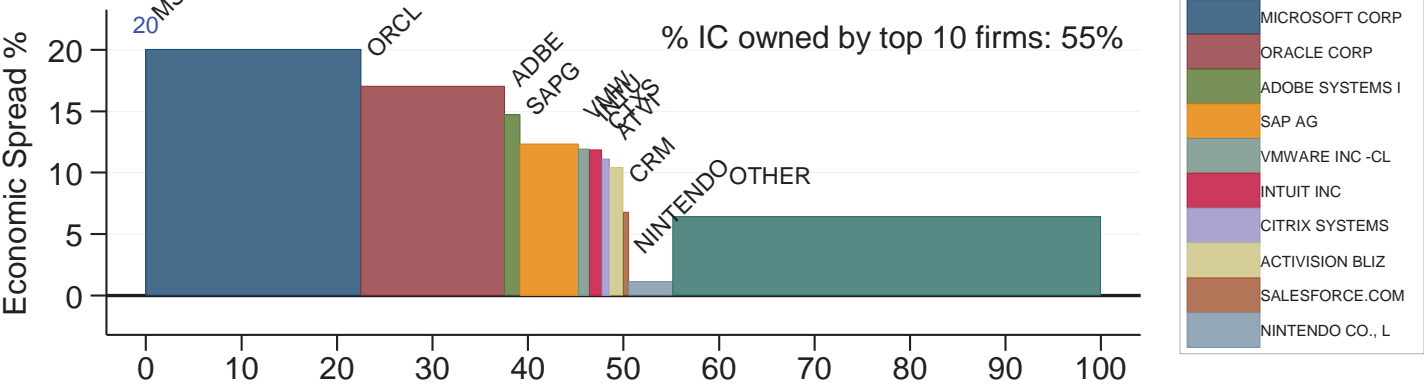
Count of firms: 770

2015 FY reporting percentage: 59%

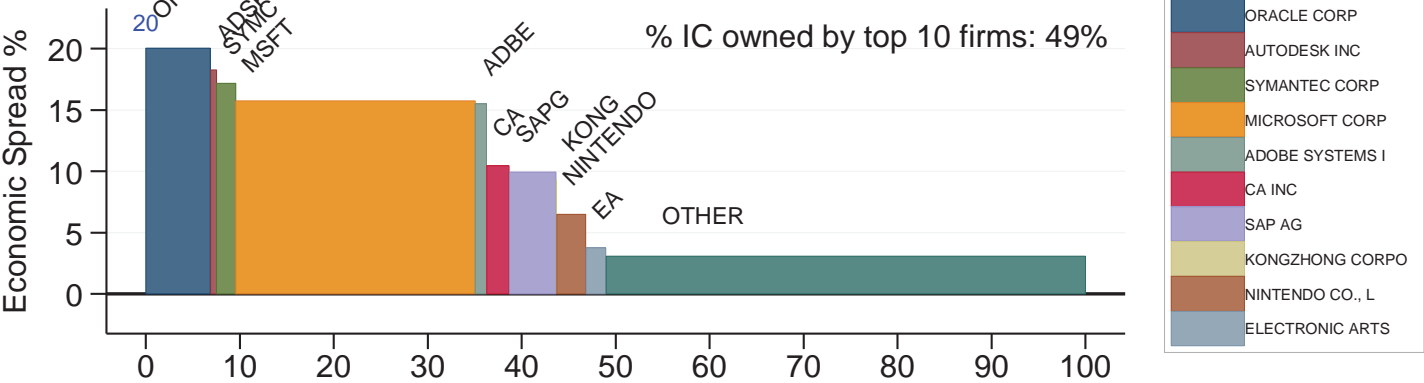
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 39.3%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

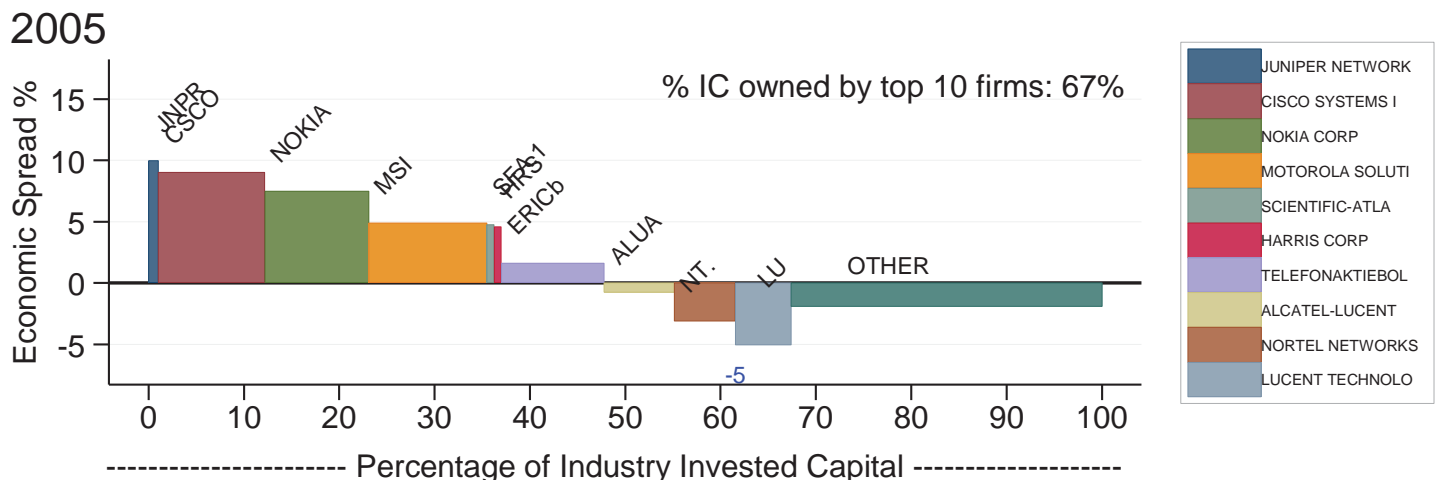
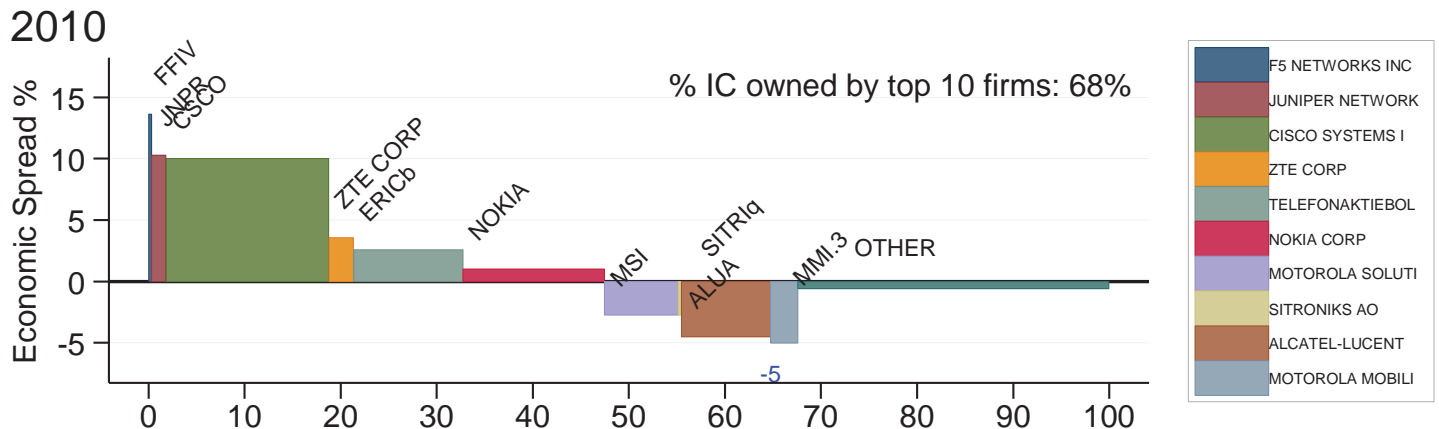
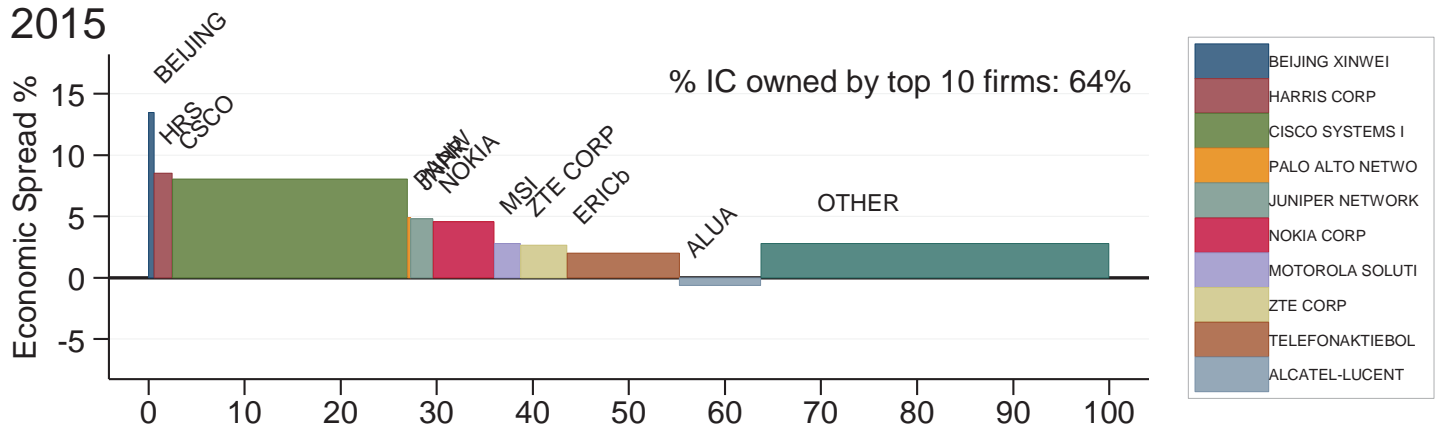
Communications Equipment



MSCI GIC: 452010

Count of firms: 366

2015 FY reporting percentage: 52%



*Industry is highly concentrated: 4 firm concentration ratio = 48.2%.

A 4-firm concentration ratio of market share below 40% is considered competitive.

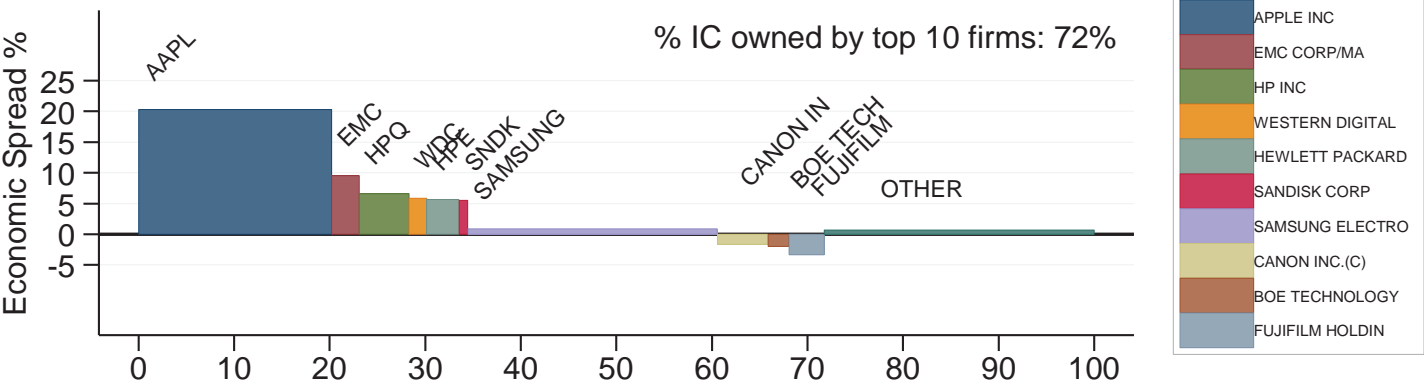


MSCI GIC: 452020

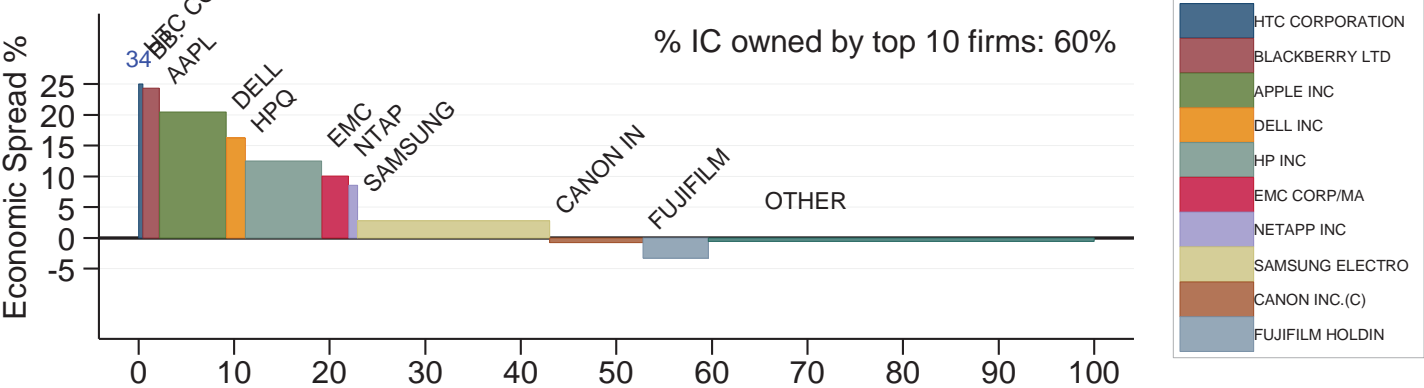
Count of firms: 275

2015 FY reporting percentage: 53%

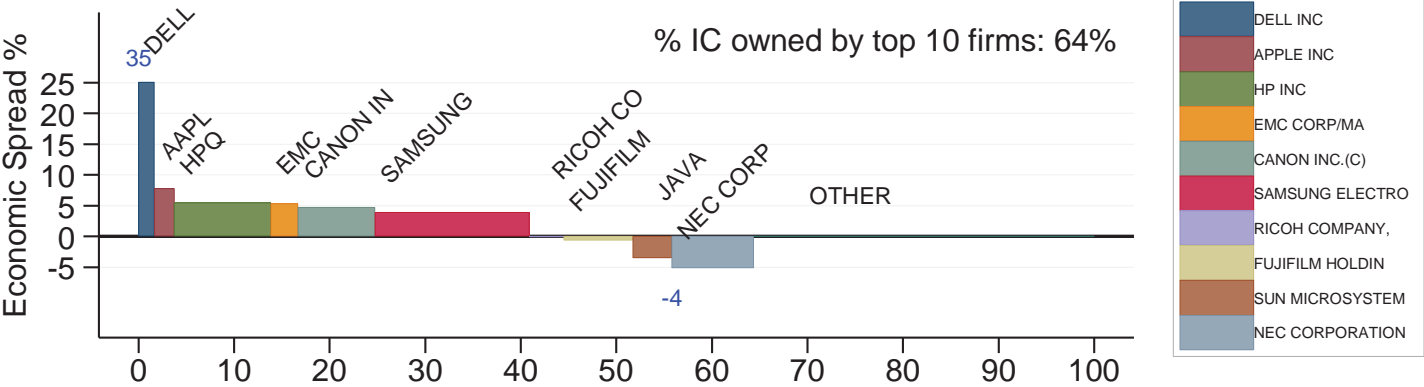
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is highly concentrated: 4 firm concentration ratio = 42.4%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

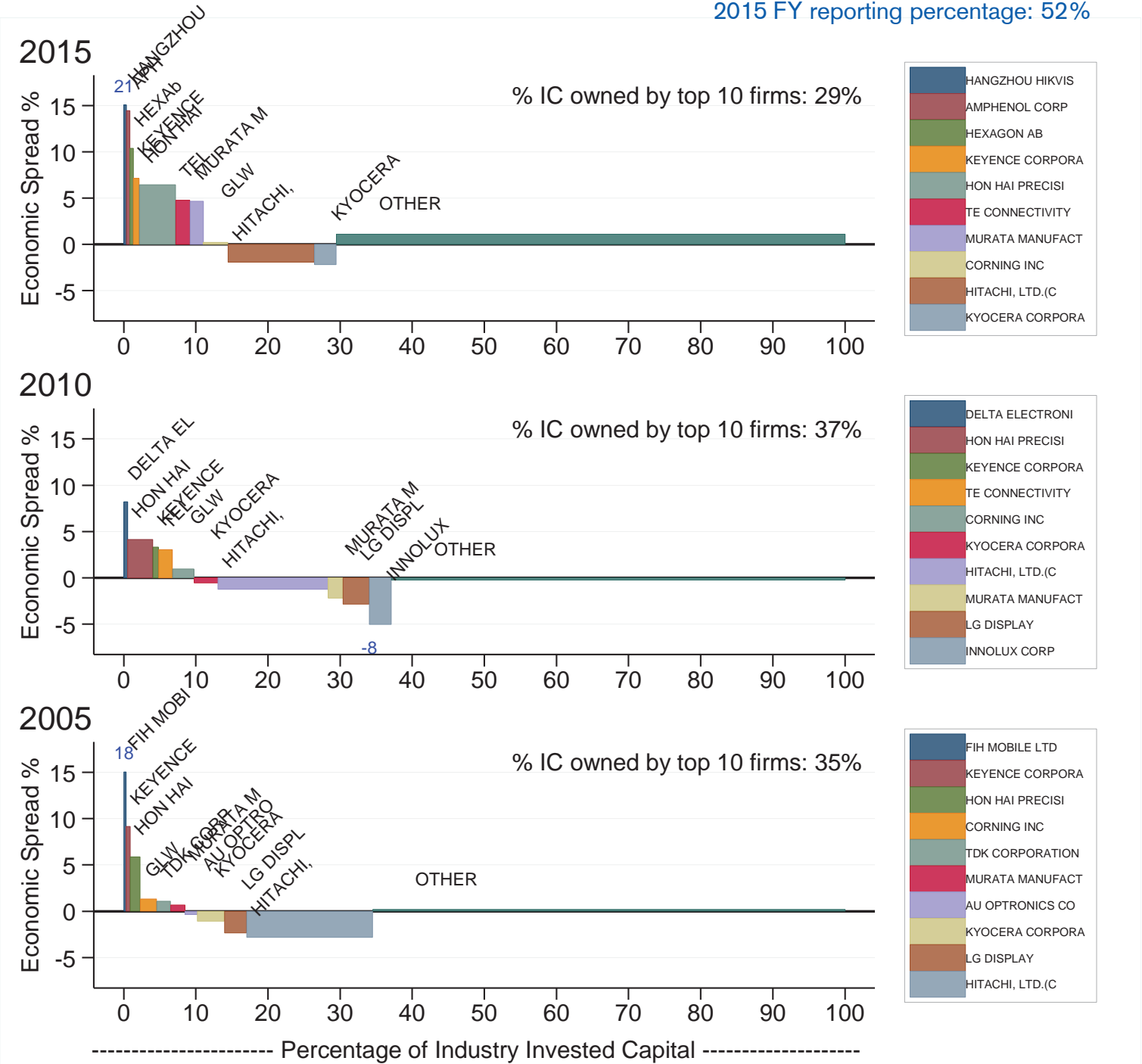
Electronic Equipment Instruments & Components



MSCI GIC: 452030

Count of firms: 1220

2015 FY reporting percentage: 52%



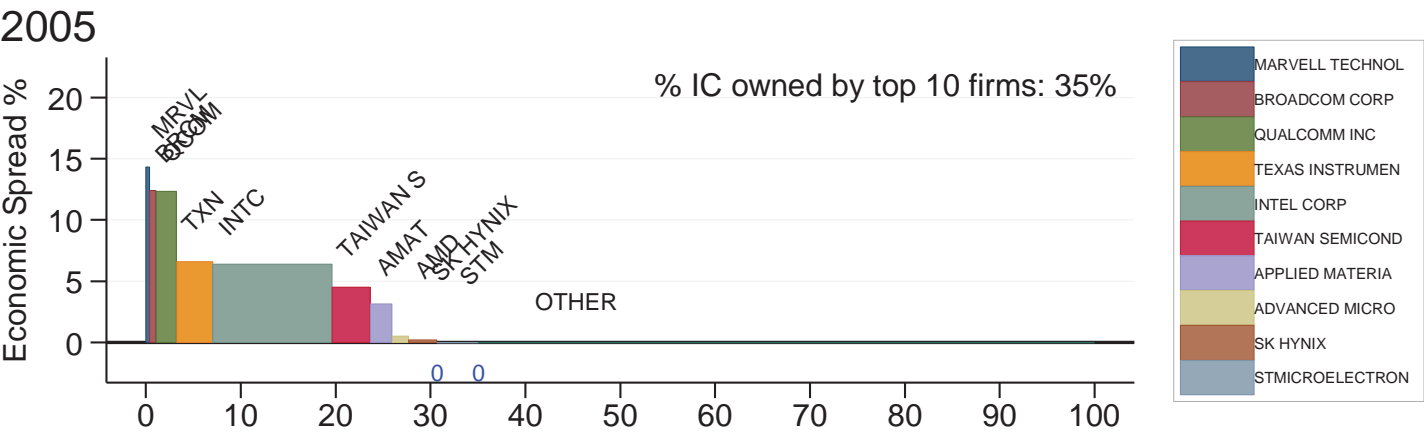
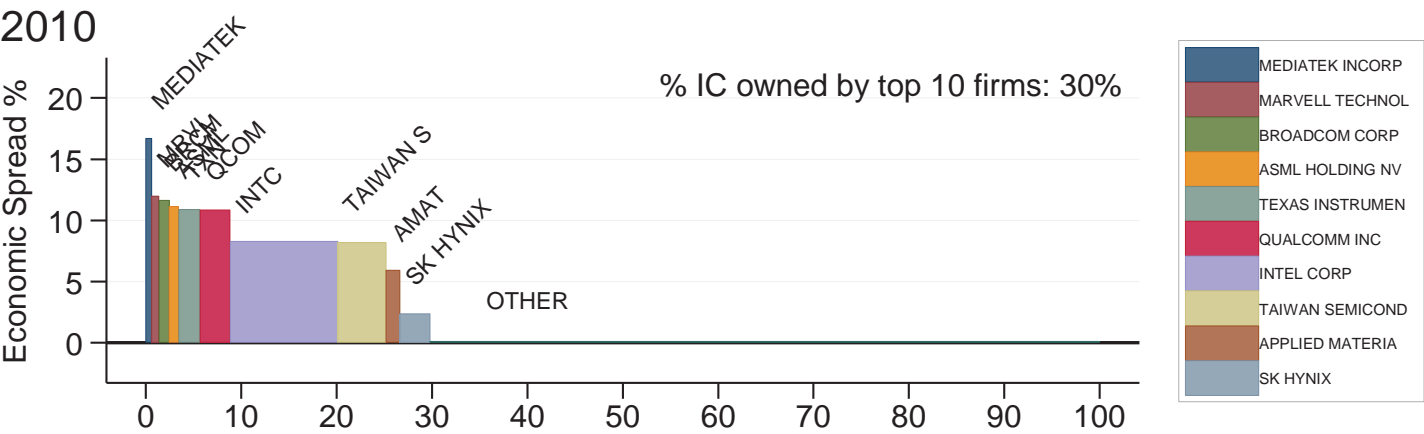
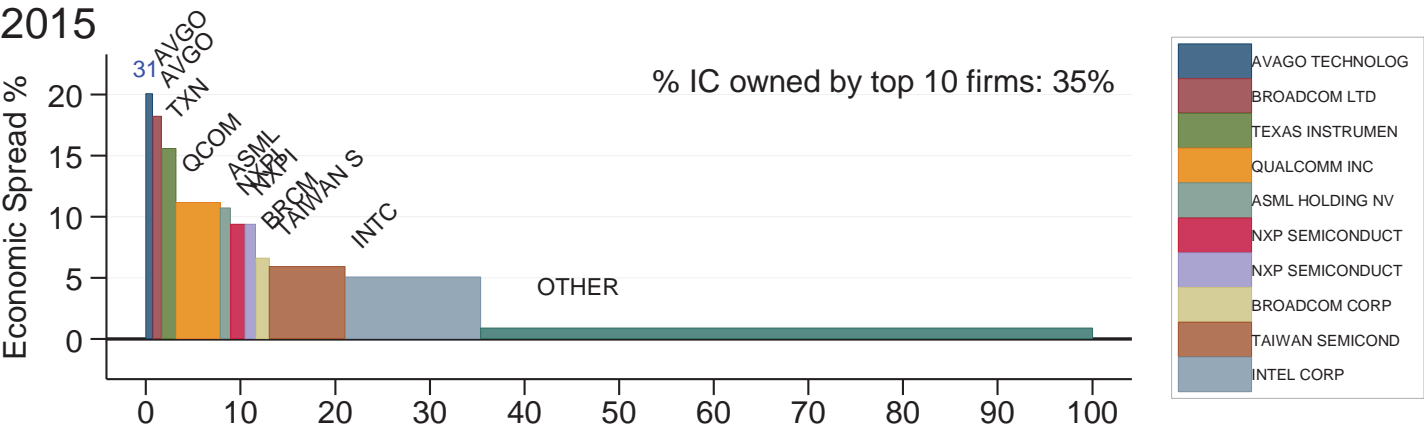
*Industry is considered competitive: 4 firm concentration ratio = 23.4%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 453010

Count of firms: 691

2015 FY reporting percentage: 53%



*Industry is considered competitive: 4 firm concentration ratio = 24.9%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

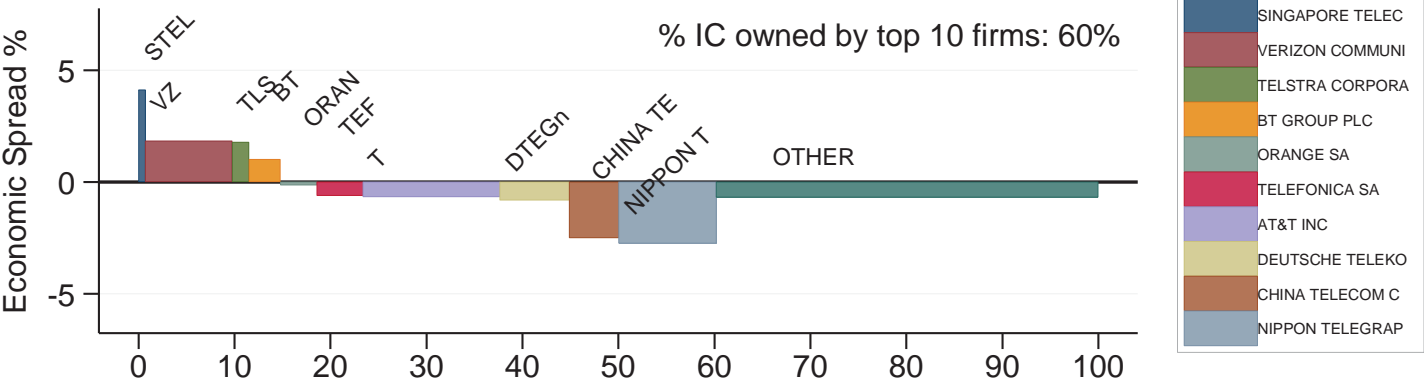


MSCI GIC: 501010

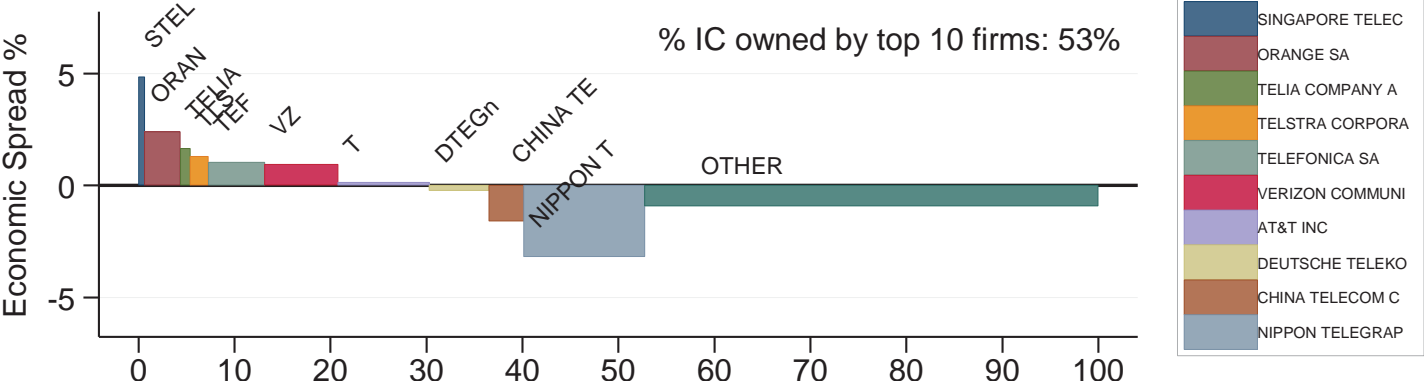
Count of firms: 217

2015 FY reporting percentage: 63%

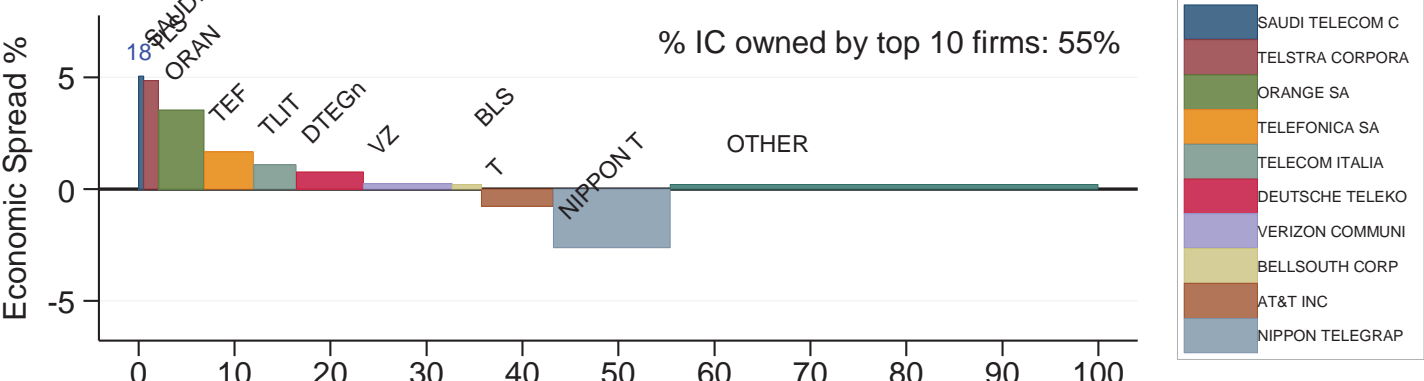
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 32.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

Wireless Telecommunication Services

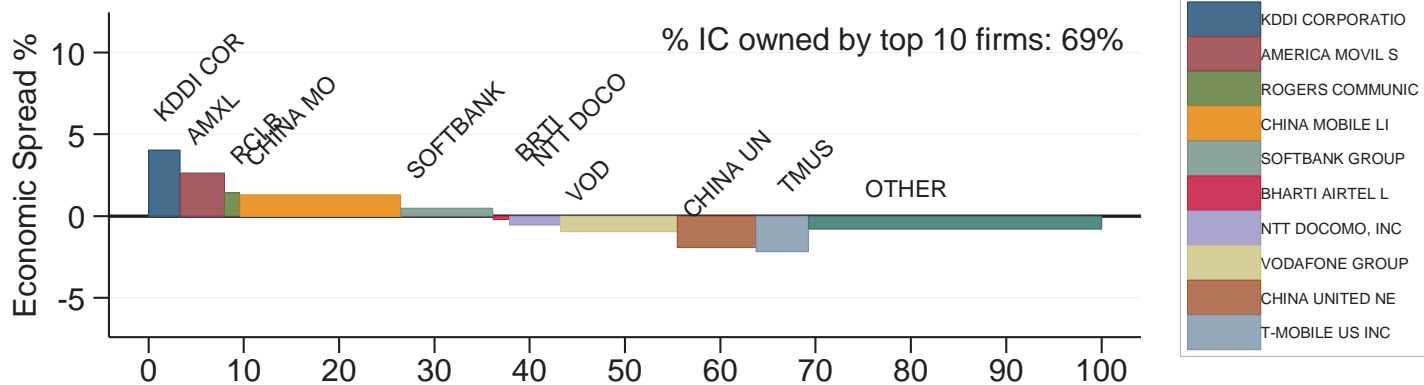


MSCI GIC: 501020

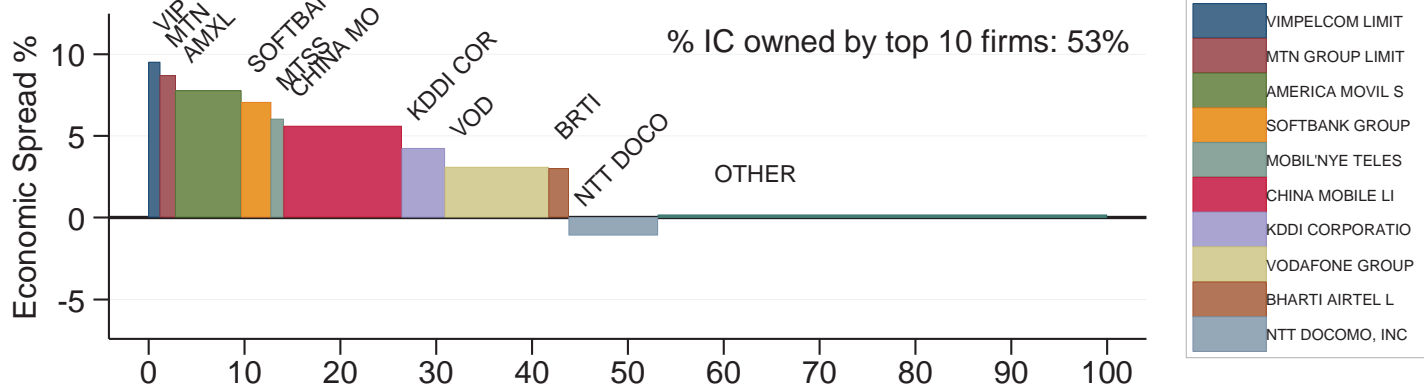
Count of firms: 87

2015 FY reporting percentage: 74%

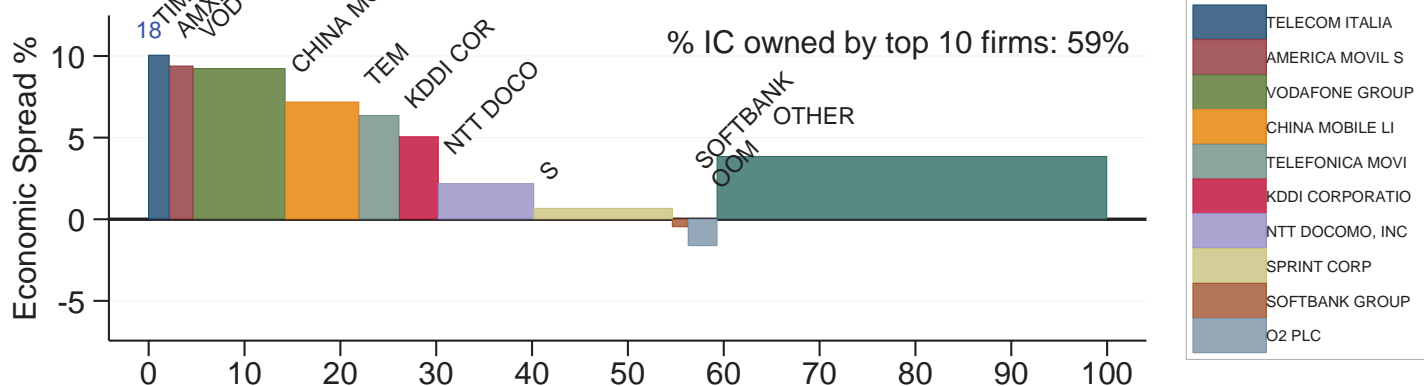
2015



2010



2005



----- Percentage of Industry Invested Capital -----

*Industry is considered competitive: 4 firm concentration ratio = 37.0%.

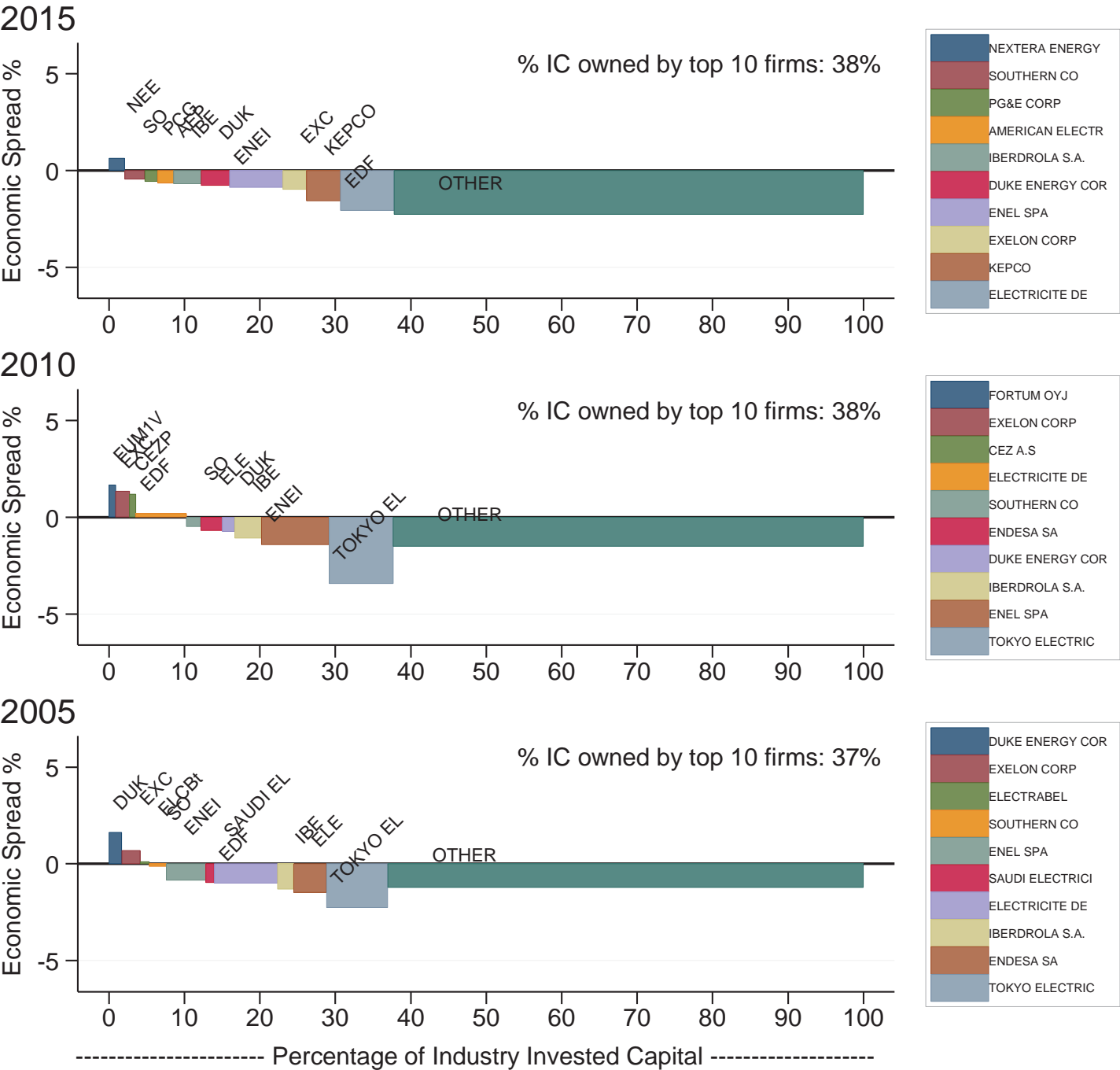
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 551010

Count of firms: 202

2015 FY reporting percentage: 62%



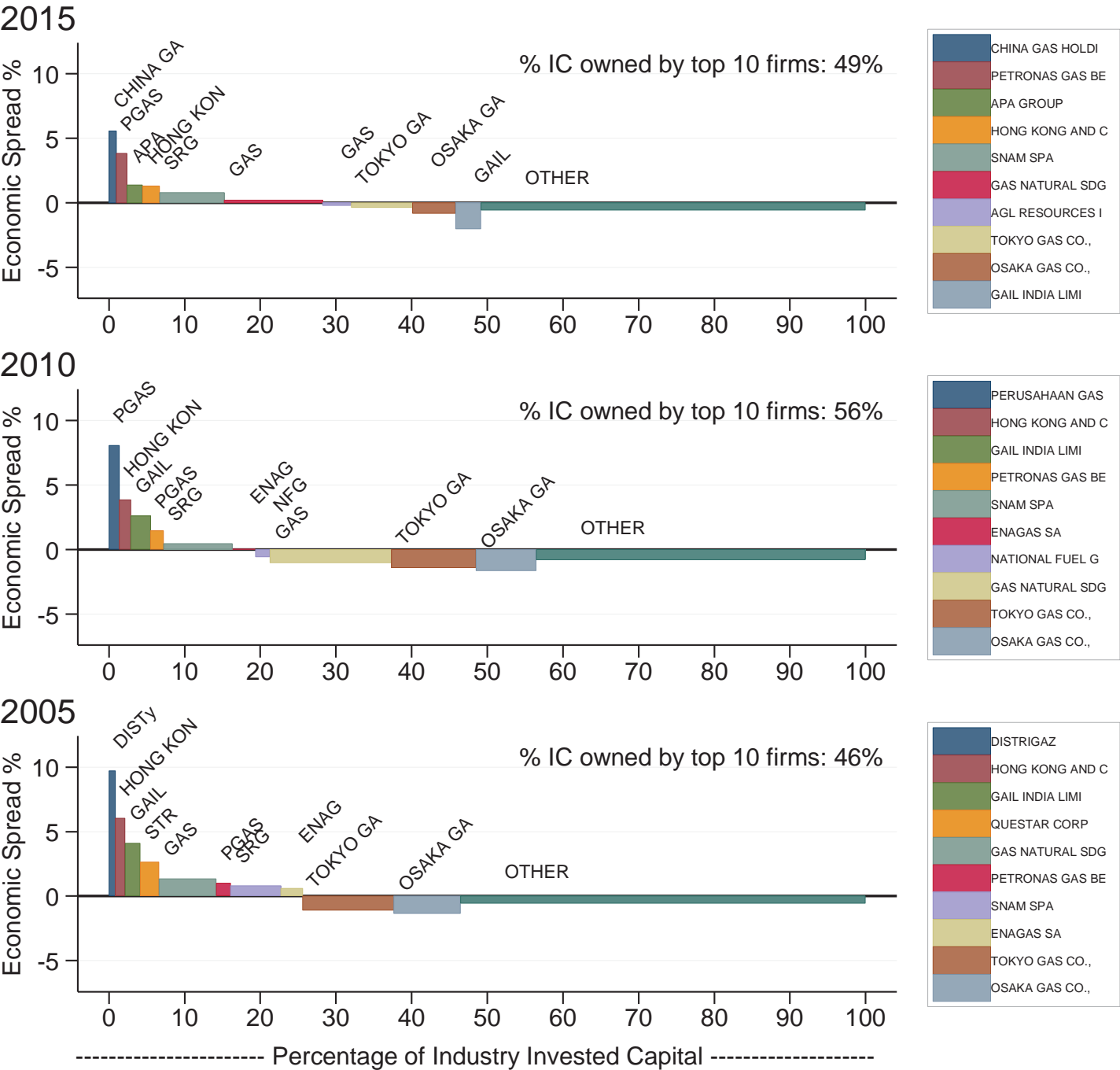
*Industry is considered competitive: 4 firm concentration ratio = 22.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 551020

Count of firms: 90

2015 FY reporting percentage: 73%



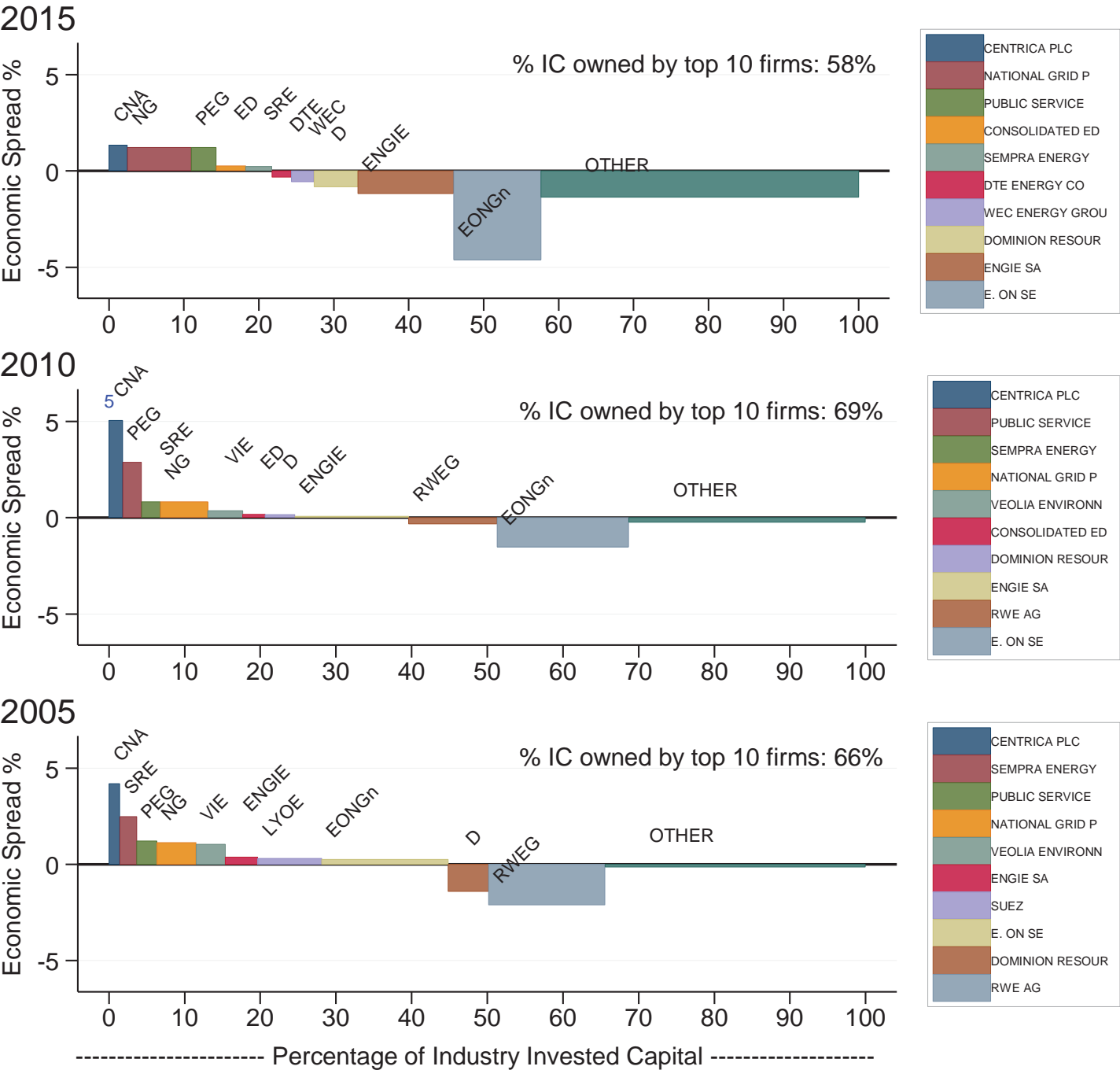
*Industry is considered competitive: 4 firm concentration ratio = 33.5%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 551030

Count of firms: 49

2015 FY reporting percentage: 82%



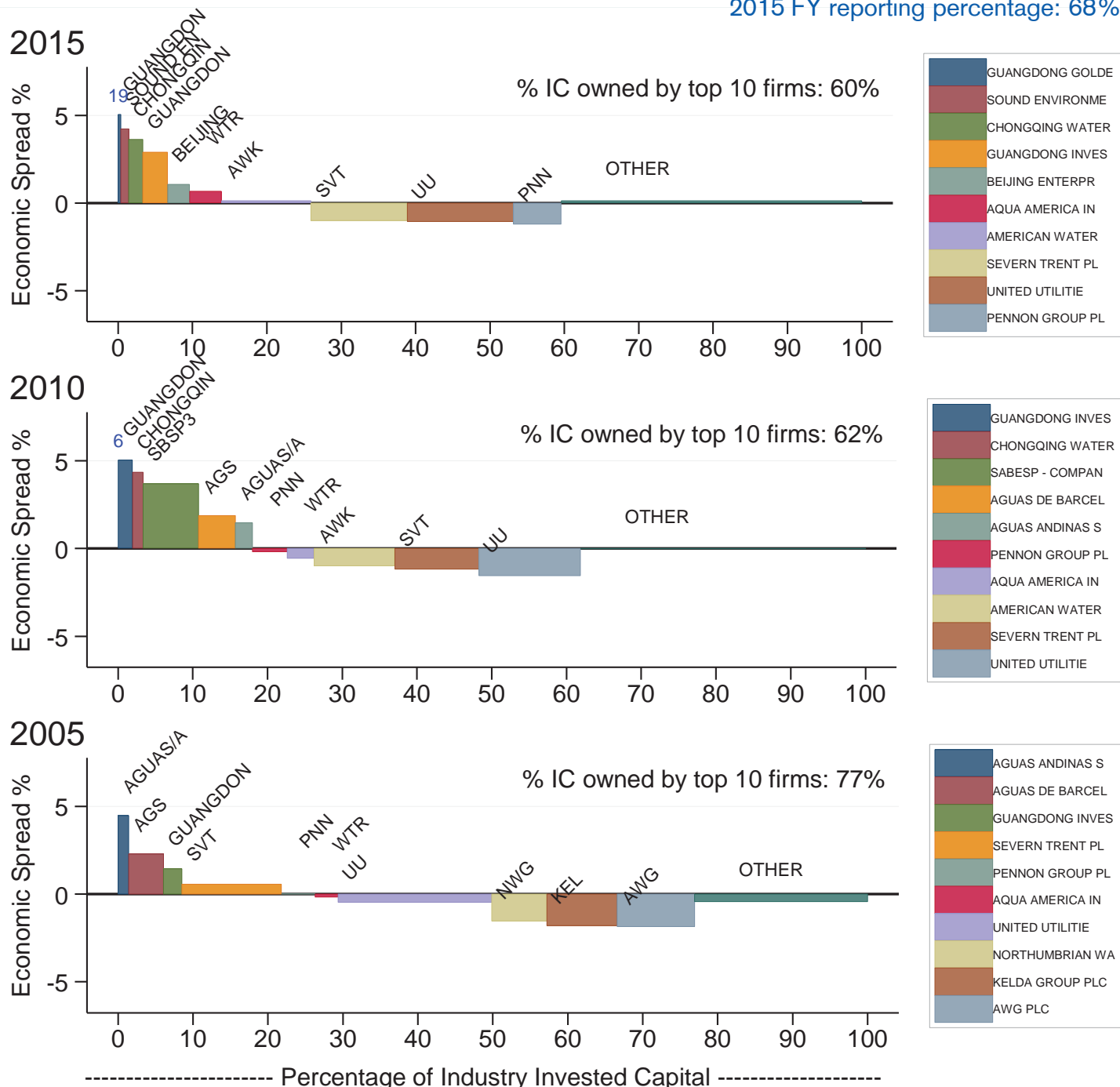
*Industry is highly concentrated: 4 firm concentration ratio = 43.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.



MSCI GIC: 551040

Count of firms: 71

2015 FY reporting percentage: 68%



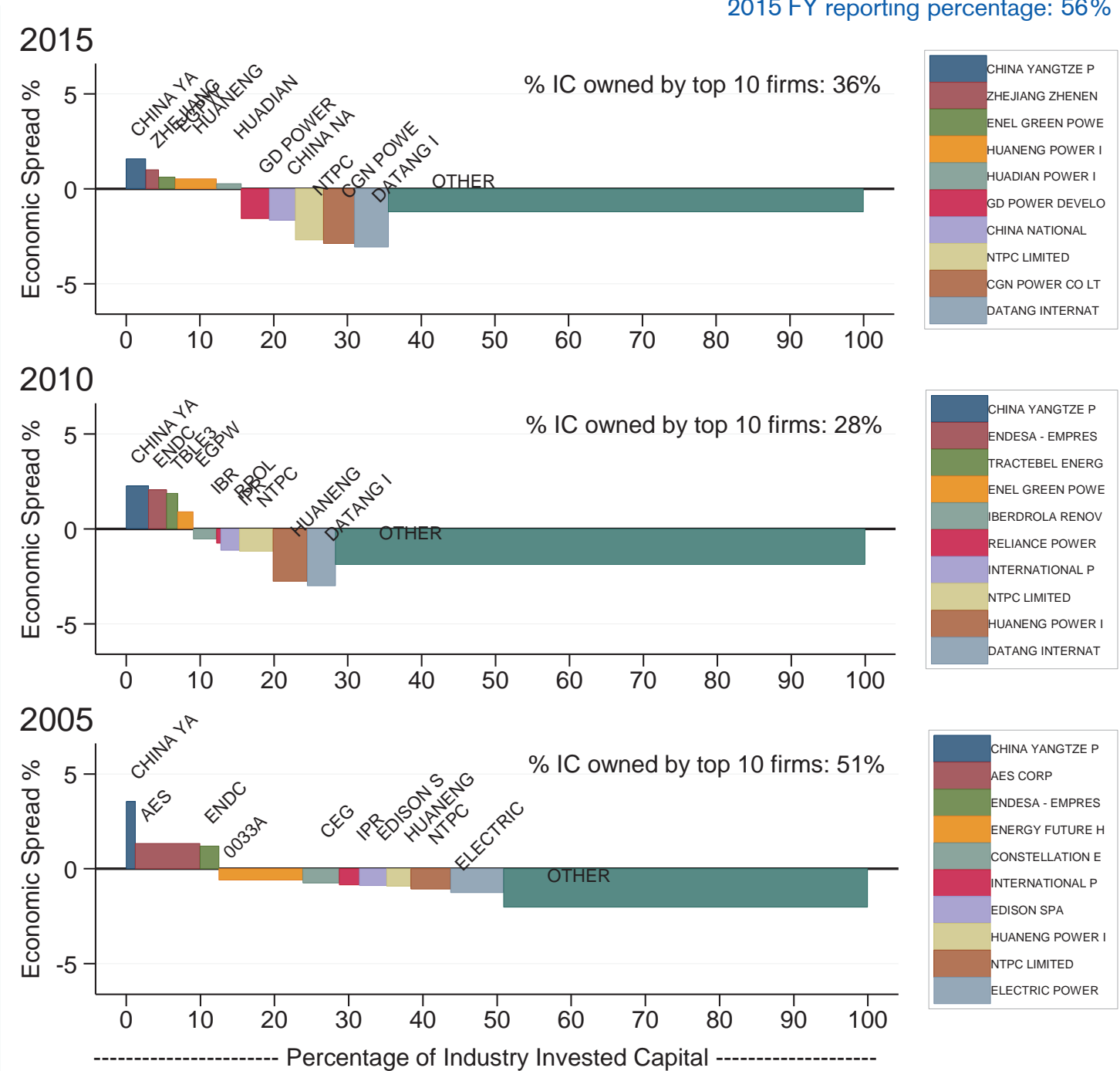
Independent Power Producers & Energy Traders



MSCI GIC: 551050

Count of firms: 231

2015 FY reporting percentage: 56%



*Industry is considered competitive: 4 firm concentration ratio = 32.8%.
A 4-firm concentration ratio of market share below 40% is considered competitive.

Appendix: HOLT Methodology



A short tutorial on CFROI is provided at the HOLT Lens website located at:
<http://holtlens.csintra.net/lens/Welcome.action> An extract is provided below.

CFROI: The HOLT Measure of Return on Capital

CFROI emphasizes a company's cash producing ability, by taking accounting information and converting it to cash. Cash flows generated from a firm's activities are the best way to measure its underlying economics, telling you whether a company is creating wealth or destroying it.

Typically, when companies undertake a specific project such as an acquisition or an expansion into a new business line, they prepare an economic profile which factors in the forecast amounts and timing of all cash outflows and inflows over the estimated project life. An internal rate of return can then be calculated, which is simply compared to the firm's hurdle rate to decide whether or not to proceed with the project.

HOLT expands on this premise, applying it not only to a specific project, but to an entire company. CFROI translates the ratio between investments and cash flows into an internal rate of return by recognizing the finite economic life of assets that depreciate such as buildings, and the residual value of assets that don't necessarily depreciate, such as land and cash. Like the IRR calculation of a project, the CFROI metric is a proxy for the company's economic return.

This provides a consistent, holistic approach that can be used to compare performance across a portfolio, a market or a global universe of companies.

Definitions

EROI (Economic Return on Investment) is the return on total invested capital after deducting a charge that accounts for the replacement of depreciating assets.

Economic Spread is the difference between EROI and a firm's cost of capital. Firms that earn a return on invested capital in excess of the cost of capital generate economic profit. Firms with a negative economic return generate an economic loss and erode shareholder value. Because economic profit is a single-period measure, it is important to understand a firm's history of wealth creation, as any single year may be anomalous.

Economic Profit equals Economic Spread x Invested Capital: $(EROI - DR) \times IC$.

Invested Capital is measured as total inflation adjusted gross investment, which includes a firm's total gross assets, as well as capitalized assets such as R&D, operating leases, intangible operating assets, etc. Invested Capital does not include acquisition Goodwill.

Economic Profit Pools, sorted by market capitalization

This analysis focuses on the largest 10 firms per industry by market cap. This is purely an arbitrary decision. Other samples are also interesting: largest firms by market enterprise value, largest firms by invested capital, etc. Regardless of sampling choice, our measure of industry concentration will show the same result since we tally up the percentage of market share (by sales) held by the four largest firms:

Concentration ratio = Revenue % (firm 1) + Revenue % (firm 2) + Revenue % (firm 3) + Revenue % (firm 4)

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Investment principal on securities can be eroded depending on sale price or market price. In addition, there are securities on which investment principal may be eroded due to changes in redemption amounts. Care is required when investing in such instruments.

HOLT Disclaimer

The HOLT methodology does not assign ratings or a target price to a security. It is an analytical tool that involves use of a set of proprietary quantitative algorithms and warranted value calculations, collectively called the HOLT valuation model, that are consistently applied to all the companies included in its database. Third-party data (including consensus earnings estimates) are systematically translated into a number of default variables and incorporated into the algorithms available in the HOLT valuation model. The source financial statement, pricing, and earnings data provided by outside data vendors are subject to quality control and may also be adjusted to more closely measure the underlying economics of firm performance. These adjustments provide consistency when analyzing a single company across time, or analyzing multiple companies across industries or national borders. The default scenario that is produced by the HOLT valuation model establishes a warranted price for a security, and as the third-party data are updated, the warranted price may also change. The default variables may also be adjusted to produce alternative warranted prices, any of which could occur. The warranted price is an algorithmic output applied systematically across all companies based on historical levels and volatility of returns. Additional information about the HOLT methodology is available on request

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