Jeff Tjornehoj, Director, Fund Insights

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Exploring Fund Industry Concentration: The Good, The Bad, and The Unknown

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EXPLORING FUND INDUSTRY CONCENTRATION: THE GOOD, THE BAD, AND THE UNKNOWN

Scale undoubtedly matters in the investment industry, but the question arises as to whether the degree of scale is limiting competition and innovation. Fortunately, we have methods of exploring this concept.

If presented with an unfamiliar word or subject, how would you research it? Chances are you would turn to Google to scour the Internet and return countless results in less than a second. Many of us rely on Google (just query "global search engine market share"), where estimates of Google's dominance go as high as 92% of all global search engine queries in 2018. Such ordinary activity seems completely harmless, but in 2017 Google's parent company, Alphabet, was slapped with a $2.7 billion fine from European Union regulators for unfairly favoring Google shopping results over those of competing sites—essentially, stacking the deck in its favor—a charge that Alphabet denies.

Could such dominance arise in America's funds industry? In the investment industry size clearly matters: with greater scale comes economic efficiency and larger profits. However, the degree to which the substantial scale of some firms may tilt the market, restraining healthy competition, is less understood. Fortunately, there are sound methods to measure this.

Various means may be used to measure or weigh the concentration of businesses in a common sector, such as comparing the market share of the top four or eight businesses relative to the rest of the industry (referred to as the "concentration ratio" and denoted as CR_4 and CR_8). While that method is immediately grasped by readers, it doesn't have much value as an analytical tool. If, for example, the top eight firms share 50% of the total market, is that too much? Or is there still room for others to compete? Unfortunately, arbitrary lists of four or eight or twenty are limited in what they can tell us.

Enter the Herfindahl-Hirschman Index, a statistical measure of concentration first developed in the 1940s to evaluate the degree to which a few firms may dominate the production of an entire industry. Since 1982, the Department of Justice and the Federal Trade Commission have used the Herfindahl-Hirschman Index, or HHI, as the agencies' preferred method to assess mergers and their likelihood of adversely affecting competition.

HHI is calculated as the sum of the squared market share of each firm in an industry. Unlike top *N* lists, information about all participants is included and by squaring terms, firms with large market shares also have an outsized influence in the final tally. As an example, in Table 1 we can look at the US auto industry to determine concentration. GM, with a market share of 17.6%, is the leader and is followed by Ford (14.2%), Toyota (14.2%), and others. Note that while only the top five are enumerated, we're going to include several others, all the way down to Daimler (2.2%), in our final calculation. The third column is the market share squared and it is this data that is summed to arrive at the HHI, which turns out to be 1,139 (including those manufacturers hidden from view).

Table 1

US Auto Industry Concentration

Manufacturer	Market Share	MS^2
GM	17.6	309.8
Ford	14.2	201.6
Toyota	14.2	201.6
Fiat/Chrysler	12.1	146.4
Nissan	9.9	98.0
	Industry HHI	1,138.8

Is this number high? According to DOJ's 2010 merger guidelines, unconcentrated markets have an HHI less than 1,500, moderately concentrated ones are between 1,500 and 2,500, and highly concentrated markets are above 2,500. In theory, HHI can go up to 10,000, which would be the case if a single manufacturer controlled the entire market (100^2=10,000) and approaches zero if many thousands of actors each hold tiny portions of the market (such as Uber drivers). Therefore, looking strictly at the present shares of the domestic auto market and making no assumptions about the effects of any potential mergers and duly noting that the top five firms have a 68% market share, it is nevertheless an unconcentrated industry.

Unlike the auto industry, which requires substantial capital outlays to build manufacturing plants and equipment and is expected to contain relatively few participants, the funds industry is less capital intensive—only $100,000 is required to seed a mutual fund—and the low barrier to entry should, in theory, accommodate numerous competitors. Is that necessarily good for investors? A good case can be made that concentration reflects efficiencies gained from scale and when those gains are passed to investors everybody wins. Concentration may also reflect a structural or legal advantage (such as an exemption letter from the SEC) that impedes other potential competitors. In either case, the point of this paper is not to raise issues of public policy or call out to relevant agencies to "do something." Instead,

Chart 1

Comparative HHIs of Select Industries

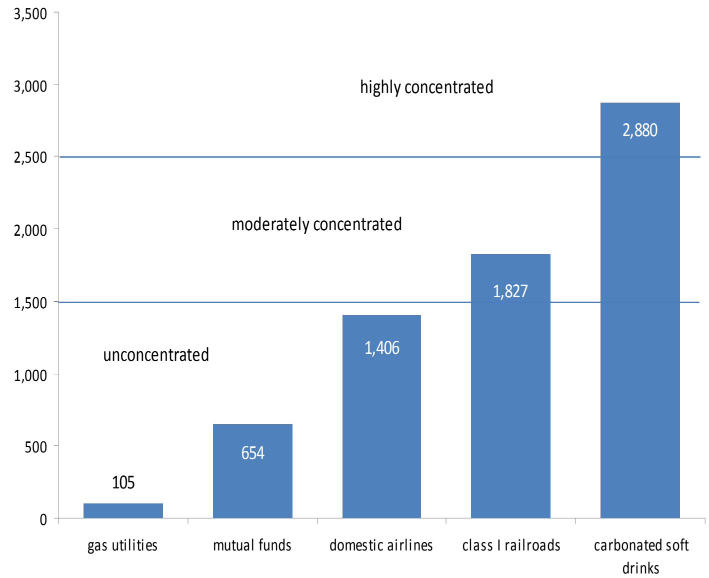


Table 2

The funds industry as a whole

Firm Name	AUM	Market Share	MS^2
Vanguard Group Inc	4,132,740	17.9%	321.3
Fidelity	2,205,582	9.6%	91.5
BlackRock	1,931,918	8.4%	70.2
Capital Research & Mgmt	1,725,475	7.5%	56.0
SSgA/State Street	696,718	3.0%	9.1
		Industry HHI	599

we'll look at concentration across and within the funds industry to gauge where true competition exists, where it's less likely to exist, and what those conditions may mean for investors.

THE BIG PICTURE

At a very high level, which includes all mutual funds, ETFs, closed-end funds, and variable annuity underlying funds (and universally excluding all fund of fund products), the U.S. funds industry is an unconcentrated market with an HHI of just 599—well below the 1,500 level that identifies a moderately concentrated industry. Although the five largest firms command a combined 46% market share—a figure that might initially suggest a concentrated environment—the great number of smaller firms dilutes their impact and keeps a lid on the HHI. In fact, the remaining 878 firms after our first five have a combined 54% market share and contribute just 51 points to the HHI.

Table 3
Mutual funds

Not surprisingly, given the dominance of mutual funds in the four primary asset types under review, some of the top names repeat on this list. Vanguard and Fidelity each have greater market share in mutual funds and between them dominate the HHI total, accounting for 492 of the total HHI of 654 points. In the past ten years, including funds that have since been merged or liquidated, the HHI of mutual funds has increased from 423 to the present 654, which suggests that even if the next ten years increase by the same rate (about 55%), that the industry HHI will only be 1,011 and still well below even the "moderately concentrated" threshold. However, there has been a 158 point increase since June 2015 (about 32%) and if concentration is increasing at an increasing rate, the 1,500 point threshold may be closer to five years from now than ten.

Firm Name	AUM	Market Share	MS^2
Vanguard Group Inc	3,231,469	18.5%	344
Fidelity	2,121,886	12.2%	148
Capital Research & Mgmt	1,586,859	9.1%	83
T. Rowe Price	630,109	3.6%	13
JP Morgan	569,408	3.3%	11
		Industry HHI	654

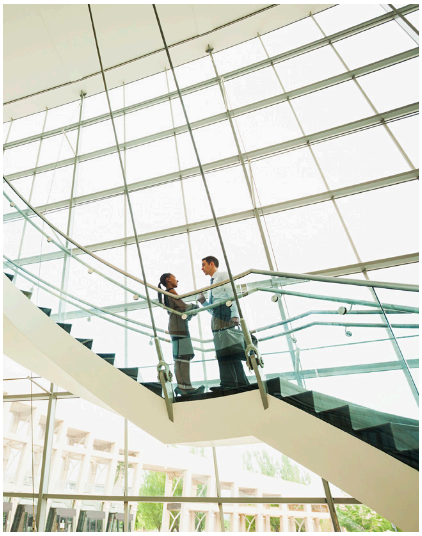
Table 4
Variable annuities

Firm Name	AUM	Market Share	MS^2
TIAA	257,877	13.6%	186
Jackson National	182,334	9.6%	93
AST Investment Services	138,930	7.3%	54
Capital Research & Mgmt	138,616	7.3%	54
Brighthouse	132,754	7.0%	49
		Industry HHI	561

The VA universe is more competitive than mutual funds, with an HHI nearly 100 points lower than mutual funds. The list of top firms is almost entirely different too, save for Capital Research & Management, which has a slightly lower market share of VA assets (7.3%) than it does for mutual funds (9.1%). Concentration data for VAs has grown far slower than mutual funds, increasing from 534 in 2008 to 538 in 2013 and now stands at 561, or just 5% more in ten years. Curiously, the number of firm with assets in the VA space has also declined since 2008, from 126 to 103 today, from which we may infer that competition is quite heated in this area: less-competitive firms have either quit the business or been consolidated while the remaining firms are still left strong enough to prevent a few firms from dominating.

Table 5
Closed-end funds

Firm Name	AUM	Market Share	MS^2
Nuveen	42,069	19.3%	371
BlackRock	32,291	14.8%	219
Eaton Vance Management	19,637	9.0%	81
PIMCO	12,192	5.6%	31
Invesco	9,463	4.3%	19
		Industry HHI	792



With almost 140 points more than mutual funds, the 792 points among closed-end funds reveals an interesting trend: despite a decline in assets between 2008 and 2018, from $230 billion to $218 billion, the number of firms offering closed-end funds increased, from 104 to 118. Concentration data has had something of a spike recently as industry HHI climbed 16% from 680 in 2017 to 792 in 2018. Increasing assets in this industry is very challenging, owing to a very slow IPO calendar that saw just seven new CEFs launched through the first six months of 2018, and the annual repurchase offers available from many funds, which draws down fund assets. There is a burgeoning interest in closed-end interval funds (sometimes called 'interval hybrids' that are not exchange-traded and offer periodic redemptions) that may see new firms offering new products in this space.

Coming in at 2,480, exchange-traded funds (which includes ETNs and other products) stands at the edge of the "highly concentrated" designation. At first glance, the 80% market share held by the top three firms certainly appears concentrated, but new entrants continue to dilute their impact on final HHI numbers. In fact, in 2008 we counted 26 ETF firms, the top three held 83% of assets, and the HHI was at 3,320. Since then, the number of firms has jumped to 120 and many more are expected to join in as interest in actively-managed ETFs grows, albeit slowly. Given the indexed nature of ETFs it is to be expected that the concentration of assets would follow the overall numbers, and they generally do: the HHI for only indexed ETFs stands at 2,563, down from 3,380 ten years ago, as the numbers of firms offering indexed ETFs has grown from 26 to 95.

Table 6

Exchange-traded funds

Firm Name	AUM	Market Share	MS^2
BlackRock	1,372,509	39.0%	1,521
Vanguard Group Inc	885,467	25.2%	633
SSgA/State Street	590,341	16.8%	281
Invesco	179,701	5.1%	26
Charles Schwab	114,762	3.3%	11
		Industry HHI	2,480

Table 7

Indexed mutual funds

Firm Name	AUM	Market Share	MS^2
Vanguard Group Inc	2,587,000	75.6%	5,721
Fidelity	402,149	11.8%	138
TIAA	73,871	2.2%	5
Charles Schwab	72,003	2.1%	4
BlackRock	34,726	1.0%	1
		Industry HHI	5,872

In news that should not come as a surprise to firms that offer indexed mutual funds, this is a highly concentrated market with an HHI of 5,872. Although assets in this industry subset grew by $508 billion in the past year, almost $100 billion was attributable to Fidelity, which was able to increase its market share by 1.3% and cause the HHI to decline from 5,972. Indexed funds are often thought to be "commoditized," that is, so uniformly constructed and consistent that investors should be indifferent to branding and prices should be identical. But it isn't like that. While these products are usually the lowest-cost offerings at any firm, Vanguard has clearly made a name for itself among mutual fund investors, such that another behemoth indexer, BlackRock, is almost powerless to find interested clients despite its own dominance among ETF investors.

CONCLUSION

There are clearly areas of high concentration in the funds industry. Yet it's not clear that any actual harm has come to investors. In fact, the last five years have seen the asset-weighted average total expense ratio for equity mutual funds decrease 10 basis points and those of fixed income funds by almost 7 basis points. But outside of lower expenses for shareholders there are potential impacts to other stakeholders to consider, such as:

BOARDS OF DIRECTORS

- At a high level, the funds industry is competitive and unconcentrated. However, the rise of low-cost products puts substantial pressure on active fund firms to reach for scale and the surest way is to consolidate—either folding funds together or engaging with other firms. This is not a subject that should go on the back burner.

FUND COMPANIES

- Fund distributors are paring shelf space, concentrating products under fewer brands and limiting investor access to new products and brands.
- The rise of model portfolios among financial advisors will lead to greater concentration of assets—while it's great to win model placement, it's also certain to cause eventual flows disruption for select products.
- Merger and acquisition activity is sure to heat up as the 'big or boutique' view of the funds industry shapes its future. Outside of passive managers and sponsors, there is plenty of opportunity to merge for scale.

INVESTORS

- It's an open question whether industry concentration has or will adversely affect investors. To date, investors seeking the lowest-cost passive products have helped push scale up and prices down.
- However, advisors are increasingly using model portfolios, which will give rise to more assets located in fewer funds, threatening to push active products closer to closet indexers in order to maintain capacity.
- Qualitative ratings and consultant recommendations are limited to the most-visible and usually the largest funds, which inhibits investor access to smaller products in plans and models, further concentrating choices.

Google became the incumbent search engine for millions of users who use it freely and without worry. Has that position of dominance affected users in ways that don't appear harmful but perhaps are so? While European regulators and Google sort that out, we might ponder what market dominance and industry concentration will bring to the funds industry? So far, it is lower prices for investors. Whether the scale that benefits investors' pocketbooks today works against them tomorrow—as reduced services, fewer choices, less innovation, or other adverse consequences—remains to be seen.

Comments and questions from readers of this white paper are welcome. Additionally, if you would like to have more detailed data presented related to your funds we can incorporate that into a study. Please direct any feedback to:

Devin McCune
Vice President Governance, Risk & Compliance
Devin.McCune@broadridge.com

Scott Arndt
Senior Account Manager
Scott.Arndt@broadridge.com

Brady Hattery
Account Manager
Brady.Hattery@broadridge.com

Josh Walker
Account Manager
Josh.Walker@broadridge.com

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