Active vs Passive - shedding light on the drivers, growth, fees, & outlook for stocks

Industry Overview

Bank of America **Merrill Lynch**

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Chart 1: Long Term Fund AUM (\$T)



Source: Strategic Insight Simfund



Source: Strategic Insight Simfund



Source: Strategic Insight Simfund. Note: LT AOG = Long Term Annualized Organic Growth.

Deciphering passive headlines and the opportunities

Passive products have been taking share from active for some time, and we expect that trend to continue given structural drivers. However, not all parts of the market or firms have the same exposure, which presents some opportunities. In this report, we attempt to decipher the structural drivers of passive vs. the cyclical case for active, catalysts that could potentially turn the momentum, passive penetration rates and strategies that are more or less exposed, the reality behind fee rates and flows, and the industry outlook. The sector faces challenges, but we see some opportunities, and like BLK & AMG.

The market is 26% passive, up from 12% a decade ago

Passively managed AUM made up 26% of the global fund market in '16, up from 12% a decade ago. Assuming recent growth rates & flat markets, we think that passive could reach 50% by 2026. These figures represent funds ("retail"), but we estimate the passive mix of separate accounts ("institutional") to be higher. Passive has penetrated different strategies & distribution channels at different speeds and controls <10% of some markets, but >40% in others, like the equity fund market in the US (Chart 1-2).

Structural drivers fueling the rise in passive market share

There are a few drivers fueling the structural growth in passive, including new products / uses (ETFs, smart beta/factor, etc.), a focus on lower fees in a lower return backdrop (asset & wealth mgmt.), weak active performance impacted by size, tech/info, and market structure (<15% outperforming S&P over last 5 yrs), and new regulations impacting the old ways of distributing products and other areas (DOL Fiduciary Rule, RDR, MiFID II, etc.).

Catalysts or drivers that could revive active management

The primary catalyst needed to revive active is outperformance, and while cyclically, we expect active to do better (YTD 57% of funds are outperforming, strongest since '09), we don't think this will be enough. We think innovation will be a key driver over time, including new products/vehicles (like EV's NextShares) and pricing (like AB's Performance Fee Series). However, given the level of over-capacity in the industry (and headwinds), we expect more M&A and some exits, which should aid the outlook for the survivors. Importantly, we expect active to always have a significant share of the market, as money will flow to areas with market inefficiencies, alpha opportunities, and outperformance.

Fee pressure reality, impact on flows, and other factors

Industry fees have been under pressure for the past decade with the shift to passive (more assets in lower fee passive products). However, fee rates in active categories have moved only marginally lower, though '16 firm fee rates faced more pressure from market & FX moves, which has recently reversed (1017 fee rates increased). In terms of the outlook, we expect some fee pressure to be ongoing (as with most areas of financial services), with most firms wanting to be near average, but since lower fees are not a primary driver of active flows (Chart 3), we expect more price innovation vs. big cuts.

BLK & AMG best positioned to weather the trends

We have most of our Underperform ratings in the asset management sector given structural pressures. However, given rising markets, shifting trends, relative exposures, and valuations, we expect more deviation ahead. On the structural shift to passive, we prefer BLK, given robust organic growth and importantly an improving fee rate & margin outlook. On the active side, we prefer AMG, given an AUM mix less exposed to passive pressures (70% Alternative & International), its M&A strategy, and valuation.

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Refer to important disclosures on page 23 to 26. Analyst Certification on page 21. Price Objective Basis/Risk on page 21.

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Overview

Passive products have been taking share from active for some time, and we expect that structural trend to continue, though there could be some cyclical and catalyst driven offsets. Over the past few years, there has been more debate on the outlook for active management and the structural growth of passive given active outflows in 2016 as well as new regulations on the horizon. While the shift to passive can benefit some firms that have passive offerings, it is a bigger headwind for the industry, as most asset managers are active managers.

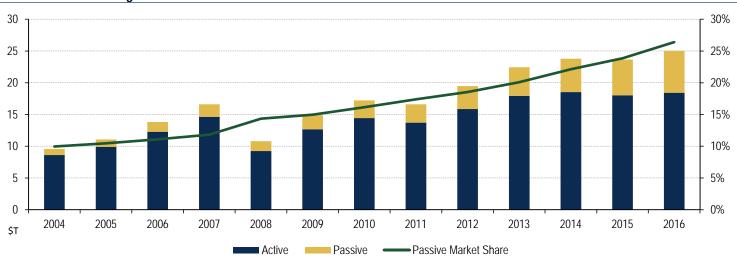
Importantly, not all parts of the market or firms have the same exposure, which presents some opportunities. In this report, we attempt to decipher the structural drivers of passive vs. the cyclical case for active, catalysts that could potentially turn the momentum, passive penetration rates & strategies that are more or less exposed, the truth behind fee rates and flows, and the outlook for the asset management sector. Given the structural pressures in the asset management industry, we have most of our Underperform ratings across the capital markets in the asset management sector. However, given the shifting trends, relative exposures, and valuations, we expect more deviation ahead in the stocks.

On the structural shift to passive, we prefer BLK (as well as IVZ), given robust organic growth, a better valuation vs. the recent past, and importantly an improving fee rate and margin outlook vs. the recent past. On the active side, we prefer AMG, given an AUM mix less exposed to passive pressures (70% Alternative & International), its acquisitive strategy, and valuation. We also see upside in BEN given improving flows/performance, relatively low U.S. equity exposure, margin upside, and cash/tax benefits. While we remain Neutral on TROW given elevated U.S. equity exposure and costs/investments, we expect the firm to be a leading survivor in active management over the longer term given its impressive performance track record, which will matter more than ever.

The Passive vs. Active Industry Today

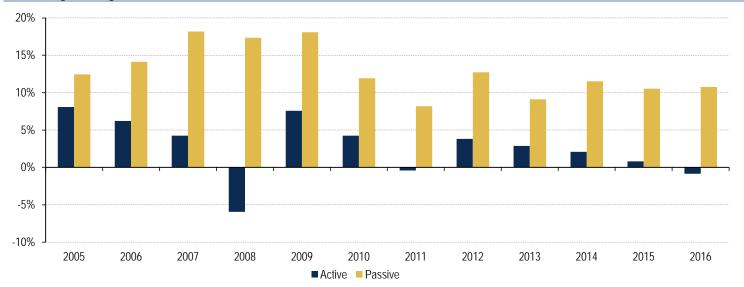
Passive AUM has grown at a healthy pace and is continuing to grow universally, but it is at different stages in its life depending upon domicile and asset class. Overall, passive AUM has a 26% global long term fund market share up from less than 10% in 2004 driven in part by stronger organic growth relative to active (Chart 4-5).

Chart 4: Active Passive Long Term AUM Mix



Source: Strategic Insight Simfund

Chart 5: Long-Term Organic Growth Over time



Source: Strategic Insight Simfund

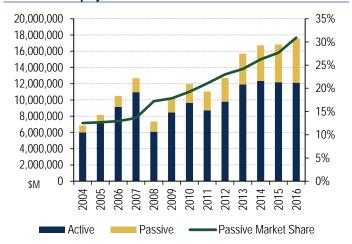
There is much debate on where the passive/active equilibrium will shake out, and while we don't have the trillion dollar answer, if a 50/50 balance is the right level, based on current AUM levels, growth rates (11% for passive and 1% for active, trailing 3 year global average growth rates), and flat markets, it would take about 10 years or until 2026 for the overall market to be roughly 50/50 active/passive.

While this is true for the overall fund market, the equity fund market in the US is the furthest along in terms of passive penetration and using 3 year trailing average growth rates of 9% for passive and -3% for active, the US equity fund market (equity funds domiciled and sold in the US) could reach a 50/50 split as early as 2020.

Passive share differs by asset class and strategy

Passive's market share is greater in equity than bond (30% versus 16%), though passive bond AUM has grown organically by roughly 20% in the past three years off a lower base versus roughly 10% for passive equity AUM. With respect to domicile, passive's market share is far greater in the US (domestic equity funds domiciled in the US have the highest passive penetration at \sim 43%) vs outside the US. However, passive organic growth rates in the U.S. and abroad are fairly similar in both equities and bonds. Interestingly, the active growth rates abroad are far better than in the US. Notably active equity has had 3% average organic growth outside the US over the last 3 calendar years, while within the US active equity has seen outflows (Chart 6-9).

Chart 6: Total Equity AUM Mix



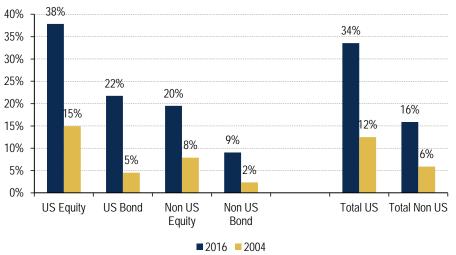
Source: Strategic Insight Simfund

Chart 7: Total Bond AUM Mix



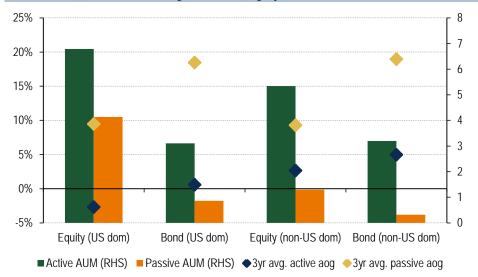
Source: Strategic Insight Simfund

Chart 8: Passive Penetration by Domicile & Asset Class



Source: Strategic Insight Simfund

Chart 9: AUM (\$T) and Annualized Organic Growth (aog) by Domicile & Asset Class

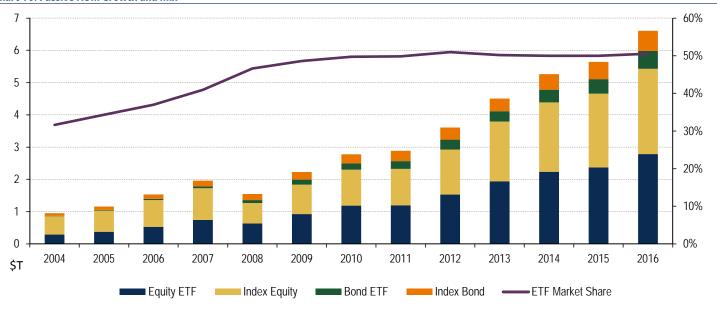


Source: Strategic Insight Simfund

The difference between Index and ETF among passive

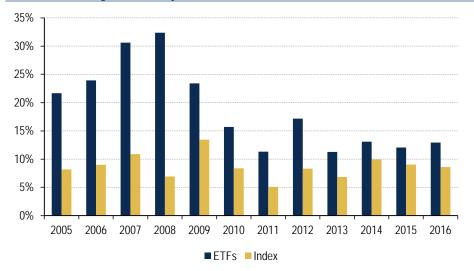
Currently, the passive mix between ETFs and index funds is roughly 50/50 and has been fairly steady since 2008. ETFs have been gradually gaining modest share, despite seeing superior flows or organic growth relative to index mutual funds, likely driven by mix and performance differences between the two products (Chart 10-11).

Chart 10: Passive AUM Growth and Mix



Source: Strategic Insight Simfund

Chart 11: Passive Organic Growth by Vehicle



Source: Strategic Insight Simfund

The passive mix is fairly similar in the US and abroad

Equity ETFs and index equity funds make up roughly 80% of the passive market in both the U.S. and outside the US. The 80% passive market share controlled by equity is fairly evenly split between ETFs and index funds. Bonds which account for roughly 20% of passive assets are also fairly evenly split between ETFs and index funds (Chart 12-13).

Chart 12: Passive Mix in the US



Chart 13: Passive Mix outside the US



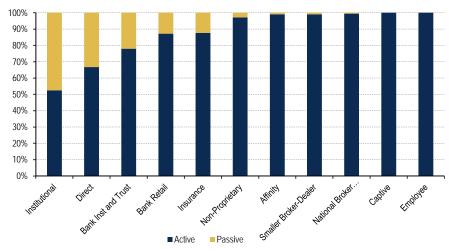
Source: Strategic Insight Simfund

Source: Strategic Insight Simfund

The landscape by distribution channel

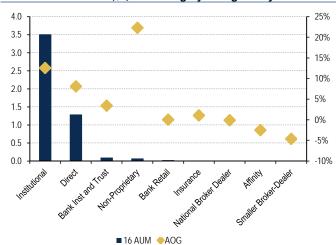
Given the lack of disclosure across all distribution channels, it's difficult to get accurate data on active/passive penetration. However, by looking at share classes and distribution channels, we can gather some insight, though it is not perfect. The institutional channel, also the largest channel (pension funds, 401ks, etc.) is about the most diversified with a 50/50 active passive split (however, this data only looks at fund products, whereas this channel, particularly pensions, also invest heavily in alternatives, which would increase the active mix). The next channel is the direct channel (~35% passive), followed by the bank and trust channel (~20% passive), bank retail (~10%), and the insurance channel (~10%) while the rest of the channels are all still predominantly active. Among the mainly active channels, the non-propriety channel where funds are sold by brokerages and other financial institutions on behalf of independent fund management companies is the largest and not surprisingly has the highest passive organic growth rate (>20%) and is seeing active outflows (Chart 14-16).

Chart 14: Passive Active Mix by Distribution Channel



Source: Strategic Insight Simfund. Note: As of 12/31/16.

Chart 15: Passive AUM (\$T) and trailing 3 year avg AOG by Channel



Source: Strategic Insight Simfund, Lipper, BofA Merrill Lynch Global Research. Note: The sales channel through which a fund is primarily sold. See below for a complete listing of Distribution Channels with accompanying definitions.

Affinity with an Organization - Funds which are sold primarily to individuals who have a relationship with a membership organization.

<u>Bank Institutional</u> - Funds primarily offered to clients, agencies and fiduciaries of bank trust departments, commercial banks, thrifts, trust companies, or similar institutions. The bank acts as advisor and, in some cases, sub-advisor for the funds.

<u>Bank Retail</u> - Funds primarily offered to bank customers, or to customers of correspondent banks, on a retail level. The bank acts as advisor and, in some cases, sub-advisor for the funds.

 $\underline{\textit{Broker/Dealer Non-NYSE Members}} - \textit{Funds that are affiliated with regional brokerage firms}.$

<u>Captive Sales Force</u> - CAPTIVE - Funds that are marketed by their own captive sales force. The captive sales force is solely focused on selling proprietary products.

<u>Dealer</u> - Wholesale fund firms whose sales are made through intermediaries such as brokers. Those fund groups with assets over \$3 billion are considered primary.

<u>Direct</u> - No-load funds that are marketed directly to the consumer.

Employee Funds - Funds that are sold primarily to employees or retirees of a particular organization.

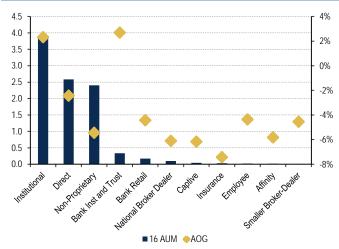
Institutional - Funds primarily targeted at organizations and institutions. Some examples include pension funds, 401k plans, profit sharing plans and endowments. Typically, these funds have a high minimum initial investment and a lower overall expense ratio.

Insurance - Funds whose advisor is affiliated with an insurance company and which are sold primarily through the insurance company's agents.

National Full Line - Fund groups that are NYSE member firms who have their own proprietary funds.

Non-proprietary - Funds managed by an independent advisor and sold via relationships with brokerages and other

Chart 16: Active AUM (\$T) and trailing 3 year avg AOG by Channel



Source: Strategic Insight Simfund, Lipper, BofA Merrill Lynch Global Research. Note: The sales channel through which a fund is primarily sold. See below for a complete listing of Distribution Channels with accompanying definitions.

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financial institutions.

The passive players and market share

The grandfather of passive investing, Vanguard is the largest passive fund manager, with BLK on its heels with well over \$1T of AUM. After BLK, the drop off is quite large and in total the top 10 managers account for a significant 83% of the global passive market. Within the U.S., passive concentration is even more severe with the top 10 managers accounting for 90%+ market share. Abroad there is much more fragmentation with only 57% of the AUM accounted for among the top 10 managers (Table 1-3).

Table 1: Top 10 Passive Fund Managers

•		•	
Firm	Total AUM (\$M)	US AUM (\$M)	Non-US AUM (\$M)
Vanguard	2,692,644	2,552,070	140,574
Blackrock	1,369,435	990,859	378,576
State Street Corp	573,872	502,415	71,457
Fidelity	266,166	261,665	4,501
Invesco	119,442	116,590	2,852
Charles Schwab	112,439	112,439	NA
UBS	98,589	NA	98,589
Nomura	93,462	NA	93,462
Credit Suisse	74,199	1,477	74,199
Deutsche Bank AG	71,847	15,402	56,445
Top 10 Market Share	83%	91%	57%

Source: Strategic Insight Simfund. Note: AUM as of 12/31/16.

Table 2: Top 10 Passive Equity Fund Managers

Firm	Total AUM (\$M)	US AUM (\$M)	Non-US AUM (\$M)
Vanguard	2,155,167	2,049,777	105,390
Blackrock	1,038,923	781,245	257,678
State Street Corp	519,393	466,623	NA
Fidelity	231,082	226,581	4,501
Charles Schwab	103,161	103,161	NA
Invesco	97,394	94,569	2,825
Nomura	85,496	NA	85,496
UBS	74,140	NA	74,140
Deutsche Bank AG	61,139	15,073	46,066
Credit Suisse	50,341	NA	50,341
Top 10 Market Share	81%	90%	48%

Source: Strategic Insight Simfund. Note: AUM as of 12/31/16.

Table 3: Top 10 Passive Bond Fund Managers

Total AUM (\$M)	US AUM (\$M)	Non-US AUM (\$M)
537,477	502,293	35,184
330,512	209,614	120,898
54,479	35,792	NA
35,084	35,084	NA
24,449	NA	24,449
23,858	NA	23,858
22,048	22,021	27
10,708	329	10,379
10,677	NA	10,677
9,279	9,279	NA
90%	95%	71%
	AUM (\$M) 537,477 330,512 54,479 35,084 24,449 23,858 22,048 10,708 10,677 9,279	AUM (\$M) (\$M) 537,477 502,293 330,512 209,614 54,479 35,792 35,084 35,084 24,449 NA 23,858 NA 22,048 22,021 10,708 329 10,677 NA 9,279 9,279

Source: Strategic Insight Simfund. Note: AUM as of 12/31/16.

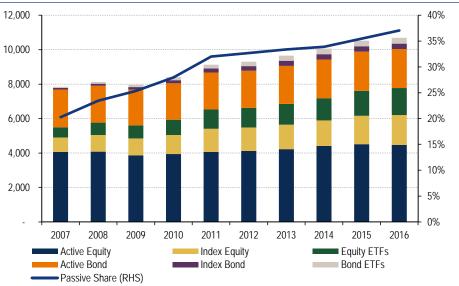
Passive growth fueled by several factors

There are a few drivers fueling the structural growth in passive, including new products and uses (ETFs, smart beta/factor, etc.), a focus on lower fees in a lower return backdrop (asset & wealth mgmt.), weak active performance (<15% of active equity managers beating the S&P over the last 5 years), & new regulations impacting the old ways of distributing products among other areas (DOL Fiduciary Rule, RDR, MiFID II, etc.).

New product launches and uses of passive products

One of the drivers behind the strong growth in passive has been the introduction of new products into the market. Over the past 10 years, the number of passive products (index funds & ETFs) has exploded by roughly 150% while the number of active products has grown by only 10% in the past decade (Chart 17).

Chart 17: Number of Funds Over The Last 10 Years



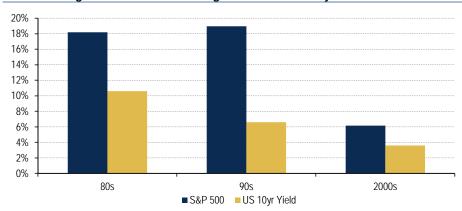
 ${\it Source: Strategic\ Insight\ Simfund}$

In addition, the uses of passive products, notably ETFs, continue to expand. ETFs can and are used for many outcomes including long term investing, tactical trading (including short lived exposures/shorting/derivatives on ETFs, etc.), hedging, and equitizing cash, among other uses vs actively managed funds which are predominantly used for long term investing. The multiple uses of ETFs is helping to steer more incremental dollars into ETFs, and aid the growth in passive (see our ETF Primer for more details on new and expanding uses of ETFs), and also blurs the portion of the market that is active vs. passive.

Attractive fees in a low return backdrop

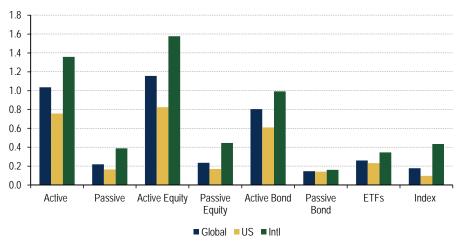
Another driver behind the growth in passive is the attractive fee rates relative to active in a lower return backdrop. Importantly, relative to the 1980s or 1990s, market returns have been significantly more muted, so the focus on fees has intensified. Fee rates are significantly lower in passive products relative to actively managed products both in the US and abroad and across different asset classes. The average expense ratio at the end of 2016 for active was roughly 100bps and only 20bps for passive. This 80bp differential not only incentivizes investors to choose passive, but also makes active outperforming passive after fees more difficult (Chart 18-19).

Chart 18: Average Market Returns and Average Yield on Treasuries by Time Period



Source: Bloomberg

Chart 19: Expense Ratios by Domicile and Asset Class (%)



Source: Strategic Insight Simfund

Active underperformance has been a headwind

Another driver of passive has been weak performance of active equity managers with less than 15% of funds beating their respective S&P 500 benchmark over the past 5

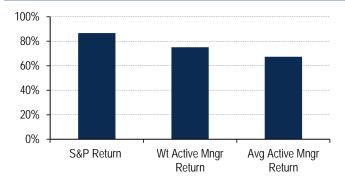
years, though this has improved meaningfully over the past year. Quantitatively, actively managed weighted AUM has underperformed the S&P by ~12 cumulative percentage points (ppts) over the last 5 years and more on an average basis (Chart 20-21).

Chart 20: Percentage of Active Funds Beating the S&P 500



Source: Strategic Insight Simfund. Note: Returns are as of 3/31/17.

Chart 21: Total Returns (trailing 5 years)



Source: Bloomberg, Strategic Insight Simfund, BofA Merrill Lynch. Note: Returns are as of 3/31/17.

To be fair, there are funds that have been outperforming versus the average statistics, but given the vast size of the active industry, the averages tend to gain the headlines and create a headwind for the entire industry. That said, we do see a few trends that have been weighing on active performance, though cyclically, the backdrop could be getting better.

Overcapacity in active management. Today, there is \$7T in U.S. active equity AUM (vs. \$3T in 2000), ~4,500 active equity funds, and ~750 active equity managers, by far the most saturated market. Bottom line, there is too much capacity in the industry, but recent outflows and the rise in passive could create a better backdrop for active survivors in the future (Chart 22).

Chart 22: Active Equity Market in the US



Source: Strategic Insight Simfund

Technology/availability of information. The internet has made information become readily available over the past 20 years, which has made it harder to get an edge in active investing. In addition, increased disclosure requirements have also made position information readily available for others to take advantage. In the future, with more investment being made into artificial intelligence and machine learning, this trend toward technology will need to be understood and used where applicable in order for managers to stay ahead.

Market structure/investor time horizons. The equity market structure has changed dramatically over the past 20 years. The U.S. market has gone from specialists and market makers with healthy bid-ask spreads to high frequency traders and market makers with pricing incentives yet razor thin spreads. This has undoubtedly been a positive to the cost of transacting, but it has created another competitive dynamic in the market.

On many days, HFT (high frequency trading) volume can be driving as much as 50% of the market volume, with a focus on anomalies versus fundamentals. In addition, with ETF volume also making up another 20-30%+ of the volume, this means on many days 80%+ of the volume is not focused on fundamentals. To make it more challenging, investor time horizons have gotten shorter not longer. With this much market volume focused on anomalies and market momentum, as well as the availability of information, it's the perfect time for managers and investors to take advantage by focusing longer term.

New regulations creating demand for passive

Finally, new regulations are also impacting returns and driving more interest in passive and less interest in active products. New disclosure requirements, liquidity rules, and other operational requirements (see Note), create increased transparency and some level of safety, but it can also weigh on returns. In addition, new regulations in the U.S. (DOL Fiduciary Rule) and outside the U.S. (RDR and MiFID II) are making or have the potential to make it tougher to distribute active products and/or to generate alpha.

- RDR. RDR (Retail Distribution Review) came into effect in 2013 in the UK, and focused on improving the level of service and transparency and ensuring interests of financial advisors and their clients are in line.
- **DOL.** The DOL (Department of Labor) Fiduciary Rule was passed in 2016 and set to begin on April 10th, 2017, but this has been delayed until June 9th, 2017. This rule creates a fiduciary standard for advisors in retirement accounts vs. a suitability standard, looks to level the commission playing field, and increases the legal liability of advisory firms. This rule, as well as some lawsuits in the retirement space, will likely dis-incentivize the use of higher cost active products and incentivize low fee passive products. While the outlook is uncertain, we believe the rule is likely to get delayed further, but we do expect a new modified rule (potentially joint with the DOL and SEC) to eventually go into effect in the future.
- MiFID II. While MiFID II (Markets in Financial Instruments Directive II) covers many different regulatory aspects across markets in Europe, one primary area of focus for asset managers is on unbundling in 2018, or separating out what a fund pays for research versus execution. This rule has the potential to increase costs for asset managers, decrease demand for third party research providers, and force more consolidation. Initially, some firms thought this could become a global standard, but many firms are now looking to ring fence Europe and continue under current rules in other geographies/jurisdictions.

Fee trends and the impact on flows

Over the years, the mix shift in the industry has favored passive and subsequently has brought down overall industry fee rates and expenses born by investors. However, advisory fee rates in active funds have moved only marginally lower in general and in some cases fee rates have increased in some more exotic strategies. That said, there are other ways to adjust fees, like revenue shares, which are shifting in the industry (Chart 23-24).

Chart 23: Mutual Fund Expense Ratios Over Time (bps)

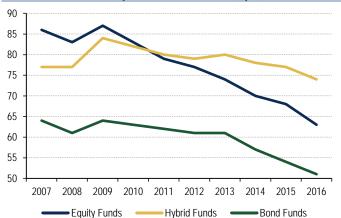
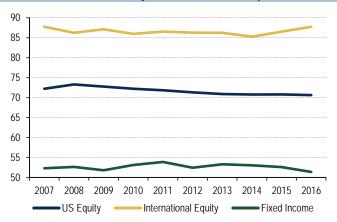


Chart 24: Active Fund Advisory Fee Rates Over Time (bps)

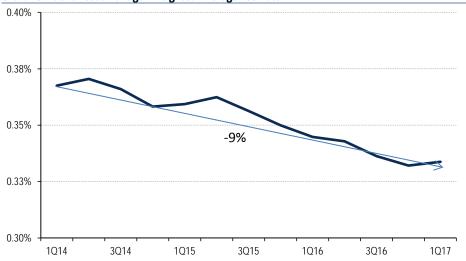


Source: Morningstar

When we compare this trend to the public asset manager fee rates, the group has seen fee pressure over the past few years, but based on the above, it's been driven more by other factors that impact fee rates, particularly mix (markets/flows) and FX vs. broad based fee cuts. To put this in perspective, between 2014-2016, U.S. equity markets did better than international equity markets, the dollar appreciated, and active equity outflows were offset by passive and fixed income inflows, all of which were fee

This is important to highlight as we think much of the fee pressure in the industry has been broadly brushed as active fee cuts. In 1Q17 when the USD and domestic markets cooled off some, we actually saw modest fee rate lift at the asset managers and we expect the trend to continue in 2017 (Chart 25-27).

Chart 25: Public Asset Manager Weighted Average Fee Rate



Source: Company Reports, Bloomberg & BofA Merrill Lynch Global Research. Stocks included in sector include: AB, AMG, APAM, BLK, BEN, CNS, EV, FII, IVZ, JNS, LM, OMAM, TROW, VRTS WDR, & WETF. Excluding BLK, the sector's fee rate has fallen by 5% over this time period.

Source: ICI

headwinds.

Chart 26: Cumulative Increase in Average Index Levels

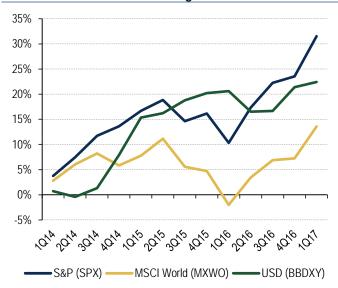
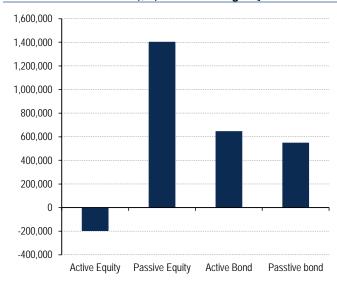


Chart 27: Cumulative Flows (\$M) Since '14 through 1Q17



Source: Strategic Insight Simfund Flows represent global fund flows.

Source: Bloomberg

In terms of the outlook, we expect fee pressure to continue (as with most areas of financial services) given the ongoing trends, with most firms wanting their fees to be near average in order to be competitive. However, since lower fees are not a primary driver of flows, we expect more price innovation vs. significant fee cuts by active funds, unless a fund has unusually high fees that are not justified by its relative return.

To put the fee vs. performance into context as a driver of flows, data shows that in 2016 which was the worst year for active equity fund flows on record in the US, funds with the best relative performance (regardless of fees) according to Lipper had inflows and 5 star funds ranked by Morningstar also had inflows in 2016 (Chart 28-29).

Chart 28: 2016 Active Equity AOG by Lipper Quintile (3yr)

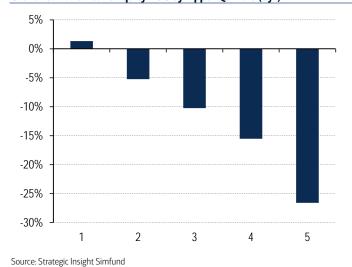
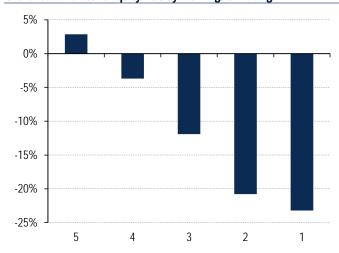


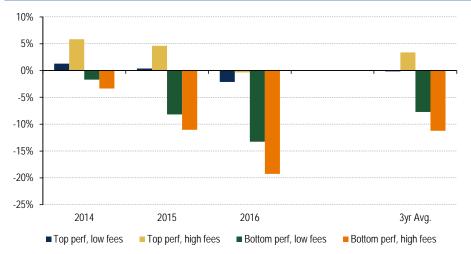
Chart 29: 2016 Active Equity AOG by Morningstar Rating



Source: Strategic Insight Simfund

Furthermore, the organic growth rates in top performing funds with relatively high fees ("Top perf, high fees") actually have had stronger organic growth over the last three years vs other top performing funds with relatively low fees ("Top perf, low fees"). This suggests that strong investment performance is the ultimate driver of flows/organic growth regardless of fees. That said, having lower fees ultimately helps performance and can bode well for distribution on platforms, particularly in light of the DOL Fiduciary Rule as well as the recent scrutiny around fees in recent years (Chart 30).

Chart 30: Long Term Fund Organic Growth by Performance and Fees



Source: Strategic Insight Simfund

Note: Top perf = top 2 Lipper return quintiles, bottom perf = bottom 3 Lipper return quintiles, high fees = Lipper Leader expense score = 1-3, Low fees = Lipper Leader expense score = 4-5

A deeper dive into equities

2016 marked the worst year for active equities in the US with roughly \$400B of outflows or -6% annualized organic decay, while passive enjoyed inflows of >\$300B or +9% aog. To get a better understanding of the shift to passive, we examined '16 flows and growth rates among the 10 largest Morningstar Objectives with a focus on performance and fees. To be fair, while "categories" aren't exactly the primary areas driving flows, it's the data that we can gather from the available databases.

Given the high level of industry active outflows, not surprisingly, in all 10 equity categories, passive organic growth trumped active's with only "Income – Mixed Allocation" having active inflows in 2016, though passive offerings are notably small in this category which likely contributed to the active inflows as there was seemingly a lack of passive alternatives.

While active's weakness is clear, there are some silver linings. In all 10 categories, the top performing managers or mangers in the top half ("Top Perf") of their peers ranked by Morningstar for the trailing 3 year period had superior organic growth to peers in the bottom half. In five of the ten categories including Foreign Stock, Equity Income, Small Company, Income Mixed Allocation, and Real Estate, the top performing funds with the highest fees had superior organic growth to top performing funds with lower fees, which suggest that ultimately investment performance drives flows, not fees. Additionally, in four of the ten categories, the top performing active funds had inflows, despite 2016 being the worst year for active equity fund flows (Table 4).

Table 4: Fund Flows by Performance and Fees for the 10 Largest Morningstar Objectives

Objective	Style	AUM (\$M)	Flows (\$M)	AOG	Wt Avg Fee Rate
Growth	Passive	1,821,505	143,961	8%	0.31%
Growth	Active	2,158,038	-209,736	-10%	1.00%
Growth	Top Perf	1,577,173	-70,535	-4%	0.92%
Growth	Bottom Perf	580,865	-139,201	-24%	1.22%
Growth	Top Perf High Fees	264,079	-12,643	-5%	1.27%
Growth	Bottom Perf Low Fees	333,905	-73,027	-22%	1.09%
Growth and Income	Passive	584,401	30,491	5%	0.27%
Growth and Income	Active	1,004,841	-56,205	-6%	0.92%
Growth and Income	Top Perf	783,302	-25,403	-3%	0.85%
Growth and Income	Bottom Perf	221,539	-30,802	-14%	1.18%
Growth and Income	Top Perf High Fees	80,817	-3,800	-5%	1.28%
Growth and Income	Bottom Perf Low Fees	151,045	-17,340	-11%	1.09%
Foreign Stock	Passive	488,964	56,488	12%	0.34%
Foreign Stock	Active	713,536	-37,522	-5%	1.04%

Table 4: Fund Flows by Performance and Fees for the 10 Largest Morningstar Objectives

Objective	Style	AUM (\$M)	Flows (\$M)	AOG	Wt Avg Fee Rate
Foreign Stock	Top Perf	516,049	-11,300	-2%	0.99%
Foreign Stock	Bottom Perf	197,488	-26,222	-13%	1.20%
Foreign Stock	Top Perf High Fees	107,158	-436	0%	1.29%
Foreign Stock	Bottom Perf Low Fees	144,135	-16,362	-11%	1.11%
Equity-Income	Passive	61,240	7,229	12%	0.29%
Equity-Income	Active	593,206	-6,001	-1%	0.89%
Equity-Income	Top Perf	485,214	14,161	3%	0.82%
Equity-Income	Bottom Perf	107,992	-20,163	-19%	1.21%
Equity-Income	Top Perf High Fees	57,706	5,651	10%	1.12%
Equity-Income	Bottom Perf Low Fees	73,770	-12,636	-17%	1.13%
Small Company	Passive	234,946	26,363	11%	0.30%
Small Company	Active	368,998	-21,405	-6%	1.15%
Small Company	Top Perf	251,562	1,647	1%	1.09%
Small Company	Bottom Perf	117,436	-23,052	-20%	1.26%
Small Company	Top Perf High Fees	62,213	-23,032 2,160	3%	1.33%
Small Company	Bottom Perf Low Fees	68,088	-10,624	-16%	1.33% 1.12%
			20,542		
Diversified Emerging Markets	Passive	123,153		17%	0.40%
Diversified Emerging Markets	Active	219,582	-4,559	-2%	1.32%
Diversified Emerging Markets	Top Perf	143,030	-3,444	-2%	1.24%
Diversified Emerging Markets	Bottom Perf	76,552	-1,114	-1%	1.46%
Diversified Emerging Markets	Top Perf High Fees	34,485	-1,009	-3%	1.59%
Diversified Emerging Markets	Bottom Perf Low Fees	61,965	-186	0%	1.41%
Balanced	Passive	30,744	1,961	6%	0.24%
Balanced	Active	322,871	-3,844	-1%	0.87%
Balanced	Top Perf	288,568	271	0%	0.83%
Balanced	Bottom Perf	34,303	-4,115	-12%	1.21%
Balanced	Top Perf High Fees	16,125	-72	0%	1.27%
Balanced	Bottom Perf Low Fees	30,519	-3,666	-12%	1.20%
World Stock	Passive	33,364	-4,470	-13%	0.32%
World Stock	Active	226,695	-16,198	-7%	1.09%
World Stock	Top Perf	173,939	-6,552	-4%	1.03%
World Stock	Bottom Perf	52,756	-9,647	-18%	1.28%
World Stock	Top Perf High Fees	36,044	-2,005	-6%	1.28%
World Stock	Bottom Perf Low Fees	35,691	-5,681	-16%	1.21%
Income – Mixed Allocation	Passive	9,966	4,511	45%	0.33%
Income – Mixed Allocation	Active	200,092	4,070	2%	0.81%
Income – Mixed Allocation	Top Perf	196,923	4,525	2%	0.80%
Income – Mixed Allocation	Bottom Perf	3,169	-456	-14%	1.40%
Income – Mixed Allocation	Top Perf High Fees	8,312	277	3%	1.34%
Income – Mixed Allocation	Bottom Perf Low Fees	1,968	-298	-15%	1.26%
Specialty - Real Estate	Passive	93,190	4,540	5%	0.37%
Specialty - Real Estate	Active	99,261	-10,516	-11%	1.14%
Specialty - Real Estate	Top Perf	71,301	-6,366	-9%	1.03%
Specialty - Real Estate	Bottom Perf	27,960	-4,150	-15%	1.40%
Specialty - Real Estate	Top Perf High Fees	22,638	-4,750 -409	-13% -2%	1.24%
Specialty - Real Estate	Bottom Perf Low Fees	22,038 17,054	-409 -478	-2%	1.31%
Specially - Real Estate	DUMUIII FEII LUW FEES	17,004	-4/0	-370	1.3170

Source: Strategic Insight Simfund & BofA Merrill Lynch Global Research

Looking at stock standouts in the active space

Given our observations within equity, we looked at our coverage group in the top 10 Morningstar Objectives and the story is more or less the same; passive is taking share, but we do see some bright spots. We see 8 firms well positioned in a top category including AB, LM, AMG, TROW, JNS, APAM, VRTS and BLK (in **bold** below). Notably AMG and TROW are well positioned in two areas while the rest stand out in one category. Well positioned is having above peer group performance and/or trailing active inflows (Table 5).

Table 5: Active Equity AUM, Flows, Performance, and Fee Data by Manager

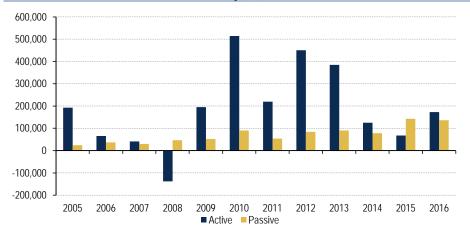
			-					100 0 1		- AUII - B	5 DIW D I	5 DIG D
Objective											Fee Diff vs Passive	
Balanced Balanced	AB BEN	1,119 84,484	-17 <u>2</u> -6,618	-15% -8%	-1% -1%	6% 6%	-14% -7%	-22% -14%	79 40	85 9	77 51	15 -12
Balanced	JNS	12,698	-1,074	-8%	-1%	6%	-7%	-15%	29	28	63	1
Balanced	TROW	5,853	-424	-7%	-1%	6%	-6%	-14%	40	29	34	-28
Balanced	VRTS	458	-55	-12%	-1%	6%	-11%	-18%	93	93	93	31
Balanced	WDR	3,912	-416	-11%	-1%	6%	-9%	-17%	65	37	93	31
Diversified Emerging Markets	AB	1,206	-68	-6%	-2%	17%	-4%	-22%	20	50	108	16
Diversified Emerging Markets Diversified Emerging Markets	AMG EV	7,410 3,021	1,524 -116	21% -4%	-2% -2%	17% 17%	23% -2%	4% -21%	30 63	13 34	90 56	-1 -36
Diversified Emerging Markets	IVZ	2,491	-110 9	0%	-2% -2%	17%	2%	-21% -16%	36	34 36	83	-30 -8
Diversified Emerging Markets	TROW	8,794	-1,577	-18%	-2%	17%	-16%	-35%	3	22	81	-11
Diversified Emerging Markets	VRTS	6,470	-3,448	-53%	-2%	17%	-51%	-70%	16	26	99	7
Diversified Emerging Markets	WDR	598	-3	0%	-2%	17%	2%	-17%	12	9	100	8
Equity-Income	AMG	1,029	35	3%	-1%	12%	4%	-8%	28	46	65	5
Equity-Income Equity-Income	BEN BLK	19,678 26,905	-796 -3,125	-4% -12%	-1% -1%	12% 12%	-3% -11%	-16% -23%	68 22	75 70	70 63	9 3
Equity-Income	EV	8,796	-3,123	-3%	-1%	12%	-2%	-15%	43	38	86	25
Equity-Income	FII	15,474	3,509	23%	-1%	12%	24%	11%	40	73	73	12
Equity-Income	IVZ	37,325	7,078	19%	-1%	12%	20%	7%	14	11	47	-13
Equity-Income	LM	7,041	-494	-7%	-1%	12%	-6%	-19%	55	74	113	52
Equity-Income	TROW	29,628	-2,248	-8%	-1%	12%	-7%	-19%	57	59	36	-25
Foreign Stock Foreign Stock	ab Amg	5,337 17,667	-574 942	-11% 5%	-5% -5%	12% 12%	-5% 11%	-22% -6%	40 7	65 15	82 77	12 6
Foreign Stock	APAM	25,062	-2,838	-11%	-5%	12%	-6%	-23%	, 55	33	77 72	2
Foreign Stock	BEN	12,201	-2,134	-17%	-5%	12%	-12%	-29%	50	40	67	-3
Foreign Stock	EV	902	-12	-1%	-5%	12%	4%	-13%	61	51	100	30
Foreign Stock	IVZ	8,374	-705	-8%	-5%	12%	-3%	-20%	36	51	79	9
Foreign Stock	JNS	1,462	-413	-28%	-5%	12%	-23%	-40%	99	99	32	-38
Foreign Stock	TROW	32,424	932	3%	-5%	12%	8%	- 9 %	26	48	56 99	- 15 29
Foreign Stock Foreign Stock	VRTS WDR	1,255 5,009	-505 -224	-40% -4%	-5% -5%	12% 12%	-35% 1%	-52% -16%	10 16	56 18	99 77	29 7
Growth	AB	15,349	722	5%	-10%	8%	14%	-3%	32	34	80	11
Growth	AMG	31,549	-2,844	-9%	-10%	8%	1%	-17%	59	62	64	-5
Growth	APAM	15,013	-3,386	-23%	-10%	8%	-13%	-30%	76	62	75	6
Growth	BEN	18,003	-1,775	-10%	-10%	8%	0%	-18%	26	43	68	-1
Growth	BLK EV	13,095	-1,874 98	-14% 0%	-10% -10%	8% 8%	-5% 10%	-22% -7%	53 23	54 29	75 73	6 4
Growth Growth	FII	23,680 4,405	-986	-22%	-10%	8%	-13%	-30%	23 61	35	86	17
Growth	IVZ	19,205	-2,682	-14%	-10%	8%	-4%	-22%	66	64	79	10
Growth	JNS	51,302	-421	-1%	-10%	8%	9%	-9%	24	37	51	-19
Growth	LM	21,141	1,315	6%	-10%	8%	16%	-2%	39	45	72	3
Growth	OMAM	1,058	-543	-51%	-10%	8%	-42%	-59%	14	35	125	56
Growth	TROW VRTS	183,591	-2,907	-2% -49%	-10% -10%	8% 8%	8% -39%	-9% -57%	19 77	8 88	41 113	-29 44
Growth Growth	WDR	2,745 11,902	-1,344 -2,755	-49%	-10%	8%	-39%	-31%	63	65	82	13
Growth and Income	AB	2,288	-99	-4%	-6%	5%	1%	-10%	59	57	77	12
Growth and Income	AMG	23,744	7,953	33%	-6%	5%	39%	28%	34	18	109	44
Growth and Income	BEN	21,208	-1,926	-9%	-6%	5%	-3%	-14%	13	12	67	2
Growth and Income	EV	6,613	-1,309	-20%	-6%	5%	-14%	-25%	65	53	84	19
Growth and Income Growth and Income	FII IVZ	3,549 30,033	-426 -5,109	-12% -17%	-6% -6%	5% 5%	-6% -11%	-17% -22%	76 46	55 35	78 63	13 -2
Growth and Income	JNS	4,529	-209	-5%	-6%	5%	1%	-10%	12	39	56	-2 -9
Growth and Income	LM	5,521	-802	-15%	-6%	5%	-9%	-20%	51	58	128	63
Growth and Income	TROW	25,612	-1,028	-4%	-6%	5%	2%	-9%	40	8	53	-12
Growth and Income	WDR	5,848	-558	-10%	-6%	5%	-4%	-15%	78	71	75	10
Income Small Company	BLK	13,887	1,225	9%	2%	45%	7%	-36%	35	19	51	4
Small Company Small Company	AB AMG	2,709 5,918	1,082 -9	40% 0%	-6% -6%	11% 11%	46% 6%	29% -11%	84 50	65 35	81 76	-4 -9
Small Company	APAM	1,809	-394	-22%	-6%	11%	-16%	-33%	81	69	96	11
Small Company	BEN	6,857	-926	-14%	-6%	11%	-8%	-25%	71	48	71	-14
Small Company	FII	1,646	-311	-19%	-6%	11%	-13%	-30%	44	46	119	34
Small Company	IVZ	7,586	-1,398	-18%	-6%	11%	-13%	-30%	61	45	79	-6
Small Company	JNS	2,459	716	29%	-6%	11%	35%	18%	7	53	75	-9
Small Company Small Company	LM TROW	13,635 25,940	-3,627 1,688	-27% 7%	-6% -6%	11% 11%	-21% 12%	-38% -5%	68 24	69 23	84 52	-1 -32
Small Company	VRTS	1,271	401	32%	-6%	11%	37%	20%	2	23 19	101	-32 17
Small Company	WDR	2,176	-184	-8%	-6%	11%	-3%	-20%	27	20	107	23
Specialty - Real Estate	AMG	2,142	-1,135	-53%	-11%	5%	-42%	-58%	19	3	80	3
Specialty - Real Estate	CNS	14,587	40	0%	-11%	5%	11%	-5%	13	14	63	-14
Specialty - Real Estate	IVZ	4,639	-742 1.057	-16%	-11%	5%	-5%	-21%	49	55	81	4
Specialty - Real Estate	TROW	9,740 1,474	-1,857	-19% 15%	-11% 11%	5% 5%	-8% 5%	-24% 20%	36 21	34	41	-36
Specialty - Real Estate Specialty - Real Estate	VRTS WDR	1,474 810	-224 -17	-15% -2%	-11% -11%	5% 5%	-5% 9 %	-20% -7%	31 38	33 48	99 98	22 21
World Stock	AMG	1,045	-17	-2%	-7%	-13%	-4%	2%	9	35	59	-18
World Stock	APAM	2,542	433	17%	-7%	-13%	24%	30%	25	9	82	5
World Stock	BEN	49,750	-8,005	-16%	-7%	-13%	-9%	-3%	45	34	82	5
World Stock	EV	6,327	11	0%	-7%	-13%	7%	14%	72	67	81	5
World Stock	FII	1,585	-807 70	-51%	-7% 7%	-13% 12%	-44% 11%	-38% 17%	82 56	14 70	78 00	2
World Stock World Stock	IVZ JNS	2,164 2,754	79 -339	4% -12%	-7% -7%	-13% -13%	11% -5%	17% 1%	56 48	70 63	99 50	23 -27
TOTAL STOCK	J140	2,134	-339	12/0	-1 /0	.1970	-J /U	1 /0	40	03	JU	-Z1

Source: Strategic Insight Simfund. Note: Data is as of 12/31/16.

A deeper dive into fixed income

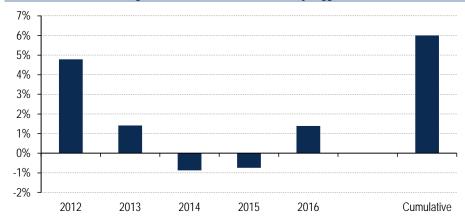
Looking at fixed income, the threat of passive taking share does not appear to be as great, given stronger absolute flows into active funds over the years, albeit passive AUM is still relatively small vs active. A key driver of this in our opinion is that active managers on average have added value in fixed income, which isn't the case on average in equity. That said, we do think new uses of passive fixed income funds is a key driver to the growth which is likely to continue (Chart 31-32).

Chart 31: Absolute Flows into Bond Funds Globally (\$M)



Source: Strategic Insight Simfund and BofA Merrill Lynch Global Research

Chart 32: Active Bond Managers Excess Returns over the Barclays Agg TR Index



Source: Morningstar and BofA Merrill Lynch Global Research

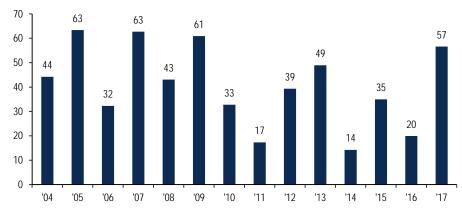
What could shift the trend towards passive?

The primary catalyst needed to revive active management is outperformance, and while cyclically, we expect active to do better, we don't think this will be enough to turn the tide and offset the structural drivers given the vast size of the industry. We think innovation will be a key driver over time, including new products/vehicles (like EV's NextShares) & pricing (like AB's Performance Fee Series). However, given the level of over-capacity in the industry (as well as headwinds), we expect more M&A activity and some funds and firms to shut down, which over time, should help the over capacity issue and improve the performance and growth outlook for survivors. Importantly, we expect active to always have a significant share of the market, as money will flow to areas with market inefficiencies, alpha opportunities, and outperformance.

Improving active performance – the cyclical case for active

The last 7 years (2010-2016) have been challenging for active performance with <50% of managers beating the S&P 500, potentially due to central bank intervention, high correlations among stocks, excess capacity, poor stock selection, new technology, market structure, and shorter investor time horizons, as discussed earlier. In backdrops when market returns are very strong, active returns can be more challenged, so over the next few years, with lower expected market returns, less central bank intervention, lower correlations among stocks, and higher passive share, the backdrop for active managers could improve. While it's early, year-to-date performance has been positive and the strongest since 2009 (Chart 33).

Chart 33: Percent of Funds beating the S&P 500



Source: BofA US Equity & US Quant Strategy and Lipper. Note '17 is through 4/30/17.

Product and pricing innovation

We think innovation will be a key driver over time for areas of active growth to improve, including new products/vehicles (like <u>EV's NextShares</u>) & pricing (like <u>AB's Performance Fee Series</u>). While these products are very new and have pros and cons, we expect more innovation over the next few years to be a driver of active flows.

EV's NextShares, is an actively managed non-transparent ETF. This vehicle takes an actively managed strategy and wraps it in a more cost and tax efficient structure which brings total expense ratios down and performance after fees up which could be a more viable option for distributors choosing between active and passive. Additionally, other firms have registration forms with the SEC seeking similar non transparent ETF structures, notably Precidian (LM owns 20% stake), which to many in the industry is viewed as an easier adoptable structure.

AB's Performance Fee Series, was recently approved on 6 funds. These new funds charge a base fee of 10 to 20 bps (lower for U.S. equity and higher for international and fixed income), and a performance/total fee that ranges between 50-85 bps if the fund outperforms the benchmark over the first hurdle (varies by fund, but 140 bps net for U.S. equity) and between 80-155 bps if the fund outperforms the benchmark over the second hurdle (280 bps net for U.S. equity), then the fee is capped at this level to deter excess risk taking. The performance period is annual, with the base fee being charged during the year, while the performance fee is only charged at year end.

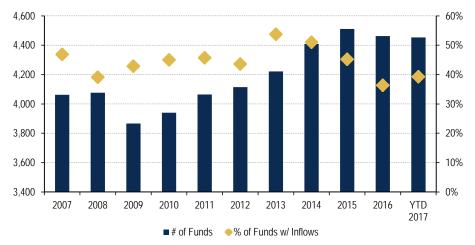
In addition to these innovative products, more common yet differentiated products / vehicles seeing active inflows include SMAs (separately managed accounts) and model based portfolios (which provide more flexibility for the end client), non-U.S. vehicles (UCITS – Undertakings for Collective Investment in Transferable Securities, SICAV – Societe d'Investissement A Capital Variable, and OEIC – Open-Ended Investment Company), and strategies that are difficult to mimic by passive (concentrated, multiasset, alternatives, etc.).

Increased M&A for the industry

Given the headwinds the industry is facing (active to passive, fee pressure, fewer funds seeing inflows, new regulations, etc.), the number of asset manager firms is on the decline, we have seen some consolidation, and we expect to see more in the years ahead. In addition, we could potentially see some asset management firms shut down, become part of larger entities, and/or go private given some of the public challenges.

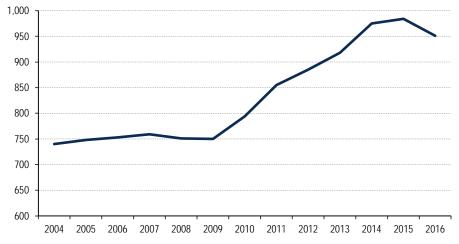
On the M&A front, we expect to see two primary types of M&A – defensive deals by firms that lack scale but are trying to become scaled (typically not great for the stocks) and offensive deals by firms that already have scale and distribution but are looking for new product offerings (these are typically positive but relatively small). Depending on the pressures in the industry, larger scale M&A is possible, but we don't expect this in the near term (Chart 34-36).

Chart 34: Active Equity Funds and Flows



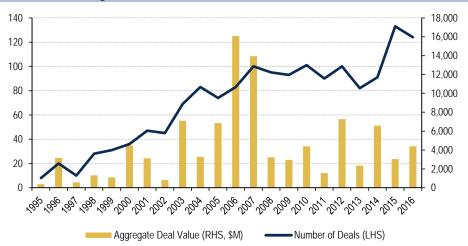
Source: Strategic Insight Simfund. Note: YTD is through March.

Chart 35: Number of Retail Asset Managers in the US



Source: Strategic Insight Simfund and BofA Merrill Lynch Global Research

Chart 36: Asset Manager M&A



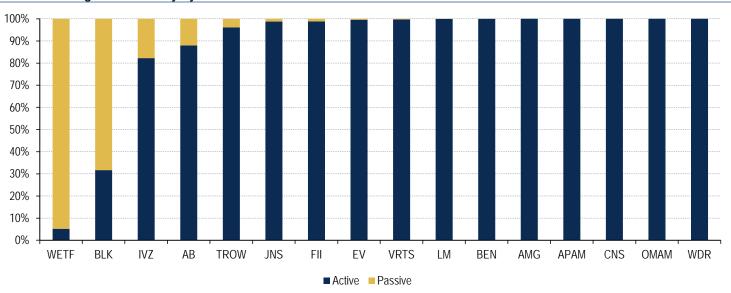
Source: SNL and BofA Merrill Lynch Global Research

Sector and stock outlook – AMG & BLK top picks

The outlook for the asset management industry is generally challenging, particularly for those asset managers with non-differentiated products and challenged investment performance. In this area, we expect more passive competition, more consolidation, and some funds and firms to shut down over time. However, for firms that have strong investment performance, differentiated products, and/or are open to innovation, we still see opportunities for growth.

In terms of the stocks, while the industry challenges drive us to have most of our Underperform ratings in the sector, we do see some opportunities. Those firms that have the most exposure to passive could do well as the structural drivers continue to aid flows, though fee pressure is a concern. The firms most exposed to this trend include WETF, BLK, and IVZ. We prefer BLK (as well as IVZ), given robust organic growth, a better valuation vs. the recent past, and importantly an improving fee rate and margin outlook vs. the recent past (Chart 37).

Chart 37: Total Long Term AUM Mix by Style



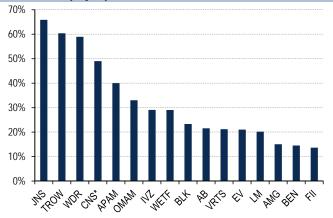
Source: Strategic Insight Simfund, Company Reports, and BofA Merrill Lynch Global Research

However, on the active front, we favor firms that have an AUM mix that is less exposed to the most competitive passive areas (U.S. equities), as well as strong investment

performance. In addition, we also like firms that can take advantage of industry consolidation and that trade at an attractive valuation. Given this, our top pick in the sector is AMG, with an AUM mix less exposed to passive pressures (70% Alternative & International), its acquisitive model/strategy will benefit from consolidation, & it trades at an attractive discounted valuation.

We also see upside in BEN given improving flows/performance, low U.S. equity exposure, margin upside, and cash/tax benefits. While we remain Neutral on TROW given elevated U.S. equity exposure and costs/investments, we expect the firm to be a leading survivor in active management over the longer term given its impressive performance track record, which will matter more than ever (Chart 38 & Table 6).

Chart 38: US Equity Exposure as a % of Total AUM



Source: Company Reports, Morningstar, and BofA Merrill Lynch Global Research. Note: Data as of 12/31/2016. CNS' AUM is predominantly real estate. For firms that do not disclose US equity AUM regularly, we estimate their exposure by using their reported equity mix and their respective US equity fund mix.

Table 6: Morningstar Percentile Rankings (Active Equity)

	Long Term Avg	3yr	5yr	10yr
AB	46	41	46	51
AMG	27	36	33	12
APAM	43	59	46	24
BLK	40	36	52	31
CNS	19	16	17	23
EV	45	45	43	47
FII	48	39	46	59
BEN	36	48	27	32
IVZ	36	39	37	32
JNS	33	27	37	34
LM	49	58	48	41
TROW	18	20	18	15
VRTS	32	32	42	22
WDR	54	67	59	37

Source: Strategic Insight Simfund. Note: Long Term Average = the average of 3/5/10yr rank. Data is as of 3/31/17.

Price objective basis & risk

Affiliated Mgrs. (AMG; B-1-7; \$154.55)

Our \$195 price objective is based on a target P/E of 11x our 2018E, a discount to peers to reflect the use of economic earnings instead of GAAP and a more leveraged balance sheet, despite above-average organic growth expectations. Downside risks to our PO are market depreciation, lower performance fees, greater leverage and difficulty completing acquisitions in volatile markets. Upside risks are equity appreciation, continued strong net inflows and further acquisitions.

BlackRock, Inc. (BLK; B-1-7; \$391.30)

Our \$430 price objective is based on a target P/E multiple of 17x our 2018E, at a premium to our target for the sector, given a higher growth rate with its ETF exposure and diversification. Downside risks to our price objective are market/AUM declines and operational issues or tracking errors within ETFs, which could stymie the growth of iShares. Regulatory risks are possible capital requirements for money market providers or BLK's designation as a SIFI.

Analyst Certification

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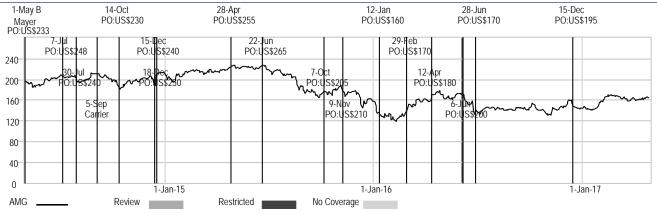
US - Brokers, Asset Managers, & Exchanges Coverage Cluster

		BofA Merrill Lynch		
vestment rating	Company	ticker	Bloomberg symbol	Analyst
BUY				
	Affiliated Mgrs.	AMG	AMG US	Michael Carrier, CFA
	AllianceBernstein	AB	AB US	Michael Carrier, CFA
	Apollo Global Management	APO	APO US	Michael Carrier, CFA
	Ares Management	ARES	ARES US	Michael Carrier, CFA
	BlackRock, Inc.	BLK	BLK US	Michael Carrier, CFA
	CBOE Holdings	CBOE	CBOE US	Michael Carrier, CFA
	Charles Schwab Corp.	SCHW	SCHW US	Michael Carrier, CFA
	CME Group	CME	CME US	Michael Carrier, CFA
	Evercore Group	EVR	EVR US	Michael Needham, CFA
	Franklin Resources	BEN	BEN US	Michael Carrier, CFA
	Goldman Sachs	GS	GS US	Michael Carrier, CFA
	IntercontinentalExchange	ICE	ICE US	Michael Carrier, CFA
	Invesco	IVZ	IVZ US	Michael Carrier, CFA
	KKR & Co.	KKR	KKR US	Michael Carrier, CFA
	Moelis	MC	MC US	Michael Needham, CFA
	Morgan Stanley	MS	MS US	Michael Carrier, CFA
	Old Mutual Asset Management	OMAM	OMAM US	Michael Carrier, CFA
	PJT Partners	PJT	PJT US	Michael Needham, CFA
	TD Ameritrade	AMTD	AMTD US	Michael Carrier, CFA
	The Blackstone Group	BX	BX US	Michael Carrier, CFA
EUTRAL	•			
	E*TRADE Financial	ETFC	ETFC US	Michael Carrier, CFA
	Eaton Vance	EV	EV US	Michael Carrier, CFA
	Houlihan Lokey	HLI	HLIUS	Michael Needham, CFA
	Janus Capital	JNS	JNS US	Michael Carrier, CFA
	Lazard	LAZ	LAZ US	Michael Needham, CFA
	Nasdaq Inc	NDAQ	NDAQ US	Michael Carrier, CFA
	Oaktree Capital Group	OAK	OAK US	Michael Carrier, CFA
	Och-Ziff	OZM	OZM US	Michael Carrier, CFA
	T. Rowe Price	TROW	TROW US	Michael Carrier, CFA
	The Carlyle Group	CG	CG US	Michael Carrier, CFA
INDERPERFORM	· · · , · · · · · · · · · · · · · · · · · · ·			,
	Artisan Partners	APAM	APAM US	Michael Carrier, CFA
	Cohen & Steers	CNS	CNS US	Michael Carrier, CFA
	Federated Inv.	FII	FILUS	Michael Carrier, CFA
	Greenhill & Co.	GHL	GHL US	Michael Needham, CFA
	Legg Mason	LM	LM US	Michael Carrier, CFA
	Virtus Investment Partners	VRTS	VRTS US	Michael Carrier, CFA
	Waddell & Reed	WDR	WDR US	Michael Carrier, CFA
	WisdomTree	WETF	WETF US	Michael Carrier, CFA

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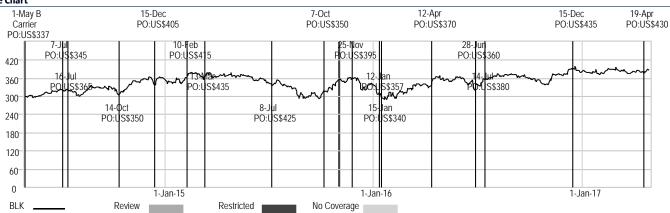
AMG Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of April 30, 2017 or such later date as indicated.

BLK Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of April 30, 2017 or such later date as indicated.

Equity Investment Rating Distribution: Financial Services Group (as of 31 Mar 2017)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	118	47.77%	Buy	90	76.27%
Hold	61	24.70%	Hold	40	65.57%
Sell	68	27.53%	Sell	35	51.47%

Equity Investment Rating Distribution: Global Group (as of 31 Mar 2017)

1 7		· /			
Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	1578	51.33%	Buy	979	62.04%
Hold	690	22.45%	Hold	434	62.90%
Sell	806	26.22%	Sell	381	47.27%

^{*} Issuers that were investment banking clients of BofA Merrill Lynch or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster*
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{*} Ratings dispersions may vary from time to time where BofA Merrill Lynch Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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