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2018 SUMMER ESSAY SERIES PART I THE FUTURE OF THE INVESTMENT INDUSTRY

Institutional Equities in Five Years

In our first full summer in business in 2007, we decided that our clients might benefit from an attempt to discern signal from noise. We published a series of five essays entitled, Five Themes for the Next Five Years, which attempted to break from the daily grind of government statistics and conventional wisdom to put forth our take on the major drivers of securities prices over the longer-term. We still get regular requests for the bound edition, and its popularity has led us to continue the practice of publishing long-form thought pieces every summer since. Our 2015 and 2016 editions addressed how an unusual business cycle, characterized by an unprecedented degree of central bank activism, has been a major contributor to the difficulties the money management business has endured over much of the last decade. Our 2017 effort, Peak Passive, examined the growth of indexation and the future for active managers. It still seems rather odd that both the sell side and buy side of the business feel as if they are facing existential threats as the broad indices are at or near all-time highs. The introduction of a zero-fee index fund this week would seem to render some urgency to the topic.

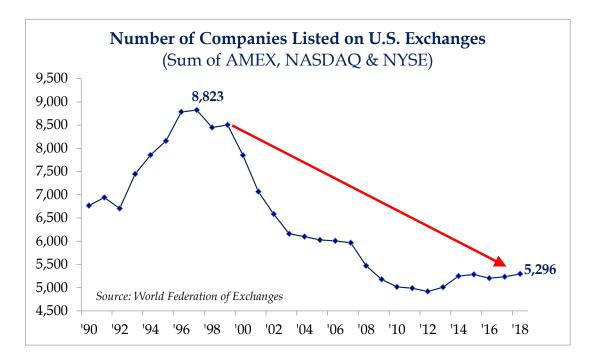
In the weeks ahead, the entire Strategas analyst team will explore longer-term themes from a variety of disciplines. In today's essay, Jason Trennert and Chris Verrone will discuss the challenges facing the institutional equity business from the standpoint of both the investor and the vast array of research analysts, capital markets professionals, salesmen, and sales traders assembled to help them. We will explore the trend toward passive management, the decline in equity trading volumes, the de-equitization of the public markets, the regulatorally mandated unbundling of execution from research, and their collective impact on market structure. Framed in this way, you may be tempted to print this report out, burn it, and bury its ashes under your front porch. Still, we believe that there are reasons to be optimistic and that there are strategies that can developed to adapt to the changes in the business. At a minimum, we hope this series will help to inform our readers about tectonic shifts taking place in our industry.

The De-Equitization of the Public Markets

"Who buys individual stocks? It has become an old-time hobby for the modestly wealthy and eccentric, like model railroading."

Matt Levine. Family Offices, Dentists and Quants. Bloomberg, March 9, 2017.

With the advent of Silicon Valley unicorns and the mushrooming of the private equity industry, it seems positively '90s for the modern entrepreneur to dream about taking his company public. As the chart below indicates, the number of publicly traded companies has fallen by more than 40% in the last 20 years. There are a variety of reasons for the decline including but not limited to the dotcom bust, the increased costs of being a public company that followed Sarbanes-Oxley legislation, and, finally, and perhaps most importantly, the growth of private equity as an asset class. Add to this mix the increased scrutiny that accompanies the social media era and it is little wonder that founders seek to avoid going public today. The decline in the number of publicly traded stocks and an increasing reliance upon the private equity industry for capital formation presents an existential question for the brokerage and asset management industries, to say nothing of the future of exchanges. New NYSE President, Stacey Cunningham, will have to wrestle mightily with these questions in the years to come.



Large banks and brokerage firms can insulate themselves from the ravages of this change to their public markets divisions by working with financial sponsors in their capital markets and investment banking divisions. Large buy side shops are not as lucky,

especially those who have specialized in small and mid-cap investing. The significant decline in the IPO business has meant that many '40 Act Funds have had to take the unusual step of seeking out private investments into their portfolios. While the rules surrounding these investments make it unlikely that they could cause a systemic risk in times of market stress, it seems safe to assume that the average mutual fund investor (or perhaps the manager herself) doesn't fully understand the liquidity impact of such investments.

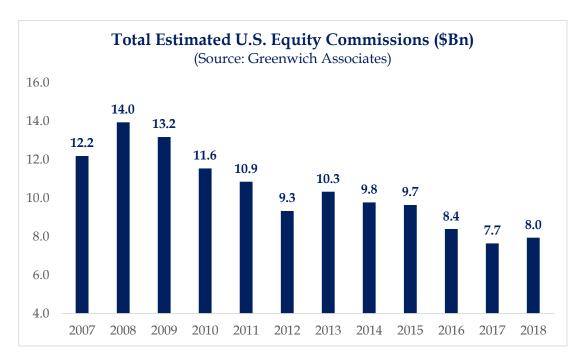
If there is any good news in all of this it is that a scarcity of public stocks has no doubt contributed in some way to the gains in the broader indices and beta-generated fees. We believe this is unlikely to be a source of much comfort as interest rates rise and earnings multiples ultimately decline. Of course, large fiduciaries – public pension plans, endowments, and foundations – armed with consultants and access to nonpublic markets may be tempted to say so what? But from the standpoint of the average guy who is unable to benefit from access to opaque markets, there must be some sense in which it feels somewhat unfair and un-American. Perhaps the most compelling reason individual investors have been slow to embrace a bull market that started more than nine years ago has been that many of the most "exciting" and "new era" companies are not public. There is little doubt that there would be greater sponsorship, and more greatly distributed benefits of the current bull market, had the likes of Uber, Airbnb, and Pinterest gone public. At this stage of the financial market cycle, there is a risk that the unicorns offer IPOs at precisely the wrong time for the individual investor. This would further damage confidence of an investing public that has suffered two 50% declines in stocks since 2000.

To be frank, it is difficult to see meaningful revival of the public markets without affirmative actions on the part of regulators and policymakers to provide incentives for companies to rely on them for capital formation. The good news is that new SEC Chairman Jay Clayton has made accessibility to the public markets a significant part of his agenda. He will need, of course, to strike a delicate balance between appropriate investor protections on the one hand and a greater democratization of the capital markets on the other. If there is any Administration that might use some of its political capital behind easing the costs and rules of being a public company, it would likely be this one.

The Decline in Equity Commissions

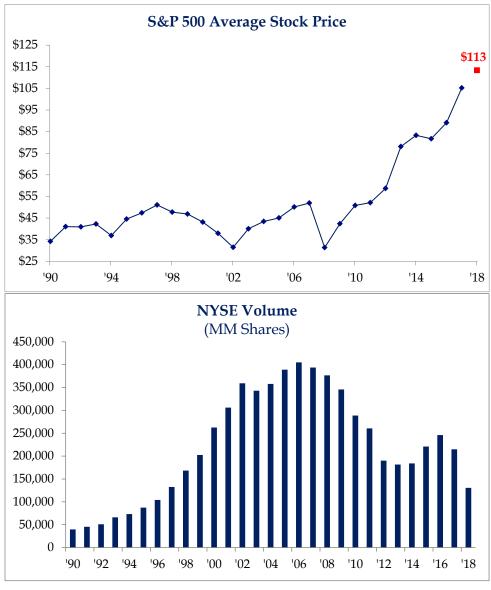
Based on recent data from Greenwich Associates, the overall level of equity commissions paid to the Street has fallen from \$14bn in 2008 to \$8bn today. At a recent

management meeting, someone looked at the chart below and asked, common-sensically, "are those commissions just gone or is there any hope of that trend turning around?" The right answer is, naturally, that no one really knows. There is little question that the cost of executing equity trades has moved inexorably toward zero. Head of Strategas' trading, John Ghize, has told us that a buy side shop seeking barebones services could execute trades for as little as 30 mils – or 30% of a penny. With rebates, the buy side could actually get paid for their order flow rendering the cost of execution *negative*. Compounding the problem has been the Fed's experiment with financial repression and its concomitant impact on volatility, a relatively slow IPO market, MIFID II (discussed in next section), greater allocation to passive investment strategies, and the absence of stock splits. Taken together, all have created a perfect storm of sorts that has put enormous pressure on the commissions paid to the Street.



Even the pessimist might find it risky to believe can things can get much worse. First, it appears that the Federal Reserve is bringing to an end its grand experiment in financial repression, and with it, an unusually long period of low volatility. Higher and more variable interest rates are likely to result in greater performance dispersion in financial assets in general and risk assets in particular. This should lead to an inevitable increase in the volume of transactions, and, perhaps, the cost brokers might be able to charge for execution in difficult markets. Greater dispersion of returns will also, we believe, expose the potential risks of an exposure to passive investing. The efforts of policymakers to revive the public markets as discussed in the last section will also help. (A hot IPO market could help even more.)

Perhaps one of the biggest, yet little talked about changes in the markets that has led to a decline in the equity commissions paid to the Street has been the absence of stock splits. This may seem like a trifle until one considers that the change in the average price of stock has increased from roughly \$40 to \$110. This change alone would result in a decline in volumes of 64%. While this appears to be of absolutely no concern whatsoever to the institutional investor, any financial advisor would tell you that it makes a lot of difference to the little old lady in Sandusky, Ohio. For the average investor, a \$20 stock is simply more attractive than one trading at \$1,000. Strangely, corporations themselves seem to have little interest in attracting individual investors to buy their shares. Institutional investors themselves could benefit by possessing a greater currency with which to purchase research and other services. This may seem like a Hail Mary, but in the trench warfare of capitalism there are few atheists in foxholes. As brokers who get paid on a cents-per-share basis we'll take it.



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MiFID II & Declining Sell-Side Coverage

Requiring seven years to draft and weighing in (currently) at 1.4 million paragraphs of rules and regulations, MiFID II, is a revamped version of the Markets in Financial Instruments Directive from the European Union. The regulatory scheme covers everything from maintaining taped conversations of securities orders to regulatory filings for transactions that can stretch to more than 65 separate fields. While this is largely a non-issue for smaller investment management firms in the U.S., large mutual funds with international operations have had to spend untold sums to comply with the law. Consider yourself lucky if you ply your trade in the investment business and you've never heard of it.

Among the most controversial aspects of this new regulatory scheme is the requirement for investment managers to unbundle the costs of research from trading and "best execution." We must stipulate at the outset that we are not writing about this subject as a disinterested party. We would further admit that if one were to think about creating a capital markets system from scratch that using client commissions to pay for investment research might not be the most obvious way to allocate scarce resources. Still, we have yet to hear of a better alternative and we are convinced that the changes to the system proposed by MiFID II will aid neither the end consumer of investment management nor the formation of capital. Small issuers will find it difficult to find investment banks to cover them and, as an analyst from Cowen noted last year, could do serious damage to America's IPO market.

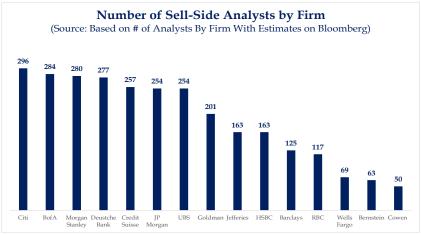
No one could dispute the fact that, in the old days, there were some unscrupulous investment managers (and brokers who serviced them) who would conspire to use client commissions to pay for business expenses, like office space and lunch, that should have been borne by the firm's partners themselves. Good research, on the other hand, is an integral part of the investment process, theoretically the life's blood of prudent investment decisions and risk-taking. Our travels suggest that the biggest proponents of unbundling fall into two categories: 1) those who mistrust the financial services industry so much that they wish to impose a solution to something very few people actually see as a problem; and 2) large buy and sell side financial services companies who see this as an opportunity to put smaller competitors out of business.

¹ What is Mifid II and how will it affect EU's financial industry? *The Financial Times*, September 15, 2017.

But who cares, really, about brokers and their alleged cupidity? What of the investment management industry itself? Here again, a number of high profile buy side shops have taken great pride in beating their breasts in generously offering to pay for their research costs out of their own P&L. Of course, the companies so generously "offering" to do this on behalf of the client are large and well capitalized enough to afford it. Smaller investment managers would find themselves unable to bear the costs or their ability to do the hard business of investment research economically would be so impaired that many would either be forced to sell their assets to larger players or cease operations altogether. As with most sweeping regulatory reforms, large, incumbent players have the financial resources and legal influence to find themselves winners. As a small research boutique, we have had to spend more money, time, and effort trying to price the marginal cost of a service designed to help other people think with little success.

What makes this all the more ironic, is that it is currently illegal for American broker-dealers to unbundle research from trading. Getting an earful from the financial services industry, the SEC issued what is called Non-Action Exemptive Relief from the rule last fall. This means that U.S. brokers with operations in Europe can be paid for research in a bundled capacity in the lower 48 and still comply with MiFID on the Continent. This has provided some comfort to American brokers but one wonders whether, once a precedent has been set, the SEC's decision will provide any relief at all to small money managers and brokers.

While less sell-side coverage could create more inefficient markets that could be exploited by talented managers, the process of going from a company that has sell-side sponsorship to one without it could be painful for both issuer, investor, and research provider alike. We have found faint signals that some large American money managers are starting to think more broadly about the costs of this new rule might be. So far, hedge fund unburdened by the regulation are garnering the greatest access to sell side resources.



Millennials & Investing

Another challenge facing our industry is data suggesting that millennials appear to have little interest in investing. According to a Gallup poll, only 38% of adults under 35 had investments in public companies. This is down sharply from the 52% of young people who were invested before the global financial crisis in 2008. The decline in stock ownership occurred regardless of gender, household income, or education. We suspect this is simply a function of the fact that household formation is occurring later and later in one's life. Young adults will, in time, see the need to invest for the long-term especially as they get married and start families. What's more, debates about the sustainability of programs like Social Security and Medicare are likely to grow in the coming years, further underscoring the importance of investing.

History would suggest that it is a rare and fleeting occasion when human beings, especially Americans, are apathetic about the potential of getting rich. Despite a bull market that started more than nine years ago, an examination of fund flows suggests that the individual investor in general, and the young investor in particular, have largely sat out one of the greatest bull markets in history. In one regard, this is great news for those who remain bullish – there is virtually no sense of the euphoria that normally accompanies the end of great bull markets, the much vaunted, fun, and sometimes frustrating "blow-off

top."

% of Americans 18-34 Years Old Who Own Stocks			
	2001-2007	2008-2018	Change
All Americans	52%	38%	-14 %
Annual household income			
Less than \$30,000	25%	18%	-7%
\$30,000-\$74,999	62%	41%	-21%
\$75,000 and above	78%	66%	-12%
Gender			
Male	55%	41%	-14%
Female	49%	36%	-13%
Education			
No college	36%	22%	<i>-</i> 14%
Some college	52%	37%	<i>-</i> 15%
College graduate	74%	64%	-10%
Postgraduate work	80%	69%	-11%

Source: Gallup

Investing Without People

In a recent memo to his clients, *Investing Without People*, Howard Marks, Co-Chairman of Oaktree Capital, explored three ways in which the role of people is diminishing in modern markets – index / passive investing, quantitative and algorithmic investing, and machine learning. We were fortunate to have Mr. Marks as the keynote speaker at our 2014 annual Macro Conference in New York City and have always respected his often differentiated view of the industry. On passive indexing, he concludes,

Like the tech stocks in 2000, this seeming perpetual-motion machine is unlikely to work forever. If funds ever flow out of equities and thus ETFs, what has been disproportionately bought will have to be disproportionately sold. It's not clear where index funds and ETFs will find buyers for their over-weighted, highly appreciated holdings if they have to sell in a crunch.

While the ETF business is no longer in its infancy, the proliferation of product over the last decade, as Mr. Marks writes, does coincide with a roughly 9 year bull market in equities, and "thus we haven't had a meaningful chance to see how they function on the downside – we won't know until it happens, but it's not hard to imagine the popularity that fueled the growth of ETFs in good times working to their disadvantage in bad times."

As was evidenced during the "Flash Crash" in 2010, again around the China currency devaluation in August of 2015, and perhaps most recently with Facebook's -25% daily decline in July of 2018, liquidity can disappear quickly in periods of acute stress, particularly in an ETF and passive-driven environment. As we observed in both 2010 and 2015, the "price received may represent a discount from the value of the underlying asset, or it may be less than it would have been if the market were functioning on an even keel." As a client recently remarked to us, "there is a 'flash crash' in an individual issue almost daily." We don't disagree.

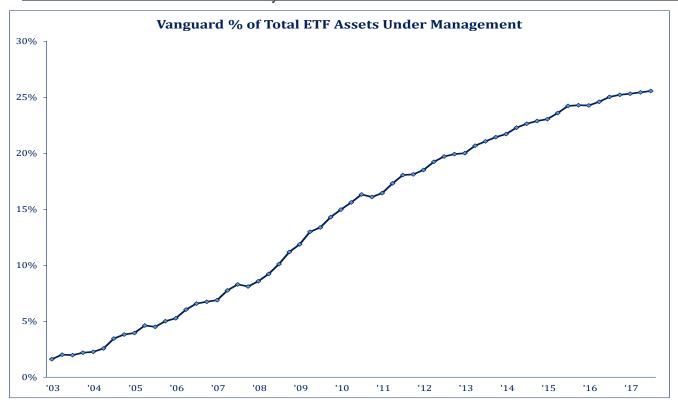
More so than just the growth of the ETF business and passive's recent dominance, a move towards quantitative and machine learning is also changing the investment landscape. While the adoption of factor driven investing has grown meaningfully over recent years, less certain is how this approach will fare in a more dynamic business cycle. As a mentor of ours frequently reminds us, "beware of recency bias." That may be even more important today, as a nearly 10-year central bank driven environment gives way to

greater variability in the cost of capital and inflation. Are the quants optimized for the last cycle? Or are they agile enough to adapt? Time will tell.

Strategas' Chief Economist, Don Rissmiller, has also explored this with respect to the shape of the yield curve and the potential impacts an inverted curve will have in a computer-driven market. With recent data suggesting that 60% to 90% of daily equity trading is machine or algorithmic, and a large part of the value in these techniques is their ability to make decisions quickly on established correlations (i.e., microseconds), the computers likely won't care to distinguish if any future yield inversion is fundamentally driven or technically driven.

In evaluating the role of machine learning and its future role in markets, Mr. Marks ends with an important thought and invokes one of the seminal concepts in investing. He writes,

Machine learning is still in its infancy. It may be that AI and machine learning will someday permit computers to act as full participants in the markets, analyzing and reacting in real time to vast amounts of data with a level of judgement and insight equal to or better than many investors. But I doubt it will be anytime soon, and Soros's Theory of Reflexivity reminds us that all those computers are likely to affect the market environment in ways that make it harder for them to achieve success.



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Changes to Market Structure

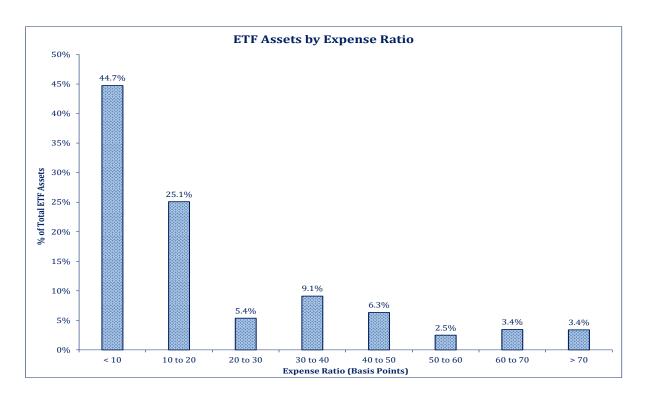
Common sense would suggest that the exponential growth in the ETF business and meaningful changes to market structure over the last decade have emerged as major headwinds for active managers. ETF assets have grown from just about \$100 billion in the early 1990s to nearly \$4 trillion today with, it can be argued, scant regulatory oversight. Vanguard now owns 5% or more of 475 U.S. traded securities! The trend has also become more pronounced globally, with the Bank of Japan owning about three-fourths of the nations' ETF market and Japan's Government Pension Investment Fund owning 5% or more in over 800+ Japanese equities.

At least in some ways, the source for the structural discontent discouraging retail involvement and frustrating institutional investors alike is the massive change to market structure over the last 15 years (which has only been exacerbated in the aftermath of the financial crisis). For starters, the proliferation of the ETF business has likely increased the correlation among stocks over the last decade – particularly in periods of market stress. The good news is that there is finally some evidence this is *starting* to change, as net ETF launches have slowed some in 2018 and dispersion among stocks has increased some. But more broadly, the advent of the ETF business has likely made the plight of the active manager more difficult. In many respects, it is possible that the democratization of the business set many of these trends in motion with decimalization starting it all in 2001. In the years following, the specialist system and floor brokers lost power and influence – likely another hit to market liquidity and occasionally responsible for some rather uncomfortable market gyrations. The implementation of the Dodd/Frank legislation following the financial crisis also eliminated the prop desks at the major banks which were also important sources of liquidity and often buyers of last resort.

The dominance of the Technology sector and FANG stocks over the last several years, along with historically low market volatility this cycle, has intensified the debate on the influence of passive strategies on index performance. While large-cap growth stocks have certainly been an important contributor to overall returns, the "average" constituent has actually still managed to keep pace with the cap-weighted S&P this year. The market likely isn't as "narrow" as currently advertised – examining the distribution of returns by market-cap for the Russell 1000 this year finds that quintiles 2, 3, and 4 have actually outperformed the largest stocks (quintile 1). As a recent white paper from Cliff Asness at AQR explored, there is actually nothing "historically exceptional" about the recent

performance of the FANG stocks. While low volatility has not been particularly kind to the brokerage business, it is also not unusual in the context of a secular bull market.

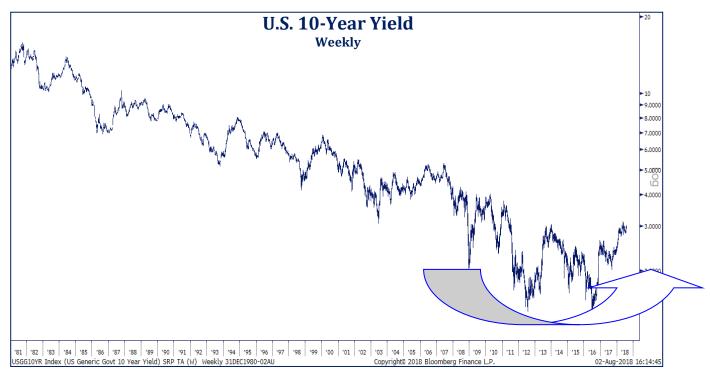
More worrying, however, is how the many passive strategies and ETF vehicles will hold up in the next period of pronounced market or credit stress, particularly with 86% of ETF assets in market-cap weighted products. We have seen a few previews of liquidity dislocations over recent years, but thus far, the explosion in the influence of indexes has largely escaped a proper bear market or financial crisis. The one thing we know for sure is that indexed investors will be subject to the entirety of the next market decline.

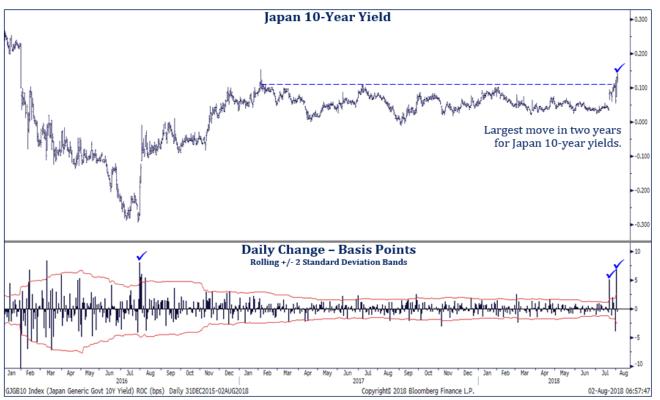


Interest Rates in Transition

It's almost hard to believe that just a few years ago U.S. 10-year yields were down to 1.3% and nearly \$12 trillion of global debt was trading in negative territory. We of course don't know for sure, but we would surmise that the Bank of Japan's failed experiment with negative interest rate policy may very well wind up marking the high-water mark in the great central bank cycle of the last decade. Negative rates created perverse incentives, leading some Japanese savers to buy safes and hoard physical bank notes. Since the BoJ has moved away from NIRP, global yields have started to rise and equity leadership has started to evolve. Notably, the correlations among equities have been in steady decline for the better part of the last 18 months – increased dispersion is evident at both the sector

and stock level. The secular turn in rates may prove to be glacial absent any immediate changes to the inflation landscape, but as we saw in the 1950s, even a modest change in the yield environment is often associated with a change in market leadership.





A Reversal in the Inexorable Move toward Passive Investing

It is incumbent upon the dispassionate financial analyst to rejoice not in a rationalization of his chosen profession but in the truth. There is no question that the democratization and widespread diffusion of information and the sheer size of the money management industry has made it more difficult to add alpha. But it should also be stated that while indexation may look particularly attractive in a period of financial repression, when near-zero percent interest rates dampen volatility and increase correlations, it is unlikely to appear as prudent in a period in which the invisible hand of free markets is able to assert itself. In short, betting on indexed funds to consistently outperform active money management requires, in part, an expectation that quantitative easing will never end. Such a conclusion would also suggest that the free enterprise system is superfluous. Despite what can sometimes appear to be a disposition suggesting otherwise, central bankers are not omniscient gods. It is in the turbulent times that the talented fund manager can most easily add alpha and prove his or her worth.

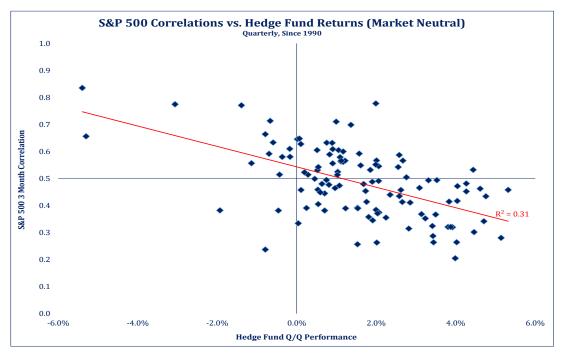
By our lights, the case for active over passive management rests on four basic pillars:

1) the size of indexed assets may sow the seeds of its own lackluster performance;

2) higher interest rates and the end of financial repression will widen the differences between winners and losers;

3) more complex financial instruments and systems are likely to make markets less efficient than the academics would have you believe; and

4) the prospects for peak profit margins and multiples in the next few years should benefit the skilled stock picker.



One of the central ironies of passive investing is that the public's desire to index increases in periods of maximum risk and decreases in periods of maximum opportunity. In the first six months of the tech-crazed year 1999, for example, nearly 70% of the money invested was placed in indexed funds. Although it may seem to be a minor point, active managers may also have an edge over their passive competition simply because of the way in which the indices themselves are constructed. As Professor Jeremy Siegel of the Wharton School has pointed out, this hyper-growth in passive investing often forces companies to enter benchmarks at inflated prices, lowering future potential returns. As an example, Yahoo! went up 64% between the day its entry into the S&P was announced and the day it actually went into the Index. The S&P itself found that shares entering the 500 rose 8.5% on average between the time their admission into the S&P was announced and the effective date of their entry.

In the scheme of things, the movement toward passive management may appear to be no great loss unless one looks, of course, at the valuations of so many of the stocks that populate the most popular indices. The "costs" of passive investing to the investing public will be largely invisible until the market starts to falter at which time they will become obvious. Remarkably, one-third of the stocks in the Russell 2000 have not earned money in the past 12 months, a level normally only seen in recessions. QE forever has, in this way, short-circuited the business cycle by keeping weaker companies, plied with cheap access to debt financing, in business. The percentage of non-earners in the Index has been stubbornly above 30% since 2013. Is it any wonder that the correlations of returns have been so high and the dispersions of those returns so low?

Despite the best efforts of regulators to increase the "transparency" of the financial markets, there is always a certain sense in which they will also be fighting the last war. It is unlikely the CDO squared will provide the basis for the next black swan event, but new candidates appear to be invented all the time. The rapid growth of high frequency trading, the asymptotic rise in the number of ETFs, record corporate debt issuance, and the fact that there are now over 3,800 private equity funds managing over \$4.2 trillion (unlevered) all might come to mind. A big part of the argument against active management is the growth in the number of financial professionals and the sheer size of the industry itself. It is much more difficult for one professional to beat another professional, the thinking goes, rather than the comparatively uninformed individual, a circumstance that was the hallmark of the money management business in its early stages. Of course, this largely ignores the fact that professionals, academics, "quants," and other expensive experts seem to come close to torching the entire financial system with

increasing and frightening regularity. Globalization and the continued proliferation of complex financial instruments and systems suggest that the tails in the financial markets will remain as fat as they have always been.

Active managers should benefit from the fact that both price/earnings multiples and profit margins are destined to peak in the next several years. While the '80s and '90s were salad days for Wall Street, a drop in the Fed Funds rate from 19% in 1981 to 1% in 2003 probably had a lot more to do with the wealth created in our industry than any improvement in the intelligence, talent, or diligence of its practitioners. How often can you expect earnings multiples to quadruple in the space of two decades? Is it realistic to expect such a wonderful tailwind when short term interest rates are quite literally starting from zero? And while a case can be made that profit margins may be less mean reverting than they have in the past due to the growth of asset-light, IP-heavy sectors like Technology, Healthcare, and Financials, the yawning gap between corporate profits and wages as a percentage of GDP will not, as we all know, be sustainable. If we are indeed in a "second machine age," the potential disruption of traditional American industries will occur faster than the index's ability to capture them. Those companies most able to adapt to these changes are likely to gain the most market share.

This isn't to say that democratization of information and the explosion in the size of the money management industry hasn't rendered active management far more difficult. Getting access to even delayed-quotes and a news service was exceptionally expensive and rare for junior employees and it was in this environment in which Peter Lynch and Julian Robertson could gain an edge through company visits, in-person channel checks, trade magazines, and old-fashioned hard work. Today, of course, the professional and amateur investor alike have access to more information than they could possibly digest in a lifetime. As a result, the greatest investment mistakes today are often made when one confuses information with knowledge or insight. There is a tendency to know everything about a stock aside from the one thing that turns out to be important. How robots will avoid this same pitfall is a mystery to us. Some CEOs of money management firms, computer programmers, and the financial press seem all too willing to believe that human beings are obsolete and that machines created by human hands will prevail. Such thinking ignores the fact that competitive advantages in technology are worn away quickly and that it is difficult to achieve a short-term edge in a long duration asset like common stocks.

Main Takeaways

- Commissions should come back as passive investing loses its appeal
- MiFID II will likely stay in the province of the largest firms in the U.S.
- Fed's move to normalize rates will render active investing more attractive
- Privatization will be a harder trend to fight without regulatory inducements for companies to go public
- M&A activity within the industry should intensify to counter these trends
- The proliferation of ETFs may hasten the speed of the next bear market
- While a secular change in interest rates may be glacial, it is often associated with a change in market leadership

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