Executive Summary

The rapid growth in the use of exchange-traded funds (“ETF”) and other passive investment strategies has reached a critical point. As more dollars are allocated on market capitalization alone, without regard for fundamental information, the market is becoming less efficient. Additionally, since many investors are using ETFs and other passive instruments to quickly build or reduce exposure to risk, they have become short-term trading vehicles. The size and volatility of flows into and out of ETFs are now affecting the prices of underlying securities.

In the following white paper, we attempt to describe the effect of this trend on (1) the market, (2) the underlying securities, and (3) active managers like ourselves. Among the white paper’s highlights and critical takeaways:

- **Increasing flows to passive funds makes the market inefficient:** The Efficient Market Theory states that it is impossible to "beat the market" because stock-market efficiency causes existing share prices to always incorporate and reflect all relevant information. The extent the market is efficient depends upon the collective efforts of active investors. However, we contend that passive investors purchase stocks through index funds and ETFs without considering the available information. Thus, as passive funds become a greater proportion of assets invested, market efficiency declines. As each passive fund manager rebalances, they potentially bring wild swings in sector weightings – often skewed by cyclicality in those areas, creating additional market inefficiencies.

- **Passive funds aren’t so passive:** There is a committee, much like an investment committee, that determines which stocks move into and out of the underlying index as frequently as every 90 days. As of April 30, 2017, there are 1,386 equity-based ETFs according to Bloomberg®, most falling into smaller market segments called “Smart-Beta” funds. The majority are not passive, as they focus on a particular industry, sector or theme rather than the broad market with frequent rebalancing. Even the ETFs that could be classified as passive are often being used as active trading vehicles. Whether passive investors realize it or not, may be exposing themselves to market segments and unintended factors.

- **Active managers have a quality bias:** When investors use an active mutual fund or investment manager, they transfer security-selection responsibility to the manager. Of course, given the many ways of defining it, “quality is in the eye of the beholder.” Still, active managers do better in a relative sense in more challenging market environments. Furey Research Partners has shown that most active managers sacrifice a little upside to help protect the downside. However, when investors use an ETF or a passive vehicle, they relinquish that responsibility. Passive funds buy or sell the stocks in the index regardless of each company’s fundamentals.

- **High stock correlations favor passive funds:** When correlations among stocks are high, it is more difficult for active managers to outperform. As inflation and interest rates rise, research has shown that correlations fall and active managers outperform both the indexes and passive funds.

- **Passive funds are indiscriminate buyers and sellers:** As an active manager, when we win a new mandate, we work hard to carefully invest new money in a manner that minimizes the effect on the market and reduces the risk of not being fully invested. It’s a delicate balance. The more money we have to invest, the more attention it demands. However, the same cannot be said for passive funds and ETFs. As money comes in or goes out, it’s invested and/or shares are sold, affecting the underlying stocks. Passive fund managers and Authorized Participants who simply trade the ETF shares and create new ones aren’t being careful. They aren’t trying to minimize the effect of money flows. Instead, their machine gets it done. Share creation happens without regard for the effect on underlying stocks. Market-on-close orders happen regardless of price – they are truly price-takers.

- **Passive fund flows can dramatically affect the market, particularly small-cap stocks:** We conducted research on the effect of flows in the stocks held within the iShares Russell 2000 ETF (“IWM®”) and similar stocks that aren’t in the index. We looked at the three days following the U.S. presidential election, Nov. 9-11, 2016, a period when nearly $5.2 billion in net new money was invested into IWM® alone. During that period, the Russell 2000® was up 7.32%. However, the small-cap companies that weren’t in the index gained only 2.84%, trailing the index constituents by 4.44%.
Passive, Aggressive?
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The rapid growth in the use of exchange-traded funds ("ETFs") and other passive investment strategies has reached a critical point. As more and more dollars are being allocated on market capitalization alone, with no regard for fundamental information, the market is becoming less efficient. Additionally, many investors are using ETFs and other passive instruments to quickly build or reduce exposure to risk – they have become short-term trading vehicles. The size and volatility of flows into and out of ETFs are now impacting the prices of the underlying securities. In this paper, we attempt to describe the impact of this trend on the market itself, the underlying securities and active managers like ourselves.

I was probably six months into my career when I saw one of the stocks in our portfolio unexpectedly jump 5%. I searched for any news stories, headlines, or research that might have caused the move and came up empty-handed. I sat on a trading desk with dozens of portfolio managers, analysts and traders. It was a noisy environment, but effective for quickly communicating. I asked out loud, "Does anyone know why XYZ is up 5%?" My boss responded, "Sure, I know why. There are more buyers than sellers."

Everyone got a good chuckle at my expense. At first, it seemed like a cheeky thing to say to the new guy, but in reality it is a profound simplification of the price discovery mechanism at work. Stocks don’t go up because of good news or because they’re a good value. They go up because someone is buying them and willing to pay up as they buy more shares than are for sale at the current price. At the most basic level, for a stock to go up, someone somewhere has to enter a BUY order. Once we understand that, we can then go about the business of figuring out what makes people buy a stock.

I’ve spent my whole career thinking about what drives an investor to enter that BUY order. If you want to own stocks that go up, you need to own a stock for which there will be more buyers than sellers. What will bring in those buyers (and discourage those sellers from selling)? Good news, and the hope of more good news, a price that is compelling given the company’s prospects, and all the things you think of that go into bottom-up, fundamental investing.

We have a marketplace with countless investors, each interpreting and analyzing all the available data that may be relevant to a company’s prospects, and then buying, selling or abstaining. This is price discovery. It is commonly believed that the collective wisdom of the crowd is at work, leading to an efficient market, one where stock prices fully reflect all available information. If a stock price doesn’t fully reflect all available information, some savvy investors will act quickly to benefit from that inefficiency, and in the process will drive the stock toward a more efficient price.

Inasmuch as we have an efficient market, it depends upon the collective efforts of fundamental investors. Passive investors freeride on the work of active investors.

I think it’s safe to assume that the most efficient market is one in which all investors are using all available information. Passive investors relinquish their input and instead invest in an index, and thus invest in stocks without regard for the available information. In theory, as passive investors become a greater proportion of assets invested, efficiency declines. If all investors ignore all information and participate in the market through a single, arbitrary metric (like market capitalization), then the market will be completely inefficient. The question is: How many active investors does the market need in order to maintain a given level of efficiency? As we go from a market entirely comprised of active investors to one now dominated by passive investing, what has happened to market efficiency? Is the shape of the curve in Figure 1 more like A, B or C? And then, where on the curve are we?

Remember that an efficient market doesn’t imply that securities trade at the right price, but at the price that reflects all the available information. It is not a requirement that every stock trades at its true value at every point in time – there will be errors and deviations. In order for a market to be deemed efficient, the deviations from the true value must vary randomly across all stocks and must not be biased.

There are investors of every flavor – growth, value, core, GARP, activists, technicians, top-down, bottom-up and everything in between. A market is healthiest when there is a diverse array of investors and a variety of opinions. When everyone is stacked on the same side, the market is less efficient. In the late 1990s and early 2000, growth strategies were in charge, dominating inflows into the market. Value managers...
seemed irrelevant. A bias in the market developed, and it became less efficient. **I am sure that efficiency and opportunity are inversely correlated.** The value managers still standing in early 2000 made a killing relative to their overcrowded growth counterparts.

Investment trends come and go like fads, this is part of what makes a market. While it’s great to catch a trend early and ride that wave, it can be even more lucrative to take the other side of the trade when things have reached an extreme or some unsustainable level.

By the way, have you heard about the latest fad?

**ETFs and Passive Management**

Actually, the word “fad” doesn’t do it justice. It’s a landslide. It’s epic. It’s historic. It might be a once-in-a-lifetime transition. Jack Bogle, founder of Vanguard, recently said, “We’re in the middle of a revolution.” Exchange Traded Funds have been around for a while now. Passively managed index mutual funds have been around even longer. Massive inflows to passive strategies started in 2007, almost entirely at the expense of actively managed mutual funds. In the last nine years, $1.4 trillion has left active funds and $1.2 trillion has gone into passive funds and ETFs (Figure 2).

![Figure 2](source)

The case for indexing is clear and compelling. You get exposure to the market at very low fees. As compared to mutual funds, ETFs provide tax benefits and intraday liquidity. On top of that, proponents say that active managers, as a group, underperform; that active management is a zero-sum game; and that after fees, the average manager won’t beat his benchmark (more on that later).

A recent report from Goldman Sachs shows that passive investors control 14% of the S&P 500® and 16% of the Russell 2000, and in some cases account for over 30% of the market cap in certain stocks.

Trading volume in the largest ETFs dwarfs that of all stocks. SPDR® S&P 500 ETF (“SPY”) regularly trades several times more dollars of daily volume than even the most liquid stock. At what level of ownership should we become concerned?

I think we can all agree that this is indeed a revolution, and the trend shows no signs of slowing. How much impact is it having today? What will tomorrow look like?

**A Day in the Life: Trading**

When I first entered this business, trading was very different. Shares actually traded on the floor of the NYSE. Over-the-counter stocks had net commissions in them. Stocks traded at quarters and eighths. Nearly every trade went to a broker who helped find the natural counterparty. Buyer meets seller, and they negotiate (through the broker) and eventually agree on a price.

Today, it’s a bit different. Everything is electronic. You can use a broker, but you don’t have to – direct market access is readily available. Trades are rarely negotiated in the way they used to be. More often than not, traders will use purpose-built algorithms to achieve their ends. The algorithms in turn will scour different venues and transact with inhuman speed, often just 100 shares at a time. Some say the market has more liquidity this way. Maybe so, but the price discovery process of a buyer meeting a seller and agreeing to a price is very, very different today. Sometimes the buyer or seller is only transacting to take advantage of a very small arbitrage situation across different market venues. (Read **Flash Boys: A Wall Street Revolt** by Michael Lewis for more on that phenomenon.) Sometimes that buyer or seller is a robot.

Other times, the buyer or seller is an Authorized Participant (“AP”) of an ETF. When money flows into an ETF, shares are created by the APs by buying the basket of underlying stocks, and then packaging them into shares of the ETF. The same thing happens in reverse: When money flows out, shares are destroyed and underlying securities are sold.

In the old days, our trading partners were often the asset management firms we competed against. We would often wonder what they knew – why are they selling when we are buying? Do they know more than we do? Does it not fit their style any longer? Today, we rarely have any idea who our trading partner is. It might be another fund manager. It might be a high frequency trading computer. It might be an AP just creating or destroying shares of an ETF as they deal with the daily flows.

One thing is for sure - the high-frequency traders and the ETF APs could not care less about company specific fundamentals. They don’t care about
valuations. They don’t care about next year’s earnings growth. They don’t care about the business model.

It’s not about price discovery; it’s about liquidity discovery, fulfilling demand for generic market exposure.

Passive is Active, Too

If you Google® “passive” the first definition that comes up is: Accepting or allowing what happens or what others do, without active response or resistance.

The construction of the S&P 500 is NOT passive. There is a committee much like an investment committee that determines which stocks go in and out of the index. On top of that, the stocks are weighted on market capitalization. Why aren’t they weighted equally? Why aren’t they weighted on revenues or cash flow or number of employees or something else altogether? I don’t mean to be ridiculously cynical, just reasonably cynical. I understand that using market capitalization is a reasonable weighting methodology, but it is not the ONLY reasonable method. Weighting stocks according to market cap introduces a momentum factor bet – as stocks go up, they become bigger positions.

The Russell Indexes are also cap weighted, but they differ in that the index construction is rules-based. However, the reconstruction happens once a year. Each rebalance potentially brings wild swings in sector weightings, often skewed by cyclicalities in those areas. Perhaps the Russell® Indexes are more “passive” than the S&P® Indices, but there are still some arbitrary things going on with the timing of the rebalance and the determinants of “growth” and “value.”

The term “smart beta” has been used to describe other so-called passive strategies that attack different segments of the market and are weighted differently. I think this is a healthy trend, and a step in the right direction, but the size of the smart beta market pales in comparison to the already established indexes.

The point is that none of these options are truly "passive." Whether passive investors realize it or not, they are exposing themselves to segments of the market and unintended factors. Since the industry has anointed the S&P 500 as the end-all be-all benchmark, and even refer to it as “the market,” all that matters is that when you choose to invest in an S&P 500 ETF, you get the same return.

It’s important to note the distinctions between passive investing and ETF use. Not all passive investing is done through ETFs, and not all ETFs are passive. Passive investing generally means that you are investing in a market-weighted, broad-based index. This can be accomplished through ETFs, index mutual funds, futures or even in-house index modeling. ETFs are one way to accomplish passive investing, but at the time of writing this publication, there were 1,386 equity based ETFs according to Bloomberg. I don’t think the majority of them can be called “passive,” as many of them focus on a particular industry, sector or theme and not the broad market. Even the ETFs that could be called passive are often being used in a very active way as trading vehicles.

Why Buy?

I am an ardent proponent of Behavioral Finance/Economics. Human nature leads us to rely on heuristics in decision making. Biases creep in and oftentimes lead to sub-optimal or even downright irrational decisions. At our firm, we go to great lengths in our investment process to eliminate and reduce these cognitive biases. It is not easy. At a minimum, it requires awareness of the bias, self-awareness, a disciplined approach, and the oversight of a team.

When we consider buying a new stock we spend a great deal of time poring over fundamental data. Many stocks tell a good story, but we can’t allow ourselves to be swayed by a narrative alone – we need concrete evidence that our investment thesis is playing out. The evidence we seek runs a wide gamut. Obviously, we look at financial data. We want to understand pricing power and market share. Depending on the industry, we might analyze production data, same store sales, backlog, design wins, and the list goes on and on. There is no cookie-cutter answer. We seek out objective data as a way to hypothesis-test our investment theory. We look for evidence to support our thesis, but we also search for data that would cause us to reject it.

We spend just as much time on the sell decision as we do the buy decision. In fact, we attempt to identify all the reasons we would sell a stock before we ever buy it. We ask ourselves, what are the events or data that will cause us to change our mind on this investment thesis or to accept that it has fully played out? We do this as a defense against the biases and mistake of human emotion. If we are right about a stock, we don’t want to be the “weak hands” that get shaken out by noise. If we are wrong about a stock, we want to be devoid of emotion and willing to change our minds.

We wouldn’t expect every investor to go to these lengths in order to buy a stock, but I think it’s fair to assume that nearly all investors have a thesis or a fundamental reason they’re buying a stock. We are all subject to the pitfalls of behavioral biases, but at least there is something we can identify as an objective reason for investing in a company, and the objective and fundamental reasons for selling.

When investors use a mutual fund or utilize an investment manager, they transfer the security
selection responsibility to the manager. However, when investors use an ETF or a passive vehicle, they relinquish that responsibility.

Even worse, there is no specific thesis for buying a broad-based ETF other than generic market exposure, i.e., beta. Clearly, passive strategies are used by some investors with a very long-term investment horizon and aren’t subject to trading as a result of these behavioral issues. In many cases, these investors aren’t using an ETF. They can replicate the index themselves more cheaply and have direct control over the process. What I’m referring to is the volatility and volume around ETF trading.

OK, maybe I’m being too cynical. I’m sure those post-election ETF investors thought they had good reasons. Surely all those issues I listed previously were on their minds and were possibly the reasons the ETF buyers told themselves as they sought exposure to small cap companies. But the money they sent into the market only went to those 2000 companies lucky enough to be in that index. The other small cap companies got left behind – not because they won’t see the same benefits, it’s just that Russell didn’t include them in the index last June.

Of the $5.2 billion that flowed into IWM in the three days following the election, or the $7.2 billion that went into SPY, who do you think those buyers were? What was their investment thesis? What was their investment horizon? Do you think they still own those shares today?

I’m willing to guess that they didn’t have a robust investment thesis, their horizon was short, and that many of them no longer own those shares. There’s not much in terms of fundamental data to hang your hat on with an investment in a broad-based ETF. The case for passive investing and the academic support behind it all assume that investors are long term in nature. Today, ETFs have become inexpensive, liquid trading vehicles - useful perhaps for some investors, but using them to time the market isn’t supported by the research in the same way.

What They Will Say

The proponents of passive investing will say these things:

- **Active investing is a zero-sum game.**
- **The passive investor will earn the market return.**
- **After fees, the average active manager will underperform.**

Not so fast, I say. My economics training reminds me that in order to make claims like these, assumptions were made. Let’s examine those assumptions and some of the problems with this argument.

1. **The system must be closed.** That is, in order for these statements to be true, we must define the “market” as a set of specific stocks over a specific time period. So, we could define the market as the S&P 500. That’s what most people refer to when they talk about the market. But then, you could only apply this logic to active managers whose sole investment universe is limited to stocks within the S&P 500. I suppose there are some managers who limit themselves to only stocks contained in the S&P 500, but that is a small minority of all active managers.

2. **The “market” isn’t the market.** The S&P 500 isn’t THE market. It is a hand-picked slice of large cap stocks on U.S. exchanges. It doesn’t include all large cap stocks. It doesn’t include any small cap stocks. It ignores foreign companies. It’s just one piece of the market, not the market itself. Admittedly, from a cap-weighted stand point, it pretty closely tracks the broadest measures of the market. The closest any index gets to representing the whole market is the CRSP Total Market Index®. So, investing in SPY isn’t exactly passive. It’s a bet on large cap stocks. It only fits the zero-sum game narrative if you limit your investable universe to the S&P 500.

3. **Institutional equity managers aren’t the only active managers.** By definition, whatever is not passive must be active. Proponents of passive investing sometimes build a straw-man argument against the mutual fund industry or other active managers. Among what we would consider active investors aren’t only mutual fund managers and other institutional managers, but also individual investors, hedge funds, sovereign wealth funds, family offices and the like. So, even if we accept the constraints to make this a theoretical zero-sum game, the zero-sum is between all non-passive investors, not just the most visible (and shrinking) part of the market (mutual fund managers).

4. **Is it still “passive” if you’re market timing?** The average daily dollar volume traded in SPY and IWM dwarfs that of the most liquid stock. If you’re trading passive vehicles, rather than buying and holding, then the argument breaks down.

5. **Ironically, the growth in ETFs has brought a new type of active manager to the zero-sum game.** Before the advent of mutual funds, nearly every dollar was “active.” A stockbroker would help with security selection. Mutual funds enabled individuals and wealth managers to outsource the security selection to professional investors. But now that money is coming out of professional investors’ hands and going into ETFs. But don’t be fooled into thinking that money is entirely passive. Wealth managers will trade in and out of ETFs, seeking to add or reduce exposure to industries or themes that they believe will
outperform – this money falls into the zero-sum game. It is actively being allocated and moved around, and by individuals that may or may not have an edge or informational advantage to professional stock pickers. This group of investors is often being swayed by marketing literature into the ETF flavor of the month, shifting from MLPs to hedged European stocks to biotechs to low volatility and so on … chasing the next hot thing.

6. Earning the so-called market return may not be the best goal. Sure, you can use ETFs to get very close to earning the “market return,” but this is the academically defined aggregate return which is cap weighted. Should that be your goal? For very, very large investors that are liquidity constrained, it may be a decent starting point. Why not consider a broad index equally-weighted? Or weighted on revenues? Or cash flow? Those are reasonable benchmarks as well.

7. As a group, active managers have underperformed lately, but it’s not as straightforward as it seems. And this topic deserves its own section ….

Relative Performance

Who wants average? It is generally true that, as a group and after fees, the average active manager has underperformed his benchmark over long periods of time. But please don’t stop reading here - there’s more to the story.

I’m quite certain that not a single person reading this is looking to hire the average manager. If you think you’ll never do better than using average managers, then perhaps indexing is a valid alternative. Just as there are rewards for picking the right stocks, there are rewards for picking the right manager.

I’m not making the case that hiring better-than-average managers is easy, but that it is a worthy pursuit. In the Large Cap Core universe, going back to 1999, the median manager’s annual return trailed the benchmark by 1.7% on average. The manager at the 25th percentile outperformed on average by 1.1%.

The dispersion of returns among large cap managers is fairly narrow. Across that same time frame the difference between the 25th percentile manager and the 75th was 5.6%. This is largely due to the fact that their investable universe is also narrow.

Small cap growth managers sit at the other end of the spectrum. The spread between the 25th and 75th percentile manager averaged 11.7%. The top quartile manager beat the index by 6.2% on average. The numbers for mid cap growth managers were very similar (Figure 3).

Quality

The previous numbers are just averages, and the year to year variations are significant. It is a bumpy road. Additionally, there are trends that can span across multiple years that impact active manager relative performance. The first is that most active managers have a quality bias. Admittedly, quality means different things to different managers – things like strong growth, recurring revenue, high and sustainable profit margins, a healthy balance sheet, and a good management team come to mind. Remember: The index doesn’t care about these things. It doesn’t differentiate between great CEOs and crooks. It invests in companies with healthy balance sheets and those on the verge of bankruptcy alike. While some managers seek out the controversial and the contrarian ideas that may lack “quality,” most managers are drawn to it.

"Quality" conjures up positive connotations, and generally it is a good thing. However, sometimes low quality stocks outperform. When economic and market fears are at their highest, investors gravitate toward quality even more than normal, at the same time shedding the lowest quality stocks – those with risk as a going concern (Figure 4). Coming out of a recession, once the market has bottomed, the best performing stocks in percentage terms are often the lowest quality. It’s a dangerous game to play, seeking risk and seeking low quality, but it sometimes pays off.
Quality is rewarded most when there is fear and uncertainty. In a straight-up market, you don’t get rewarded for owning higher quality companies. The rising tide lifts all boats. As a result, active managers do better in a relative sense in more challenging market environments.

Furey Research Partners has shown that most active managers sacrifice a little upside in order to protect more on the downside. A sensible strategy, but it only pays off with patience (Figures 5 and 6).

Get ready for some circular reasoning. As investors shift their focus to more macro-related issues and make investment decisions from the top-down, it tends to cause stocks to move together. The growth in ETFs has made investing from the top-down very easy. Today the average retail investor can get long or short on just about any segment of the market, any sector, any industry, any theme, while making long, short, or levered bets on commodities and interest rates - all just using ETFs. I don’t think it’s a stretch to say that the growth in these products has led to higher correlations. So, the growth in ETFs and passive investing has created an environment in which active managers struggle, which in turns fuels the belief that passive is superior to active. It’s a vicious cycle.

**Correlations**

When correlations among stocks are high, it is more difficult for active managers to outperform. Perhaps this is just another way of saying the same thing about the rising tide that lifts all boats. If stocks are performing similarly, it’s harder for a manager to differentiate his performance (Figure 7).

Get ready for some circular reasoning. As investors shift their focus to more macro-related issues and make investment decisions from the top-down, it tends to cause stocks to move together. The growth in ETFs has made investing from the top-down very easy. Today the average retail investor can get long or short on just about any segment of the market, any sector, any industry, any theme, while making long, short, or levered bets on commodities and interest rates - all just using ETFs. I don’t think it’s a stretch to say that the growth in these products has led to higher correlations. So, the growth in ETFs and passive investing has created an environment in which active managers struggle, which in turns fuels the belief that passive is superior to active. It’s a vicious cycle.

**Interest Rates**

An old friend of mine who has been in the industry for decades recently shared a great metaphor with me. He said that interest rates are like gravity. In a low interest rate environment everything floats. It’s not until interest rates ratchet up that you’ll need something substantial to stand on to maintaining your elevation.

Low interest rates mean lower borrowing costs for heavily levered companies. Low interest rates drive investors to equities, bidding up prices across the board. I should be clear that all of these things are tied together – low quality, correlations, interest rates, and flows into passive.
Nominal interest rates are in turn, connected to inflation. And it turns out that active managers do better when there is more inflation. Figure 8 speaks for itself.

Figure 8

Flows

I’ve alluded to this previously, but let me say this more clearly and explicitly: As money flows into passive vehicles, it makes it more difficult for active managers to outperform, in that same time frame.

Here’s my cynical exercise: Instead of accepting that the S&P 500 is “the market,” think of S&P as an investment manager and the S&P 500 is their large cap portfolio. They have some rules by which they choose stocks (largely on size and liquidity but also what S&P considers “leading companies in leading industries”), but it is also actively managed by committee. And the weighting mechanism generates some exposure to momentum. It’s not about active versus passive, the question is: Do you want to hire S&P as your manager, or hire someone else with a different method of selecting stocks?

The same could be said for the Russell 2000. Don’t think of it as the benchmark, think of it as a quantitative manager that cap-weights a diversified portfolio and rebalances once a year. You can hire that manager, or you can hire some other manager.

Here’s the twist: As a manager, the Russell 2000 has the world’s best marketing and sales. They’ve convinced everyone that their portfolio management style is the best, and assets have been coming in at an alarming rate. Investors are firing their existing managers and hiring Russell in droves.

Here’s an unavoidable reality as a small cap manager: There are liquidity constraints. When we win a new mandate, we work hard to carefully invest new money such that it minimizes its impact on the market, while trying to minimize the risk of not being fully invested. It’s a delicate balance. The more money we have to invest, the more attention it demands – and at some dollar level, there will be an impact to the underlying stocks.

The same is true for our friend, Russell. Money comes in, and it gets invested in the portfolio, impacting the underlying stocks. Except there’s one key difference: Russell isn’t careful. Or more accurately, the APs trading the ETF shares and creating new ones aren’t careful. Russell isn’t trying to minimize the impact of new money, it’s a machine – it just gets it done. Share creation happens without regard for the impact on the underlying stocks. Market-on-close orders happen regardless of price, they are truly price-takers.

Let me try to quantify the impact.

Donald J. Trump surprised the world by winning the 2016 U.S. presidential election. He continued to surprise people with his acceptance speech late at night Nov. 8. The knee jerk reaction for many investors was to sell, but once investors began to digest the news, they realized that Trump might spend more time on things like tax reform, fiscal stimulus, and shrinking regulation than on some of the other issues regarding trade and immigration that had scared the market. The market reversed directions early on the morning of Nov. 9, and investors everywhere got excited. Money poured into the market, largely through ETFs. November nearly broke a record for ETF inflows, and this all happened in the last two-thirds of the month.

IWM is the most popular Russell 2000 ETF. Up until Nov. 8, flows had bounced around all year, without a strong trend. In fact, YTD through Nov. 8, net flows were negative $897 million. The next three days were quite different – nearly $5.2 billion of net new money came into the Russell 2000 via IWM alone (Figure 9).
For those three days, the Russell 2000 was up 7.32%. I created a simple portfolio of 2,635 stocks, using similar criteria as Russell. I included all companies that were inside the same market cap range as the Russell 2000 and weighted them on market capitalization. That portfolio was only up 5.08% over those same three days. The companies in my generic small cap portfolio which were also members of the Russell 2000 were up 7.28%, right in line with the index. However, the small cap companies that weren’t in the index only gained 2.84%, trailing the index constituents by 4.44% in just three days.

Again, no one was careful or patient about putting that money to work. All that electronically-generated “liquidity” was on full display. The vast majority of stocks in the Russell 2000 were up for those three days. Was it because the market was discounting the possibility of lower tax rates and increased earnings? Was it because less regulation would ease expenses for large companies helping them to expand margins? Was it because fiscal stimulus might reignite the consumer and get GDP growth moving again? Or maybe because the combination of these potentialities would make the Fed’s job easier, allowing them to get to a more normal rate environment? Nope. The answer is much more simple.

There were more buyers than sellers. The passive buyers surely outnumbered the active buyers, and the market heavily skewed toward index constituents, and away from whatever the efficient prices might have been.

Let’s dig a little deeper on the impact these buyers had on individual stocks. On Nov. 11, 2016, there was a net flow of $2.143 billion into IWM, one of the largest single day net flows for this ETF. Since these are net flows, ETF shares must be created by purchasing the underlying securities. If we do some simple math, using $2.143 billion and the weights of each stock in the Russell 2000, we can determine how many shares of each of the securities must have been purchased. This day’s flow generated buy orders amounting to almost 18% of the last 30 days average trading volume for the average company in the Russell 2000 (Figures 10 and 11).
I think it’s safe to assume that this is a conservative number, in terms of measuring the impact of ETF trading on underlying securities.

IWM is not the only small cap ETF; there are others. There were certainly sector specific ETFs that also saw significant flows that day. I haven’t even touched on the futures market, which for the Russell 2000 is even larger than the ETF market (value traded per day).

Rather than just pick on this one small time frame, if we broaden the scope to look at any week with a large flow in or out of IWM, we see similar results. When money comes into IWM, it bids up those stocks on the index causing them to outperform non-index constituent stocks (Figure 12).

When you put all this together, it’s a little easier to see why active managers have had a tough time. Low rates, high correlations, a self-fulfilling loop of ETF flows and performance, and an 8-year-old bull market with surprisingly low volatility have all conspired to make active managers look unnecessary.

Conclusions

- Market efficiency and the share of passive investing are inversely correlated. I would argue that the market is less efficient today than at any time in my career. As passive takes share from active, even more inefficiency will creep into the system, creating more opportunity.

- This trend will continue for the foreseeable future. If there’s one lesson I’ve learned in this job, it’s that trends tend to persist much longer than anyone expects. Buckle up.

- ETF investors are often the weak hand. For passive investors who buy and hold, this is not true. But for the many investors that use ETFs as trading vehicles (and trading volumes would suggest that there are many of them), they are
essentially timing the market and using sector or specialty ETFs to bet on various themes and factors. Without hard data and a strong fundamental thesis, the behavioral biases will be rampant with these investors. When volatility comes, when confidence is shaken, these investors will fold quickly.

- **Passive investing makes the most sense in the large-cap arena.** When looking at active manager performance data, there just isn’t enough reward, even when picking a better-than-average large cap manager to justify the fees or the risk. This contrasts with small- and mid-cap active managers; when they outperform, they do so in a big way.

- **Mid-cap investing is relatively immune from the influence of ETF flows.** I think we’ve shown that small cap stocks can get whipped around by ETF flows - that’s the whole point. Large cap stocks have sufficient liquidity to soak up ETF flows, so the impact isn’t fairly small. At least for now, mid cap stocks aren’t as represented in the most heavily used ETFs.

- **This too shall pass.** It has been a challenging environment. You can probably detect the frustration in my writing. But I hope you also detect some excitement as well. I think we may be about to enter a golden age of active management. Not because the ETF/passive trend will slow, quite the contrary. The further this goes, the more inefficiency there will be in the market. Exploiting inefficiencies are how active managers justify their existence.

- **The zero-sum game of active management that passive investing proponents talk about is very misleading.** In fact, I think that their line of reasoning makes a very compelling argument for active investing! If we accept the premise that the return among active investors is a zero-sum game, then I suppose one logical conclusion is to throw in the towel and not try to play the active game. The other conclusion is that it is important to find a better-than-average active manager. More importantly, the game is changing. Investors who had previously used professional money managers are now playing manager themselves, allocating assets among the flavor of the month ETFs. In the zero-sum game that all active managers play, we are bringing less sophisticated investors back to the table, and all they have at their disposal are the blunt tools we call ETFs. Experienced stock pickers should be licking their chops right about now.

The problem is that we have to survive the journey. As money continues to flow into passive vehicles it drives more inefficiency, but at the same time makes it difficult to outperform in that time period.

There are parallels between our job as portfolio managers and our clients’ efforts to allocate assets. On an individual stock basis, these inefficiencies or dislocations are opportunities because the performance of the stock does not match the fundamental outlook for the company. As this dynamic is aggregated up into the portfolio, a manager’s performance may not necessarily reflect the stock-picking skill of the manager in the short run. As long as we’ve got the fundamental side right, underperformance in the short run is the moment of opportunity for the long run. This environment will test a manager’s process. Conviction and discipline are paramount to success. The same will be true for our clients.
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*Note: Data for the past 5 years is presented here.*
Ryan Crane is the Chief Investment Officer of Stephens Investment Management Group. He also serves as the Lead Portfolio Manager for SIMG’s Small Cap Growth, Mid Cap Growth, and Small-Mid Cap Growth Strategies.

Stephens Investment Management Group, LLC (“SIMG”) specializes in equity investment management focused on small and mid-capitalization growth companies. SIMG was established in 2005 as a registered investment advisor.

Returns shown reflect the performance of the indexes referenced and not actual investment returns of any investor. The S&P 500® Index is a broad-based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general. The Russell 2000® Index measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000® Index. You cannot invest in an index. Index returns do not include transaction costs or fees. Index funds may underperform the indexes they are designed to track. Performance information on exchange traded funds designed to track these indexes may be accessed on www.ishares.com Actual account investment returns would also reflect the amounts of investment management fees paid by the accounts, which would reduce net investment returns.