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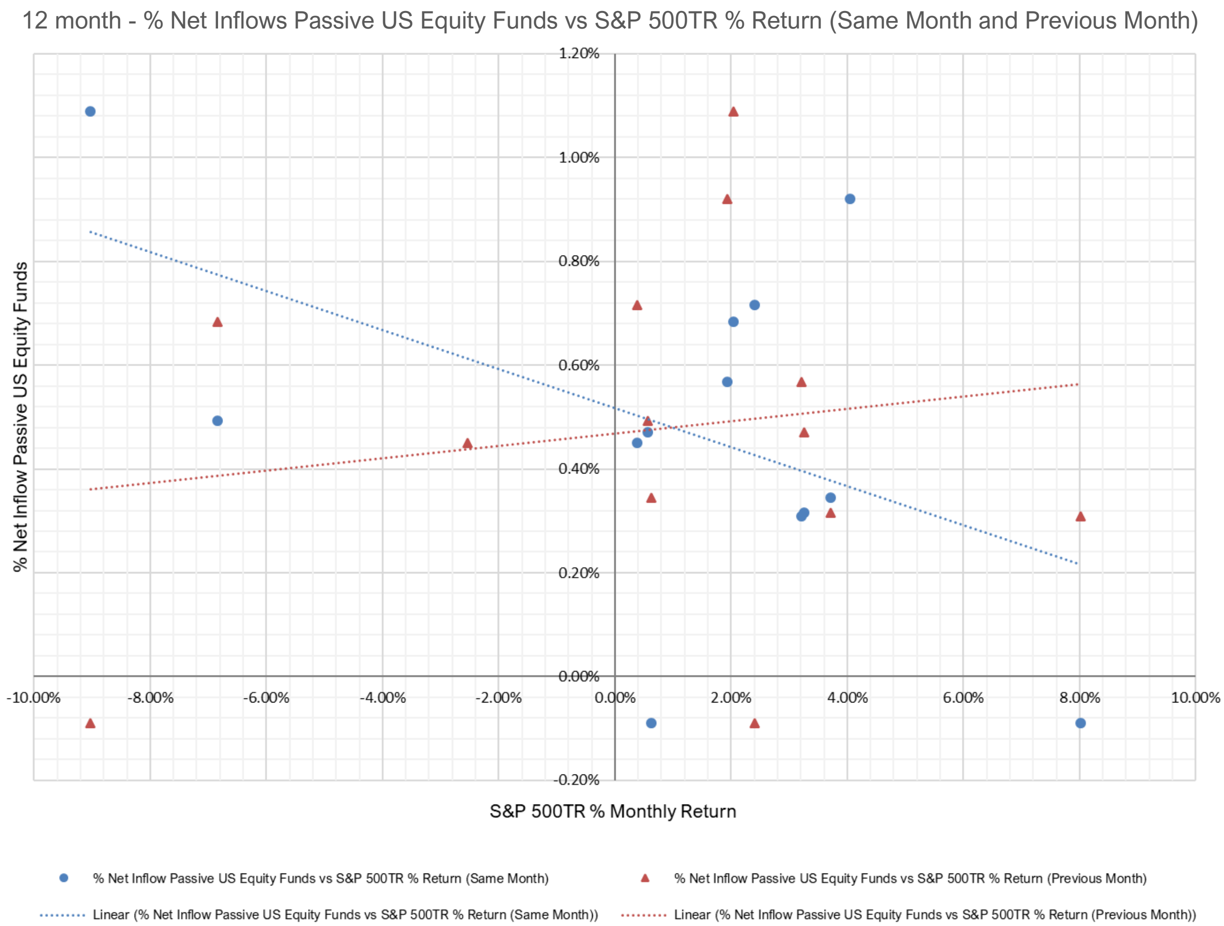
Passive Investment: Falling asleep at the Desk or Falling Asleep at the Wheel?

The market is not directing cash into passive investment. Many investors may not appreciate that the longest bull market in history has not generated very much extra money for US equities. What is happening is analogous to active-investment cars being swapped for a seat on the passive-investment bus.

A zoomed-out view of the yearly inflows of capital into passive US equity funds versus yearly returns of the S&P 500TR index illustrates little or no connection between the two. That relationship suggests that market returns are not dictating the increase in capital flows, nor the pace of that increase. A more detailed look at the same inflows on a monthly basis shows a similar lack of connection. Even at a stretch, monthly inflows show only a mild relationship to the previous month's S&P 500TR performance.



Source: Plotinus Asset Management, LLC.

So what is causing the shift? There is the underlying assumption that investing now in the market index **will** yield positive returns, but even that does not explain the change which perhaps could be better described as contagion. Inflows into passive strategies provoke further inflows. The contagion is something of a happy coincidence for the promotors of the passive vehicles, considering how dependent on scale they are for their business to be profitable.

Hop on the Driverless Bus

If the only decision to be made is to get a seat on the bus and the fact that the bus is already jam-packed is all the evidence required that you should be on that bus, then some questions are pointless. *Where are we going?* and W*ho's driving?* are assigned to the meanderings of the philosophically-minded. By omitting to ask *Why we got here?* all on board should take comfort from the fact that there are plenty of others on board too. One would not have to be a sage from Omaha (or anywhere else for that matter) to get the tingling feeling that this may not be the best reason to board that bus.

In the world of autonomous vehicles, one might ask is it a problem that there is no driver? As advocates of the use of artificial-intelligence technology in the investment decision-making process, our opinion is that the passive-investment bus is no autonomous vehicle. It is just an old-style bus with no driver.

Destination Unknown

Where are we going? is an interesting question for those still at the bus stop waiting on Godot to arrive. Mr. Beckett would likely chuckle at the thought that the Theatre of the Absurd might somehow find a place in the investment world. Yet, for those already on the bus, this is not the time for existentialist pondering.

The lack of clear direction motivating the piling into the passive vehicle means no one is stopping to seriously ask the question, *Where are we going?*

The most important factor is that there is no collective *"We"* here. The notion of passive investment is conceptually misleading. It implies that active decision making is both not present and not necessary and in so doing suggests that there is a generic context. There is however an active component: investors are deciding to opt for passive. There is not a generic context. Ask investor 1 who joined the S&P Index bus at the beginning of October 2018 how they are doing relative to investor 2 who joined the same bus at the start of January of this year and you are likely to have two very different perspectives from two very different experiences. Ultimately the only context relevant to the individual investor is their own.

Rush to the Door

If fear takes over, there will be the proverbial rush to the door. It does not take a large stretch of the imagination to visualize how nasty that rush would look like with a small door and a moving vehicle. Maybe of even greater concern, though, is the potential for a non-rush to the door. Given the passivity of the situation, is it possible that the passengers could passively stay sitting on the bus until it is too late?

It is important to recognize that the US equities landscape has changed with the emergence, equivalence, and soon to be dominance of passive over active investment. It would be foolhardy to ignore the likelihood in an if-it-goes-wrong scenario that this new dynamic would, by its very newness, spawn unforeseen issues.

You Are Driving

Passive investment is a vehicle. It is a means to an end, not an end in itself, but that end must be determined and the very act of determining means acting. In our view, the “vehicle” has to be treated as an active component with delineated criteria. You decide where you want to go to, and how you intend to get there. The individual has to drive their bus or at least competently delegate responsibility for someone else to drive it. If this is done, then passive investment can be treated appropriately, with an awareness of the assumptions and risks involved, allowing further questions to be asked. Are there better, safer, more efficient ways to achieve the desired result?

We believe that there is both a role for and benefit from passive investment. Rather than being viewed generically, it should be taken for what it is, with an attempt to understand its inherent risks. Among the most important issues are latent risks which are present because of its growth in recent years and forthcoming dominance, particularly in the US equities sector. It is a question of how best the approach may be augmented to enhance the individual investors’ needs.

Applying Artificial Intelligence

Experience informs our view that AI is best utilized in specific situations. The superior identification capabilities it can offer are, in our opinion, best tapped when one can use it to simplify the complex. Machines have a lot to learn from the behavior of the natural world. This world is one of organic redundancy and 'tear and repair' that helps to deal with and gradually eliminate vulnerabilities. We adopt a scientifically skeptical attitude and process to de-complexify and to clearly identify the problems we wish technology to assist in solving.

In our work, we utilize what we term "Nimble AI". Our angle may be the anthesis of the Big Data approach. Instead of choosing data *ad infinitum*, we opt for a small, defined set of data. We adopt a "many views" approach to that data, treating the data from different contexts, each with its own interpretation. These contexts are passed on to decision streams which heuristically determine when to act on the information

The tendency for passive-investment approaches to distill themselves into products itself means that these strategies require benchmark anchoring. In other words, there has to be an object (i.e., index) to be followed. It should be remembered that this is an all-in approach. You are tracking said benchmark for better or worse.

Passive-investment vehicles have an integrity due to the absence of choice. This feature can lead to an absence of connections to fundamentals. Yet, these same instruments are also highly-suited to be analyzed in a mathematical, technical manner.

We can isolate key data to be interpreted in our approach using a unique analytic process to search for a metric which we have termed "Informational Dissonance". Responding to digitalization, "Informational Dissonance" is used to determine if a rational system deviates from reality, whilst remaining internally coherent. It examines the effects of when internal coherence is mistakenly taken to be the same as correctness.

Consider, for example, the S&P 500 index, a favorite among passive vehicles. The S&P 500 is both an amalgam of information and an interpretation. From a passive-investment perspective, it is a factual object. This type of combination of factors means that it is possible to garner different views and measure when such dissonance occurs. This information then forms part of a decision stream that helps determine when to trade.

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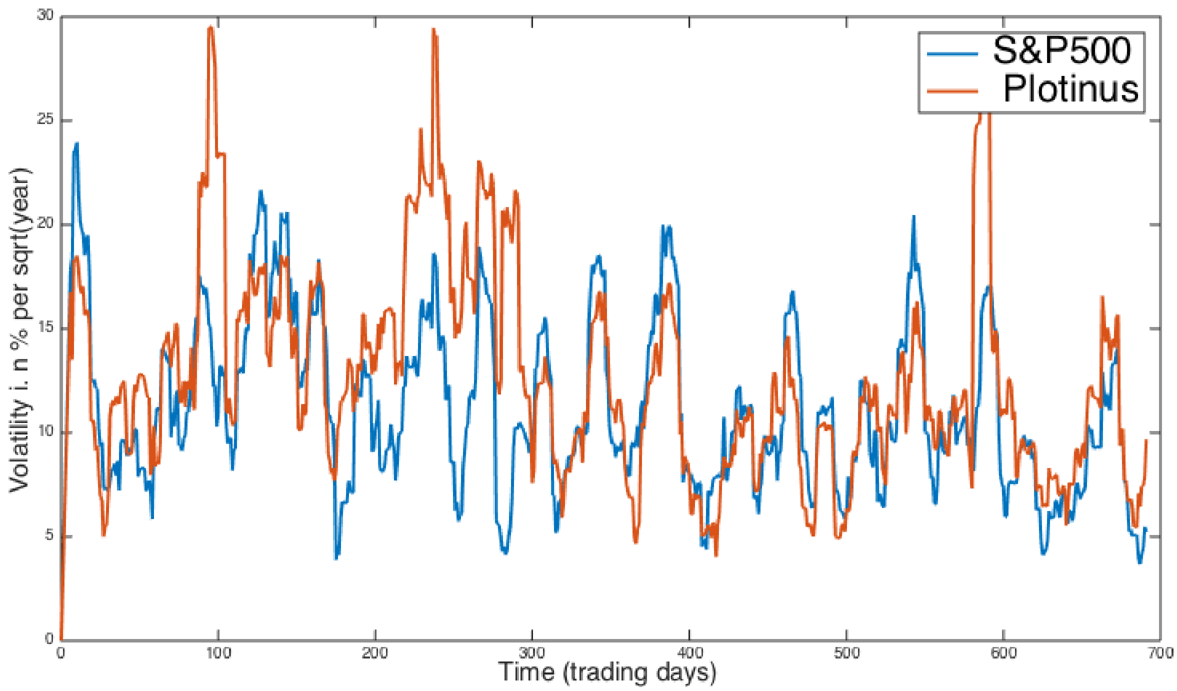
The chart illustrates one such (Plotinus) view in comparison with the index itself. By way of straightforward example, the extreme dissonance seen in trading days 100, 250, 800, contributed to the decision stream informing us to exit selected positions .

An Illustration of Informational Dissonance



Source: Plotinus Asset Management, LLC.

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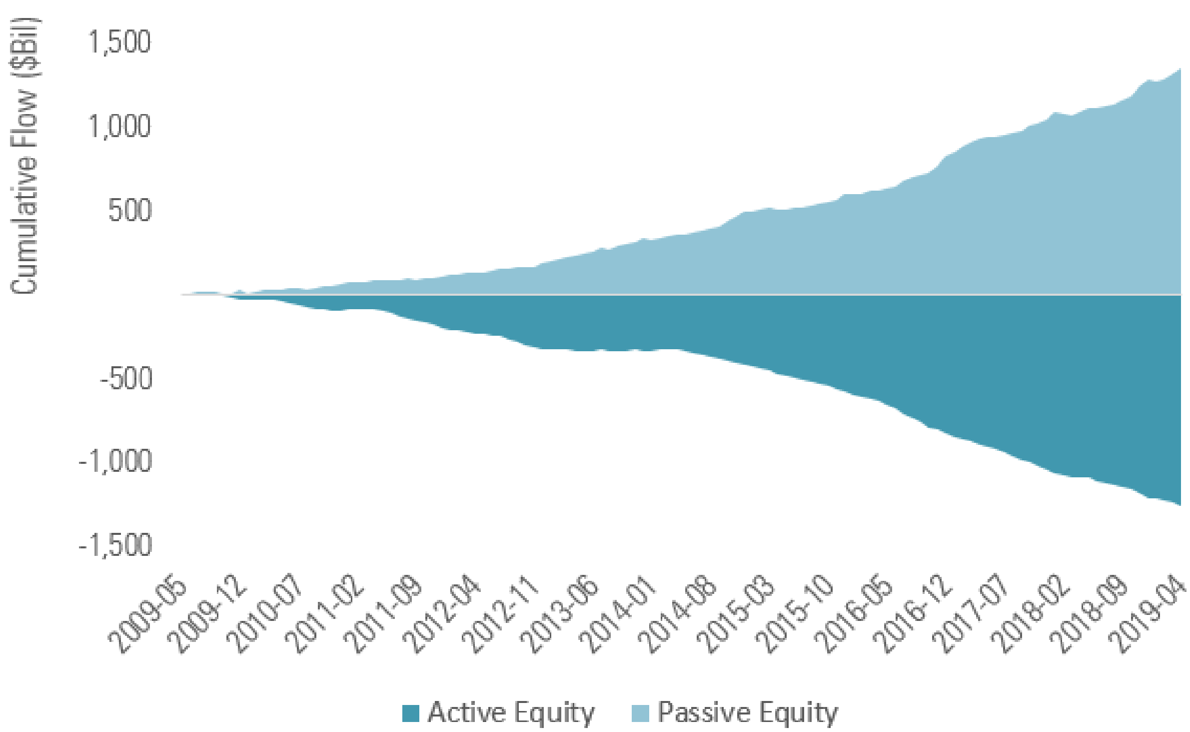
How Serious is the Threat?

With the not unexpected news that by the end of April Passive US Equity funds had reached $4.3 trillion, effectively reaching the same levels as Active US equity funds,[i] it is a timely opportunity to reflect on the changed landscape that now exists and how best to orienteer one's investment decisions.

Ramifications of a Beautiful Butterfly Print

The chart, illustrating the shift of capital from active to passive strategies, resembles a child's butterfly print. But it is important not to be deceived by the simplicity of the illustration. We scrape the surface to reveal its assumption-laden contents.

10-Year Cumulative Flows for Active-Passive U.S. Equity[ii]



Source: Morningstar Direct Asset Flows. Data as of April 30, 2019.

Dangers of Abdicating Responsibility

The latent issues going on beneath the surface are diverse and many. Take the troubling example of the increased use of passive-investment vehicles by brokers and financial advisors as a case in point. Since 2009, inflows into index domestic equity ETFs as subclass of US Equity Passive investments have grown at one-and-a-half-times the speed of their mutual-fund equivalents.[iii] The share of client's portfolios invested in ETFs by fee-based advisers increased from 10% to 28% from 2011-2017[iv]. Apart from the obvious subverting of the lower-fees logic for passive investment that this represents, it illustrates the potential for a deeper problem.

In the world of selecting active managers, the end client has the risk of picking a bad/unlucky manager and in many cases, this is not by direct selection, but is often brokered on their behalf by an intermediary (e.g., the fee-based adviser). The adviser is in competition to hold on to their clients, thus they must take full responsibility for their selection of managers and offer reassurance that due diligence and risk assessment has been performed to justify their selection. This process is by no means painless, but it does however create a market. That market, in turn, serves to separate the wheat from the chaff dynamically through constant competition for limited resources. It is worth noting that the size of the US equity funds sector only increased by 3.3% in the last 10 years.[v]

The growth in the use of passive vehicles by fee-based advisers begins to remove a layer of oversight that manager-picking enforced. The *Why did you pick this manager?* question becomes obsolete and with it so too culpability/responsibility. This cannot simply be replaced with a *Why did you pick this passive fund?*

Lack of Accountability

The index fund is not responsible for its actions. In fact, there are no actions because it is inactive; it is passive. Furthermore, unlike a manager, it cannot underperform. It may "disappoint," but since it is the benchmark it is a fact. It is a comparator, not comparable. In the case where an adviser has chosen an index fund to comprise part of a portfolio, it is not their fault if it "disappoints." The dodgy justification for its use is that it is cheaper and everyone else is doing it. Scale becomes the measure of justification for inclusion and thus the protection against the accusation of the adviser having made a bad decision.

The self-fulfilling nature of the process is that because it is not active, there is no action to be taken, hence the relationship between performance and capital inflow ceases to be relevant. The key is to remain passive and any problems will presumably rectify themselves. Add to this ample historical evidence that reinforces the underlying expectation that an index investment **will** ultimately be profitable and you can contentedly ignore the adage, *"Past performance is not necessarily reflective of future returns*".

The notion that index investment provides exposure to the diversity of the market has to come under scrutiny when an increasing portion of monies in the US equity space has, by necessity, to be allotted proportionately to an index itself. There is of course a question of both monopolizing for the larger entities, but also the creation of a monolithic structure. This structure is one in which a diminishing amount of active capital is going to impact movement in the market itself. There is also potential for a clash of interests, as the motivational factors for different passive-investment types meet. The impression that passive investment is safer being one of the factors that is helping fuel its growth. Yet what if this is helping contribute to an increasingly unsafe environment where ultimately, problems are always caused by extraneous forces, and where, due to the lack of overt decision making, there is nobody in place to maintain oversight through the fear of being held responsible?

Selection of the Largest

Everyone is aware of the explanation that the shift from active to passive is a straightforward fee-based issue. Put simply, that passive investment is more efficient and that as a result it has been able to offer a lower cost structure, thus cheaper investment. On the other hand, there is the problem of active-management fee structures incentivizing risk. Things, however, are more nuanced than the one-line explanation. It should be remembered that active management has a natural counterbalance to this risk, particularly in the long term. The scenario forces the active manager to pay high attention to clients' risk exposure for fear of losing them. While efficiency may be desirable and at points necessary, it should not be confused with long-term endurance or stability. Re-emphasizing our point from biology, the natural world habituates redundancy and thrives on apparent inefficiency.

With passive investment, on the other hand, it is only worth doing if it can be sufficiently scaled in size to make it efficient. It starts to become detached from risk and is justified entirely by its efficiency, which in the muddle is represented by reduced fees. This reality requires concentration for it to work; the more participants there are, the more participants there will be. The dynamic is further complicated if the broker also is flogging the same products (inefficiently), resulting in more concentration. The marketplace is creating a monolithic structure under the vestige of efficiency.

Taking Control with Artificial Intelligence

Perhaps it is best to view the shift from active to passive strategies as an opportunity for new investment approaches to take advantage of the changing market landscape. This is possibly where new technology can be best applied, in our opinion, through the mature use of artificial-intelligence applications.

AI should not be taken as the new dawn, fix-all technology. Its greatest advantage is when it is exploited in specific fields and tasks. The passive-investment phenomena of itself creates specific fields of interest, with its tendency to identify things that can be passively followed. The index fund is a case in point.

These fields of interest make a very suitable match for deploying AI to extract opportunity by going active in the context where the drift is toward going passive.

We see the greatest opportunity in combining passive approaches with AI-based active strategies to augment the approach. This blended style can help to offset some of the latent risk of the passive-only strategy. It may be time to scrap the Kierkegaardian either/or view of passive/active, embracing the new reality that both form part of the same butterfly.

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[i] Morningstar Direct
[ii] Morningstar Direct
[iii] Investment Company Industry
[iv] Investment Company Industry
[v] Morningstar Direct