



Will Stock Asset Classes Continue To Diverge And Converge

I MEASURE, THEREFORE I DIVERGE

In our paper ***Why Stock Asset Class Persistence Works*** we observed that stock asset classes diverge in terms of performance over short periods of time and then converge in terms of performance over longer periods of time. Under most circumstances, the persistent investor can capture this divergence and convergence cycle to outperform a buy and hold strategy as well as to outperform a rebalancing strategy that sells leading stock asset classes to buy lagging stock asset classes. However, mathematically we know it is not sufficient for stock asset classes to simply diverge over a short time frame and then converge over a longer time frame. They must do it in a certain way or else it is possible to design any number of divergence/convergence cycles where the persistent investor does not outperform either a buy and hold strategy or a rebalancing strategy. The question then is under what circumstances could this transpire? In other words, what can go wrong? This is the central question that must be answered before embarking on the persistence path.

The persistent investor like the **Modern Portfolio Theory** practitioner or MPT investor assumes stock asset classes diverge and converge. The proof for divergence is simple. If for some unknown reason in the future stock asset classes were to stop diverging there would be no reason to diversify since without divergence it wouldn't matter which stock asset class you owned. They would all perform similarly over any time frame. In this theoretical case the persistent investor would equal the performance of the buy and hold strategy or the rebalancing strategy since we would be in an equilibrium state. We know this is only in theory. In practice, it's clear that as long as man measures the stock market, and slices it in pieces, there will be divergence.

But where's the proof for convergence? Is it valid to assume stock asset class convergence? We think so but let's digress for a moment. We have

analyzed individual stocks in the same fashion as we have analyzed stock asset classes and have found similar results without the same degree of convergence found in stock asset classes. Convergence is important to the success of a persistence style but not as important as divergence and the disciplined application of the methodology. In the most extreme case we included individual stocks in our persistency pods that eventually traded to \$0 and because the methodology says to buy the leader and not the laggard, we avoided these companies that went bankrupt. So is there a correct answer to the question will stock asset classes converge? We don't think so. We can see that convergence has been the case for decades and in every country studied but no one can be certain. It's possible that a stock asset class might emerge that is so superior that it outperforms the others. All we know is that should that be the case, the superior performing stock asset class will be represented disproportionately in our approach of selecting the fittest stock asset. Why? Because it is likely that this yet to be determined superior fit stock asset class will be the fittest the most often.

Let's look at MPT a little closer. MPT has as its origin the concept that equity diversification is achieved through a proper asset allocation selection and then periodic rebalancing as the portfolio moves away from its original asset allocation. Said differently, MPT states that equity diversification, combining assets with different correlation coefficients or what we call divergence, along with rebalancing, selling relative winners to buy relative losers or what we call convergence, will increase the rate of return for a given risk level or equal the rate of return for a lower risk level. The persistent investor recognizes this and takes advantage of it in a different manner than the MPT investor. There is no intellectual conflict between what the persistent investor does and what MPT prescribes for the equity component of a portfolio. Both assume divergence and both assume convergence. They just measure in different time frames. One says buy the loser and source from the winner. The other says buy the winner and source from the loser. Buying winners and sourcing from losers is just better. Persistence is just better. However, both have at their core the identical assumptions which are divergence and convergence. Let's hope for the sake of MPT investors that a superior stock asset class never emerges or else the MPT investor will forever be selling it to buy inferior stock asset classes.

We know that MPT has evolved in practice to include multiple asset classes. MPT utilizes more than just equity asset classes and researchers tell us that the major benefit from MPT as practiced today is derived

from the interplay between equities, fixed income and non core asset classes vs. the interplay of just equities alone. This translates to the inclusion in most portfolios of asset classes that have differing correlation coefficients such as stocks, bonds, real estate, commodities and alternative investments. When the allocation moves too far away from the original or proper asset allocation in one direction you rebalance just as you would an all equity portfolio. This is just a different type of divergence/convergence. Because persistence can be applied to individual investment styles without style drift, a persistence portfolio could easily be constructed that works within the guidelines of an MPT portfolio. It would not be our recommendation since style drift or moving from leading asset class to leading asset class is our preferred method. Nevertheless, if one would choose to use persistence and especially the persistency pod to manage within a style the results would improve vs. current practices.

The question the persistent investor must ask, just like the MPT investor should ask, is no longer will stock asset classes continue to diverge and then converge. Of course they will. The question is will they continue to diverge and converge in such a way that the persistent investor can outperform the MPT investor, the industry standard, the buy and hold investor, a benchmark or a diversified rebalanced equity portfolio? This question is complex and has no conclusive answer. We can only offer the following; we have tested many types of assets including individual stocks, stock indices, bond indices and commodities and found select cases where persistence fails. When persistence fails it is almost always for the same reason and almost always for individual stocks. We have found no failures when using stock asset classes. What's clear is the addition of a persistence component to any portfolio, like the addition of a value component, international component or a small capitalization component, is constructive. It is constructive under the constraint of no style drift and even more constructive with style drift.