Selecting Assets To Trade In A Persistence Style

THE PERSISTENCY POD

In our paper ***Stock Asset Class Persistence*** we say investors can capture the persistence effect in four ways. Persistence can be a stand alone portfolio technique or in conjunction with risk management techniques. It can also complement an established portfolio as an investment style since persistence exhibits a low correlation with the stock market or as a focused style specific technique devoid of what consultants call style drift. We also maintain the persistent investor must utilize a model that they follow religiously, but that without a fundamental component, the mechanics of the model are meaningless. We consider our model the equivalent of the body. If you feed it healthy food it will perform, but if you feed it garbage it will betray you. What you choose to trade in a persistence style or what you choose to include in what we call a persistency pod is important.

We say that what you choose to include in a persistency pod is important. By this we mean that you want to include assets that have different characteristics. They certainly should not be highly correlated because persistence captures asset divergence and highly correlated assets don't diverge. For example, if you had a 2 asset class persistence pod, it makes no sense to include the S&P 500 with the **Wilshire 5000**. On the other hand, it makes sense to include the **S&P500** with an International Index. If you randomly select assets for inclusion in a persistency pod the whole is still greater than the sum of the parts. However, some intelligence in the selection of assets magnifies the degree to which the whole exceeds the sum of the parts by an order of magnitude in many cases.

Let's define the term persistency pod since it comes up in every investment conversation. The persistency pod must contain at least 2 assets and they are ranked in terms of performance relative to each other over a set time frame. This time frame can consist of minutes, days, weeks, months or years. The trading mechanism is simple, if you are trading Follow the Leader, you always have your money invested in

the top performing asset in the persistency pod over the time frame you are using. For example, if you were to create a persistence pod with 2 asset classes and you were using weekly data as measured over 8 weeks, you would invest all your money in the 1 asset class that performed the best over the last 8 weeks. If the following week the other asset class performed the best over the new 8 week period the persistent investor would switch from one asset class to the other. This couldn't be any simpler.

A persistency pod can and should contain more than 2 assets. So for example, a 2 asset persistency pod might include The S&P 500 and **General Electric** or The **Russell 2000** Value Index and Gold or The Wilshire 5000 and The Nikkei 225. A 3 asset persistency pod might include IBM, 10-year bonds and Euros. The number of persistency pods is infinite. What they have in common is they are traded in an identical fashion. So it is important to settle on the mechanics of how you will trade the persistency pod.

We've defined a persistency pod. What would you call a portfolio that is composed of a number of persistency pod? We call it a persistency pod portfolio or PPP. So we have an infinite number of persistency pods that we can create, but once created they must all be traded in the same way and though we have a practical limit of persistency pods in a PPP it isn't beyond the stretch of the imagination to trade the S&P500 in a persistent style. For example, you might want to create 100 persistence pods each with 5 stocks per persistency pod all under the auspices of 1 PPP. In this example, the PPP would have a universe of 500 stocks. Earlier I said that dividing a universe into pods has an enhancing effect. This is due to the fact that by creating a network of pods with a hierarchy, you are allowing the best pods to emerge from the universe. What this means is that while logically the use of persistency pod couldn't possible outperform a similar percentage allocation it does due to emergence. In this example, allocating 1% of an unleveraged portfolio's money to each of the 100 persistency pod is better than allocating 100% of the portfolio's money to trading the 100 top performing stocks.

Most of the research on the subject of stock momentum or relative strength has focused on investing in some percentage of the top performing stocks from a fixed or defined universe. Some trade those stocks that are performing in the top 20% of the universe. Others might trade the top 25% or 30%. We've found and we are sure others have as well; allocations above 20% do not perform as well as using lower

allocations such as 10% for example. Perhaps the reason traders and portfolio managers allocate such a high amount is to avoid portfolio concentration. The use of the persistency pod lets them have their cake and eat it too. They can maintain their higher allocation while increasing their metrics.

This paper explains the persistency pod and provides hints on how to select assets to trade in a persistence style. Using our terminology this means the investor must decide on 4 things. The first is how many assets should be included in a persistency pod. Should it be 2, 3, 4, 10 or more? Once you decide on the number of assets to include you must then decide which assets to include in the persistency pod? Random selection works but not as well as intelligent selection. Next the investor needs to decide over what time frame to trade the persistency pods. Finally, they must decide how many persistency pods to include in the PPP. We can't answer these questions without revealing more than we would like. We will only say that running randomized trials on using persistency pods vs. the corresponding % of the universe favored the use of persistency pods. Adding intelligence to the selection of the assets to include in persistency pods makes it significantly better.

We wrote a paper entitled **Trading Persistence and Long Term Moving Averages** that provides some examples of how one may go about combining persistence with long term moving averages in a profitable manner. The combination of the two is our preferred method. It's preferred because we feel uncomfortable saying things like, our benchmark went down 35% but we did great we only lost 32%. In that paper our approach depicts the standard persistence model that we use throughout. We use our standard 12 month rolling average technique to measure both persistence and to construct a moving average.