

A New Breed of Oscillator

Monest Value Indicator – Part 3

In the first article of this series, we developed an oscillator that was not prone to stickiness in the overbought and oversold regions and which lacks the lag that oscillators built on moving averages suffer. In this article, as in the previous one, we are studying its usage and usefulness.

Recap

We assumed anything less than -8 (two standard deviations) to be considered oversold or short-term undervalued, while overbought and short-term overvalued is indicated by any value greater than eight. As this might give us too few signals in back tests we can lower limits to anything outside of the [-7, +7] interval to increase our number of samples, if necessary.

In the previous article (TRADERS' 12/2011) we proved that buying at undervaluation might aid any long trade to stay largely out of initial loss before takeoff. Likewise, short trades can be more successful, not needlessly getting stopped out, when entered in the presence of an overvalued MVI (Monest Value Indicator). In Figure 1 different pure entry systems (i.e. based on non-technical entries) are compared with entry on undervaluation, during a bull market. The undervalued MVI entry clearly seems to make a difference.

This sets stage for our MVI



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as an add-on to existing trading systems or existing indicators, since no indicator is a complete trading system in its own right. In fact, the minute most indicators make it to the back tests, results seem to get disappointing very often and very fast. For the record, no set of indicators is a complete system either. Successful trading needs careful risk management and consistent money management discipline. However, in this article we are going to look at the effect of the MVI when added to other indicators or entry systems. We look at the Monest Value indicator as a catalyst.

Pattern Filter

First we want to assess the value of the MVI indicator as a pattern filter. For this purpose we use an objectively defined pattern and see if we can pimp it with our newly discovered oscillator. As an objectively defined pattern we chose a key reversal bar, defined as a bar opening below the previous bar's close but closing above the previous bar's high. In our back test we round up all those key reversal days and have a look at the average profit for each day forward after such a bar.

Figure 2 shows an average profit of about three per cent, 30 days after a key reversal day was taken. After 30 days the effect of

a key reversal day seems to wear off. In the first five to seven days the chart shows an average loss never amounting to more than one per cent.

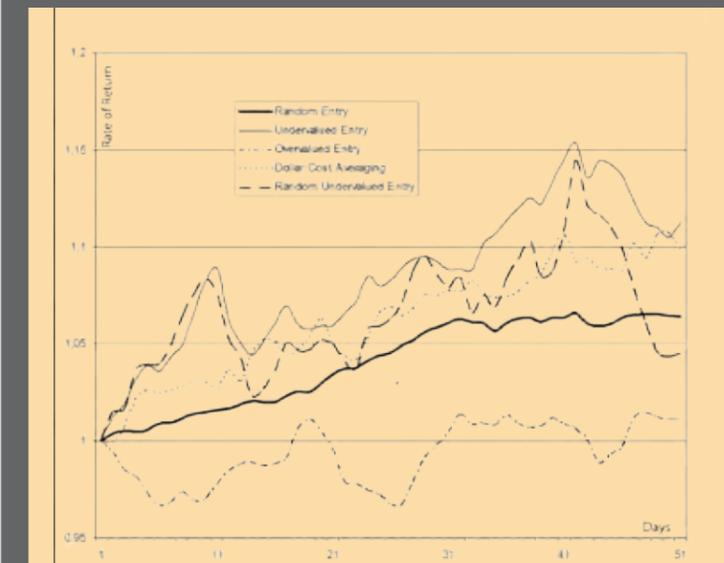
When the key reversal days get filtered with a Monest Value indication on top, allowing only those key reversal day entries to be taken when they were accompanied by an MVI less than -4, the number of valid entry signals drops by about 50 per cent.

However, the average profit on 30 days almost doubles. This can be seen on the chart in Figure 2. Of course, adding an additional criteria to the signals taken, can never change anything about the wearing off effect. After about one month, the signal effect fades away. What is more is that the minor (average) adversity in the beginning of a key reversal day trade seems to be half in length (only about three days instead of up to seven).

System filter

A key reversal day is just a pattern. We see patterns everywhere. We are evolutionary designed to do this. In evolutionary terms, it pays off to assume a tiger where there is not one (false positive). That programming happened a really long time ago, because even a horse is scared of a garden hose (assuming it is a snake). So one

F1) Different Entries vs. Undervalued MVI Entry



Buying while short-term undervalued ($MVI \leq 7$) seems to pay off against other entry strategies. All systems are compared to a random entry system.

Source: www.chartmill.com

F2) The Monest Value Indicator as a Pattern Add-on



Effect on the average return up to 50 days after a key reversal day when only the key reversals are taken that are accompanied by an $MVI < -8$. This demonstrates the Monest Value Indicator as a pattern catalyst.

Source: www.chartmill.com

of our common ancestors already must have developed this trait. However, it takes far more than a pattern to make a complete trading system. The pattern on which to enter a trade might well be of less importance.

But if entries can be fine tuned by adding our MVI as an additional filter, it might certainly be a good idea to put the idea to the test of adding an MVI filter to a complete trading system. We backtested a really easy, but totally objectively defined trend following system that can only enter a trade when the 25 bar simple moving average is above the 75 bar simple moving average. Trades are entered when prices break above the highest high of the previous five bars. That is actually called a five period Donchian Channel breakout.

Again, we wanted to see what happens, on average, with price, up to 50 days after entry. The result is shown in Figure 3 and they are far from impressive. It takes the average trade about 30 days to become only marginally profitable.

Next we superimpose the trend following trading system with an $MVI < -8$ filter, meaning only those five bar Donchian Channels breakouts are taken when the Monest Value Indicator has a value below -8, a sign of short-term temporary

undervaluation. Of course the moving averages requirement also still holds.

The result here is quite impressive. First, the average trade has far less initial drawdown, both in terms of duration as well as in terms of size. The maximum drawdown is about half the original drawdown, while the days the average trade is in losing territory are minimised to only about five to six days (from almost 30 in the original, un-enhanced, system). Secondly, the average trade has an overall much clearer trend. And finally, compared 50 days upon entry, the average trade for the enhanced trend following trade system has up to five times more profit.

Conclusion

In our search towards a better oscillator that produces sharper and more objective signals with the least lag, we built the Monest Value Indicator based on the concept of context. Short-term valuation perception being mainly lead by the most recent prices, we used statistical normalisation to capture an objective interpretation of the idea. However, the distribution in bull and bear markets will be skewed from perfectly normal, meaning that under- and overvaluation, now fixed at -8 and +8, could be calibrated onto

the real distribution. So, in a bull market, undervalued probably will have a slightly higher threshold than -8. Likewise, in a bear market, overvaluation perhaps could be calibrated a little lower. But as far as different financial instrument were studied (futures, commodities, equities, ...) there were no family specific, nor product individual differences. So a certain stock (of a certain company) neither has a different value distribution, nor a specific one.

We conducted three back test experiments. One experiment was aimed at proving the standalone quality of the Monest Value Indicator in its own right. We compared buying undervaluation with buying at random, buying overvaluation, buying on a dollar cost averaging basis and a combination of random entry with undervaluation. An experiment which made more than a nice case for the quality of our new breed of oscillator.

In a second and third experiment we tried to answer the question of whether the Monest Value Indicator oscillator could act a catalyst to enhance both pattern performance and system performances. And though two experiments might be too few to make a general case, they seem very promising, at least justifying further research. ■

F3) Average Random Buy vs. Postponed Random Buy



Effect on the return of a trend following trade system when only entries are taken when the Monest Value Indicator shows undervaluation.

Source: www.chartmill.com