Adversity Is Often the Mother of Innovation

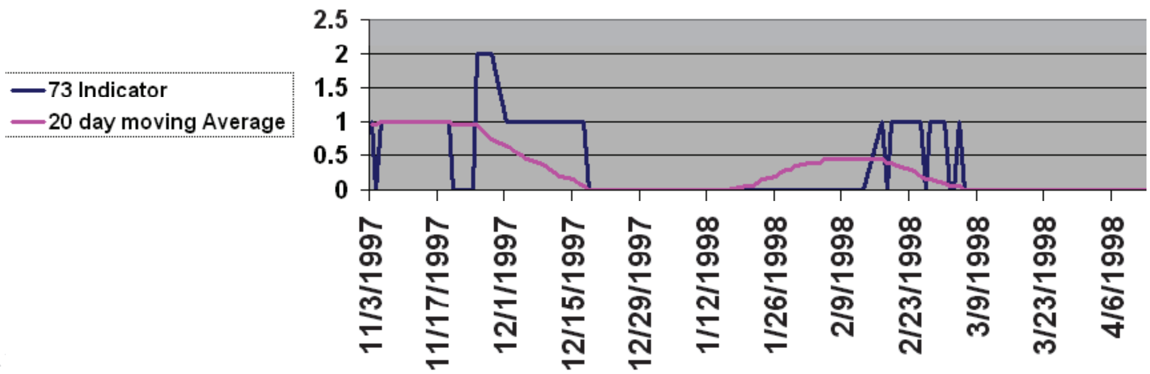
By: Thomas J. Reavis

I was a day-trader in the "pits" of the Chicago Mercantile Exchange for over thirty years. I traded almost exclusively for my own account in the cattle pit, the Swiss pit and finally in the S&P 500 pit. My father had taught me early on to "follow the boys driving the big cars." In other words, you don't need to reinvent the wheel. Just watch who is making the money and try to do the same thing. Over the years it became clear to me that the rule based traders were the ones that seemed to consistently make the most money. Today, worldwide Futures Systems trades a portfolio of over 200 proprietary day trading systems. Our goal was to develop a diversified portfolio of systems that had a low correlation to each other. We were well satisfied with the results and have been trading it real time since 2001. Suddenly, after the first quarter of last year, things took a turn for the worst. Our longest period between hitting a new equity high was exceeded and then our largest drawdown was exceeded. All this was happening while the S&P 500 was climbing higher every day. It was very frustrating. But, I've been a trader all my life so I've been there before. As one of my trading buddies used to say "they aren't getting a virgin." The question is: has our system failed? Or is this just a very bad market? 2009 was the worst period for managed futures in history. (Source: Barclays) It was a massive contraction period creating the smallest daily ranges in the S&P 500 in 20 years. The VIX (which is a measure of risk or volatility in the market) dropped from a record high of over 80 to a near record low under 20. Finally, the number of days that the market opened and closed at almost the same price was amazingly high. For day trading systems this is the "perfect storm". There is very little opportunity for great trading days.

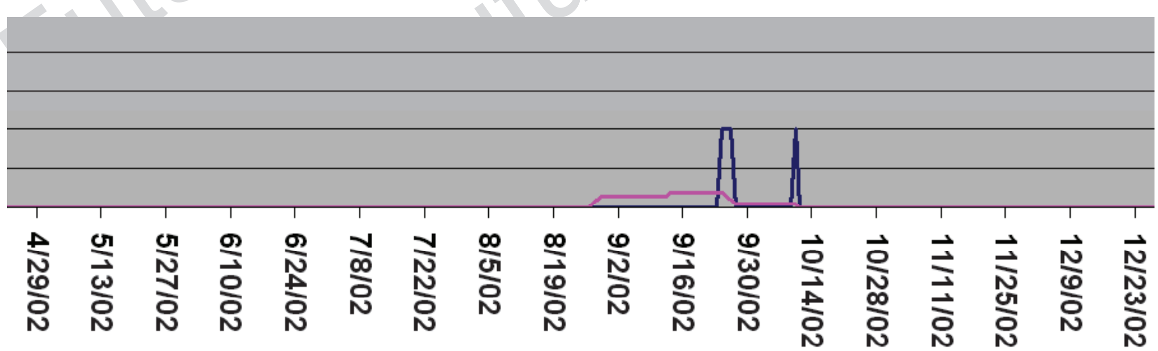
As a "pit" trader, when I was losing money I went on vacation. I felt that I was fighting the market and if I took some time off so that I would have a better perspective of the market, and I would be fresh when I returned. It usually worked too. I usually traded much better when I returned. In retrospect, I was doing the right thing for the wrong reason. It probably wasn't me that was trading poorly so much as the market was offering little opportunity for a day trader at that time. The right thing to do was to not trade the market and to wait until market conditions "improved".

In the fall of 2009, we decided to try to develop a filter that would keep us out of low opportunity markets. The result of that work is the "73 indicator." It is a proprietary filter created to track and detect "trending" versus "choppy" intra-day markets. It takes the average of the previous month's trading days and calculates the percentage of days that fall either in the "trending" or "choppy" categories since these have the most weight in determining when a program should or should not trade. Since September 1997, the historical data shows that "trending" days occur on average about 25% of the previous month's days and that "choppy" days occur on average about 30% of the previous month's days. Each program is tested against these averages to determine if the program is suitable to trade during "trending" or "choppy" markets. When a smaller percentage of "trending" days occur and/or a larger percentage of "choppy" days occur, the majority of the programs will "sit on their hands" and stay out of the market and wait for the indicator to turn back into better trading conditions. This allows a majority of our programs to stay out of choppy or non-trending market phases and wait for better, trending market conditions.

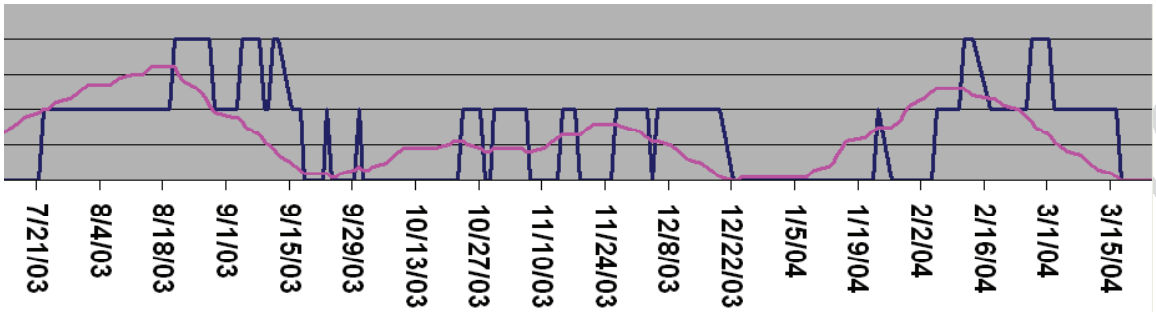
If we look at the 73 indicator chart we will see each day our proprietary indicator calculates values for a given trading day. These values are monitored on a portfolio level to allow various levels for trading to take place depending on market conditions. When the chart shows values of zero then all of the programs are trading. When the chart shows a value of 1 this indicates some congestion in the market and some of the programs will not trade during this congestion period. When the chart shows a value of 2 then a majority of the programs will not trade due to extremely unfavorable market conditions. We will just sit on our hands for the entire day.

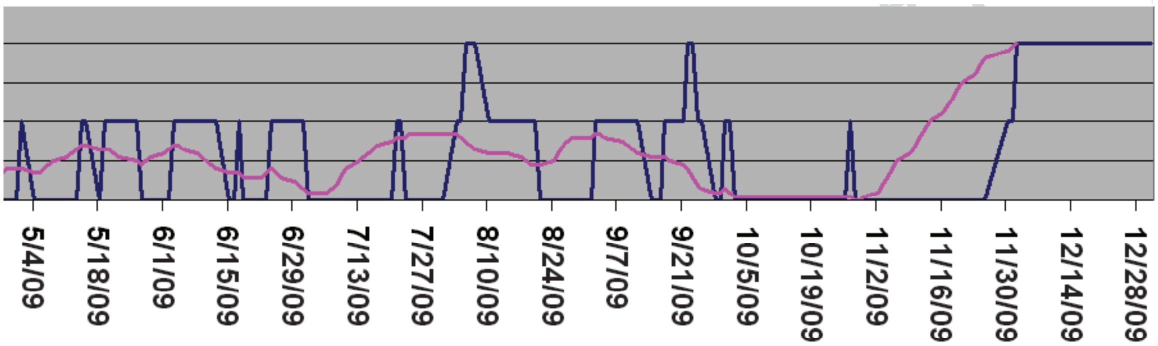


We now feel it is more important to correctly identify market conditions in terms of "trending" or "choppy" intra day markets than the programs and concepts themselves. If you refer to the spreadsheet once again and look at the trading year during 2002 you will see the market conditions for trading are excellent and solid day trading programs would have made excellent profits. We can see that there is very little "noise" which makes for ideal day trading conditions, which was the case during this year.



However, if we look at the periods from July 2003 through March 2004, December 2005 through May 2006, August 2006 through May 2007 and May 2009 through December 2009, it shows horrible market conditions for day trading programs with the more than average "choppy' or non-trending days. Knowing when to enter the market with a day trading program is at least or even more important than the program concept itself. For individuals that have been trading the S&P E-mini since the beginning, one should be able to look at the results and see the amount of profits and losses correspond to the 73 indicator. Looking at December 2009 was one of the worst months in the history of the S&P and the 73 indicator caused us to sit on our hands and stay out of most trades.





One of the worst days for day trading is having the market open and close at the exact same value, also known as a “Doji day”. Whereas one of the best scenarios is when the market opens and runs in one direction that ends at the high or the low for the day.

The 73 indicator was developed by observing real day trading results since the S&P E-mini has been trading. The 73 indicator works on all types of markets. So for instance a portfolio that day trades currencies, uses the 73 indicator just as well as a portfolio that day trades the S&P E-mini. The concept for portfolio money management is similar to that of card counting in blackjack. When a large number of the small cards have been dealt and the majority of the rest of the deck consists of large cards, the game turns in favor of the player and he/she will adjust his/her betting to take advantage of this condition. Just like when the chart is showing a “0”, the majority, if not all the day trading programs are ready to execute when all its parameters are met. When the opposite is true for blackjack and there are very few large cards left in a deck the player will not bet as much and slow down a bit. The same concept is true in regards to the 73 indicator again as when the value is at “2”, where the brakes are put on a number of programs and very little trading is done.

Please find below the hypothetical performance report for our smallest portfolio ($10K Portfolio) without the “73 Indicator”. This is followed by the same report with the addition of the indicator. Notice that it generated a higher net profit with substantially lower number of trades. This, of course, will have the added benefit of lowering costs. The average trade jumps from $132 per trade to $179 and the profit factor soars from 2.40 to 3.30. Finally, and probably most importantly, the maximum drawdown (DD), drops from -$3,662 to -$2,485. PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.

WFS 10k day-trader with 73 Indicator

Total Net Profit	334,891.00		
Gross Profit	480,473.00	Gross Loss	-145,582.00
Total # of Trades	1,866.00	Percent Profitable	69.19%
Number Winning Trades	1,291.00	Number Losing Trades	575.00
Largest Winning Trade	2,442.00	Largest Losing Trade	-1,445.00
Average Winning Trade	372.17	Average Losing Trade	-253.19
Ratio AvgWin/AvgLoss	1.47	Average Trade	179.47
Avg Days Winning Trade	0.00	Avg Days Losing Trade	0.00
Avg Days (win + loss)	0.00		
Max Drawdown	2,485.00	Drawdown to Equity	7.68%
Profit Factor	3.30		
Max Entry Value Long	108,838.00	Entry Value Short	0.00
Return / Risk	0.61%	Std Dev of Drawdown	749.74
Return / St Dev of DD	18.94%	Number of Drawdowns	7.00

WFS 10k day-trader without 73 Indicator

Total Net Profit	326,856.00		
Gross Profit	559,877.00	Gross Loss	-233,021.00
Total # of Trades	2,469.00	Percent Profitable	63.91%
Number Winning Trades	1,578.00	Number Losing Trades	891.00
Largest Winning Trade	2,443.00	Largest Losing Trade	-1,445.00
Average Winning Trade	354.80	Average Losing Trade	-261.53
Ratio AvgWin/AvgLoss	1.36	Average Trade	132.38
Avg Days Winning Trade	0.00	Avg Days Losing Trade	0.00
Avg Days (win + loss)	0.00		
Max Drawdown	3,662.00	Drawdown to Equity	1.12%
Profit Factor	2.40		
Max Entry Value Long	143,751.00	Entry Value Short	0.00
Return / Risk	0.57%	Std Dev of Drawdown	918.61
Return / St Dev of DD	15.06%	Number of Drawdowns	14.00

So for individuals that have had a difficult time trading the S&P E-mini during 2009 the good news is that there are cycles of compression and expansion for the markets that can be readily identified by an indicator like our "73". We feel that the key is staying out of the market when conditions are bad and "pressing your bet" when the markets are in your favor.

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT

THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS.

Thomas J. Reavis belongs to an elite class of brokers. For over 30 years, he was one of only 625 full members of the Chicago Mercantile Exchange (CME). He has been an independent trader and market maker in the "pits" from 1973 until 2000. For over two decades Tom was a spokesman for the Chicago Mercantile Exchange, representing the position of the floor trader. He has spoken before the National Cattleman Association, Organization of Young Millionaires, American Hog Producers Association, National Association of Police Retirement Fund, State of California Retirement Fund and numerous other groups. Mr. Reavis has served on many exchange committees include the Long Range Planning Committee, Trading Floor Communications Committee, and the Live Cattle Committee. Tom now serves as president and head trader for Worldwide Futures Systems. You can contact him at 800-982-5321 or info@wwfsystems.com. Worldwide Futures Systems: www.wwfsystems.com