Adaptive Mixture of Experts: AME #100, FedEx Corporation

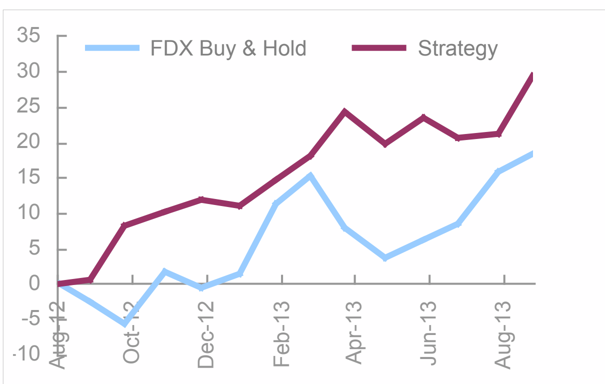
September 2, 2013

Overview

In this series we are looking at how the strategies that are part of our AME package have performed since the report's launch in Aug 8, 2012. More specifically we give an update of how AME has been doing on Fedex (chart AME #100).

Strategy rules: Buy/short FDX at the next open after AME of close has crossed above or below the zero line.

Days correct: 58.7%, Return: 32.2%, W/L: 1.16 *



We'll give numbers later, but the graph is pretty clear that the strategy has done well in terms of total return and volatility reduction. It has been quite successful at sidestepping local drawdowns.

* Those results do not account for transaction costs but because of how infrequently the model trades, transaction costs are minimal assuming a decent sized account and proper money management. See the adjunct on position sizing.

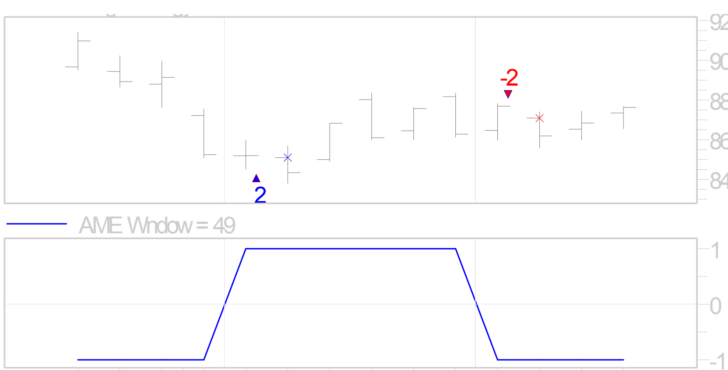
Key takeaways

- You have probably read about adaptive trading strategies that are capable of "learning" from the markets. Our AME expert takes this approach and so far has done a good job adjusting to some very troubled markets.
- The benefit of using AME has been in improving returns relative to volatility, and managing drawdowns. As a result, YTD performance has run more or less in line with the historical backtest.

Chart Description

Chart Name	AME #100 Setting FDX The chart was released August 6, 2012 as part of the [Noxa-AME package]()
Platform	NeuroShell Daytrader®
Instrument	FedEx Corporation (FDX) NYSE
Type	Volatility
Position Sizing	Fixed Size: Shares/Contracts = 1

Figure 1 | Strategy rules



> Go Long at the next available Open if AME of Close, with the Window parameter set to 49, crosses over above the zero line.
>
> Go Short at the next available Open if AME of Close, with the Window parameter set to 49, crosses over below the zero line.

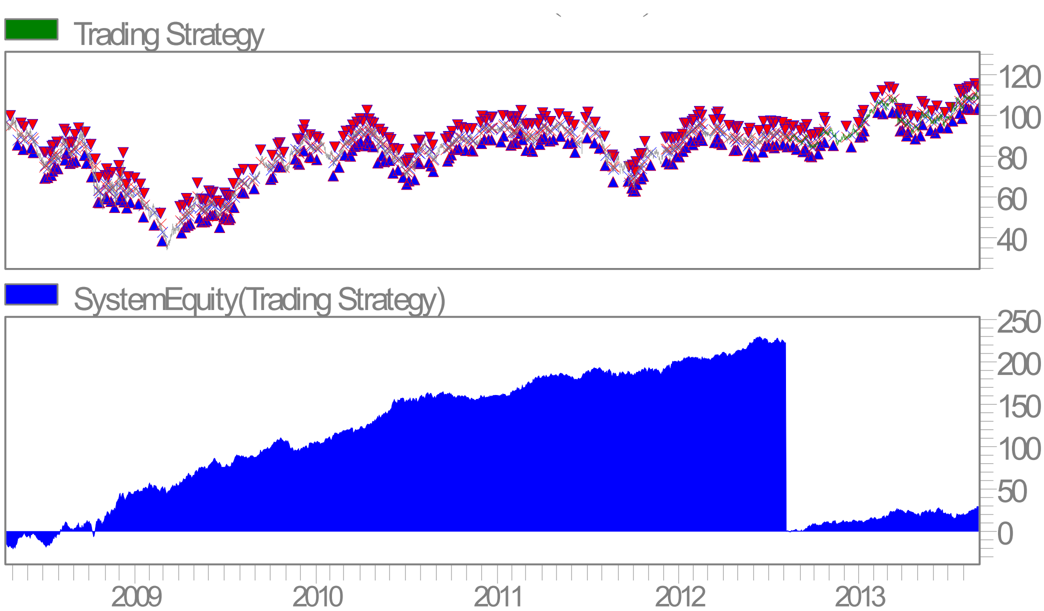
For the number lovers

	Paper Trading	Trading
Start Date =	11/24/2006	8/6/2012
End Date =	8/3/2012	8/29/2013
Annual Return on Account	35.0%	**30.3%**
% Profitable Trades	60.4%	**58.7%**
Ratio Gross Profit/Loss	1.89	**1.64**
Ratio Avg Win/Avg Loss	1.24	**1.16**
Number of Trades	369	**75**
Average Trade Span	4 bars	**5 bars**

Results do not account for transaction costs. For more on that, see the adjunct on position sizing.

Note that the trading rules and parameter values are kept unchanged so that the results are "Out-Of-Sample" (OOS).

Performance Chart



Position Sizing

The results reported above do not account for transaction costs. The table below shows how chart #100 would have benefited from the money management features available in NeuroShell Trader 6. We make sure the sizing strategies are set by default and do not use optimization, so that the benefit of hindsight is limited to the choice of the method.

Initial account balance $100,000
$10 transaction costs
Start date = 8/6/2012, End date = 8/29/2013

	Fixed size: 500 shares per contract	Fixed leverage: 2 to 1	Fixed fractional: 0.05	Kelly formula	Optimal f
Annual Return on Account	26.8%	27.5%	25.2%	27.5%	27.5%
Ratio Gross Profit/Loss	1.56	1.52	1.52	1.52	1.52
Ratio Avg Win/Avg Loss	1.10	1.07	1.13	1.07	1.07

As you can see, transaction costs are minimal assuming a decent sized account and proper money management.