



Use haDelta for a Better Timing in the Market

# Trade ahead of the Crowd

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Heikin-Ashi is a trend technique getting increased traction these days. Its simplicity and strength make it a great tool to trade any financial instrument in any time frame. At origins, this technique was used as a visual add-on improving the interpretation of regular price charts. Since everything can be quantified, Heikin-Ashi candles became a logical target to achieve this goal. And so haDelta was born as the difference between the close and open of a modified (Heikin-Ashi) candle. This article will show how traders can use haDelta in different trading situations in order to “steal” one bar of action.





**Dan Valcu**

Dan Valcu is a Certified Financial Technician (CFTe), Board Member of the International Federation of Technical Analysis (IFTA) and a private trader. He is the author of the first book on Heikin-Ashi "Heikin-Ashi – How to Trade Without Candlestick Patterns".

### What Is haDelta?

Heikin-Ashi is a price filtering technique based on modified open/high/low/close (OHLC) values. Its revolutionary charts reveal trends, consolidations and reversals in greater detail. A remarkable enhancement of this technique comes with the construction of haDelta, defined as the difference between haClose and haOpen. As a momentum indicator it can be used to alert for impending trend reversals but also as other momentum indicators. Since haDelta is a raw measurement of Heikin-Ashi candles, it is recommended to use it together with a short 3-bar simple average SMA(3).

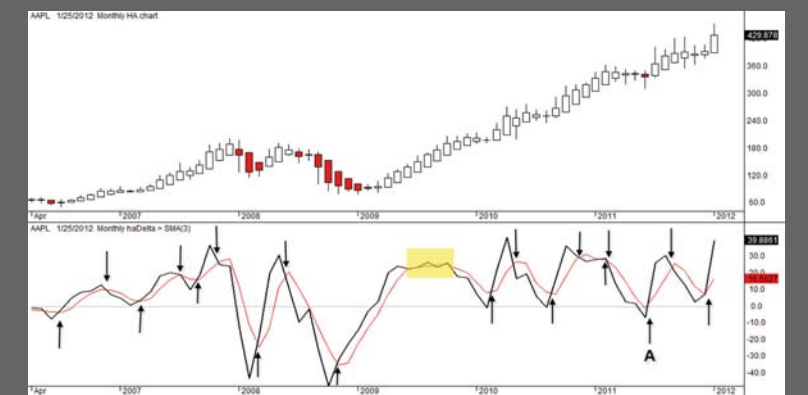
The examples in this article are an excellent practical guide for traders. As with any technique or strategy, haDelta and Heikin-Ashi in general, should be implemented with solid risk management rules.

### haDelta and Heikin-Ashi Charts

Heikin-Ashi started as a visual trend technique. A series of white modified candles identifies a shorter or longer uptrend while a sequence of filled/dark Heikin-Ashi candles point to downtrends. Small candle bodies with both higher and lower shadows are a Heikin-Ashi visual representation of price consolidations. The impact of these charts is strong. As with anything which looks too good, Heikin-Ashi as a visual instrument, offers traders a trap they easily can fall into: A delay of one, even two bars, between the reversals on the Heikin-Ashi chart and those corresponding on the regular price. This is not bad but it can surely be improved upon.

And this is how the quantification idea (haDelta and SMA(3)) came when I introduced this trend technique to the trading community in the West in 2004.

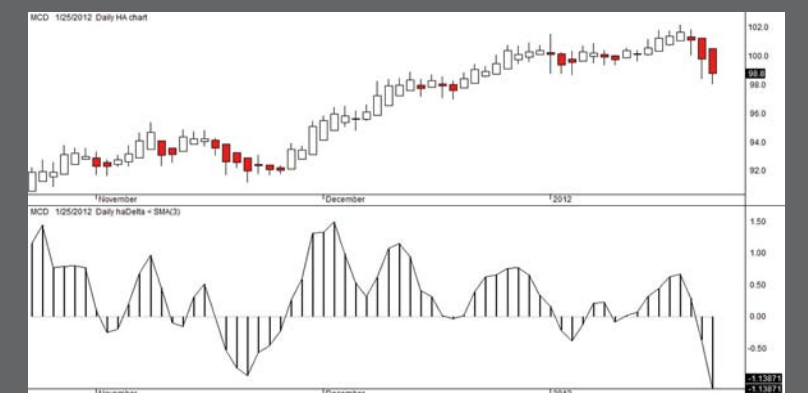
#### F1) haDelta-SMA



Buy and Sell early signals on a monthly Apple (AAPL) chart using haDelta and SMA(3).

Source: [www.educofin.com](http://www.educofin.com)

#### F2) SMA Polarity



SMA(3) polarity changes on McDonald's (MCD) chart generate Buy and Sell signals.

Source: [www.educofin.com](http://www.educofin.com)



### Purists and Others

There are two main categories of traders who use already Heikin-Ashi: Purists and the rest.

The purists or the Heikin-Ashi hardcore traders, use only the visual Heikin-Ashi charts. The problem, as mentioned, is the one- or two-bar lag. To remove this deficiency, haDelta comes into the picture and keeps Heikin-Ashi traders happy with a quantifiable instrument. Both brain hemispheres work together for the same purpose: The right side loves the visual candle charts and the left one, our analytical side, listens to haDelta and SMA(3).

The rest or other traders, new or familiar with Heikin-Ashi, prefer to add their indicators and other visual price representations. In

this case, Heikin-Ashi in any form (visual and quantifiable) is used to confirm or reject trading signals. haDelta is of particular relevance in all these cases.

### haDelta and Its Short Average SMA(3)

It is general knowledge that an indicator above one of its averages establishes bullish sentiment depending on the period used for computations. When an indicator falls below one of its averages, the bias turns generally bearish for the time frame associated with the period used for the average.

Since haDelta is an indicator, it follows the same rules. The novelty and the focus here are the early reversal signs offered

by crossings of haDelta and the short average.

Although Heikin-Ashi is not a mechanical trading technique, any earlier sign of a trend reversal is of great benefit either to prepare for an entry or exit, or to tighten the trailing-stop. In the chart in Figure 1 we see clear entry and exit signals, some of them, one or even two bars before the indications offered by Heikin-Ashi charts. In this case, the investor should pay attention to whipsaws caused by the trend slowdown (note: during a slowdown, haDelta acts in the opposite direction with the main trend giving the false impression that a serious pullback/reaction may take place).

One particular setup is the one when the crossing occurs at or very near zero (A on the chart). More often than not, it warns about a strong trend ahead.

### SMA(3) Polarity

haDelta, by definition, is a rough indicator. Although the crossings are very profitable in stronger trends (steeper regression lines), they may generate whipsaws in slower trends and of course during consolidations. To reduce the number of false indications, we use signals triggered by change in SMA(3) polarity:

- Buy/Cover Short when SMA (3) goes above zero.

### What Are Heikin-Ashi Charts?

Heikin-Ashi (Japanese for “average bar”) candlesticks are a weighted version of candlesticks calculated with the following formula:

Open = (open of previous bar + close of previous bar) / 2  
 Close = (open + high + low + close) / 4  
 High = maximum of high, open, or close (whichever is highest)  
 Low = minimum of low, open, or close (whichever is lowest)

Heikin-Ashi candlesticks must be used with caution with regards to the price as the body does not necessarily sync up with the actual open/close. Unlike with regular candlesticks, a long wick shows more strength, whereas the same period on a standard chart might show a long body with little or no wick. Depending on the software or user preference, Heikin-Ashi may be used to chart the price (instead of line, bar, or candlestick), as an indicator overlaid on a regular chart, or as an indicator plotted on a separate window.

Source: Wikipedia

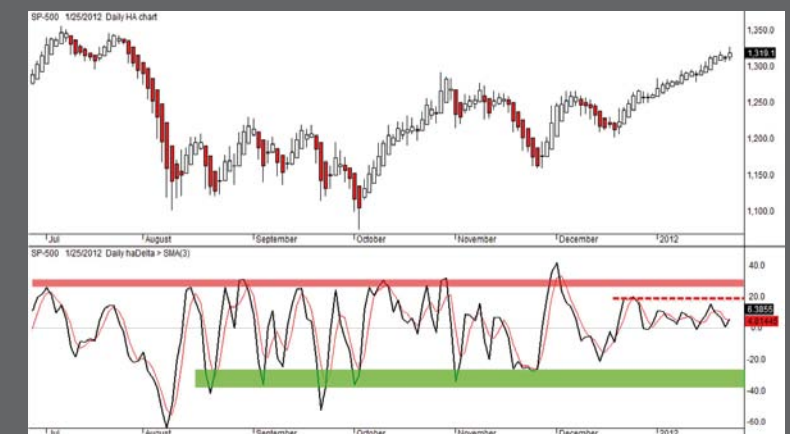
### F3) SMA Failures



Positive and negative SMA(3) failures act as warnings for stronger trends ahead.

Source: www.educofin.com

### F4) haDelta Support and Resistance



haDelta as a non-normalised indicator offers reliable indications about where the price could hit a resistance or support.

Source: www.educofin.com



- Sell/Short when SMA (3) falls below zero.

Although the main task of Heikin-Ashi is to filter out price noise, haDelta remains a rough indicator and may offer false indications as seen in Figure 2. Its short moving average, SMA(3) comes to the rescue and reduces these fake buy/sell signals. For clarity, SMA(3) is represented in Figure 2 as a histogram improving the confidence of the trading signals.

#### haDelta/SMA Failures

During any up- or downtrend, prices bounce at certain levels

and times. These corrections are often tricky and only a stop-loss can save capital when the dominant trend resumes and the ocean reveals all naked swimmers.

haDelta or its average sometimes offers indications about the continuation of the current dominant trend when the indicator turns back at or approaches very near zero.

On Nokia (NOK) chart in Figure 3, the negative failure in November 2011 (red) was an early indication of a possible breakdown. A failure of SMA(3) to break below zero in January 2012 (green) translated into a stronger uptrend.

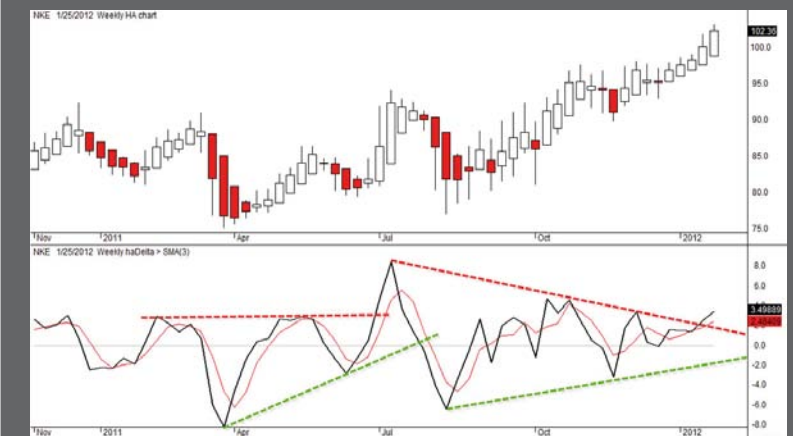
#### haDelta Historical Support and Resistance

haDelta is a momentum indicator and can be normalised. The main disadvantage of doing so is the visual limitation during strong trends. It is preferable and recommended to keep haDelta as is and identify its historical peaks and valleys in order to assess resistance and support levels.

This approach helps estimate the price excursion from its current value.

The daily S&P 500 chart in Figure 4 is self-explanatory and shows how far the index can, theoretically, travel. Although a simple and visual technique, it is

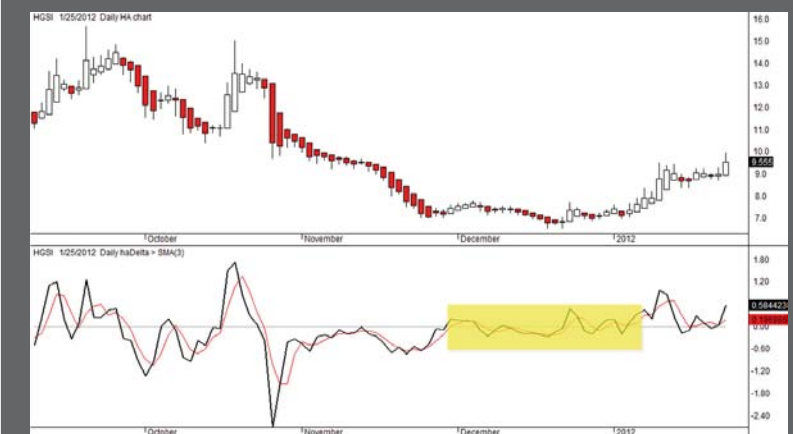
#### F5) haDelta Trendlines



The use of trend lines with momentum indicators applies even for haDelta on Nike (NKE) weekly chart.

Source: www.educofin.com

#### F6) haDelta Tight Range



A tight range above and below zero indicates a consolidation for Human Genome Sciences (HGS) in December 2011.

Source: www.educofin.com





very useful to use it to anticipate where the market will reverse.

### haDelta and Trendlines

Simple trend analysis is best. Violation of trend lines applied to technical indicators, especially to oscillators (and momentum) point in many cases to early reversals signs. These signals are reliable and demand attention in regard to immediate price action.

haDelta is no exception and Figure 5 shows such a situation. The break above or below the trend lines drawn in Figure 6 triggers entries or exits. Since haDelta has a limited excursion between its historical support and resistance levels, it is strongly advisable to use a tighter stop-loss.

### SMA(3) in a Tight Range

We have seen above (Figure 2) how trading signals are generated when SMA(3) changes polarity. Unfortunately, price consolidations change the beauty of these signals and may lure many traders. One way to improve the odds for better signals but also to assess the existence of a consolidation is to define a tighter range that covers an area above and below zero. If and when SMA(3) travels inside

this range, the message is that of a price consolidation. Best is to act upon the violations of the range boundaries.

The tight range developed by SMA(3) during December 2011

**“If you focus on trends, Heikin-Ashi technique is a must-have instrument.”**

(yellow area in Figure 6) is an indication of a consolidation. The height of the range can be defined by looking at past levels reached by SMA(3).

### haDelta and Divergences

As a momentum indicator, haDelta is used to identify positive and negative divergences with the price.

The daily FXE chart in Figure 7 shows three positive divergences with significant outcomes.

### Simple Remains Beautiful

If you focus on trends, the Heikin-Ashi technique is a must-have instrument for analysis and trading decisions. Its simplicity and strength lies in the way the modified prices derive from regular OHLC prices. While a Heikin-Ashi chart reveals trends, consolidations and reversals in

greater detail with finer accuracy, the addition of haDelta improves timing with many early trading signals.

Although Heikin-Ashi is not a mechanical add-on to your trading, it adds great value and delivers improved results to your portfolio.

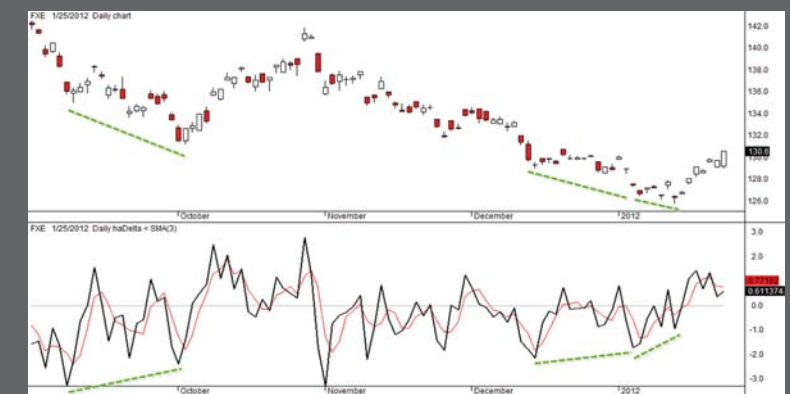
You may use this technique either singularly or by combining it with your existent decision tools. Both ways work

but your personal trading profile and habits are factors to take into account.

haDelta is the quantifiable translation of the Heikin-Ashi trend technique. Implemented in a simple manner, it offers the following features:

- Use with Heikin-Ashi candle charts.
- Earlier trading signals.
- Support/resistance levels offered by historical haDelta valleys/peaks.
- Signals triggered by crossings above/below a short period average.
- Signals triggered by the change in polarity of the short period average.
- Warnings about stronger trends (failures at zero)
- Violation of trend lines.
- Price divergences. ■

### F7) haDelta Divergences



Positive and negative divergences (price vs haDelta) are warnings for future moves of FXE (Rydex CurrencyShares Euro Trust).

Source: [www.educofin.com](http://www.educofin.com)