HEIKIN-ASHI

HOW TO TRADE WITHOUT CANDLESTICKS

Presentation for BCUG 24 August 2021 by Alek Jankowski

ORIGIN OF HEIKIN-ASHI

- Originated in Japan; relatively new to Western traders (2004)
    - First article by Dan Valcu February 2004

- A variation on Japanese Candlestick charting

- Heikin means "average", Ashi means "bar"; hence "average bar"

A price filtering technique based on modified open/high/low/close values

- Focuses on:
    - Pattern recognition capabilities of the human brain – a visual tool
    - Drawing attention directly on trends and reversal patterns
    - Adding confidence to decision making

CANDLESTICKS V HEIKIN-ASHI

- Candlesticks
  - Very popular
  - 100+ patterns
  - Very flexible rules and interpretations "in context"
  - Individual translation is subjective
  - Complex - cheat sheets and books of reversal and continuation patterns

- Heikin-Ashi
  - A more objective, quantifiable tool – context is not a factor
  - 3 patterns, 5 rules; very short learning curve
  - In synergy with candlesticks not in competition

FEATURES OF HEIKIN-ASHI

- Striking clarity of trends, reversals are clear

  - Colour changes with trends

  - Doji-like candles with upper and lower shadows point to probable trend reversals

  - Series of candles with both upper and lower shadows define periods of consolidation

  - Gaps shown as strong long candles (no gaps on charts)

  - Turning points are sharper; trend analysis improves

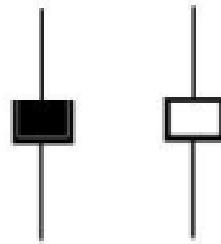*Simplicity is the ultimate sophistication*

THERE ARE ONLY THREE HEIKIN-ASHI CANDLE TYPES

HEIKIN-ASHI ORIGINAL CANDLE COLOURING
NOTE OPEN AND FILLED CANDLES

HEIKIN-ASHI CANDLES - OVERVIEW

Indecision.
Small candles

Long filled candles
indicate downtrend.

Long green
candles indicate
upward strength

Indecision

Long lower shadows
indicate buying pressure

180.00
176.00
172.00
168.36
165.87
164.00
160.00
156.00
152.00

BHP w 36.840 (-0.910 -2.41%) 27/09/2019

Candlesticks

Heikin-Ashi

WHAT HEIKIN-ASHI IS AND IS NOT

- Heikin-Ashi chart filters out price noise
    - Trends, consolidations and reversals are more visible to the eye
    - It works on all markets and across any time frame

- Heikin-Ashi is not the Holy Grail
    - Can be used stand alone but best used with other analytical tools for confirmation
    - Normally displays peaks and valleys one bar later than Japanese Candlesticks
    - Can be used for discretionary trading

TRADING – ELEMENTS TO CONSIDER

- Traders should take into account:

  - Sentiment, trend and momentum

- With Heikin-Ashi candles:

  - Sentiment is gauged by the colour, plus size of candle bodies and position of shadows

  - Trend is shown by candle colour

 - Momentum is measured by the height of candle bodies

TYPES OF HEIKIN-ASHI CANDLES

- Green with no lower shadows – uptrend

- Red with no upper shadows – downtrend

- Doji-like with shadows – reversal
    - Two or more doji-like candles in sequence - consolidation

Very easy to recognise the trend – look at candle colour and the direction of the shadows

FIVE RULES FOR HEIKIN-ASHI CANDLES

Rule	Features
R1	A sequence of green bodies identifies an uptrend. A sequence of red bodies identifies a downtrend.
R2	The uptrend gets stronger with longer green bodies and no lower shadows. The downtrend gets stronger with longer red bodies and no upper shadows.
R3	The trend gets weaker with smaller bodies and, possibly, with the emergence of both lower and upper shadows.
R4	A consolidation is revealed when a series of smaller bodies with both upper and lower shadows emerges.
R5	A trend reversal is likely with the emergence of a small body with long upper and lower shadows (doji-like) or a sudden colour change.
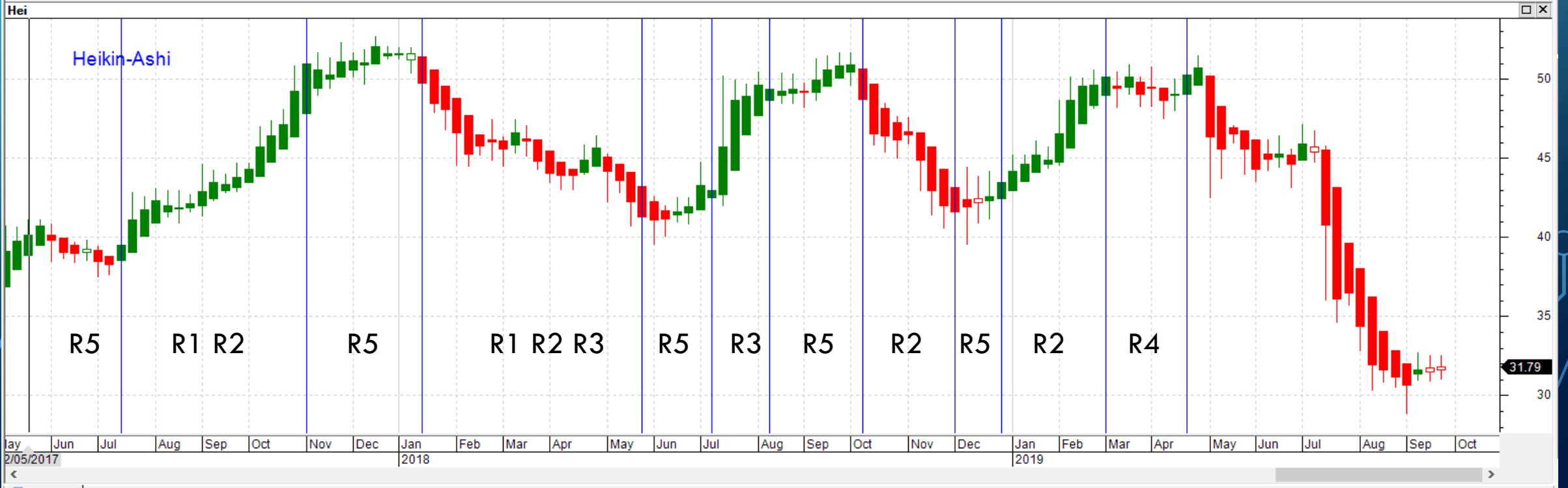
CONSTRUCTION OF HEIKIN-ASHI CANDLES
THE FORMULAS

- haOpen = (open of previous bar + close of previous bar)/2

  Mid-point of the previous HA candle body

- haClose = (open + high + low + close)/4

  Average price of the current bar

- haHigh = maximum value from high, haOpen or haClose of the current bar

  Highest value of the current bar

- haLow = minimum value from low, haOpen or haClose of the current bar

  Lowest value of the current bar

QUANTIFYING HEIKIN-ASHI CANDLES
IMPROVING THE ACCURACY OF ENTRIES AND EXITS

- The bodies of HA candles are the main element used to indicate and measure trend direction and momentum

- Introducing a new indicator "haDelta"
  - It is the difference between haClose and haOpen
  - Long HA candles push haDelta to extreme positive or negative values
  - Shorter bodies bring haDelta closer to zero
  - Positive values are associated with green candles, negative values with red candles
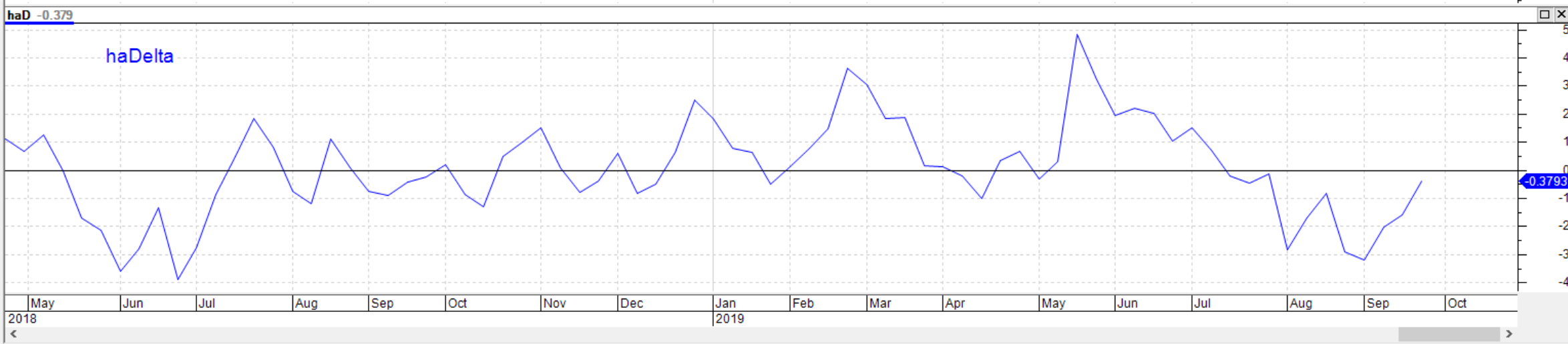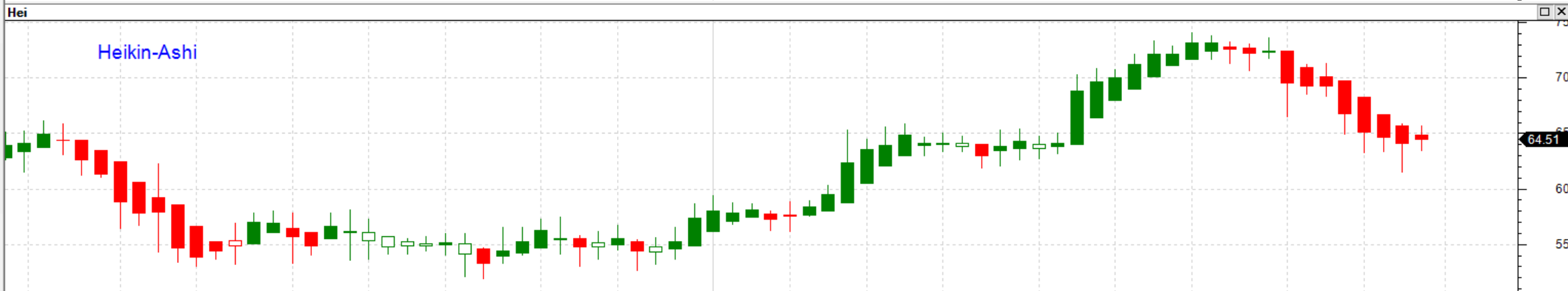
USING HADELTA

- haDelta is a raw and sensitive indicator, measures only the body height & colour

- Observe where haDelta is relative to extreme values reached in the past

- Expect haDelta to warn about a price top or bottom when it hits extreme values

- Offers indications about continuation of the current trend when indicator turns back at or approaches very near zero

- But generates whipsaws, especially in slower trends and during consolidations
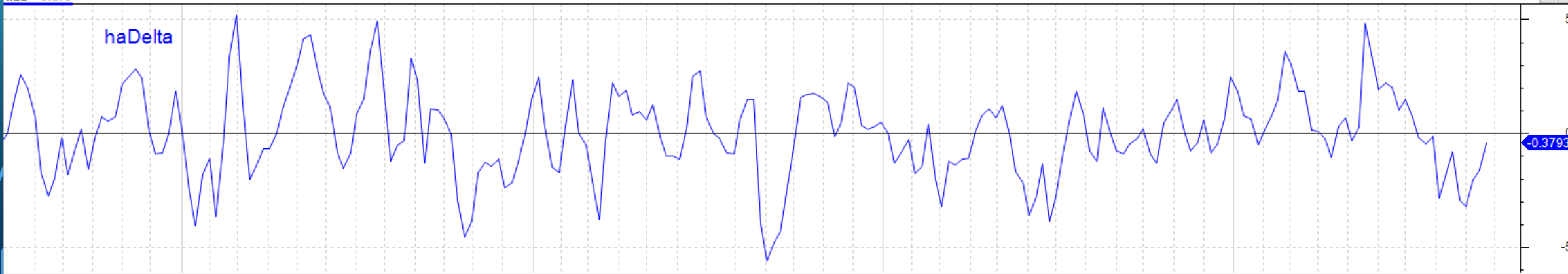
- Hard to use over longer time spans

IMPROVING HaDELTA

- haDelta is smoothed with a short SMA (3 bar) = haDelta+
  crossings between haDelta and its SMA (haDelta+) give better warnings of trend changes – but still give some false positives

- Further improvement is achieved by applying a second SMA (3 bar) to the first SMA = SMA haDelta+
  crossings between haDelta+ and its SMA give fewer but more reliable warnings of trend changes

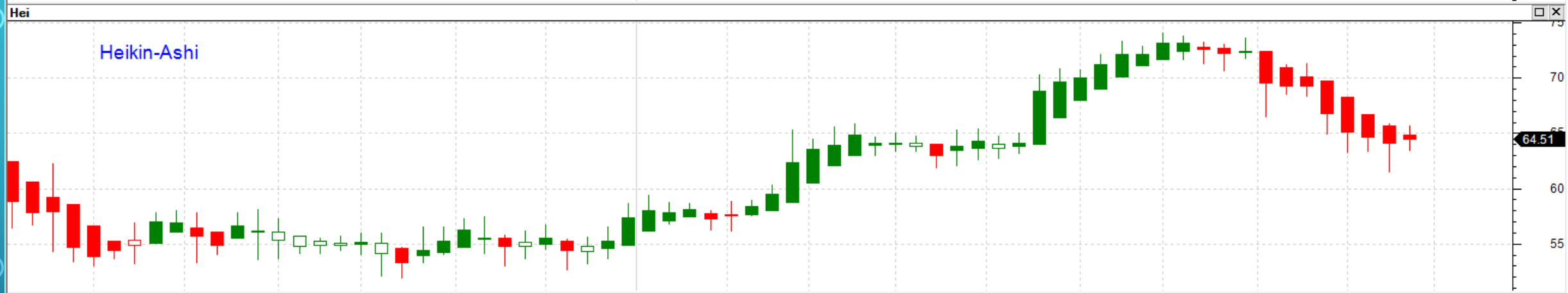- Trade-off: smoothing introduces a lag but improves confidence; trade-off is best in strong trends

RHC w 64.670 (+0.600 +0.94%)   27/09/2019
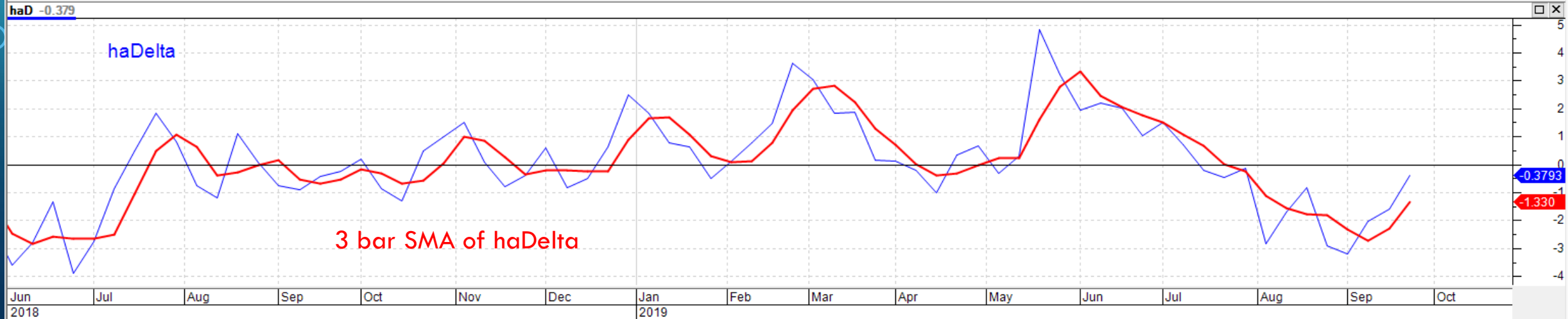
Candlesticks

Heikin-Ashi

haD -0.379

haDelta

3 bar SMA of haDelta

RHC w 64.670 (+0.600 +0.94%)   27/09/2019
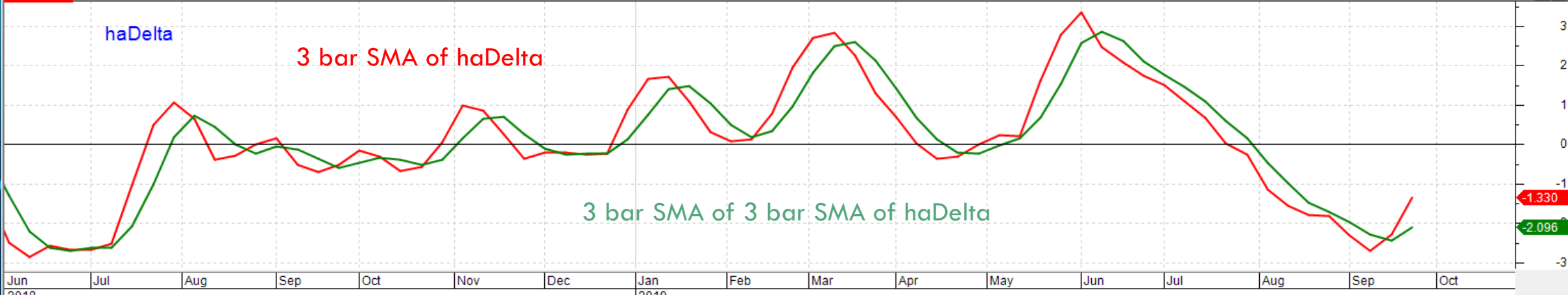
Candlesticks

Heikin-Ashi

haDelta

3 bar SMA of haDelta

3 bar SMA of 3 bar SMA of haDelta

HADELTA TRADING PLAN

- Used in conjunction with a Heikin-Ashi chart

- Buy or cover short when first SMA (haDelta+) crosses above second SMA (SMA haDelta+) – better if crossing is above zero (or just below zero)

- Sell or short when haDelta+ crosses below zero

SMOOTHING HEIKIN-ASHI CHARTS

- For longer term long trades, further reduce the amount of noise in the chart to avoid selling too early

- Found only two references to this idea in my research

- Researched various ways to achieve meaningful results (see next chart)
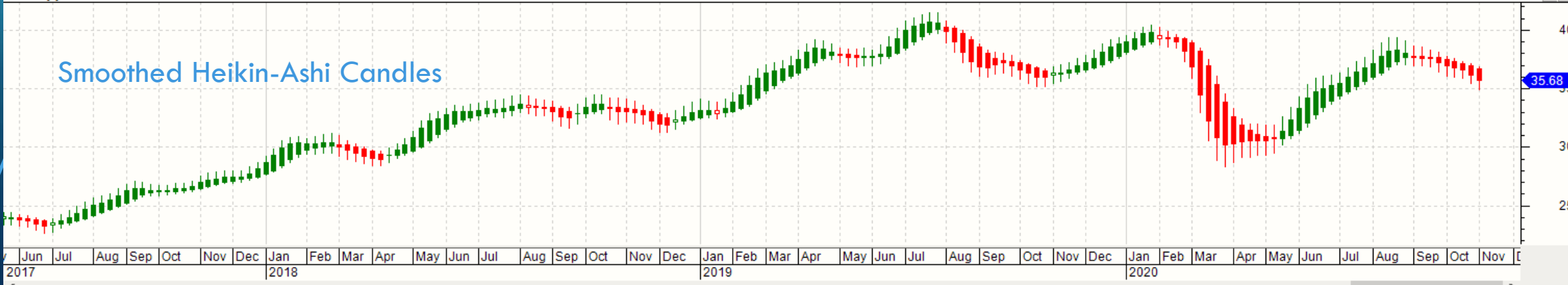Still being developed

NUMBER OF COLOUR (TREND) CHANGES
WEEKLY CHART MAY 2017 TO OCT 2020

- Candlestick chart   81

- Heikin-Ashi chart   54

- Heikin-Ashi smoothed   16

HEIKIN-ASHI AND MOVING AVERAGES
ANOTHER APPROACH TO SIGNAL ENTRIES & EXITS

- Add a 7 bar simple moving average of the regular closing price to the Heikin-Ashi chart

- Buy (exit short) at the close of the price bar when haClose crosses above the SMA

- Sell (enter short) at the close of the price bar when haClose crosses below the SMA

- Trends with steeper slopes appear clearer on a Heikin-Ashi chart

RHC w 62.350 (-2.320 -3.59%) 30/10/20

Buy   Sell

Hei   MA (C, S, 7) 66.200

SMA Close 7 bar

HEIKIN-ASHI AND MULTIPLE TIME FRAMES

- Ideal if all three timeframes have HA candles of the same colour

- Alternatively, buy when HA candles in two consecutive timeframes change to green e.g.   daily/weekly, weekly/monthly

# ADDING VOLUME TO HEIKIN-ASHI
SOMETHING TO THINK ABOUT

- Equivolume and Candlevolume are powerful visual tools

- Both can be used with Heikin-Ashi candles

- Combining these indicators with Heikin-Ashi candles adds a new visual dimension, adding volume confirmation to price action

- Candlevolume is the better technique for identifying tall and wide candles in uptrends and downtrends

SUMMARY

- A Heikin-Ashi chart provides a visual snapshot of trends, consolidations and reversals – easy to scan by eye

- Heikin-Ashi charts are simple to implement and do not use patterns

- Heikin-Ashi chart analysis is easy to learn
        only 3 candle types and 5 rules; no context implications

- Heikin-Ashi candles can be quantified

- Heikin-Ashi candles can be used in all timeframes but work better in higher timeframes

- Heikin-Ashi charts have a one bar delay in showing turning points compared to candlesticks
  haDelta can counter this lag

- Heikin-Ashi is a component of a broader discretionary trading process

BULLCHARTS CAUTION
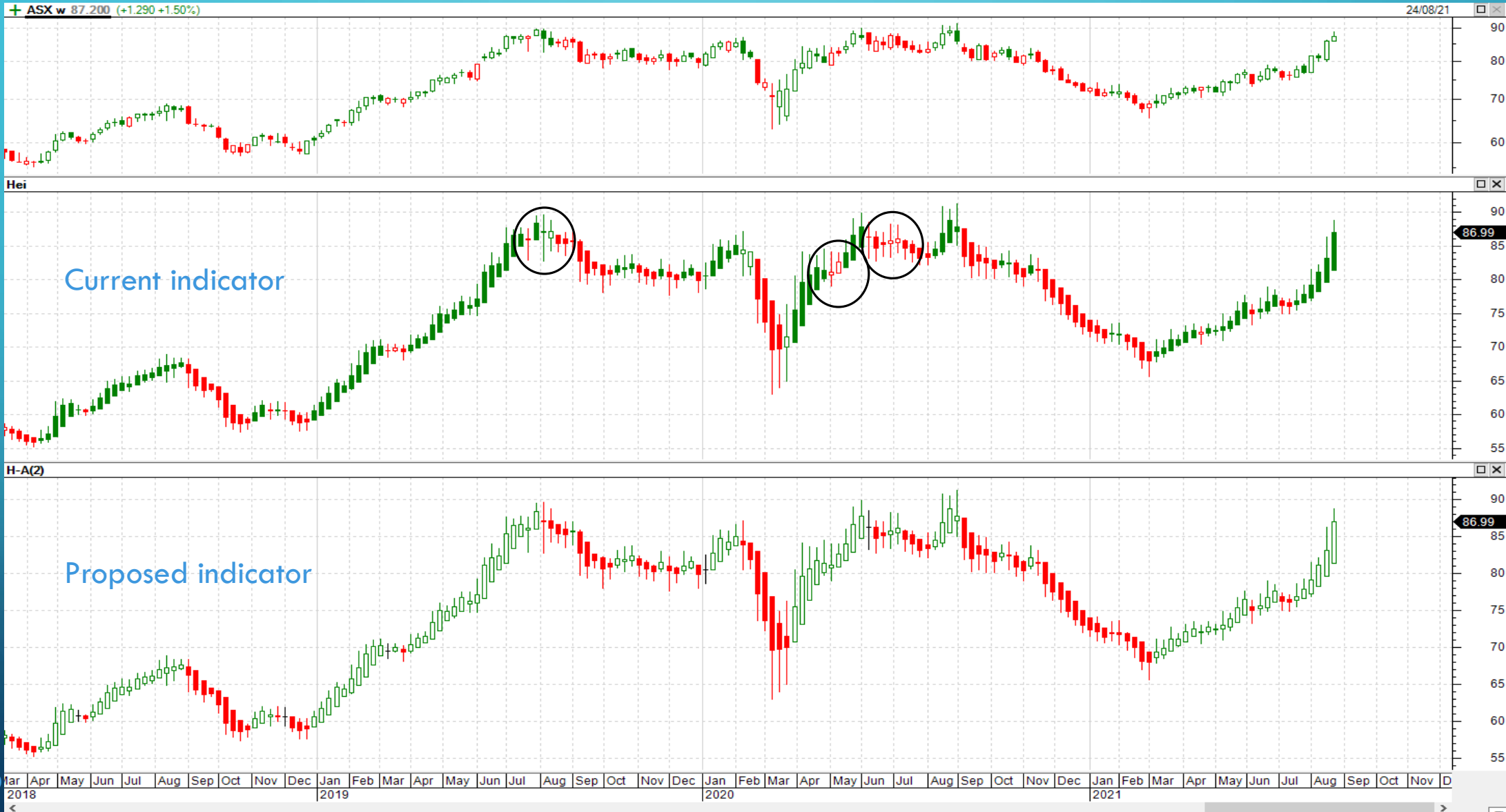
REFERENCES

- Dan Valcu "Using the Heikin-Ashi Technique"; Stocks & Commodities, Vol22 February 2004

- www.educofin.com

- Books
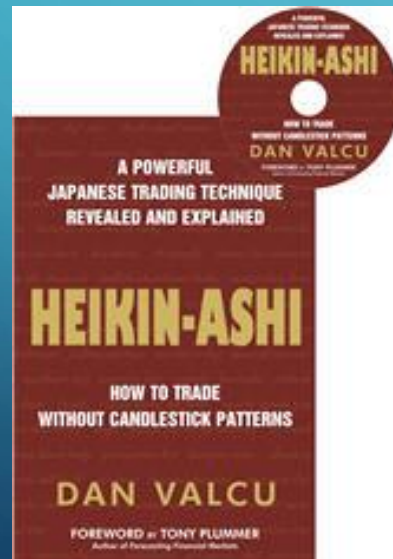
Thank you
Questions Please

........more to come