Multi-Timeframe Trend Trading

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1. Synopsis

The system described is a trend-following system on a slow timeframe that uses optimized (that is, contrarian) entries and exits on a fast timeframe at the tops and bottoms of retraces against the overall trend. Instead of trying to pick tops and bottoms at the beginning and end of major trends, multiple entries are made after the trend has been established with confidence.

The system is in the market only when the currency pair is in a well-confirmed trend. There is no stop-and-reverse logic keeping the system in the market at all times (although a trade in the opposite direction of the trade just closed may be entered immediately if all conditions are met).

2. Money Management

This is the make-it-or-break-it part of any system. I am an economist with a post-graduate degree and tend to get carried away with my opinions on the market. Being smart (or, rather, educated) has not helped me the least in the markets. As a sportsman I want to have some degree of discretion in my trading, and I also do not enjoy watching a mechanical robot frittering away my profits. Except for that, I learned the hard way that it is a good thing to think about the rules of trading, and a not-so-good thing to think about the actual trades.

Position size and numbers of pairs and positions entered concurrently are a function of risk tolerance. Unlike many traders, I do not calculate risk and position size as function of my trading capital (e.g.: "Risk no more than 2% of capital on any single position, no more than 5% of capital on all combined positions" etc.). I enter into a trade only if I am reasonably confident it will work out in my favor; I take controlled risks. I set hard stops beyond recent support and resistance areas (see below, "Stop-Loss Rules").

I do not concern myself with the expected risk/reward ratio. While I can estimate the risk of the trade, I have no way to predict the potential reward. Closing the trade at a pre-determined multiple of risk could see me missing out on the larger part of the trend. Not taking profits because a risk/reward ratio-determined target has not been reached, although the signals tell me to exit, would be plain stupid.

At any given time, I want only one risk position per pair.

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Generally, my initial entry is one mini-lot (10,000 units of base currency), putting my risk at roughly one dollar per pip; I do not believe that sound trading is a function of position size – the market will move in my favor or against me regardless of how small or large my position is, and I will not become a better technical analyst by increasing or decreasing my position size. If the distance to support/resistance and thus the risk in dollars is too large, I simply skip the trade and look for the next opportunity. If I started small and the trade develops in my favor, there will be opportunities to increase it as it runs (see below, "Adding Positions").

"I would rather be out of a market wishing to be in,
than in a market wishing to be out."

3. CHART SET-UP

All charts are line charts. On all charts blue color indicates long direction and red color indicates short direction across all indicators. Indicators marked as optional are not part of the trading system but used to help with discretionary decisions.

- The trend chart has the following indicators:
  - *Heikin-Ashi*, with optional alert arrow
  - *Gann High/Low* (box size 10) as dots and/or line
  - *2-Bar High/Low* to show recent support and resistance (optional)
  - *Stochastics* (13,3,3), fixed low of 25 and fixed high of 75, center line at 50 (optional)
  - *MACD* (5,13,3), center line at 0 (optional)
  - *Bollinger Bands* (55 period, 1/2/3 deviations) (optional)
- The entry chart has the following indicators:
  - *Heikin-Ashi*, with optional alert arrow
  - *Gann High/Low* (box size 5) as dots and/or line
  - *Stochastics* (13,3,3), fixed low of 25 and fixed high of 75, center line at 50
  - *2-Bar High/Low* to show recent support and resistance (optional)
  - *MACD* (5,13,3) , center line at 0 (optional)
  - *Bollinger Bands* (21 period, 1/2/3 deviations) (optional)
- The exit chart has the following indicators:
  - *Heikin-Ashi*, with optional alert arrow

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- *Gann High/Low* (box size 5) as dots and/or line
- *MACD* (5,13,3), center line at 0
- *2-Bar High/Low* to show recent support and resistance (optional)

Some of the indicators on the shorter entry/exit timeframes are set to faster values than those on the longer trend timeframe. This makes them more sensible to retracements and reversals, resulting in more trade opportunities.

The exit chart has a different background color from the trend and entry charts. When I enter a trade, I simply switch the template on the short-term chart from my entry template to the exit template. Thus I have an immediate visual clue on which pair and which timeframe I am currently holding a position. I also draw a horizontal line at the entry price to help me see how the trade develops, and whether the *Gann* dots have already moved into profit territory.

4. ENTRY RULES

This system uses a combination of lagging indicators for entries. Lagging indicators are a representation of the past, not a reliable prediction of future price action. Interpretation of the behavior of the (combined) indicators, a look at the total picture by the trader is therefore something I find an integral part of any trading "system" – maybe "approach" is a better word.

The rules of this system can be used to make strictly mechanical entries and exits. I personally prefer to leave the final decision to trader discretion and common sense. I also do not take signals when major news releases are about to come out; on the other hand, I am quite happy to take signals immediately after news has reinforced or changed the overall fundamental picture – that is when big moves happen, and happen for a reason.

To enter:

- I check the filter on the trend timeframe:
  - For long trades, *Heikin-Ashi* must be blue and above the *Gann High/Low*
  - For short trades, *Heikin-Ashi* must be red and below the *Gann High/Low*
- I check for a signal on the entry timeframe:
  - For long trades, *Heikin-Ashi* must be blue and above the *Gann*

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High/Low; the *Stochastics* %K and %D must cross back into the chart from below the oversold area at 25

- For short trades, *Heikin-Ashi* must be red and below the *Gann High/Low*; the *Stochastics* %K and %D must cross back into the chart from above the oversold area at 75

- It does not matter in which sequence *Heikin-Ashi*, *Gann High/Low* and *Stochastics* line up – important is that they do line up; the more of the three indicators retraced and reversed back into trend direction, the stronger the signal is.

Practically, I watch the entry chart on closed candles for an entry signal; when I see one, I check the trend chart to confirm the trend is strong and the entry signal is in the direction of the trend.

To avoid entering into a ranging market I utilize the *MACD* and *Bollinger Bands*, mostly on the trend charts. If *MACD* hovers listlessly around the 0 level, or if the *Bollinger Bands* are contracting and flat, I approach entry signals with a lot of caution.

5. STOP-LOSS RULES

I set a hard stop-loss beyond recent support or resistance on the long-term trend timeframe. The optional *2-Bar High/Low* indicator helps me identifying those zones, and I also take a look at recent price action to confirm.

In general, I close a position if either of the below conditions is met:

- Only in profit when a reverse signal happens on the short-term entry/exit timeframe, meaning:
  Price pierces and closes on the opposite site of the *Gann* resistance/support, visually confirmed by the *Gann* dot disappearing and/or an opposite dot appearing.
- In profit or loss if the trend reverses on the long-term trend timeframe, meaning:
  On a closed candle *Heikin-Ashi* reverses color and the *Gann* resistance/support dotted line is broken.

If I have added positions to my initial position, I treat them as individual trades. In other words, if all positions are already in profit and I get an exit signal on the fast timeframe, I close them all. If any positions are not in profit yet, they are only

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closed if the trend reverses on the slow timeframe.

There is something peculiar about the *Gann High/Low* indicator which sets it apart from other support/resistance indicators like DeMark or PSAR: the dot does not flip just when a spike touches them, but only if the candle closes beyond it. Therefore I do not like to place stop orders where the dot is, but instead check what happens when the next candle forms. If I cannot sit at the PC and actively manage my trade, I will – depending on where the trade is at – either hedge the position or place a stop at the long-term *Gann* dot or the short-term *Gann* dot three candles back (only if that dot is already in the profit zone of the trade); this, again, is a discretionary element of my trading style.

6. TARGET-PROFIT RULES

I do not set a target to close the initial position, instead I wait for a clear reverse signal to close the position or my – trailed – stop to be hit.

Doing so has some distinctive advantages:

- With the final stop being a reversal of long-term trend, the pip-distance can get very large. Taking out successful trades early or trailing stops too closely quickly results in a bad risk/reward ratio (penny-wise and dollar-foolish). Holding the trade unless a reverse signal is generated forces me to let my profits run.
- Most importantly, when I exit on the short-term chart while the long-term trend is still intact, only having the short-term signals reverse against the trade guarantees me that I will have re-entry signals later if the long-term trend continues.

For added positions only, I sometimes set discretionary targets at or before the closest support (for long trades) or resistance (for short trades) zones in order to lock in profits and to avoid subjecting the trade to whipsaw around those zones.

7. ADDING POSITIONS

I only enter into more positions if my initial and all consequently added positions are in profit and risk-free.

The add-on signal can never be the same as the initial entry signal – receiving

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an initial signal means that the indicators had reversed during a retracement before and the initial position was closed. I am essentially looking for minor retracements against the trend, not large enough to close my existing positions and wait for a fresh entry, but also not too small to generate a clear signal.

To add a position:

- I check that the trend has not been broken on the trend chart
- I make sure all existing positions on the pair are in profit and risk-free, with a hard stop-loss trailed into the profit zone
- *Heikin-Ashi* and *Gann High/Low* conditions must be met on the short-term exit chart
  - For long add-ons, *MACD* must cross below the 0 line <u>or</u> turn from red to blue when already below the 0 line
  - For short add-ons, *MACD* must cross above the 0 line <u>or</u> turn from blue to red when already above the 0 line

8. TIMEFRAMES

Suggest timeframe combinations are:

Long-term trend direction	Short-term entry/exit
D1	H1
H4	M15 or M5
H1	M5

9. PAIR SELECTION

Naturally, a trend-trading system requires pairs that trend well. Because of multiple entries and exits, trend momentum has to be strong enough to compensate for cost from spreads or commission; this is especially true for shorter timeframes. The relative cost of entry can be calculated by dividing the typical spread in pips of any currency pair by its Average True Range (*ATR*).

Example: I evaluate the spread against the 144-period *ATR* on the hourly chart (the trading week is 6/24, or 120 hours; 144 captures a bit more than a week and is the next-largest Fibonacci number).

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	Spread	ATR (144,h1)	Ratio
eurgbp	2.3	14	16.43%
gbpusd	2.1	28	7.50%
eurusd	1.0	33	3.03%
audnzd	5.9	22	26.82%
audusd	2.0	21	9.52%
nzdusd	1.6	24	6.67%
usdjpy	0.5	18	2.78%
eurjpy	1.1	33	3.33%
gbpjpy	1.9	39	4.87%

On my broker EUR/GBP and, more so, AUD/NZD have expensive spread costs; USD/JPY, EUR/USD and EUR/JPY have much less of a premium. If my entry is on the M30 or higher, I want spread/*ATR* ratios of less than 10%; for scalping and entering on M15 or M5 I am looking for ratios below 5%.

When trading longer timeframes (i.e., H4 or D1 for trend) I watch as many pairs as my screen and concentration can accommodate. For shorter timeframes I am careful about (normal and inverse) correlation between the pairs traded. From experience I would avoid trading e.g. EUR/USD and USD/CHF on the same timeframe, or GBP/JPY and EUR/JPY, AUD/USD and NZD/USD, USD/CAD and CAD/JPY and so on. Recent correlation can easily be looked up on many FX portals, such as: http://www.mataf.net/en/tools/correlation .

10. INDICATOR DISCUSSION

I deliberately use only standard indicators that are widely available for many platforms. Using exotic indicators can be exciting, but I do not like the idea of maybe having to study and incorporate new indicators into my trading if I ever switch charting platforms. I also want to be able to look up an indicator and understand the mechanics behind it, how it is calculated and what it shows me.

I also try to avoid putting too many indicators on my charts. In my opinion using different timeframes for confirmation is the strongest "indicator" possible; therefore I picked one indicator each to show me (1) the momentum of the price action, (2) help me avoid trading into support or resistance, and (3) give me an edge by exploiting overstretched short-term spikes in price movement against the underlying trend. All the other indicators are optional and can be eliminated from the charts

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without harm to the system or its functionality.

The charts are set up to show price action and momentum (*Heikin-Ashi*) and trend (*Gann High/Low*) in the main window, and market strength (*Stochastics* plus *MACD*) in the oscillator sub-window.

- Price Action and Momentum: *Heikin-Ashi*
  - *Heikin-Ashi* are essentially derived from *Moving Averages*, however unlike trading *MA* cross-overs the size of the body and the shadow relative to it give valuable clues about the price action. The dynamics of a pair of *MA*s crossing, moving further apart or closing in on each other can also be easily displayed by oscillators like *MACD* or *Awesome Oscillator*, so I do not want them to clutter the main window of my charts.
  - *Heikin-Ashi* are faster with their signals than *Heikin-Ashi Smoothed*; also, it is more difficult for me to interpret the shadows on the latter to read momentum.
  - If I want to look at pure price action, I can always switch to a traditional candle chart.
- Trend, Support and Resistance: *Gann High/Low*
  - Other, similar indicators like *PSAR* flip when being touched, not upon close of the candle, so they do not survive quick spikes. I do not like that for short-term trading. *PSAR* also gradually closes in on the price with each period, not forming an equidistant line but assuming gradually increasing overbought/oversold conditions with no basis in price action but based on timeline only. For me that is no reliable indication of support/resistance, but only a statistical guesstimate.
  - *DeMark* trendlines are drawn on different angles from the most recent tops and bottoms. They can be based on just the previous two candles, and I do not find that reliable enough.
  - *Gann High/Low* takes the guess-work out, it is not ambiguous, I get the historical picture and signals are generated only upon candle close, so there is no problem with repainting.
- Market Strength, Extreme conditions: *Stochastics*
  - Generally speaking, with the massive volume of the currency markets I do not believe at all in overbought or oversold conditions. To the contrary, when an oscillator travels into the standard overbought or

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oversold territories, I think that a strong trend has formed. So if on the trend chart the %K and %D lines are flying off the chart in the trend direction, I find that an encouraging sign. On the entry chart, on the other hand, the lines going off the chart in the opposite direction of the trend shows me that the retracement has been violent and quick, likely to be corrected by a decent move back in the direction of the trend.

- I picked *Stochastics* over other common oscillators because it:
  - Is calculated from price ranges, unlike *RSI*, *Williams %R* which are momentum indicators; with *Heikin-Ashi* I already have a momentum indicator in the system.
  - Has pre-determined lower (0) and upper (100) limits, setting it apart from e.g. *CCI*.
  - Has pre-determined overbought and oversold levels unlike e.g. *RVI*, *MACD* or *Awesome*.
  - Draws two lines making for better visual confirmation than a single-line indicator (like *RSI*, *Williams %R*); in summary, I find it straightforward.

11. APPENDIX: CHARTS

<u>**MULTI-TIMEFRAME TREND TRADING**</u>

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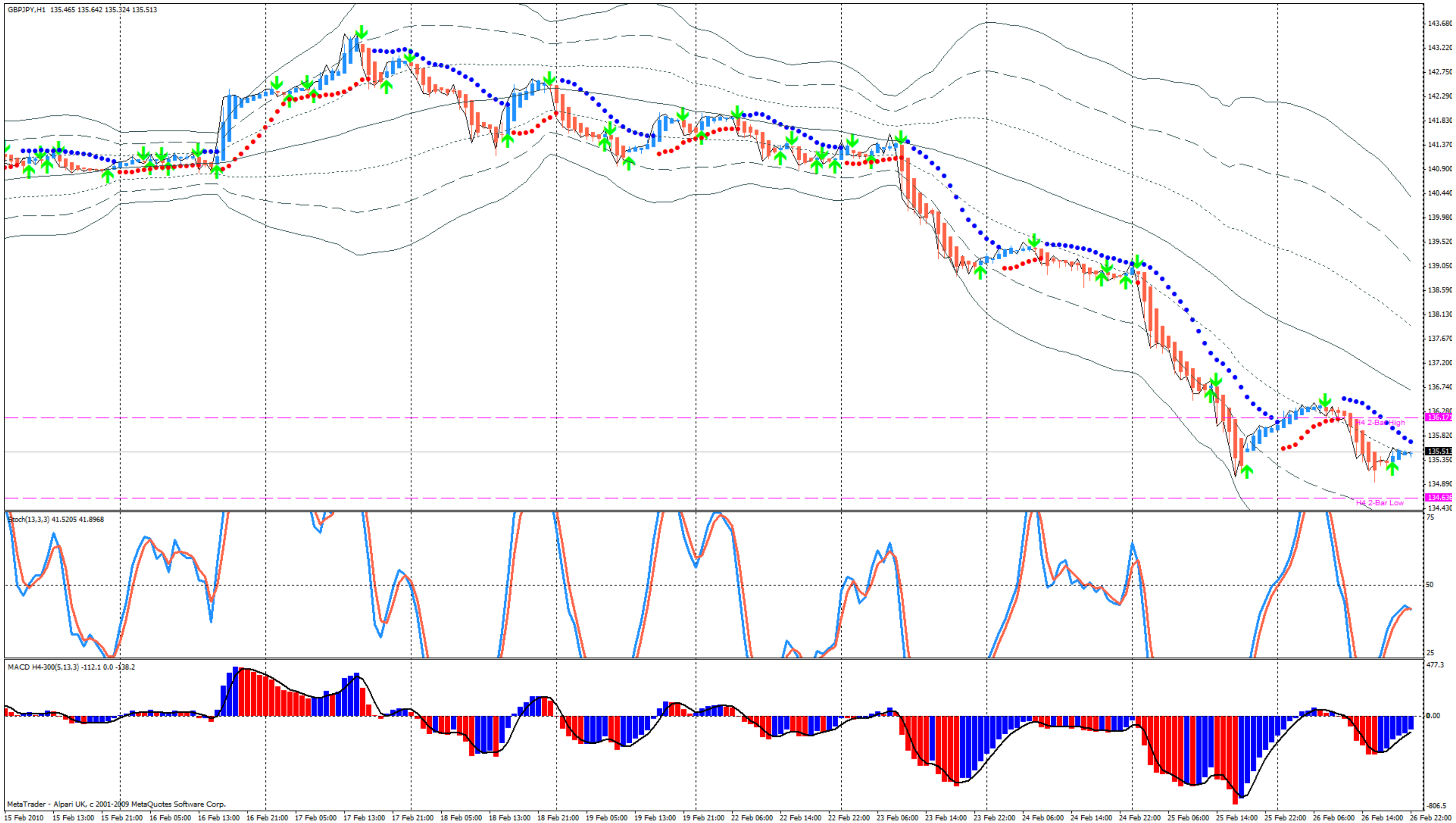
Trend Chart



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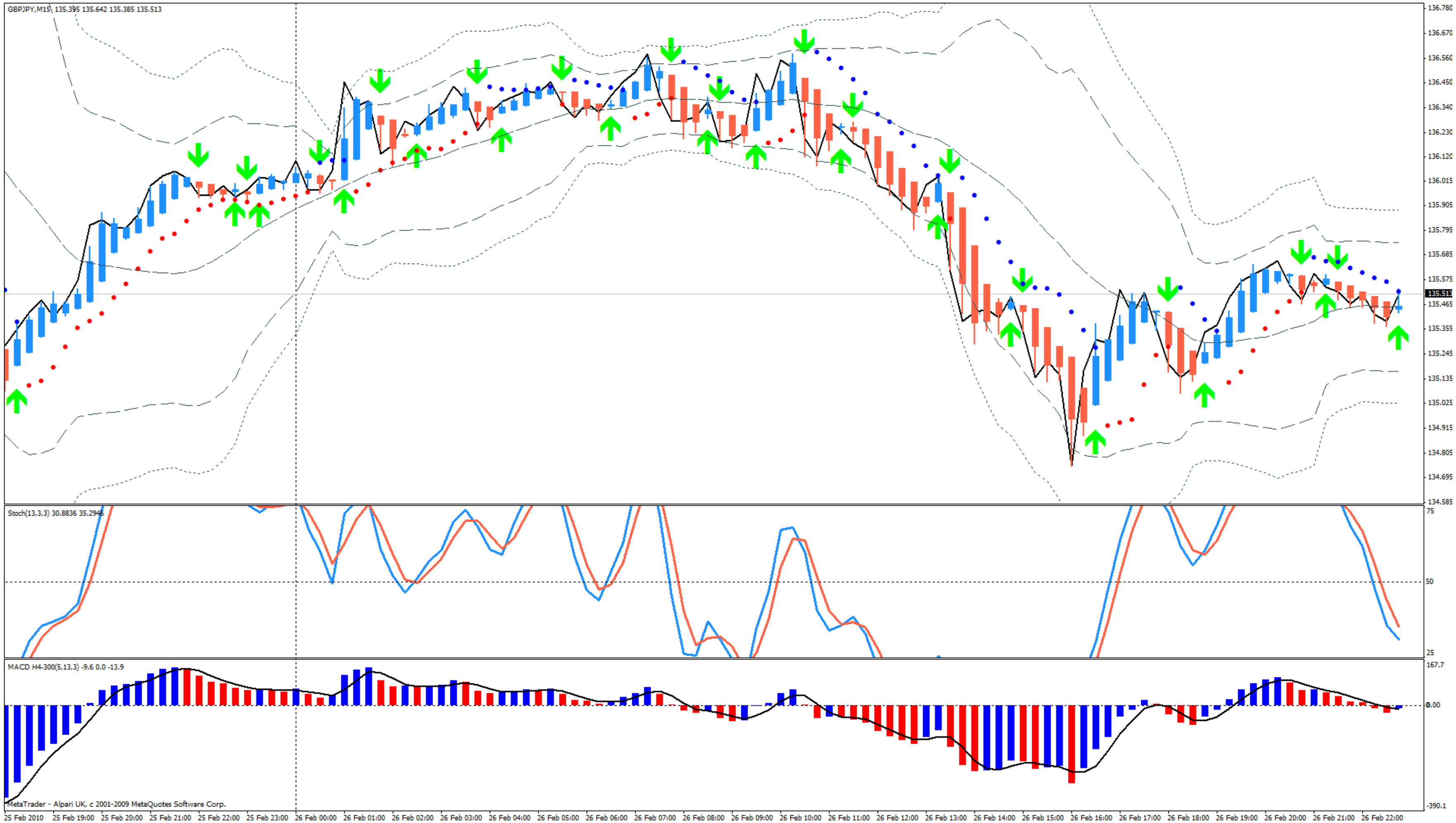
Entry Chart



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Exit Chart