

Hanover

Introduction

I created this user guide from my shell user guide, so there may be stuff in here that does not apply to Hanover. If you read about inputs/functions in this guide that you cannot see in the EA, ignore them.

In this thread, <http://www.forexfactory.com/showthread.php?t=163158> hanover (David) posted his Recent Strength indicator. You need to visit David's thread to learn to use the indi in detail, but what it gives us is a graphical representation of the relative strength of the major currencies.

We have all read the mantra, "Trade the strongest currency against the weakest." Using this tool presents us with the opportunity to do so.

Hanover the EA works by:

1. Looking at the time frames you enter into the TimeFrames input.
2. Once each time frame has the same currencies at the top and bottom of each list, it creates a trading pair from them, then either buys or sells the pair as appropriate. This assumes that your criminal offers this pair for trading.
3. Trade exit is by take profit or stop loss; you can trail the sl in a variety of ways by using Multi-purpose Trade Manager. There is a link to this at the end of the first post in my Hanover EA thread.
4. If you close a trade manually, remember to turn off Hanover first. If you forget, and conditions are still appropriate for a trade, then he will instantly fire off another.
5. If you have a trade open and new currencies move into the top and bottom positions, then H will send a fresh trade. You could end up with multiple trades open, so bear this in mind when choosing your lot size.

Setup

Take a lot of care with this. Get it wrong and H will sit quietly on your chart for ever without trading:

1. Download David's Recent Strength indi into you Indicators folder.
2. Download David's Build Strength Preset File.mq4 into your Scripts folder.
3. Download my Hanover EA into your Experts folder.
4. Close down then restart your platform, assuming it was open whilst you downloaded the files.
5. There are some inputs common to script, indi and EA that are the same, or have the same purpose even if named differently. These *must* all have the same input value:
 - NumPoints. I suggest you go with the defaults of 25.
 - OutputFile. Don't confuse this with OutputFileName at the head of the list of inputs in the Build script. Mine is the default that comes with the Build script I.e. Output---Recent Strength.CSV.
6. Using David's Build script
 - Drag the Build script onto the charts. Unless you *really* know what you are doing, then leave the defaults alone, apart from these two inputs:
 - **PairSuffix**: insert any pair suffix used by your criminal. For example, IBFX mini accounts end with 'm' I.e. GBPUSDM. You need to place m in this input. Forget to do this and the indi will sulk forever without displaying any values. Guess how I know?
 - **UseOutputFile**: this *must* be set to 'true'. There will be a reason why the default is 'false' but I have not read David's thread and do not know what it is.

Leave this input set to 'false' and Recent Strength will do nothing.

- Even better than entering these inputs manually, go into the source code, change the defaults in the code and re-compile. This means you will never forget to make the changes. Go to my mptm thread if you cannot do this. There is a pdf there that tells you how to edit external variables; learning to do so will save you hours in the future.

7. Setting up Recent Strength:

- Start a new chart and make it as large as you can. Chart and time frame are irrelevant. Blot out the candles by pressing the F8 key and changing all the candle colours to that of your chart background.
- Drag the indi onto a chart
 - Check your NumPoints input to make it match that of the Build script. I do not actually *know* if this matters, but it makes sense to have them set to the same value.
 - OutputFile must be the same as you have in your Build script. Copy/paste Output---Recent Strength.CSV into this input.
- Click OK to run the indi. I change time-frames to make sure it initialises properly; this probably is not necessary. You will have to experiment with scrunching up the chart to see all the time-frames. Leave RS to go through its initial calculations for 30 minutes or so. When first run, RS takes a while to calculate all the data points but it only has to do so once.
- Remember these two points: they are *really* important:
 - You have done something wrong if the RS is displaying all zero values, and probably need to start again.
 - You only need 1 instance of RS per criminal account running on your entire machine. Once up and running, you can refer to this single chart every time you want to consult the indi (remember that many criminals - the naïve call them 'brokers' - have different data-feeds for live and demo accounts, so you may need a separate one on a live account for your live trading). Eventually, all of my auto-traders will have a Hanover module; they will all refer to the same RS output file I.e. Output---Recent Strength.CSV if you go with this default file name.
- You have to leave the indi running on a chart in order to generate output. This goes to the output file – you can view this in Excel if you want (Experts/Files).

8. Set up a separate chart for Hanover and blank out the candles again. Drag him onto the chart, make sure the relevant inputs are the same as those of the script and the indi. Also look at:

- **TimeFrames:** always use upper case letters and separate the inputs with a comma. Spaces in between are irrelevant, as is a trailing comma right at the end. The inputs you can use are: M1, M5, M15, M30, H1, H4, D1, W1, MN. Especially, remember to use 'H1' for the hourly, not 'M60'.
- **SlopeConfirmationCandles:** H will check your strongest and weakest currencies for their slope before allowing a trade, so that the strongest has to be rising and the weakest falling.
 - Enter the number of candles you want to check back by inputting these into SlopeConfirmationCandles, separated by commas. There should be the same number of inputs as you have in your TimeFrames input.
 - For example, suppose you want to trade off the D1 chart, using the H4 as your 'trigger', and using the slope of the last two D1 and three H4 candles:
 - Input D1, H4 into TimeFrames input.
 - Input 2,3 into the SlopeConfirmationCandles input. Leaving this input

blank, or set all to zero, tells H not to check the slope, and merely to work on the latest Recent Strength values.

9. You only need one instance of Hanover running. It matters not a jot which chart or time-frame, but make it one of those that receives plenty of ticks from your crim.

A note about Hanover's screen feedback. Recent Strength is a resource-hog, so by default it calculates values once a minute. For the same reason, Hanover only reads the output file once a minute; these events will rarely coincide, so H's display is sometimes out of synch for a few seconds.

Inputs

Most of the inputs are straightforward. Some that might need explanation are:

- **StopTrading, TradeLong and TradeShort:** these allow you to control the trading direction or even stop trading altogether if all you want this EA to do is manage an open trade.
- **Magic number and trade comment:** leave these alone unless you know what you are doing.
- **CriminalIsECN:** set this to true if your criminal insists on two-stage order-sending. This is irrelevant if you do not use StopLoss and TakeProfit. Remember that IBFX are ECN even though they do their best to hide this fact and stop all their 'valued clients' actually sending any trades; the EA has code to detect IBFX as the crim and set this input accordingly..
- **MaxSpread:** this is the maximum spread you will accept on a trade. It should be set on a pair-by-pair basis when trading live. Some pairs have narrow spreads, whilst others are quite wide, whilst others are *monstrous* and best avoided. At major news-release time, the crims will typically widen their spreads to ruinously wide extents, so this filter helps avoid trading at times of extreme volatility,
- **Trade balance filters:** these help you to avoid entering trades that could prove detrimental if the market turns against you for a particular currency, and to avoid entering trades at news-release times.
 - **UseZeljko:** named after Zeljko who corrected the code for this filter and made it work. This filter ensures 'balanced' trading. The easiest way to describe it is to use hypothetical trades. Imagine that:
 1. this EA buys GBPUSD.
 2. this EA buys GBPJPY. You are now heavily exposed to GBP.
 3. Something unexpected happens (and something unexpected *always* happens in Forex) and the pound plummets, dropping like a stone into the abyss. Both your trades scream into huge drawdown.
 4. To avoid this, having taken the GBPUSD trade, this EA will not buy another GBPxxx pair. Imagine instead that a Sell GBPJPY trade arises, just before the market plummets. This time, your GU trade is screaming into the abyss, but your GJ trade is going stratospheric. One trade 'balances' the other in the event of something dramatic happening.
 - **OnlyTradeCurrencyTwice:** works in conjunction with UseZeljko. Again, imagine the above scenario nos 1 & 4. Now you have a GU Buy and a GJ sell open – perfectly balanced trades. If you now further trade any pair involving GBP, you will unbalance your trading again, leaving you exposed to unexpected events. This filter prevents a third trade being opened involving GBP.

- Note: both UseZeljco and OTCT work more deeply than the example I have just given. For example, now you have a GU buy open, balanced trading does not allow a further buy xxxUSD trade to open, only a sell xxxUSD – then OTCT kicks in again..... Got a headache yet?
- **Swap filter:** some pairs have dreadful swap in one direction. This filter allows you to avoid trading pairs in the direction that would cost a fortune in swap. How much relevance this has to a system that could follow a trend for hundreds of pips is open to debate, but once you have seen one of these adverse-swap pairs hang around going nowhere for a couple of weeks, you will see why a lot of us want nothing to do with them.
- **Margin checks:** these help avoid over-trading by limiting the number of trades that can be opened. this EA will make the calculations before sending a trade and abort if there is insufficient margin to allow further trading. There are two to chose from; the default indicates my preference.
 - **Scoobs** check: scooby-doo is a former pro trader with the big banks; we have benefited hugely from his advice. This filter compares the current account margin with the free margin divided by 100, and aborts the trade if the margin is greater than the result of this calculation.
 - **ForexKiwi** check.ForexKiwi contributed this filter. It looks at the margin percent figure and aborts the trade if yours is less than the figure you specify in FkMinimumMarginPercent.
- **Trading hours:** allow you to specify when this EA is allowed to trade. These are best left to trade 24 hours by default, but users can specify trading times if they wish.

Disclaimer and Risk Disclosure:

Trading foreign exchange on margin carries a high level of risk, and may not be suitable for all investors. The high degree of leverage can work with as well as against you. Before deciding to invest in foreign exchange you should carefully consider your investment objectives, level of experience, and risk appetite. The possibility exists that you could sustain a loss of some or all of your initial investment and therefore you should not invest money you cannot afford to lose. You should be aware of all the risks associated with foreign exchange trading, and seek advice from an independent financial advisor should you have any doubts.

I will put this a tad more bluntly:

Most Forex traders lose all their money.

- Using this EA in trading Forex does not guarantee success.
- Trading with this EA could lead to serious financial loss.
- Trading this EA without understanding its underlying trading strategies *guarantees* traders will lose their money.

Good luck. Have fun.