

TRADING STRATEGIES CATALOG

GUIDE FOR THE USER



visualchart

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BREAKBANDS

■ Bands Breakthrough System

Introduction

This is a typical breakout strategy system that uses two bands in order to generate buy/sell signals. This system can generate huge benefits in directional markets.

Concept definition

Upper band: For the calculation of this band we use the function GetHighest that calculates the high of a defined data series. Successive highs form this band that generated the buy signals.

Lower band. For the calculation of this band, we use the function GetLowest that returns the low of a defined data series. Successive lows form this band that generates the sell signals.

System rules

- ✓ If the close of the current bar is superior to the value of the upper band, buy at close.
- ✓ If the close of the current bar is inferior to the value of the lower band, sell at close.

Parameters

DataSource: Data source to calculate the system.

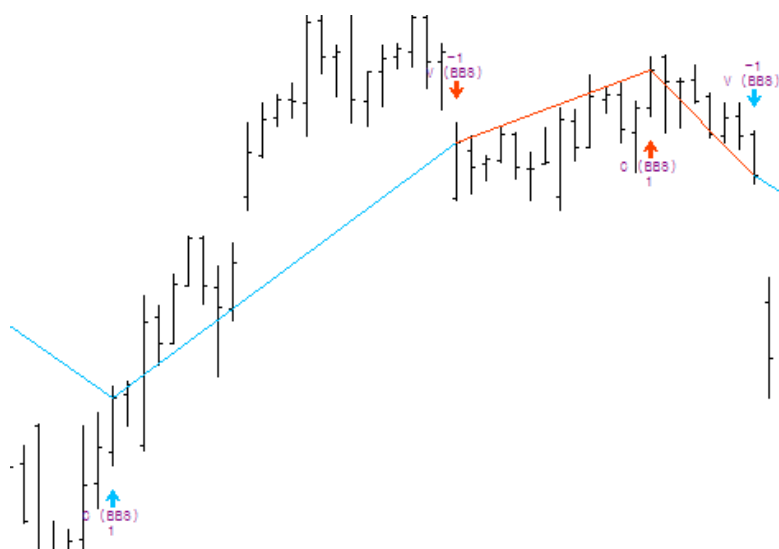
Period: Number of bars used by the functions GetHighest and GetLowest for the search of the high and low generating the bands. (Range from 2 to 25 barras).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Comments on the system

This system obtains its best results in periods of strong directionality or in the typical patterns with bullish or bearish channels with test of supports and resistances and thus generating a medium of high directional movement. As with most of the directional systems the worse drawdown with many false signals will come in market lateral movements where we recommend using short calculation periods for the systems parameters. The breakout systems can be applied to any asset and in any type of chart compression: intraday, daily, weekly.

Chart example



■ JCarmona Regression

Introduction

This system tries to optimize the market swings for different assets all over the historical data. Each of these assets has specific movements and sometimes these movements are correlated to some other assets belonging to the same market. The idea of changing the trade direction if the markets returns itself over a certain percentage of its movement is very popular. This type of strategy provides very solid systems also well adapted to the movement of the asset. The system uses a trailing stop in order to improve its performance. Also the adjustment of the percentage enables us to control the risk in function of our money management.

Concept definition

PercentageSell: Percentage applied to the highest high since the system opened its long.

PercentageBuy: Percentage applied to the highest high since the system opened its short.

System rules

- ✓ The system places a buy stop order in the following point: lowest low since the bar where the system started the short position plus **PercentageBuy**.
- ✓ The system places a sell stop order in the following point: highest high since the bar where the system started its short position minus **PercentageSell**.

Parameters

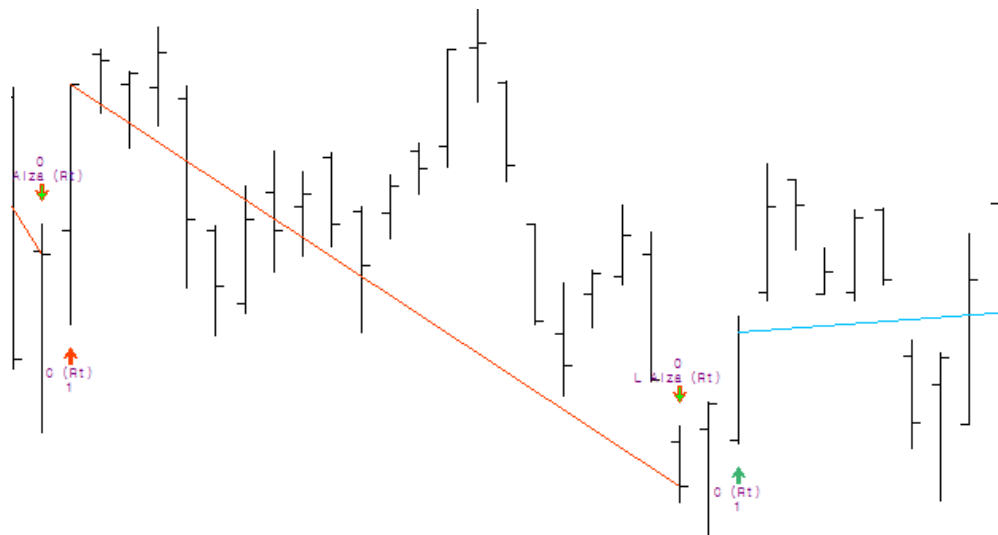
DataSource: Data source to calculate the system.

BuyingPercentage: Percentage applied to the highest high of a group of bars to place our order to protect the long positions (1 to 20 for End of Day and 0.5 to 3 for intraday).

SellingPercentage: Percentage applied to the lowest low of a group of bars to place our order to protect our short position (1 to 20 for End of Day and 0.5 to 3 for intraday).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



To be taken into account

The first entry starts being calculated after the second bar according to the following criteria:

- ✓ If the close is higher than the average price of the bar we place a buy stop order in the following point: low of the bar plus **PercentageSell**.
- ✓ If the close is lower than the average point of the bar we place a sell stop order in the following point: High of the bar plus **PercentageSell**.

This system does not accept the options of trade long or short and closing at the end of the session.

■ JCREGRESSIONS01

Introduction

This is a trend following system that first looks for a high/low breakout point and once in the market the systems changes its position each time a change in the current trend is confirmed.

System rules

The system is divided in two situations:

- ✓ **Start situation.** The start situation is verified bar by bar and a buy or sell stop order is placed depending on the position of the prices in relation to the average price of each bar. If the closing price of the bar is higher than the average price a buy stop order is sent at the low price of the bar + x% (parameter BuyingPercentage). If the closing price is lower than the average price a sell stop order is sent at the high price of the bar - x% (parameter SellingPercentage).

And so forth and so on until an order is triggered to the market.

- ✓ **We have bought /sold at least one time.** From now on, the new high and low prices are stocked so that:

If we have bought, we save the highest value reached since we started the trade.

If we have sold, we save the lowest value reached since we started the trade.

If our last operation was a long the system sends a sell stop order at stop at the saved price - x% (parameter SellingPercentage).

If the last operation was a short the system sends a buy stop order at the low saved price + x% (parameter BuyingPercentage).

Parameters

DataSource: Data source to calculate the system.

EndOfDay: If this parameter is worth 0 the system works normally, if it is worth one the system will close its positions at the end of the session.

LongShort: With value -1 the system trades only short; with value 0 long and short and finally with value 1 only long.

BuyingPercentage: Percentage applied to the highest high in order to calculate our protection stop order for the long positions (1 to 20 for end of day and 0.5 to 3 for intraday).

SellingPercentage: Percentage applied to the lowest low of a group of bars in order to protect the shorts (1 to 20 for end of day and 0.5 to 3 for intraday).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

■ PivotBreak

Introduction

This is the typical breakout system that uses pivots to generate buy/sell signals. It is a trend following systems able to generate high yields in directional markets.

Concept definition

Pivot up. To calculate and find this pivot, we use the function GetPivotUp that calculates the latest up pivot of a certain data series.

Pivot down. To calculate and find this pivot we use the function GetPivotDown that calculates the last pivot of a certain data series.

System rules

- ✓ We use the price of the upPivot in order to generate a buy stop order that will be launched at market if a bar is high or equal than this reference point.
- ✓ We use the price of the low pivot to generate a sell stop order that will be executed at market if the quote price of a bar is lower or equal than its reference point.

Parameters

DataSource: Data source to calculate the system.

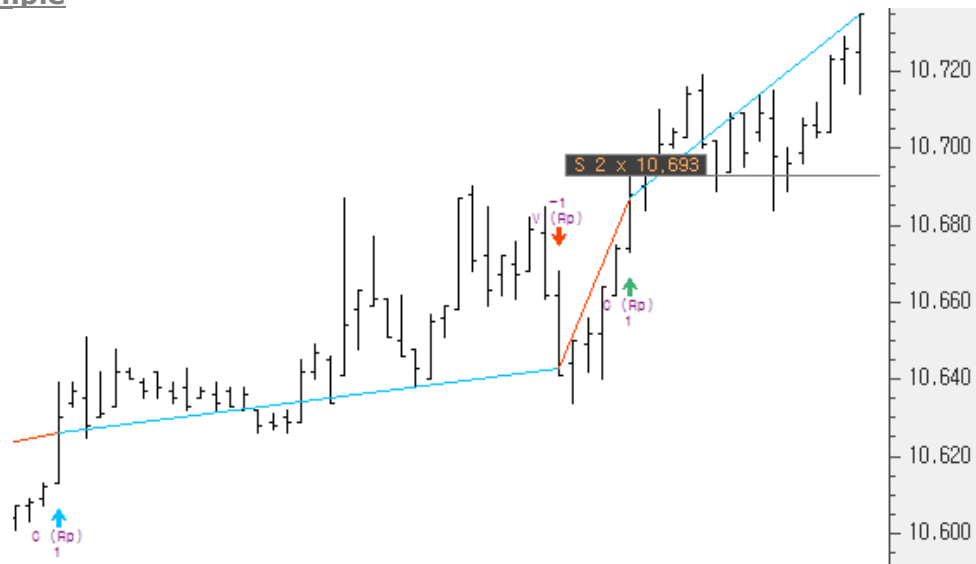
PivotLateralBars: This is the period used by the functions GetPivotUp and GetPivotDown for the search of the up and down pivot generation the buy/sell orders (range from 2 to 25 bars).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Comments on the system

This system obtains its best results in periods of strong directionality or in the typical patterns with bullish or bearish channels with test of supports and resistances and thus generating a medium of high directional movement.

Chart example



■ PivotBreak01

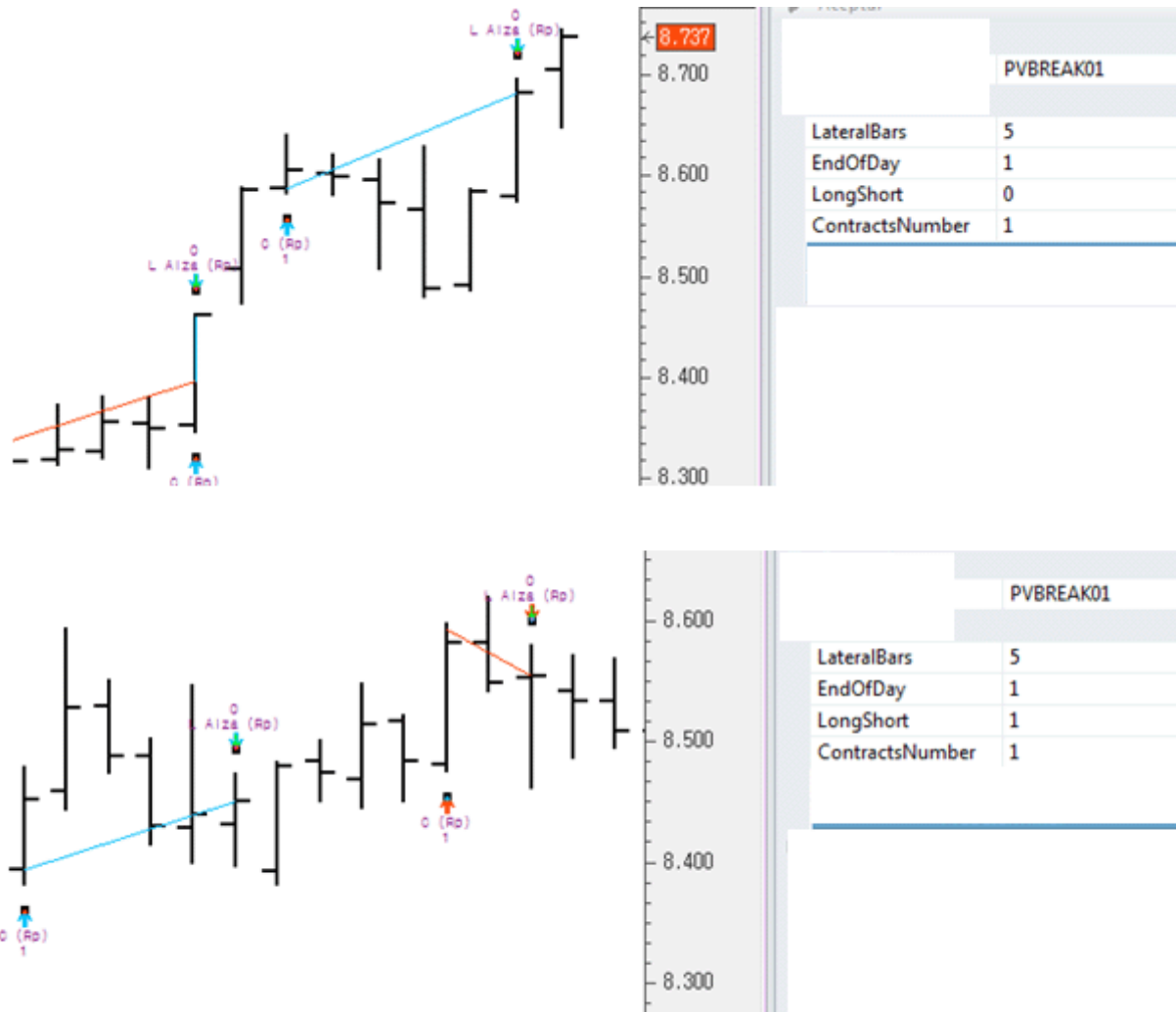
Introduction

This system works as the [PivotBreak](#) does but this one includes two new parameters:

EndofDay: With value 0 the system works normally and with value 1 the system liquidates the positions at the end of the session.

LongShort: With value -1 the system operates only short, with value 0 long and short and finally with value 1 only long.

Chart example



Resistance Support System

Introduction

This is a pivot breakout system. It calculates the Pivot Points for each session and it has been conceived to trade in the latest bars of each session.

System rules

On each session, the system calculates the pivotpoints from the start time (StarHour) to the end time (FinishHour). After this time and until the end of the session (FinishHourSystem), it places a buy stop order in the first resistance and a sell stop order in the first support.

This is the way the pivots are calculated:

$$\text{Pivot} = (\text{High} + \text{Low} + \text{Close}) / 3$$

$$\text{Res1} = 2 * \text{Pivot} - \text{Low}$$

$$\text{Sop1} = 2 * \text{Pivot} - \text{High}$$

The order remains active until the end of the session. If the order is executed in the following session, the operation is closes in the first bar of the session.

Parameters

DataSource: Data source to calculate the system.

StopLoss: The system is used with a protection stop.

StarHour: Start time to calculate the pivot points.

FinishHour: End time to calculate the pivot Points.

FinisHourSystem: End time of the session.

ContractsNumber: Determines the number of contracts by trade.

■ Trend Line System

Introduction

TD Lines can be classified as a classical trend following system. The system calculates trend lines uniting significant pivots according to the rules described in the corresponding section. The parameters defining this system enable to modulate its sensibility from very aggressive into conservative.

Concept definition

Pivot Up. High preceded and followed by lower prices. We can admit as a pivot up two consecutive pivots up followed by lower values. Also the pivot has to be equal or higher than previous nCierresAnt.

Pivot Down. Low preceded and followed by higher prices. We can admit as pivot down more than two equal lows followed up by superior values. The pivot also has to be equal or lower than previous nCierresAnt.

Línea_TD: Trend line defined by the 2 latest valid Pivots Up or Pivots Down. The trend made of two pivots up will be down while the one made by two pivots down will be up.

Validation: To generate the stops in the following bar the following rules must be taken into account:

- 1.- Stop bull.- The difference between the close and the low price of the same bar added to the close must be lower than the higher value of the TD line in the following bar and the high of the current bar.
- 2.- Stop bear.- The difference between the close and high of the same bar subtracted to the close must be superior to the lower value included between the value of the TD line in the following bar and the low of the current bar.

System rules

- ✓ A TD line between two valid pivots up happens (decreasing). The system places a stop buy order in the most favorable high between the value of the TD line in the following bar and the high point of the current bar. If the first stop of the validation is not fulfilled the stop order will be placed in the high of the last pivot up plus Ticks.
- ✓ A TD line between two valid pivots down happens (increasing). A sell at stop order is placed in the most favorable low between the value of the TD line of the following bar and the low point of the current bar. If the step number 2 of the validation is not fulfilled the stop order is placed in the low of the latest down pivot minus Ticks

Parameters

DataSource: Data source to calculate the system.

NPreviosClose: Number of previous closes (from 1 forward).

NBars: Number of bars to obtain the pivot.

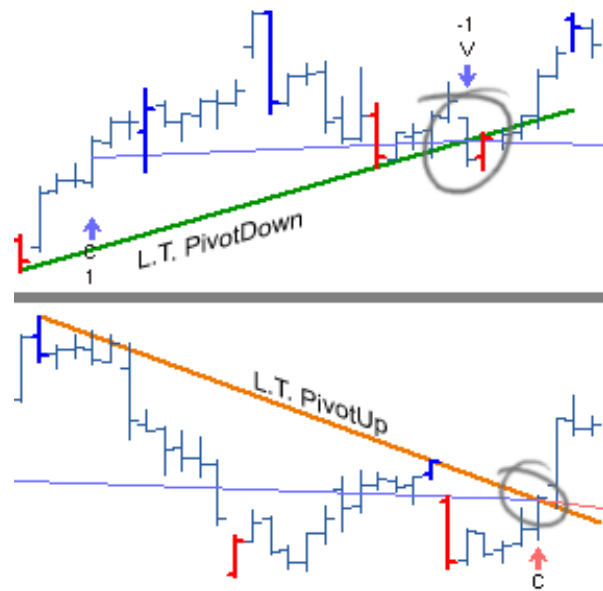
Ticks: Percentage filter applied to the high and low of the bar to place the stops (3% (EOD) - 0.5% (Intraday)).

EndofDay. With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort. With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



CLASSIC

■ Aberrations system

Introduction

The functioning of this system is very easy as it is based on the indicator "Bollinger Bands".

The system buys when the quote uncrosses the upper band of the mentioned indicator and sells when the quote down crosses the lower band of the same. The system closes positions when the quote crosses the intermediate line.

The aim of the system is to determine the trend in function of its position and different contacts with the Bollinger Bands as these contacts normally involve changes of trend. These changes of trend are normally used to determine the operation to be made.

System rules

- ✓ If the current bar closes above the upper band of the "Bollinger Bands" indicator, a buy stop order is placed at market and in consequence this order will be filled in the following bar. This position will be closed when the quote down crosses the intermediate line.
- ✓ If the current bar closes below the indicator's lower band, a sell stop order is placed at market and in consequence this order will be filled in the following bar. This position will be closed when the quote up crosses the intermediate band.

Parameters

DataSource: Data source to calculate the system.

Period: Period used to calculate the average that will be used further on to calculate the values of the upper and lower band (1 forward).

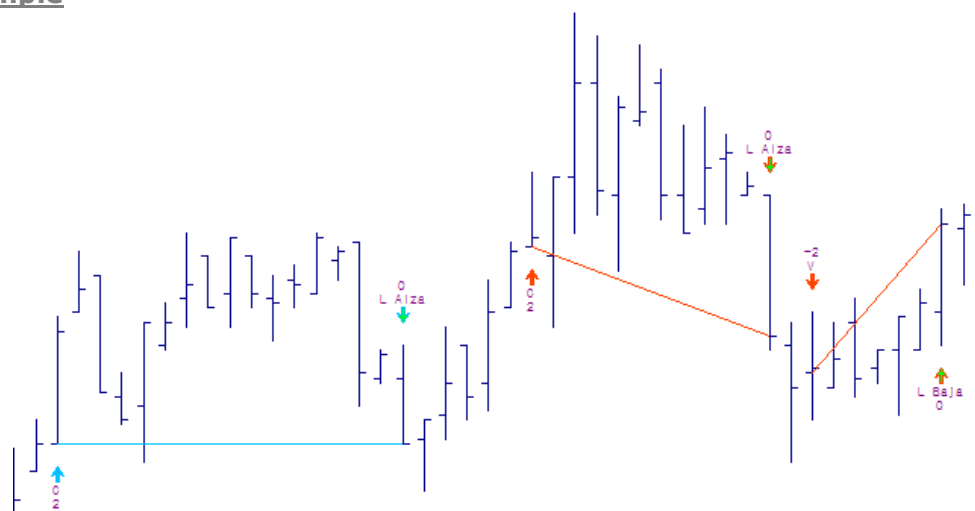
CoefficientM: Multiplying coefficient used for the calculation of the indicator "Bollinger Bands" (1 forwards).

PriceSource: Field of the bar used to calculate the average (close, open...)

BollingerAverage: Type of average to be used by the indicator Bollinger bands. 0 (simple), 1 (exponential) or 2 (smoothed).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



■ ADX_Gapper

Introduction

This system is based on the indicators ADX, DIPositive and DINegative; the latest two are used as filters.

Concept definition

ADX: The ADX oscillator tries to give an answer to the problem of measuring the amount of directional movement over a certain frame of the prices line. The oscillator moves around an intermediate line that is generally situated around 20. Values superior to this level indicate a dominance of directionality against congestion. If the oscillator falls below this value it indicates that the market or asset is in a congestion zone, in other words, a zone with lack of directionality.

Ticks. Percentage filter applied to the high and low of a bar to place the stops.

System rules

- ✓ The value of the ADX must be superior to ValorBandaADX. The value of the indicator DI+ must be superior or equal to the value of the DI-. The open of the current bar must be lower than the low of the previous bar.

Once the previous conditions are fulfilled, the system places a buy stop order in the low of the previous bar plus a percentage (Ticks) applied to itself. If the value of the ADX is lower than ValorBandaADX, the system places a liquidation order at the close of the bar.

- ✓ The value of the ADX must be superior to ValorBandaADX. The value of the indicator DI- must be higher or equal than the DI+. The open of the current bar must be higher than the high of the previous bar.

Once the previous conditions are fulfilled, the system places a sell stop order at the high of the previous bar minus a percentage (Ticks). If the value of the ADX is lower than ValorBandaADX, the system places a liquidation order at the close of the bar.

Parameters

DataSource: Data source to calculate the system.

DIPeriod. Period used for the calculation of the indicators DI+ and DI- (values from 5 to 20).

ADXPeriod: Period used for the calculation of the ADX. (Values from 5 to 20).

Ticks. Percentage applied to the high or low of the bar to place the stops.

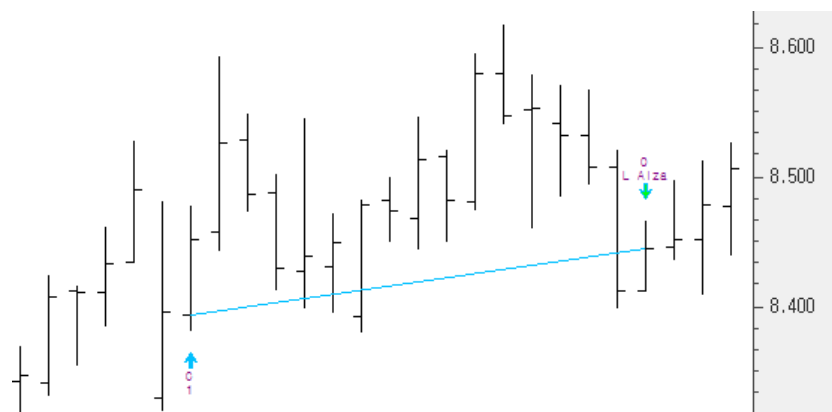
ADXBandValue: Parameter to be compared with the band of the indicator ADX. (values from 0 to 35).

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will close the position at the end of the session.

LongShort. With value -1 the system only trades short; with value 0 it trades long and short and with value 1 it only trades long.

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



ADXBAND System

Introduction

This is an example of a very simple system using few elements for its calculation:

- Indicator ADX
- Function GetHighest
- Function GetLowest

System rules

- ✓ If the value of the indicator is lower than the band the variable **UpperBand** is updated to the highest value of the latest bars defined by the variable **BandBars**.
A buy stop order is placed at the value of UpperBand.
- ✓ If the value of the indicator is lower than the band, the variable **LowerBand** is updates to the lower value of the latest bars defined in the variable **BandBars**. A sell stop order is placed in **LowerBand**.

Parameters

DataSource: Data source to calculate the system.

Period. Period used for the calculation of the indicator ADX.

BandBars: Range of bars used to find the highest or lowest point to place the entry stop orders. (Values between 15 and 100).

BandValue. Value of the indicator band (values between 15 and 50).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



■ Bollinger-RSI

Introduction

Next we present a very simple strategy based on the combination of two well-known indicators: RSI and Bollinger Bands.

The strategy buys when the RSI indicator is oversold and also the current bar close is below the bollinger lower band. On the other hand, in order to sell the opposite conditions must be fulfilled.

Concept definition

Overbuying. The RSI is in overbuying zone when its value is equal or superior to the upper band.

Overselling. The RSI indicator is in overselling zone when its value is lower than the lower band.

System rules

✓ The value of the RSI indicator must be lower than its band. The close of the current bar has to be lower or equal than the Bollinger lower band.

Once the two previous rules have been fulfilled a buy stop order is placed at the close of the bar.

✓ The value of the RSI indicator must be higher than its upper band. The close of the current bar must be higher or equal than the Bollinger upper band.

Once the two previously mentioned rules are fulfilled a sell order is placed at the close of the bar.

Parameters

DataSource. Data source to calculate the system.

RSIPeriod. Period used for the calculation of the RSI indicator.

UpperBand. Upper band of the RSI (60-80).

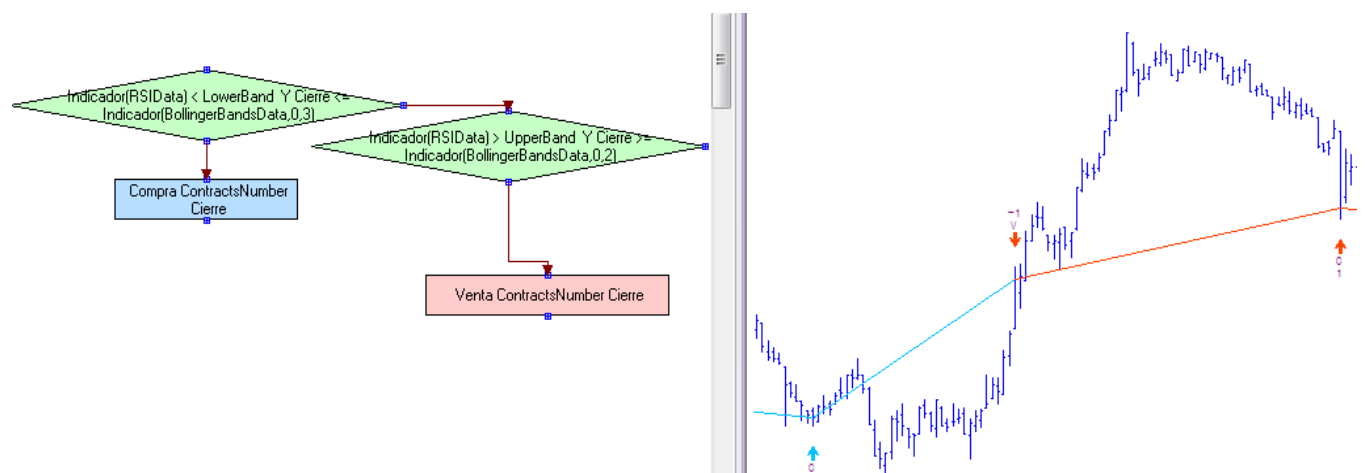
LowerBand. Lower band of the RSI (20-40).

BollingerBandsPeriod. Period used for the calculation of the indicator Bollinger Bands (1 forwards).

BollingerBandsCoefficient: Multiplying coefficient of the Bollinger bands indicator (0-2).

ContractsNumber: Number of contracts bought or sold when the system rules are fulfilled.

Chart example



■ Cafederpivotssys4

Introduction

This system is based on the idea of a user and for the use of this system the indicator **CafeDerdPivotsInd1**, must be installed and compiled.

For more information please send an e-mail to sistemas@visualchart.com

Parameters

DataSource: Data source to calculate the system.

StarHour. Entry time (market time).

FinishHour. Exit hour (market time).

LastEntryHour: Time for the last entry of the system into the market.

Unit.

MinimumIncreaseStops: Activates the alert signal when the stop changes at least for the number of points appointed by the parameter. If we put this parameter to 0 it will be activated when the system considers so, independently from the number of points since the last alert signal. (0-3 Fut 0-5 Acc in %).

PercentageFilter: Value = 0 the filters are established in points, value = 1 in %.

LongEntryFilter: Number of points above the breakout point to start a long.

ShortEntryFilter: Number of points below the breakout point to start a short.

LongExitFilter: Number of points retraced since the last high so that the system does not close our position

ShortExitFilter: Number of points retraced by the quote since the last low so that the system does not close our position.

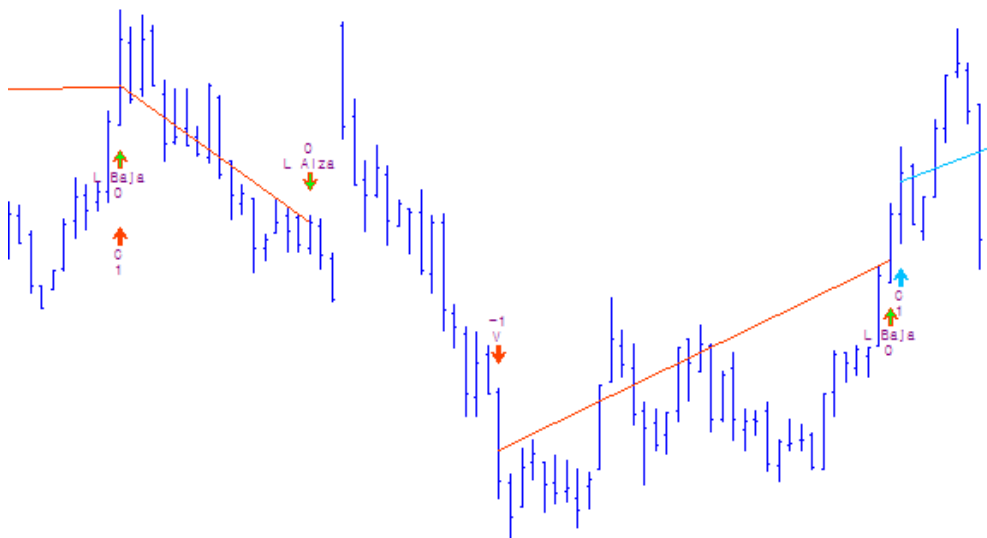
ReentranceFilter: Number of points so that the system enters the market again after having closed our position if the market keeps moving in the same direction. If we were long and the system has closed our position, the system will go long again as soon as he reaches the number of points set within this parameter.

OutOfRangeBarsNumber: Number of bars outside the support or the resistance marked by the system so that the long or shorts are activated (0-20).

AdditionalTouchNumber: If, in top of the bars outside the range, we want to make sure that the support or resistance is touched again (0-20).

ContractsNumber: Number of contracts/titles to be bought or sold when the conditions are given.

Chart example



Close difference system

Introduction

This system is based on the indicator **DifCloses** that calculates the velocity of the rate of change of an asset. In the images bellow we observe how the rules are fulfilled for the generation of buy/sell signals.

Concept definition

Momentum: Difference between the close of a bar and previous closes over a defined period.

System rules

- ✓ The value of the indicator in the current bar must be higher than the value of the same indicator in the previous bar. If the first rule is fulfilled a buy stop order is placed in the high of the bar plus the filter Ticks.
- ✓ The value of the indicator in the current bar must be lower than the value of the same indicator in the previous bar. If the first rule is fulfilled a sell stop order is placed at the low of the bar minus a filter Ticks.

Parameters

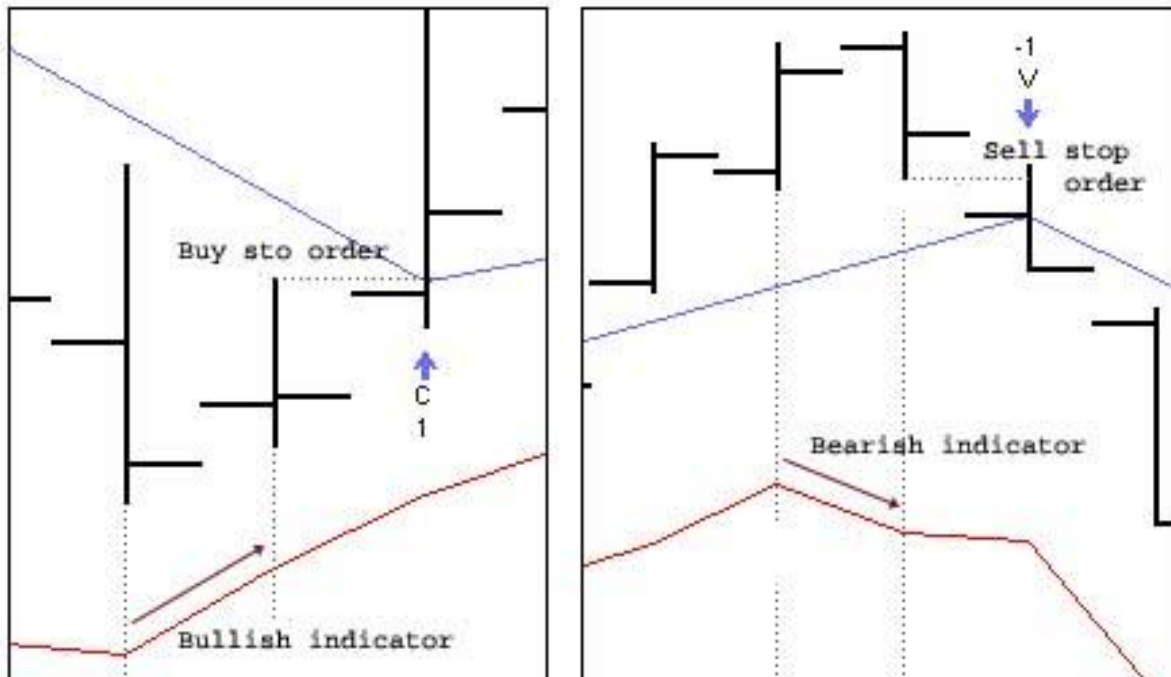
DataSource: Data source to calculate the system.

CLOSESDIFPeriod: Number of bars backwards taken into account to calculate the difference between closes (1 forward).

Ticks: Percentage filter applied to the high or low of a bar in order to place the buy or sell stop order (1 forward).

ContractsNumber: Number of contract/titles to be bought or sold by the system when the conditions are given.

Chart example



Cooper System

Introduction

The Cooper System uses the indicators ADX, DIPositive and DINegative. ADX was developed by Wilder within his book, "New Concepts in Technical Trading Systems" where values superior to the ADX bands indicated dominance of the directionality against congestion. According to this author it is recommended to buy and sell assets with an ADX superior to its band (25); this aspect is specified in the first point of the system's conditions.

The first to conditions must be fulfilled compulsorily for the generation of the buy and sell signals and at least one of the other conditions must also be fulfilled.

Visual Chart V also provides a study where the bars matching the conditions are represented with a certain color.

System rules

- ✓ The value of the ADX must be superior to the value of its band.
DIPositive must be superior to DINegative.
Three consecutive lows must be formed.
Or two consecutive lows and an inside bar.
Or an inside bar and two consecutive lows.
- ✓ The value of the ADX must be superior to the value of its band.
DIPositive must be lower than DINegative.
Three consecutive highs must be formed.
Or two consecutive highs and an inside bar.
Or an inside bar and two consecutive highs.

Parameters

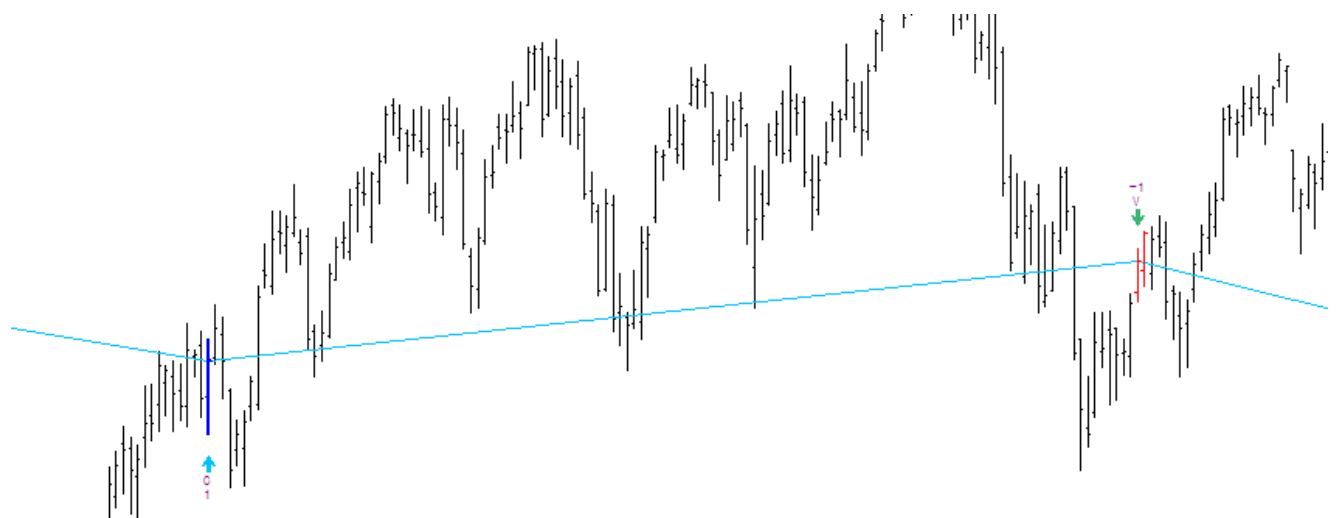
DataSource: Data source to calculate the system.

Range. Number of bars to calculate the indicators ADX, DIPositive and DINegative (1 forwards).

ADXDataBandValue: Bands delimitating the zones of congestion against directionality (20-40).

ContractsNumber: Number of contracts/titles bought or sold when the conditions are given.

Chart example



■ Cross CCI AVG Exponential

Introduction

The Commodities Channel Index (CCI) shows the relation between the weight of an asset and its statistical measure. If the indicator reaches high values it refers to prices above average while low values of the indicator refers to prices bellow averages. This system uses this indicator with an exponential moving average applied to it in order to smooth the indicator swings in order to verify later on the crossovers of the indicator to indentify the changes of trend.

System rules

- ✓ When the CCI downcrosses its exponential moving average, a buy stop order is placed at the high of the bar where the crossover has happened minus a percentage filter applied to this high.
- ✓ When the CCI uncrosses its exponential moving average, a sell stop order is placed at the low of the bar minus a percentage filter calculated on this low.

Parameters

DataSource: Data source for the system calculation.

CCIDataRange_P: Period of the first average (1-100).

CCIDataRange_M: Period of the second average (1-100).

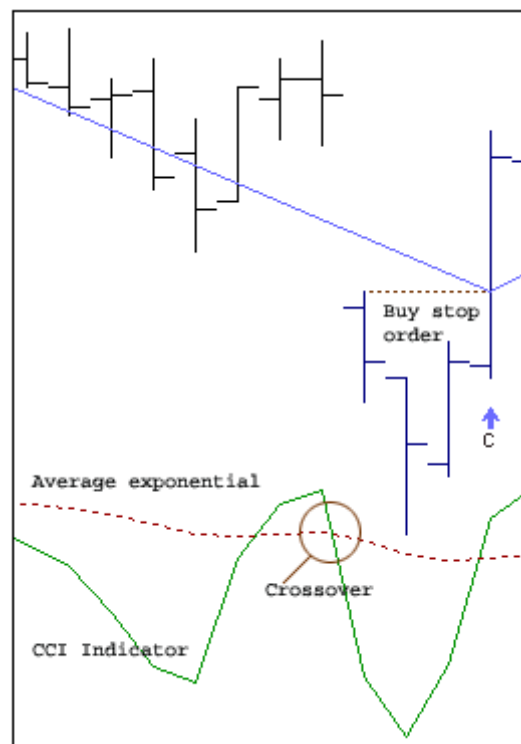
AvExponentialCCIDtaRange: Period of the moving average applied to the CCI (1-100).

BuyFilter: Percentage filter that is added to the high where the crossover happens, in order to calculate the buy stop order (0-2).

SellFilter: Percentage filter that is subtracted from the low of the bar where the crossover happens in order to calculate the sell stop order (0-2).

ContractsNumber: Number of contracts to be bought or sold when the system rules are fulfilled.

Chart example



DM

Introduction

This is a well-known breakbands system with some new characteristics with the aim of only trading in periods with high directionality in order to avoid false signals. This system can generate high yields in markets with strong directionality.

Concept definition

Upper band: Line with a value resulting from the addition of a certain percentage to the highest high of the latest **n** bars.

LowerBand: Line with a value resulting from the subtracting of a certain percentage to the lower low of a group formed by **n** bars.

System rules

- ✓ The system places a buy stop order in the highest high of the subsequent **n bars** plus a percentage (filter). If bullish the system places a protection stop in the highest value of the lower band since the system went long.
- ✓ The system places a sell stop order in the lowest low of the subsequent **n bars** minus a percentage (filter). If the system is short a protection stop is placed in the lowest value of the upper band since the system went short.

Parameters

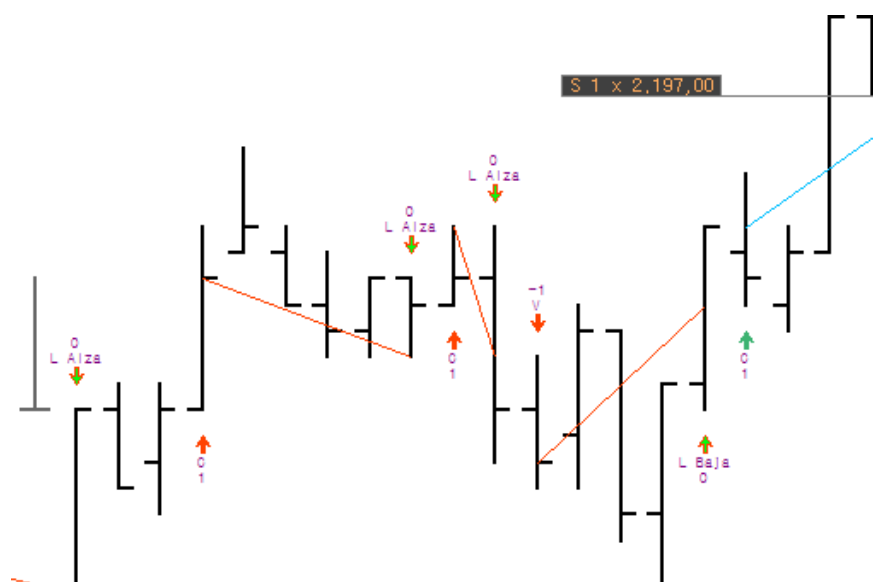
DataSource: Data source on which the system is calculated.

nBars: Group of bars to be considered in order to obtain the highest high and lowest low (1-50).

Filter. Percentage added to the upper band and subtracted to the lower band. (0-2% Fut. 0-5% acc.).

ContractsNumber. Number of contract/titles bought or sold when the system rules are fulfilled.

Chart example



■ Erika

Introduction

This system is based on a moving average calculated on the prices ROC indicator in order to smooth its peak and two simple moving average, also on the RIC providing buy and sell signals with their crossovers.

System rules

- ✓ The first moving average must be above the second one. Once this first condition is fulfilled if the current open is superior or equal than the previous close and also is superior or equal than the open, a buy stop order is placed in the high of the bar plus the configured percentage.
- ✓ The first moving average must be below the second one. If this first condition is fulfilled and also the close of the current bar is lower or equal than the close of the previous bar and also lower or equal than the open a sell stop order is placed at the low of the bar minus percentage.

✓ Parameters

DataSource: Data source on which the system is calculated.

Ticks. % of the high or low of the corresponding bar depending on buy or sell order (0 a 1. Increase 0.01).

PriceRocPeriod. Period of the ROC (2-25).

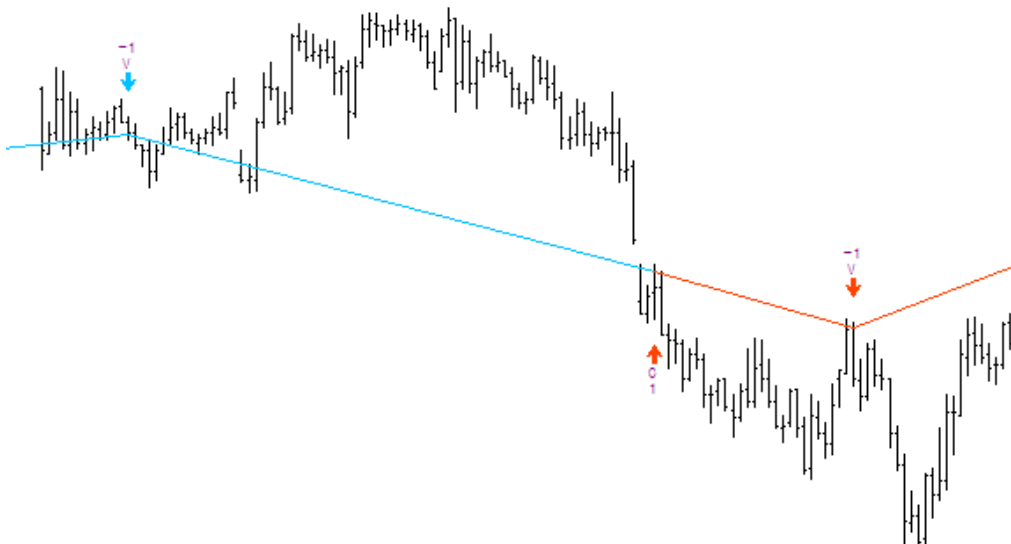
SMAPriceROCDPeriod: First average ROC use to smooth the prices (2-25).

SMASMAPriceROCPeriod: Period of the first average (2-25).

SMA1SMAPriceROCDDataPeriod: Period of the second average (2-25).

ContractsNumber: Number of contracts to be bought or sold once the system conditions are fulfilled

Chart example



■ Fluctuation index system

Introduction

This system is based on the indicator **Accumulated Swing Index with code SwingIndexAcum**. It uses the concept of breakout as entry method, for example when the value of the indicator exceeds the value of the latest high fluctuation point we will go long; on the other hand, when the indicator falls below the last fluctuation point we will go short. Once in the market we will use the previous fluctuation points or a certain number of bars determined as protection methods if the market moves against us. According to Wilder, the 5 most important characteristics of a bullish trend are:

- 1.- The close of the current bar is higher to the close of the previous bar.
- 2.-The close of the current bar is superior to the open of the current bar.
- 3- The high of the current bar is superior to the close of the previous bar.
- 4- The low of the current bar is superior to the close of the previous bar.
5. - The close of the previous bar was higher than the open of the same bar.

On the other hand the 5 most important characteristics of a bearish trend are the opposite of the previously mentioned ones.

Concept definition

High swing point: This is defined as the bar where the value of the indicator is superior than the one in the previous and in the subsequent bar.

Low swing point. This is defined as the bar where the value of the indicator is lower than the same value in the previous bar and in the following one.

System rules

- ✓ The value of the indicator in the current bar must be superior to the value of the last point of High Swing. If the first condition is fulfilled a buy stop order is placed in the high of the two latest bars (see first image). If we are long and the market changes its direction abruptly without previous formation of a new swing low, we will use as protection method a dynamic stop that will be placed at the low of **BarsRange**.
- ✓ The value of the indicator in the current bar must be lower than the value of the last low swing index. If the first condition is fulfilled, a sell stop order is placed at the low of the latest two bars. If we are short and the market changes its direction abruptly without forming a new swing low, we will use as protection a dynamic stop placed in the high of **BarsRange**.

Parameters

DataSource: Data source to calculate the system.

L: According to Wilder this is the limit movement in one direction.

BarsRange: Number of bars necessary to place the dynamic stops.

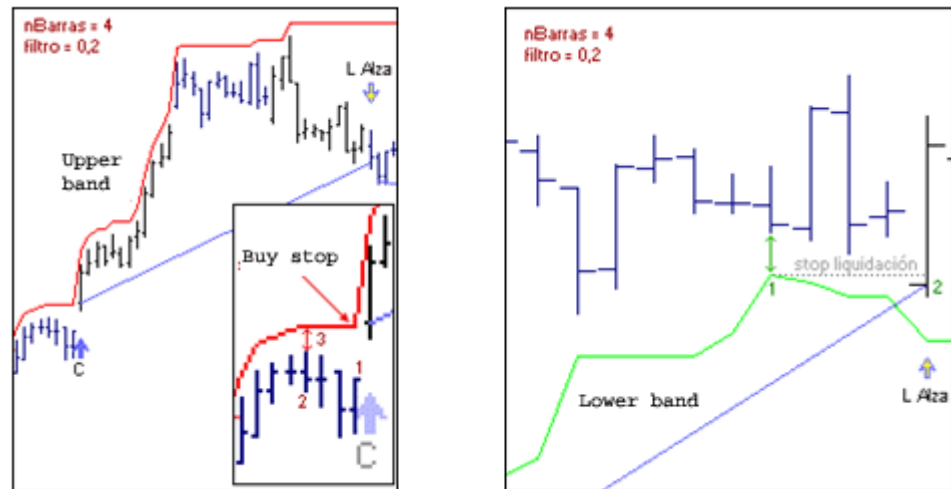
Ticks: Percentage filter applied to the high or low value of a certain number of bars in order to place the stops (3% Fin Día - 0.5% Intradía).

EndofDay: With value 0 the system has a normal functioning with value 1 the system liquidates its position at the end of the session.

LongShort: With value -1 the system only trades short corto; with value 0 it trades long and short and with value 1 the system only trades long.

ContractsNumber: Number of contracts to be bought or sold once the system conditions are fulfilled

Chart example



■ Linearregresion system

Introduction

This system uses the indicator **Regresion line**. This line uses the minimum square method for its calculation so that the lines moves through the bars so that the distance between this line and the total sum of the square of is close are as low as possible. The approximation of the line to the closes appoints the dominant trend offering this way good entry points.

System rules

- ✓ A buy market order is placed if the value of the regression line in the current bar is higher or equal than the value of the same line in the bar indicated by **PreviousBars** plus a percentage. If the value of the indicator in the current bar, while the system is short, is higher than the low reached by the indicator plus a percentage, during this period, a buy at market order is placed.
- ✓ Short at market if the value of the regression line in the current bar is lower or equal than the value of the line in the bar indicated by PreviousBars minus a percentage. If the value of the indicator in the current bar, while the system is long, is lower than the higher value reached by the indicator minus PorcentajeGiro during this period, a sell at market order is triggered.

Parameters

DataSource: Data source on which the system is calculated.

PreviousBars: Number of bars backwards taken into account to verify the difference with the value of the indicator in the current bar (1-50).

RegressionPeriod: Period used by the indicator linear regression (1-100).

Percentage: Rising or falling percentage that the regression line must suffered between the current bar and the bar determined by the parameter **PreviousBars**.

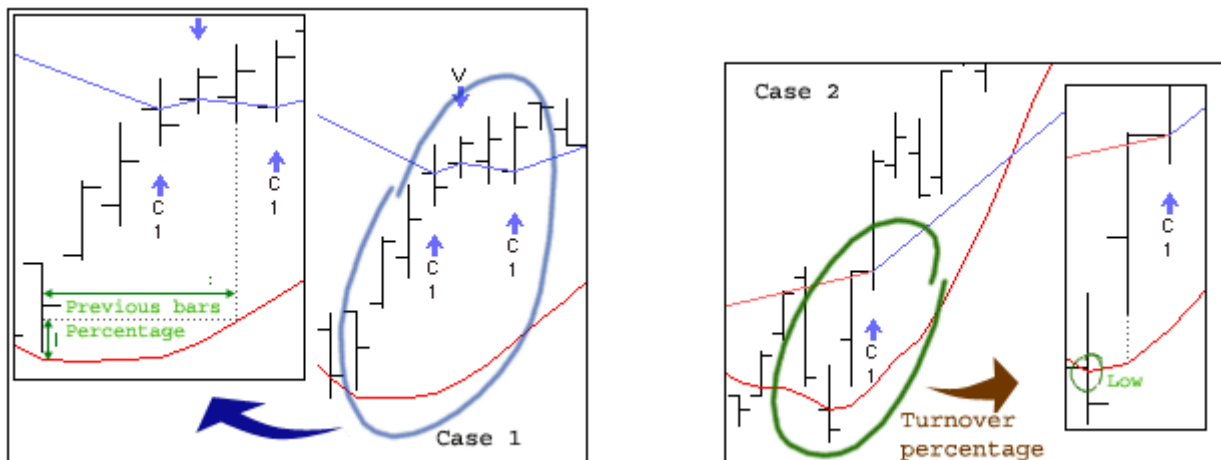
TurnPercentage. Rising or falling percentage that the regression line must suffered between the current bar and the in relation with the value of the indicator in the turn up point (0-3% Fut; 0-5% Acc).

EndofDay: With value 0 the system has a normal functioning while with value 1 the system will liquidate its position at the end of the close.

LongShort. With value -1 the system only trades long; with value 0 the system trades long and short; with value 1 the system only trades long.

ContractsNumber: Number of contracts to be bought or sold once the system conditions are fulfilled

Chart example



LR system

Introduction

Many investors think that the most complex and sophisticated systems are the ones providing the best results. This is simply not true. The system coming next is very simple and returns very consistent profits:

- A series of conditions must be fulfilled to execute an order
- The system uses a stop loss if the market turns its direction against, we assume the losses and cut the trade
- Also a target profit is placed in case that the trade is positive.

System rules

- ✓ The low of the current bar must be lower than the low of the two bars preceding it. The low of two bars backwards must be lower than the low of three bars backwards. The high of the current bar must be superior to the high of three bars backwards. Once these conditions are fulfilled a buy order is placed at the low of the current bar. If a long order has been executed a sell stop order is placed at the entry point minus a percentage and a limit order at the entry price plus a percentage.
- ✓ The high of the previous bar must be superior to the high of two bars backwards. The high of two bars backwards must be superior to the high of three bars backwards. The low of the current bar must be lower than the low of three bars backwards. Once these conditions are fulfilled a sell order is placed at the close of the current bar. If the order is executed the system places a buy stop order at the entry price minus a percentage and a limit order at the entry price minus a percentage.

Parameters

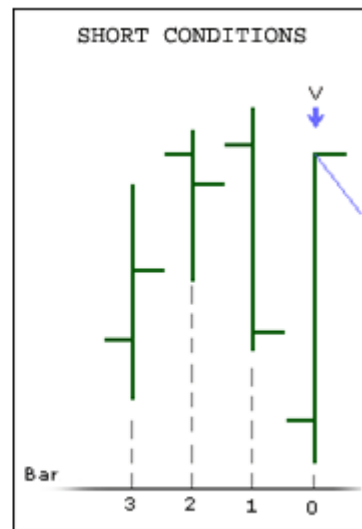
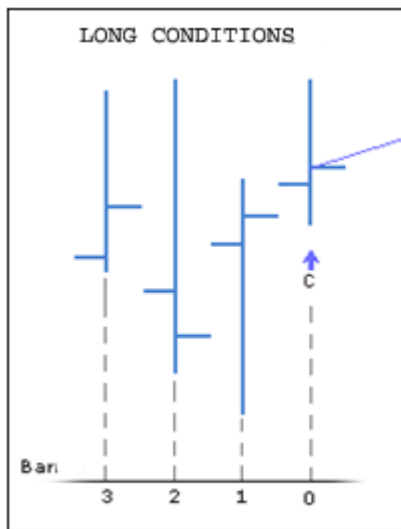
DataSource: Data source on which the system is calculated.

Target. Target profit expressed in percentage.

Losses. Margin of losses that we are able to assume, expressed in percentage.

ContractNumber: Number of contracts to be bought or sold once the system conditions are fulfilled

Chart example



■ Pivot_Point01

Introduction

The following system is based on the indicator **Pivot Point**, this system tries to get profit from small market swings. The particularity of this system is that it establishes entry and exit points for the following day at the end of the session.

Concept definition

Cruce_pivot: The system will consider the pivot as broken when the open and the close of the bar are in both sides of the pivot.

System rules

- ✓ Once the entry time has passed, the system takes into account the first bullish pivot-cross. Once the first rule is fulfilled a buy stop order is placed in the high of the bar where the pivot cross has happened. In function of the parameter PivotLine we will use as target profit the first or second resistance and as protection stop the first or second support. If there is some opened bullish position it will be closed at the end of the session.
- ✓ Once the entry time has passed, the system takes into account the first pivot-cross produced. Once the previous rule is fulfilled the system places a sell stop order at the low of the bar where the pivot break has happened. In function of the parameter PivotLine the system will use as target profit the first or second support and as stop protection, the first or second resistance. If there is some bearish position opened, it will be closed at the end of the session.

Parameters

DataSource: Data source on which the system is calculated.

StartSession: Time to start the system execution. It will have a range comprised between the open and the close of the corresponding session of the asset where the system is inserted.

PivotLine: Defines the line to consider as target profit or protection stop; resistance1/supporte or resistance2/support2.

TradesNumber: Number of trades allowed during a single session when the conditions are fulfilled.

CalculationType: In function of the value of this parameter we will apply one variable or another to the system calculation (0-2).

ContractsNumber: Number of contracts bought or sold when the conditions are fulfilled.

Chart example



■ Rebound system

Introduction

The **Momentum** indicator will detect the overbuying and overselling zones and inform the system on the direction to be taken by operating short against the overbuying zones and long against the overselling zones.

We use this indicator with different periods so that they can be used independently, for instance one 10 periods momentum for the buy orders and one 8 period momentum for the sell orders.

The stop loss and target profit orders enable to close the position when the expected percentage of benefits or losses is reached.

System rules

- ✓ The system buys when the Momentum indicator used to trade long is in overbuying zone after an upwards crossover of its band and also the close of the bar is higher than the higher high of the latest bars. The long is closed by reaching the stop loss or the target profit.
- ✓ The system sells when the Momentum indicator used to trade short, is in overbuying zone after a downwards crossover of its band and the close of the bar is lower than the lower low of the latest bars. The short is closed when the target profit or stop loss orders are reached.

Parameters

DataSource: Data source on which the system is calculated.

MomentumPeriod: Period of the Momentum indicator used to trade long (1 forwards).

MomentumBand: Band of the Momentum indicator used to trade long (98-99).

Momentum1Period. Period of the Momentum indicator used to trade short (1 forwards).

Momentum1Band. Band of the Momentum indicator used to trade long (100-102).

nUp: Number of bars to obtain the highest price (1 forwards).

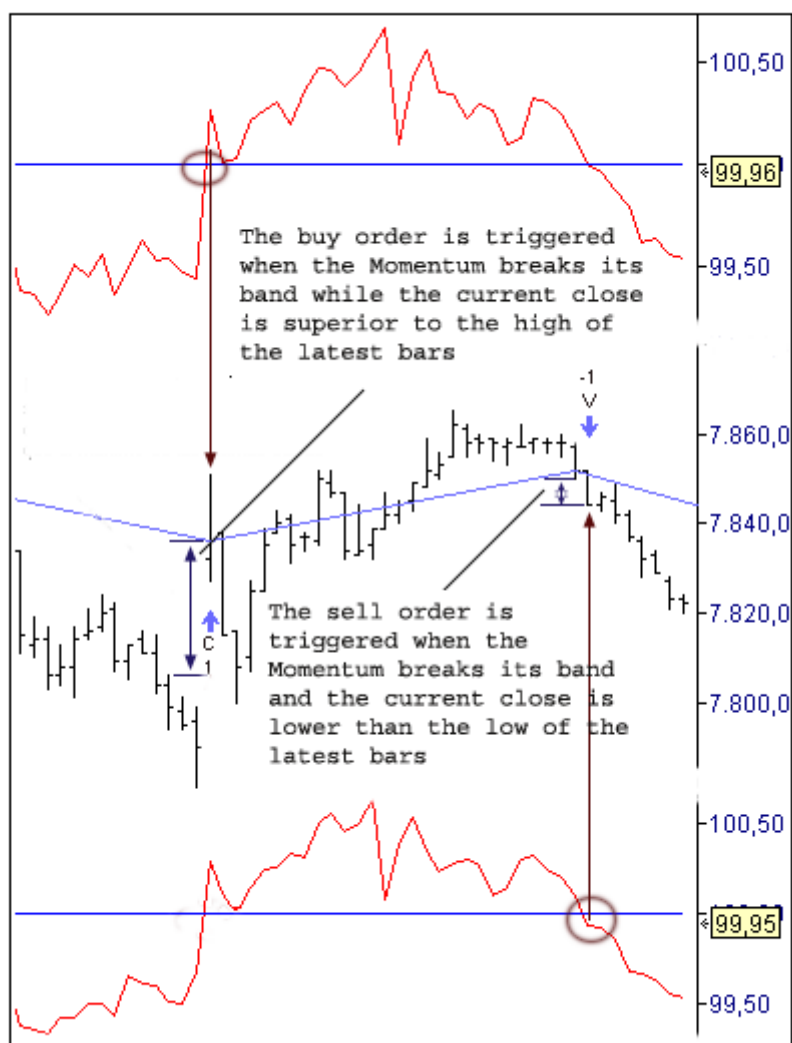
nDown: Number of bars to obtain the lowest price (1 forwards).

LossFilter. Percentage of losses to close positions (0.5-3).

Earnings. Percentage of profits to close positions (0.5-3).

ContractsNumber: Number of contracts/titles to be bought or sold when the conditions are fulfilled.

Chart example



■ Speed system

Introduction

This system uses as entry criteria the concept of expansion from a certain point in order to set the corresponding buy or sell stop orders. The criteria are as follows:

From a neutral point of view of the market, "a priori" the possibilities of starting a bullish or a bearish movement are equal; the system takes the position indicated by the market.

Concept definition

PorcBandEntry: Percentage applied to the close of the bar in order to place the buy/sell stop orders.

IncreaseStop. Percentage applied to place the liquidation stops.

System rules

- ✓ A buy stop order is placed in the following point: close of the current bar plus PorcBandaEntrada. Once the position is opened a liquidation stop order is placed in the low of the n previous bars.
- ✓ A sell stop order is placed in the following point: close of the current bar minus PorcBandaEntrada. Once the position is opened, the system places a liquidation stop order in the high of the n latest bars.

Parameters

DataSource: Data source on which the system is calculated.

EnterBandPercentage: Percentage applied to the high or low of the nBars to place the buy/sell stop orders.

nBars: Number of bars backwards taken into account by the system to place the liquidation orders.

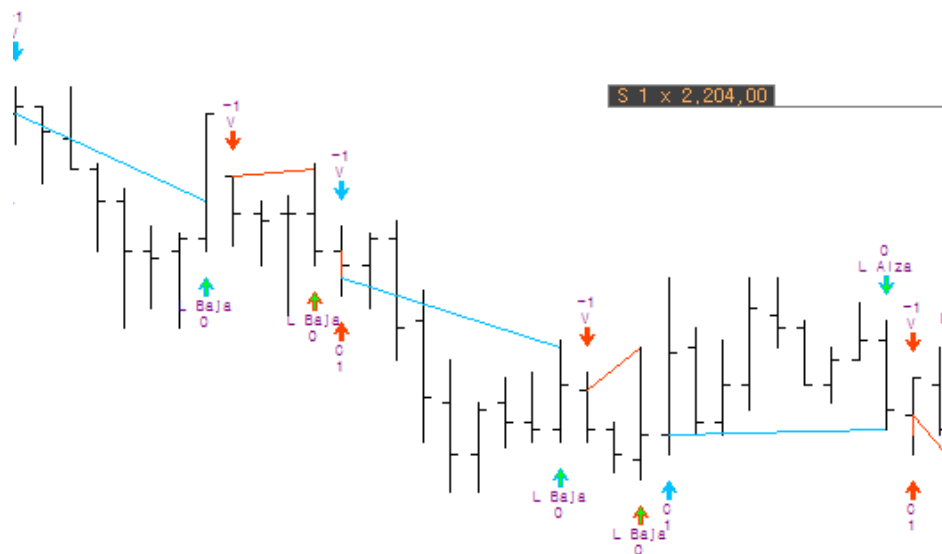
StopIncrease: Percentage applied to the high or low of nBars to place the liquidation order.

EndofDay: With value 0 the system has a normal functioning with value 1 the system liquidates the position at the end of the session.

LongShort. With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

ContractsNumber. Number of contracts/titles bought or sold when the conditions are fulfilled.

Chart example



■ Stochastic Cross

Introduction

The classic Stochastic Oscillator offers the investor very valuable information on market cyclical periods. On the contrary, when the market is clearly trending, its prediction value diminishes. An automatic system based upon this indicator will return huge yields in cyclical markets and bad results in directional markets. The system described next tries to give an answer to this matter by placing itself in the direction of the trend if the market breaks a significant support and resistance.

The results are consistent as the system has a good behavior in both previously mentioned conditions.

Concept definition

BuyPercentage. Percentage applied to the highest high starting up with the last crossover of SK and SD to place the buy stop order.

SellPercentage. Percentage applied to the lowest low starting up with the last crossover of SK and SD to place the sell stop order.

System rules

- ✓ Straight after the crossover of the SK and SD line the system places a buy stop order at the high of the bar plus the buying percentage.
This signal is only valid if the crossover between both lines has happened below the lower band.
If the buy stop order is filled, a new buy stop order is placed at the highest high plus the buying percentage. This new stop is only valid if the market violates the last buying stop.
- ✓ Straight after the crossover of the SK and SD a sell stop order is placed at the low of the bar minus sell percentage.
- ✓ This signal is only valid if the crossover between both lines has happened above the upper band.

If the sell stop order is filled, the system sets a new sell stop order situated in the lowest low plus the selling percentage. This new stop is only valid if the market violates the last buying stop.

Parameters

DataSource: Data source on which the system is calculated.

StochasticDataPeriod: Period used to calculate the lines of the indicator.

StochasticDataSk: Periodo used to calculate the indicator's SK line.

StochasticDataSd: Periodo used to calculate the indicator's SD line.

StochasticDataUpperBand: Upper band of the stochastic indicator (50-100).

StochasticDataLowerBand: Lower band of the stochastic indicator (0-50).

SellingPercentage: Percentage applied to the lowest low after the last crossover of the lines SK and SD to place the buy stop order (0-10).

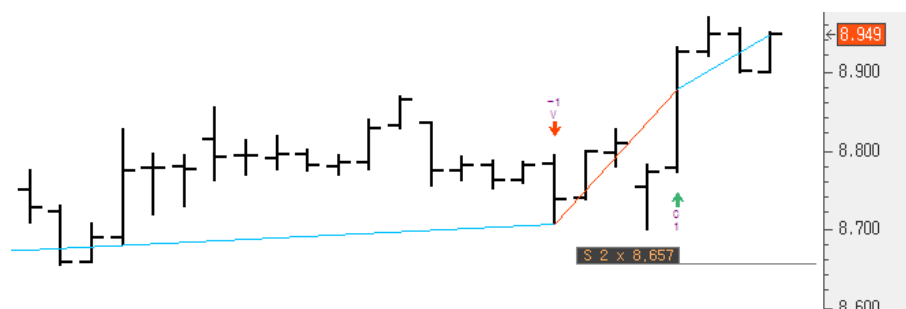
BuyPercentage: Percentage applied to the highest high after the last crossover of the Sk and Sd lines to place the buy stop order (0-10).

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

ContractsNumber. Number of contract titles to be bought or sold when the conditions are fulfilled.

Chart example



■ The anti

Introduction

The following system is also based on the **Stochastic** but do not use the typical lines crossover. In this case the strategy is based on the slope of its data lines - %K and %D. A positive or negative slope at the same time, in both data lines indicates a reliable trend that will be used by the system to take its positions. Also it includes a filter in order to avoid the number of false signals.

Concept definition

Positive Slope: When the difference between the values of the stochastic line in the current bar minus its value n bars ago is positive.

Negative Slope: When the difference between the values of the stochastic line in the current bar minus its value in the previous n bars is negative.

System rules

- ✓ The following conditions must occur so the system goes long:
 - The Stochastic D line has a positive slope.
 - The line K also has a positive slope.
 - If the two previous conditions are fulfilled a buy stop order is set at the high of the bar plus a percentage applied to it. This percentage should confirm the bullish reaction.
 - If the system is long and no reaction confirms a change into bearish trend the system protects its position with a liquidation stop calculated from the highest low since the system entered the market minus a defined percentage.

- ✓ The following conditions must occur so the system goes long:
 - The Stochastic D line has a negative slope.
 - The line K also has a negative slope
 - if the two previous conditions are fulfilled a sell stop order is set at the low of the bar minus a percentage applied to this low. This percentage should confirm the bearish reaction.
 - If the system is short and no signal confirms a bullish reaction, the system will protect its position with a liquidation stop calculated from the lowest high since the system entered the market plus a defined percentage.

Parameters

DataSource: Data source on which the system is calculated.

Range: Period of the Sochastic indicator (1 forward).

K. Period used for the calculation of the average applied to the SK line (1 forward).

D. Period used for the calculation of the average applied to the SD line (1 forward).

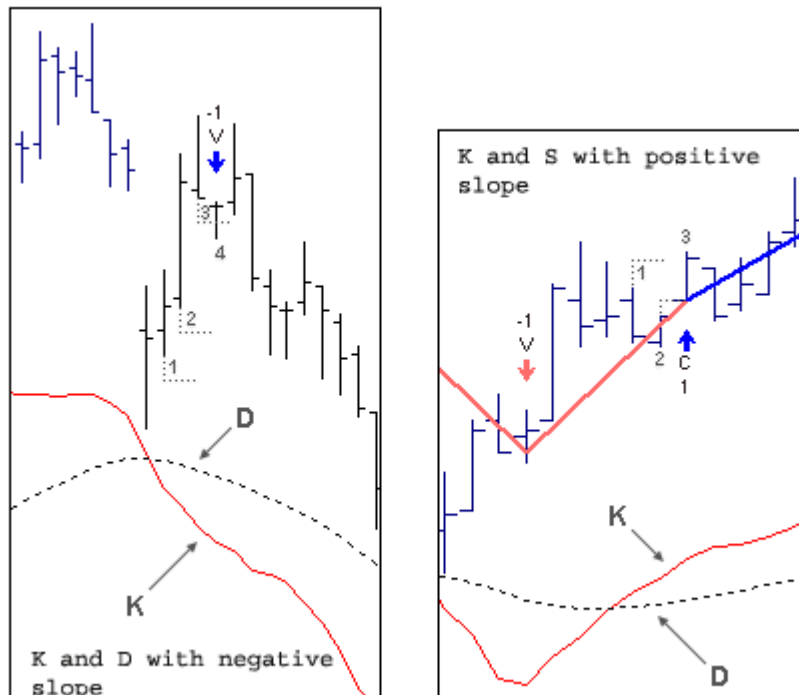
NBars: Number of bars backwards to verify the slope. (1 forward).

Filter. Percentage value applied to the high or low of the bar depending on the generated signal (bullish or bearish). We try this way to avoid false signals (0-2% Fut; 0-5% Acc).

Protection: Percentage value applied to the high or low of the bar in order to place a protection stop (0-2% Fut; 0-5% Stoc).

ContractsNumber: Number of contract titles to be bought or sold when the conditions are fulfilled.

Chart example



■ Trailing Stop

Introduction

Next we present a tool that updates the position of the protection stop in function of certain parameters. While time goes by and new bars are formed, if the operation returns benefits, the system will automatically change the position of the stop downwards or upwards according to the defined criteria. On the contrary, if the market moves against our position the stop will remain unchanged.

The close of the position will be made by the stop order as a consequence this stop must be updated with each new operation.

Concept definition

Trailing Stop: In the image bellow we can notice where the stop was situated initially and the way this stop has been automatically updated.

1. - Once the entry point and the type of order have been established the protection stop was situated.
2. - The market advances and makes a close superior to the entry point, and then the stop is upated to the close of this bar minus the value of the variable RangoStop.
3. - Situation analog to the previous stop.
4. - The stop remains unchanged as the market does not advance anymore.
- 5.-In the last bar, the market starts retracing; once the stop is touched the position will be closed.

Parameters

DataSource: Data source on which the system is calculated.

EntryPrice: Specifies the entry price of the trade.

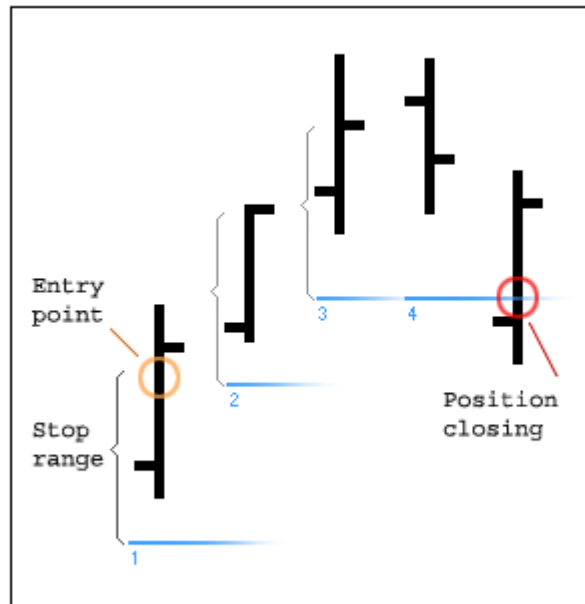
OperationType: With the value 1 is long; with value -1 is short.

StopType. With value 1 the stop is in points with any other value in %.

StopRange. We specify here the amount in points we are ready to lose in a single trade (> 0).

ContractsNumber: Number of contracts to be bought or sold when the conditions are fulfilled.

Chart example



■ Trend system

Introduction

The functioning of this system is based on the detection of overbuying and overselling zones in order to validate the long term trend and trade in its direction.

If the system is long and the Momentum indicator enters in overselling zone the system turns its position and goes short.

The opposite situation happens if the system is short and the Momentum indicator enters the overbuying zone.

The system also uses a target stop order to close its position with benefits.

System rules

- ✓ The system buys when the momentum indicator used to trade long, upcrosses its band and the close of the bar is higher than the highest high of the latest bars. The long will be closed when the target profit set in the system parameters is reached.
- ✓ The system sells when the momentum indicator used to trade short downcrosses its band and also the close of the bar is lower than the lowest low of the latest bars. The position will be closed when the target profit established in the parameters of the system is reached.

Parameters

DataSource: Data source on which the system is calculated.

MomentumPeriod: Period of the momentum indicator used to confirm the buy signal.

MomentumBand: Band of the momentum used to start long positions (100-104).

Momentum1Period. Period of the momentum used to confirm the sell signal.

Momentum1Band. Band of the momentum used to start short positions (96-100).

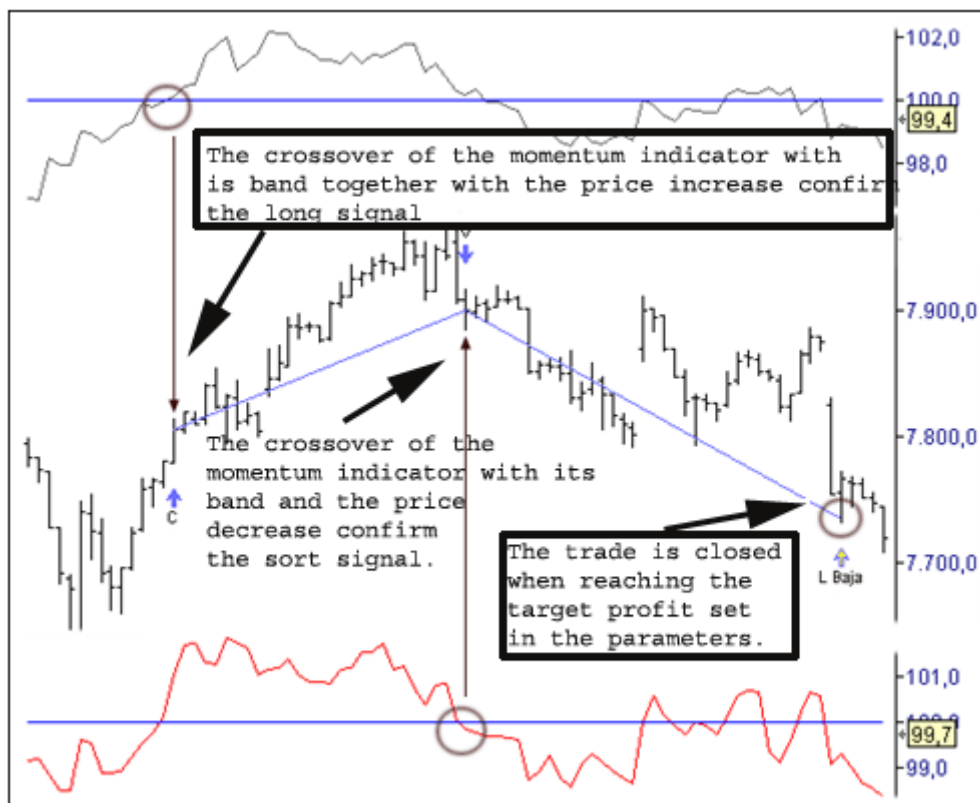
nHigh: Number of bars used to obtain the highest high (1 forwards).

nLow: Number of bars used to obtain the lowest low (1 forwards).

Earnings: Percentage profit to close the position (0.5 -3).

ContractsNumber: N of contracts to be bought or sold.

Chart example



■ UpDowGap System

Introduction

Next, we present a very simple system based in the gaps; also to control the generation of the buy and sell signals we used the indicators **AvSimple** and **AvTrueRange**.

In the image bellow we show how the buy and sell signals are generated: gap down and close of the bar lower than the MA. Once a certain number of bars have passed, the position is closed.

Concept definition

Bullish Gap: A bullish gap occurs when the open of the bar is superior to the high of the previous bar plus a factor that is obtained by multiplying the value of the indicator **AvTrueRange** of the previous bar by the variable **GapFactor** (see images).

Bearish Gap: A bearish gap occurs when the open of the bar is lower than the low of the previous bar minus a factor that is obtained by multiplying the value of the indicator **AvTrueRange** of the previous bar by the variable **GapFactor** (see images).

System rules

- ✓ Generation of a bearish gap. The close of the current bar must be below the simple moving average. If these two conditions are fulfilled the system buys at the close of the bar.
- ✓ Generation of a bullish gap. The close of the current bar must be above the simple moving average. If these two conditions are fulfilled the system sells at the close of the bar.

Parameters

DataSource: Data source on which the system is calculated.

RangeATR: Number of bars necessary to calculate the AVTrueRange.

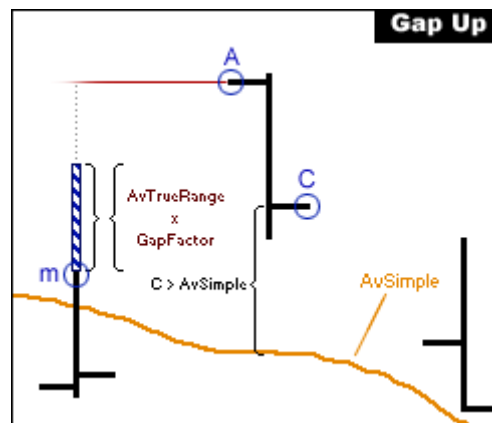
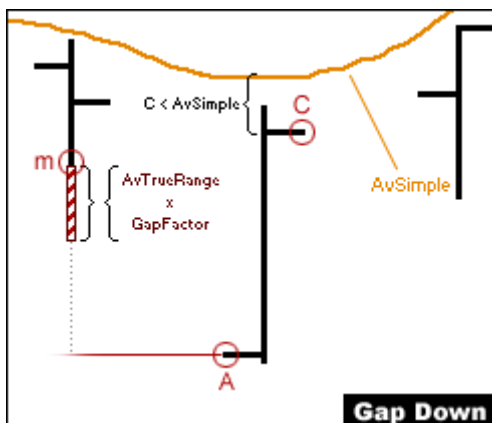
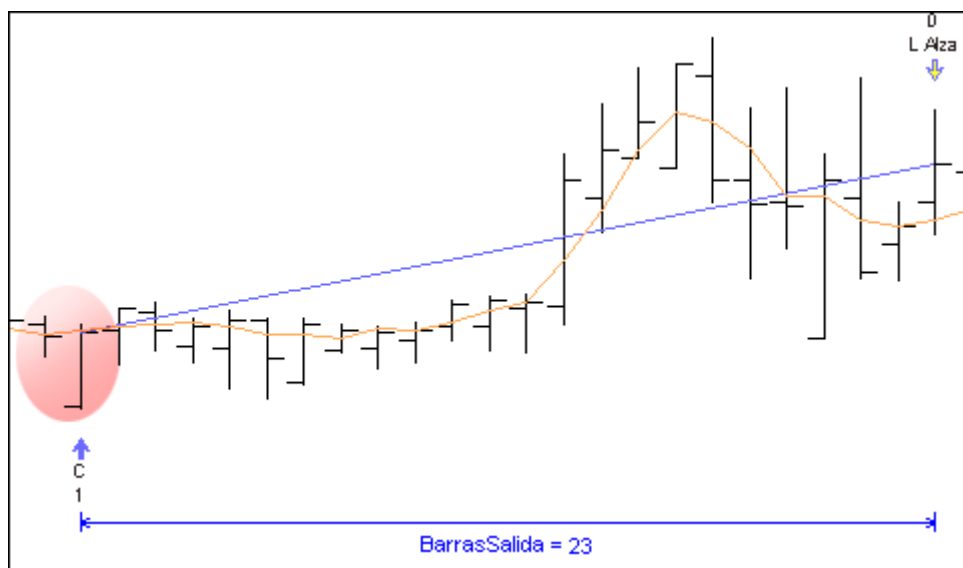
AvSimplePeriod: Number of bars necessary to calculate the Avsimple.

ExitBars: Number of bars from the beginning to the end of the trade.

GapFactor: Multiplying factor applied to the indicator **AvTrueRange** for the possible generation of buy and sell signals.

ContractsNumber: N° of contract titles to be bought or sold.

Chart example



■ Variable Trend system

Introduction

This system calculates two moving bands that adapt themselves to the market situations. The distance between both bands increases in a volatile market while they get close to each other in a non volatile market.

To manage so, we obtain the high and the low made by the momentum in the latest "x" bars that will be used as overbuying and overselling calculation bands. When the system is long and a lateral movement occurs below the high and then the bullish trend continues the band is reduced for the sell until reaching the original position. For the short positions the functioning is similar.

System rules

- ✓ The price is higher than the high of the latest x (**nHigh**) bars. The value of the momentum indicator is higher than one of the mobile bands calculated by the system.
The long will be liquidated when reaching the percentage benefit indicated in the parameter **Earnings**.
- ✓ The price is lower than the low of the latest x (**nLow**) bars. The value of the momentum indicator is lower than one of the bands calculated by the system.
The short will be liquidated when the percentage benefit defined by the parameter **Earnings** is reached.

Parameters

DataSource: Data source on which the system is calculated.

MomentumPeriod: Period of the Momentum indicator.

nHigh: Number of bars to be considered to obtain the highest price with which the closing price is compared.

nLow: Number of bars to be considered to obtain the lowest price with which the closing price is compared.

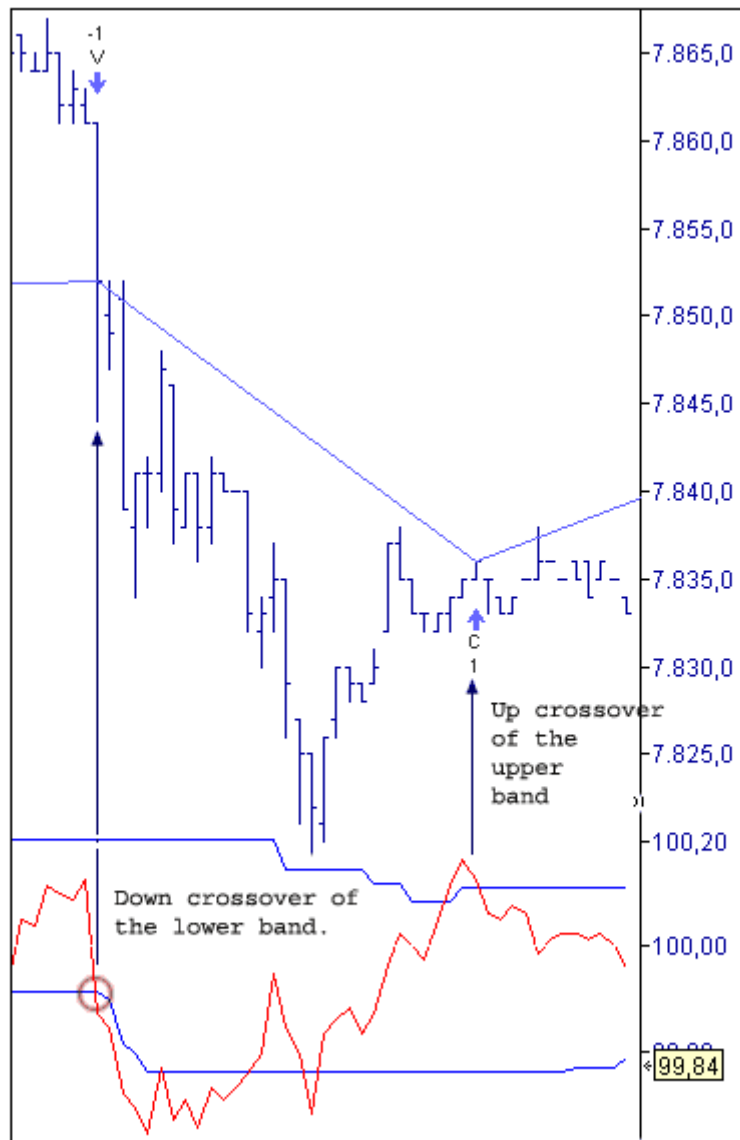
Earnings: Percentage profit to close the position.

CorrectionBars: Number of bars belows the high so once this high is broken we can consider it as a pivot.

SpeedBars: Number of bars to be considered to find the new high or low to place the bands.

ContractsNumber: N° of contracts to be bought or sold.

Chart example



Wilder Trend Reaction

Introduction

This system obtains its name from the fact that it is both a trend and also an antitrend system. It works two different ways:

REACTION: This is the way this system normally operates, it does so in non directional markets with the aim of taking profit in congestion zones.

TREND: The system works this way when the market exits a congestion zone to start a directional movement.

Both behaviors differ in the way the system exits the opened position, the first of them changes the direction of the opened position while the second one closes the trade with the dynamic stop..

To summarize, this system returns good results in a non directional market, however when the market changes its status the system will automatically change into **TREND MODE**. When the new trend ends up the system gets back to the **REACTION MODE**.

Concept definition

Average: We obtain the close of each bar and this is the base for the calculation of the 4 entry points.

B1. Point considered as target of a short operation that was started in **S1**. If this point has not been reached in the following bar it will be calculated again by taking into account the values of the current bar.

S1. Point considered as a target for a long trade started in **B1**. . If this point has not been reached in the following bar it will be calculated again by taking into account the values of the current bar..

High breakout point: If the quote gets equal or superior to this value, the system will consider that the market has started a bullish trend.

At this stage, the system gets back into TREND MODE.

Low breakout point. If the quote gets equal or lower than this value, the system will consider that the quote has entry in a bearish trend. At this stage, the system moves automatically into TRENDMODE.

System rules

- ✓ **Reaction mode.** If the system is short a limit sell order is placed in B1.
 - A buy stop order is placed by the system in the low breakout point in order to obtain benefits if an abrupt change of trend occurs.
 - If the previous conditions is fulfilled the system steps into trend mode.
- ✓ **Trend mode.** The long position is closed when the quote falls below the dynamic protection stop situated at the low of a defined group of bars.

Parameters

DataSource: Data source on which the system is calculated.

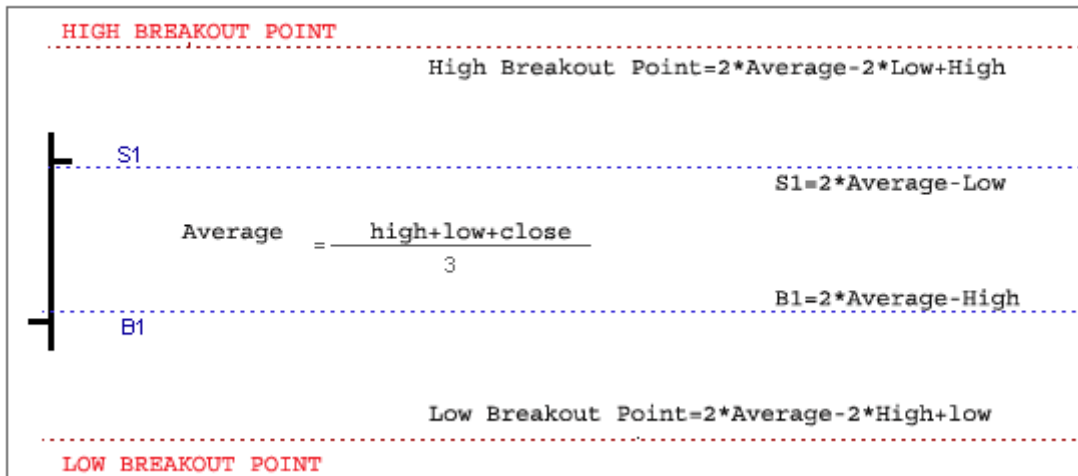
PreviousBars: This parameter is only used in Trend mode. It indicates the number of bars backwards to be considered with the aim of obtaining the low or the high of the group of bars to place the protection stop.

TargetPercentage: Percentage applied to **S1** and **B1** in order to increase or diminish the entry price by target: A negative value for this parameter will diminish the target of an opened position while a positive value will increase it (-1%-2%).

TrendPercentage: Percentage applied to the **high or low breakout point** in order to diminish the range after which we can consider that the market has started a trend mode. A positive value of this parameter makes the range smaller while a negative value makes it wider (-1%-2%).

ContractsNumber: Number of contract to be bought or sold.

Chart example



INDICATORS

■ Sky system

Introduction

The current strategy is based on the convergence of three moving averages. It looks for the proximity between these averages over a certain period and, according to the value of this convergence, places the buy and sell stops that are calculated on the high and low of the period when the averages are in convergence.

The search for the convergence is run over a determined period, during this period a counter of bars inside the value of the convergence increases by, this counter is initialized to 0 when the averages get out of the convergence value so that the process starts again.

The stops to enter the market are calculated by using the high or low of the average convergence period, using a filter in points for both the long and short positions. The exit stops are calculated on the value of the long period average and also a filter in points is used. This filter is added to or subtracted from the value of the average.

In order to monitor the entries and exits we can use the indicator **sky_indicator** that shows the values of the difference between the averages.

System rules

- ✓ A buy stop order is placed at the high of the period where a convergence between the averages has occurred. To this high, the system adds the value of the parameter **EntryStopFilter**.
A stop order is placed to liquidate this long. This stop is calculated by subtracting the parameter **ExitStopFilter** to the value of the average with the longest period.
- ✓ A sell stop order is placed at the low of the period where a convergence between the averages has occurred. The value of the parameter **EntryStopFilter** is subtracted to this low.
A stop order is placed to liquidate this order. This stop is calculated by subtracting the parameter **ExitStopFilter** to the value of the average with longest period.

Parameters

DataSource: Data source on which the system is calculated.

ShortPeriod: Period of the short term average.

MediumPeriod: Period of the medium term average.

LongPeriod: Period of the long term average.

AverageType: Type of average to be chosen.

StarHour: Start time of the system (0 – 2359).

LastEntryHour: Limit time for the system to trade (0 – 2359).

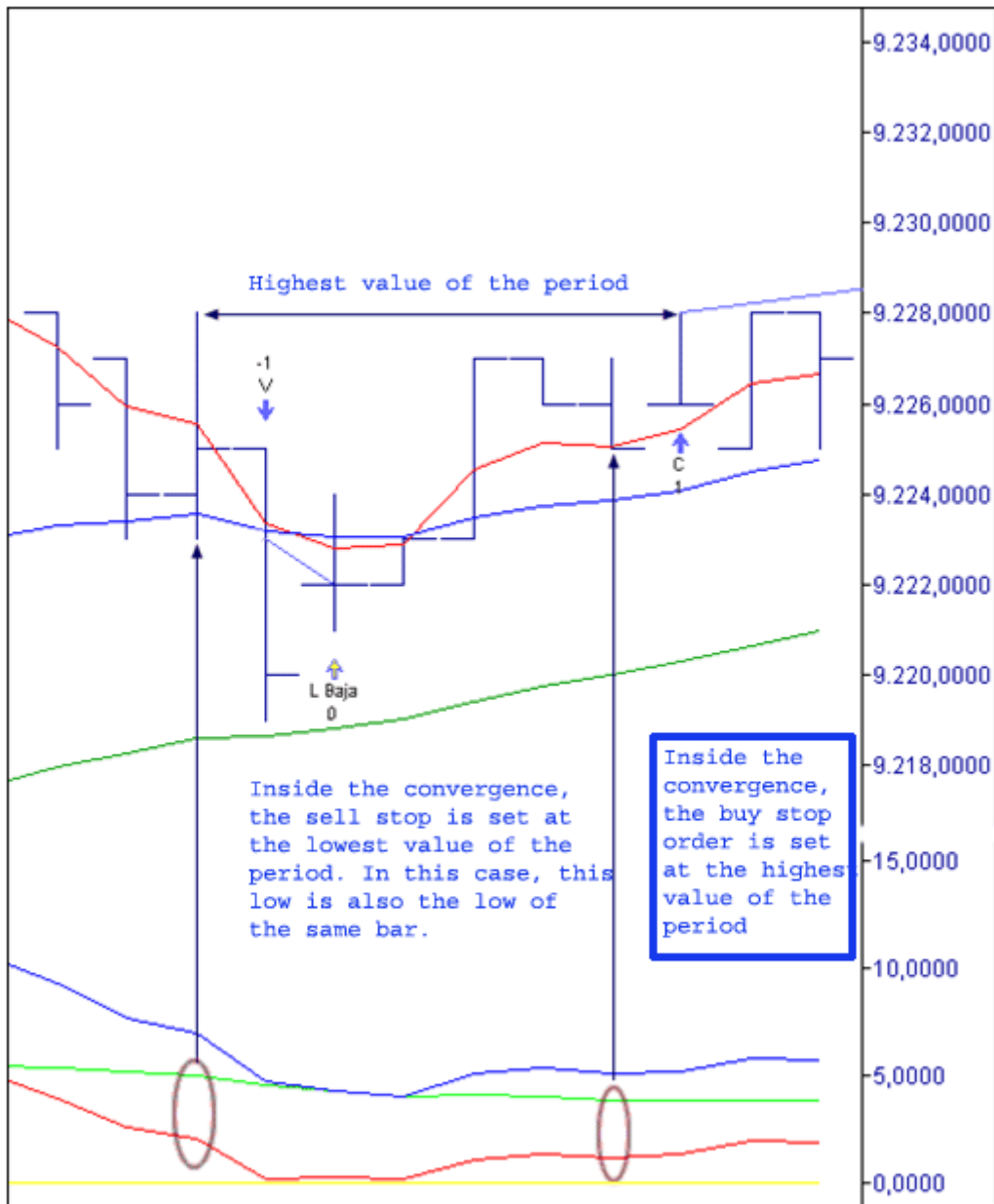
MaxConvergenceValue: Highest difference between the averages so the situation is considered as convergence.

EntryStopFilter: Filter in points to enter the market.

ExitStopFilter: Filter in points to exit the market.

EndOfDay: If this parameter is worth one the system closes its position at the end of the session. On the opposite case the system keeps its position overnight.

Chart example



MOMENTUM

■ Cyclic System

Introduction

This strategy uses the **PriceRoc** indicator for its calculations. This indicator measures the difference between the current price and a price a certain number of bars ago. The idea of the system is based on the well known phenomenon that prices increase and decrease in cyclical movements.

So, the system used the value of the indicator **PriceRoc** advanced **nBarras** and the **standard deviation** applied to the results of the indicator and also advanced the same number of bars. What we try to do is anticipating the entry signals.

Concept description

Line 1. Line resulting from the displacement of the indicator **PriceRoc** for the number of bars indicated in the parameter **BarrasAtras**.

Line 2. Line resulting from applying the indicator **Standard Desv** to line 1 and displacing the result rightwards for the amount indicated in **n-BarrasAtras**.

System rules

✓ The following conditions must occur:

- The **Line_1** of the indicator upcrosses the **Line_2**
- The system places a buy stop order at the high of the bar plus a percentage (Filter)

If the parameter **TypeTrade** is 0, the system remains long until the selling conditions occur and then changes its position. On the other hand if **TypeTrade** is 1 the position is kept for the number of bars indicated in the parameter **DurationTrade** and then closes the position.

✓ The following conditions must occur:

- The **Line_1** of the indicator downcrosses the **Line_2**
- The system places a sell stop order at the low of the bar where the crossover has happened minus a percentage (Filter).

If the parameter **TypeTrade** is worth 0 the system remains short until the buying conditions are given and then turn into long. On the other hand, if **TypeTrade** is worth 1, the position is kept during the number of bars indicated in the parameter **DurationTrade** and then closes the position

Parameters

DataSource: Data source on which the system is calculated.

ROCRange: Period used for the calculation of the PriceROC and used by the system.

DesvTipRange: Period used by the indicator standard deviation.

Filter: Percentage value applied to the high or low of the bar (depending on the bullish or bearish breakout) (0-2 % Fut, 0-5 % Stck).

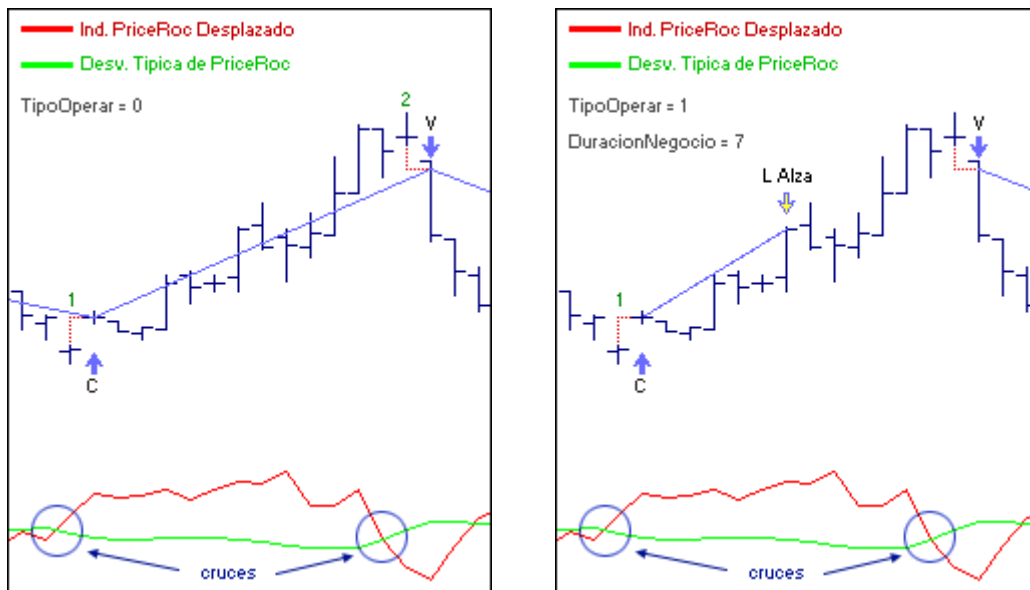
BackBars: Number of bars to displace the PriceRoc.

DurationTrade: Indicates the number of bars that the trade is going to last. This parameter is only active if TypeTrade is 1.

TypeTrade: With value 0 the system changes its direction when the conditions are given and is always "in the market". With value 1 the system closes its positions when a certain number of bars have passed by.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ JSTRIX System

Introduction

This system is based on the functioning of the Trix indicator, and tries to take profit of the lateral zones by operating in the direction of each oscillation.

System rules

When the Trix upcrosses its band (band zero by default) the system launches a buy order at market.

When the Trix downcrosses its band, the system launches a sell order at market.

If the system is long, it places the stop at x% (protection) of the low of the last bearish bar (if its close is lower than the close two bars backwards), as a consequence, the stop loss will be dynamic as it will change while prices move and will only be touched if the market direction suffers an abrupt change.

If the system is short, it places the stop at x% (protection) of the high of the latest bullish bar, as a consequence it is a dynamic stop loss than will change while prices move but will only be touched if there is an abrupt change in the market direction.

Parameters

Data Source: Data source used for the system calculation.

TrixPeriod... TrixBandValue. Parameters belonging to TRIX.

Protection: Percentage value to set the protection stop.

ContractsNumber: Contracts by trade

StartHour/FinishHour: Time when the system works.

MOVING AVERAGE

20-Day EMA Breakout

Introduction

This system is based on the **Exponential moving average**. The strategy has been programmed to trade in the market breakout points and to take profit from these situations of market clear directionality. When a breakout occurs (bearish or bullish), the bars tend to move away from the line of the oscillator. If the breakout is bullish the bars are formed above the indicator, and if the breakout is bearish the bars are formed below the indicator. On the other hand when price establish itself again the bar form again closed to the line. As a consequence, this are the conditions that must occur so that the system generates the corresponding signals.

System rules

- ✓ n bars have been formed above the line of the exponential moving average. A buy stop order is placed in the highest high of a group formed by n bars and is kept until touched or until the opposite conditions occur (the bars are formed below the line). If we are long, a protection stop is placed in the highest value of the indicator since the position was started.
- ✓ n bars have been formed below the value of the exponential moving average. A sell stop order is placed in the lowest low of the group formed by n bars and is kept until it is filled or until the opposite conditions occur (the bars are being formed above the line). If the system is short, a protection stop is placed in the lowest value of the indicator since the position was started.

Parameters

DataSource: Data source on which the system is calculated.

Range: Period used for the calculation of the exponential moving average.

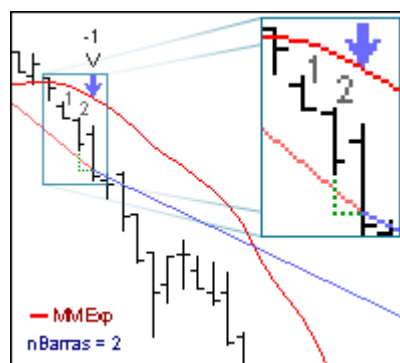
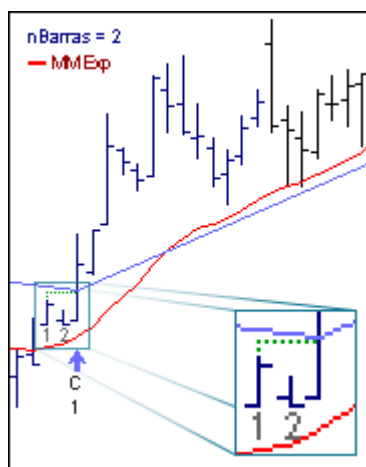
nBars: Number of bars that must have been formed above or below the exponential moving average to consider that a breakout has occurred.

ProtectionStop: Percentage applied to the value of the indicator to set the protection stop (0-3% Fut. 0-5% Stc.).

Filter. Percentage value applied to the high or low of the bar depending on if it is a bullish or bearish (0-3% Fut. 0-5% Stc.).

ContractsNumber: Number of titles/contract bought or sold when the conditions are fulfilled.

Chart example



■ Average Cross Data2

Introduction

This simple system places a buy or sell stop order calculated when an average crossover happens by using as base for the placement of this order the high or low of the crossover bar. The difference with all other systems is that this one uses two data series. From one of the charts, we obtain the value of the averages and the crossovers between them and in the other one, we apply the system orders.

In order to use this system we must have inserted 2 charts in the same page to be able to run the calculations.

System rules

- ✓ When the shortest period average upcrosses the other average, the buy stop order is placed at the end of the bar plus a percentage.
- ✓ When the shortest period average downcrosses the other one, a sell stop order is placed at the low of the bar minus a percentage.

Parameters

DataSource: Data source on which the system is calculated.

ShorterAvPeriod: Period of the short average.

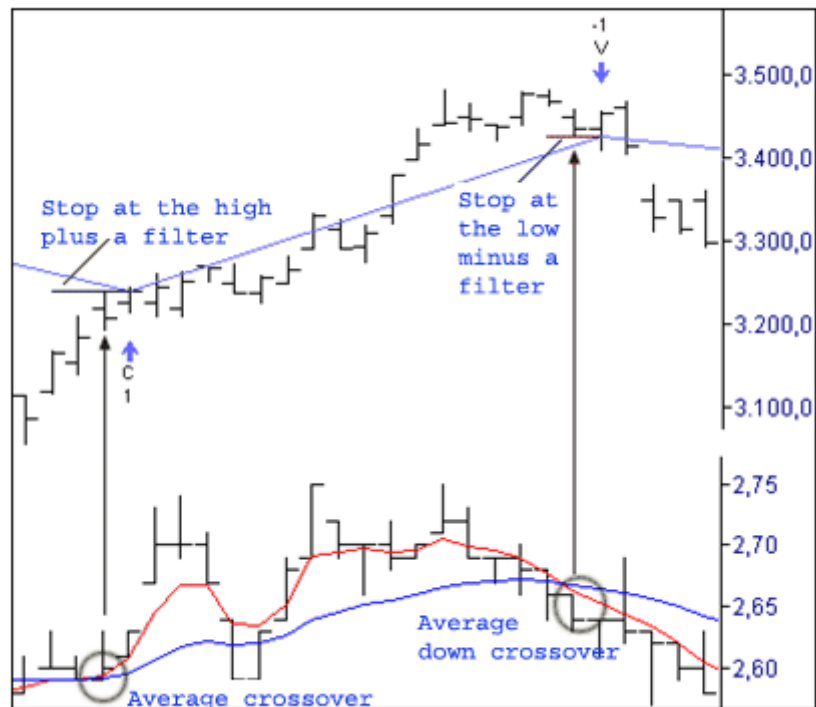
LongerAvPeriod: Period of the long average.

BuyingPercentage: Percentage applied to the high of the bar where the crossover happens in order to calculate the buy stop order.

SellingPercentage: Percentage applied to the low of the bar where the crossover happens in order to calculate the sell stop order.

ContractsNumber: Number of contract to be bought or sold when the conditions are given

Chart example



■ Average Cross

Introduction

This system is based on the crossovers of the lines of two indicators (for example 2 moving averages). These lines are called AvgCross and AvgCrossed.

System rules

- ✓ When AvgCross upcrosses AvgCrossed, the system sends a buy order.
- ✓ When AvgCross downcrosses AvgCrossed, the system liquidates the position.

Parameters

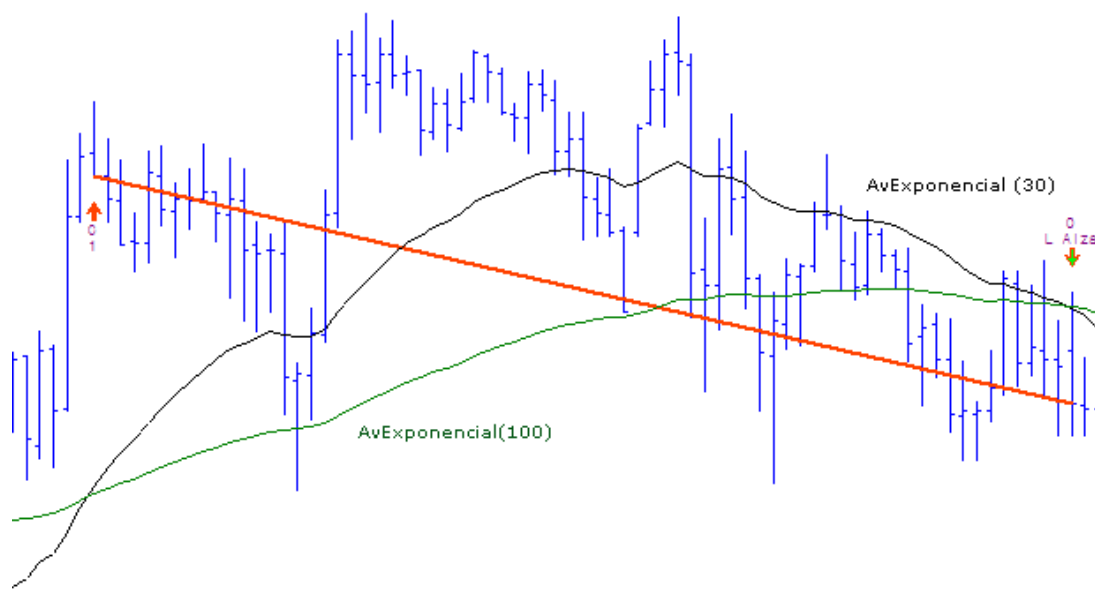
DataSource: Data source on which the system is calculated.

AvgCross: Type of average used.

AvgCrossed: Type of average used.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Average system

Introduction

The functioning of this system is very similar to the previous one's. In this case the system uses to simple moving averages and the difference in relation with the system AVGCross is that the current one is always "in the market".

System rules

- ✓ When the shortest period average upcrosses the longest period average, the system triggers a buy order.
- ✓ When the shortest period averaged downcrosses the longest period average, a sell order is triggered.

Parameters

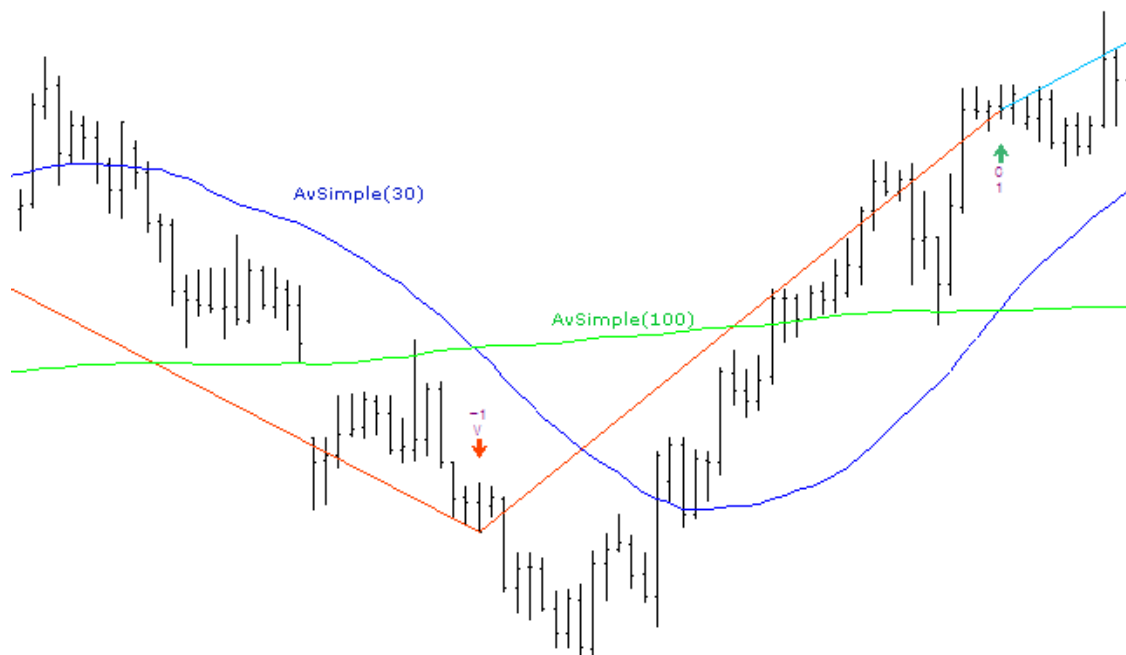
DataSource: Data source on which the system is calculated.

ShorterAvPeriod: Period of the sort average.

LongerAvPeriod: Period of the long average.

ContractsNumber: Number of titles contract to be bought or sold when the conditions are fulfilled.

Chart example



Balance point system 01

Introduction

This system is based on a price average on each bar. This average is calculated at the close of the bar and consists in the sum of the high, low and close of a certain amount of bars defined in the parameters **BarsRange** divided by 3. This system also uses an average (to be chosen by the user) on the previous indicator for the generation of buy and sells signals as it appears in the previous image.

In the first of the images we can see a long trade at the value of the indicator is above the average exponential, while in the second image the conditions are the opposite.

System rules

- ✓ The indicator **BalancePoint01** must be equal or greater than the average applied to it, and that was previously defined in the parameter **Average**. When this situation happens a buy stop order is placed in the high of the group of bars determined by the parameter **BarsRange**.
- ✓ The indicator **BalancePoint01** must be lower or equal than the average applied to it and that was previously chosen by the user in the parameter **Average**. When this situation happens a sell stop order is placed at the low of a group of bars determined by the parameter **BarsRange**.

Parameters

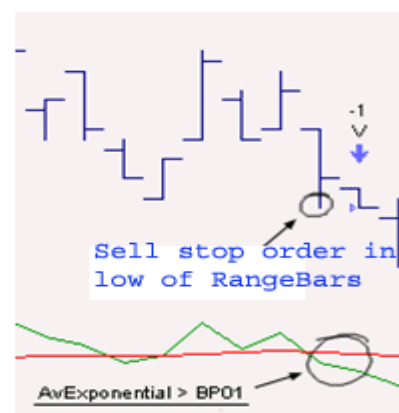
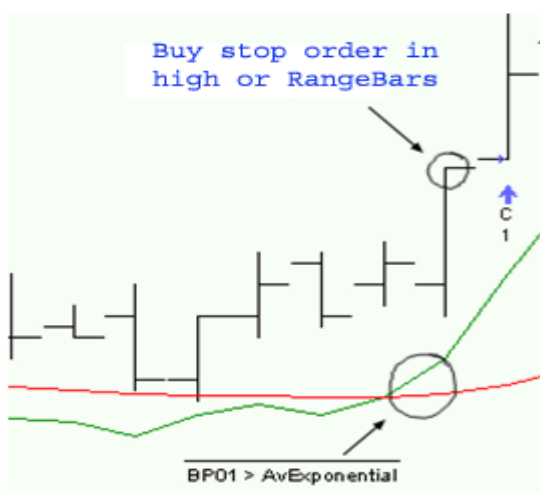
DataSource: Data source on which the system is calculated.

BPPeriod: Number of bars backwards taken into account by the indicator to obtain the high and low used for the calculation of the average.

BarsRange: Number of bars backwards to be considered to obtain the high and low where the buy and sell stop orders are placed.

ContractsNumber: Number of titles contract to be bought or sold when the conditions are fulfilled.

Chart example



■ Cafetero01

Introduction

This system works in antitrend mode. Here are some interesting considerations regarding this system:

- ✓ It can work in antitrend mode if the optimization of the system's parameters says so.
- ✓ The automatic regulation of the system if the market changes suddenly into trend mode. As a consequence, we need to be confident in the autorregulation possibilities of the system to act according to the market basic characteristics.

The strategy is based in the crossover of two averages that generate buy and sell basic signals. Two filters are added to the signals, one for shorts and one for longs that along with the protection stops give place to a very versatile strategy enable to adapt itself to different market situations.

System rules

- ✓ The short period average must downcross the long period one. Once this crossover has happened a buy stop order is placed in the lowest high plus the bullish filter. From the crossover of the averages, this condition is verified on each of the bars. Once the buy stop order is filled, a protection stop order is triggered at the highest low minus the protection filter.
- ✓ The short period average must upcross the long period one. Once this crossover has happened a sell stop order is placed in the highest low minus the bearish filter. From the crossover of the averages, this condition is verified on each of the bars. Once the sell order has been triggered, a protection stop order is placed at the highest high plus a the protection stop.

Parameters

DataSource: Data source on which the system is calculated.

EndOfDay: With value 0 the system lives opened positions between sesión. With value 1 the system closes its positions at the end of the session.

ShortAverage: Number of bars used for the calculation of the short average.

LongAverage: Number of bars for the calculation of the long average.

AverageBuyingPercentage: Filter applied to start a trade after the average crossover (0 to 15%).

AverageSellingPercentage: Filter applied to exit a trade after the average crossover (0 to 15%).

ProtectionBuyingPercentage: Stop used as protection to exit a long trade (0.5 to 5%).

ProtectionSellingPercentage: Stop applied as protection to exit a short trade (0.5 to 5%).

CrossAverage: Type of average used.

CrossedAverage: Type of average used

nDecimals: Number of decimals used to obtain the values of the averages.

ContractsNumber: Number of titles/contracts to be bought or sold when the conditions are given.

■ Cafetero02

Introduction

This system works the way the previous one does but included a time filter (2 additional Parameters **StarHour** and **ExitHour**).

Flat average system

Introduction

The flat moving average (AvFlat) is applied to a data series (prices, volumes, other indicators...). The calculation is made with a certain number of bars indicating the period of the moving average. While new data are incorporated to the series, the old data disappear this way the same period is always kept for the calculation.

It needs to be taken into account that the average does not forecast anything; it just indicates the prices trend by smoothing the data it is applied to. In fact, the flat moving average diminishes the noise and enables to have a clear idea of the prices evolution. While the period of the average increases the delay in relation with the price also increases.

The advantage of using a short period average is that the price is followed closely by the average but it has the inconvenience of generating many false signals thus increasing the commissions. The solution is to find a period where the average follows the prices closely and at the same time is not affected by their randomness.

System rules

- ✓ If the close of the bar is above the moving average, the system buys at close.
- ✓ If the close of the bar is below the moving average, the system sells at close.

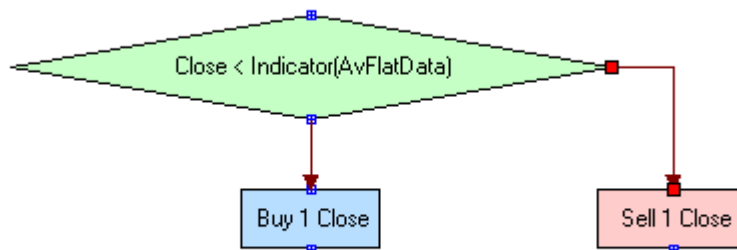
Parameters

DataSource: Data source on which the system is calculated.

Period: Period used for the calculation of the avFlat.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



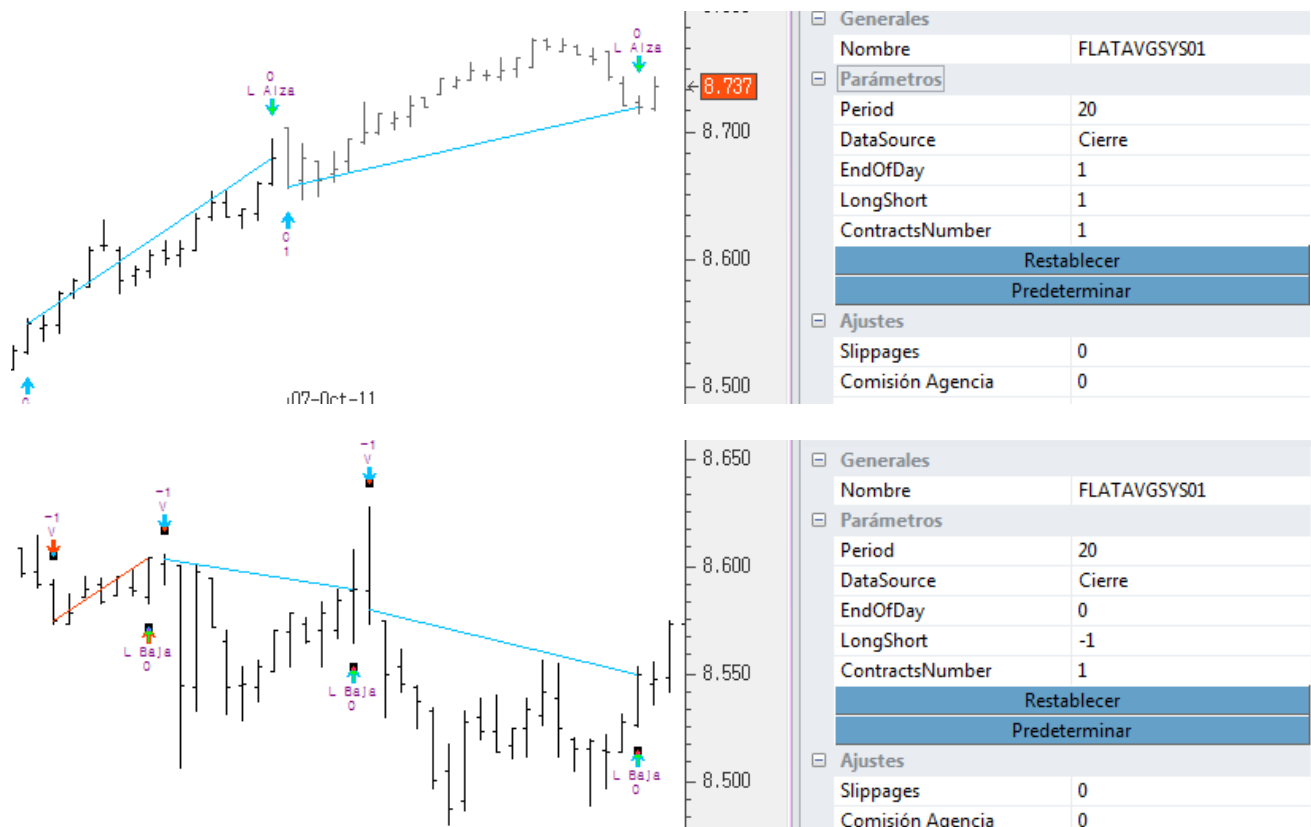
Flat average system01

This system works the way the [Flat average system](#) does but in this case 2 new parameters are included.

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

Chart example



Full Average

Introduction

This is the typical averages but, in this case an additional procedure is included in order to reduce the system's activity when the market is in a congestion zone. This procedure consists in two filters.

- ✓ The first filter consists on the overcoming of the high or low inside a number of bar, this value will be taken into account to compare it with the quote straight after the average crossover.

- ✓ The second consists on comparing the ADX with the highest or lowest value produced in the latest x bars (and using it as a mobile band). This last filter is only used after the system has made three consecutive negative trades.

System rules

- ✓ When the number of consecutive negative trades is lower than three, if after the short average upcrosses the long average, the close of the current bar is higher than the value of the high over the latest N bars, a buy order is sent.

When the number of consecutive negative trades is higher or equal to three and the close of the current bar is higher than the high of the latest N bars, after the average crossover the value of the ADX must be higher than the high of the latest x previous bars.

- ✓ When the number of consecutive negative trades is lower than three, if after the short period average downcrosses the long period average, the value of the close is lower than the lowest value of the latest N bars, then a sell order is sent.

When the number of consecutive negative trades is equal or higher to three and the value of the close is lower than the lowest value of the latest N after the average crossover, the value of the ADX must be superior to the highest value of the latest X bars in order to make the trade.

Parameters

DataSource: Data source on which the system is calculated.

ShortAveragePeriod: Period of the short average.

LongAveragePeriod: Period of the long average.

ADXPeriod: Period of the ADX.

BuyingFilter: Period to look for the highest price of the quote, with which we are going to compare the close to send the buy order.

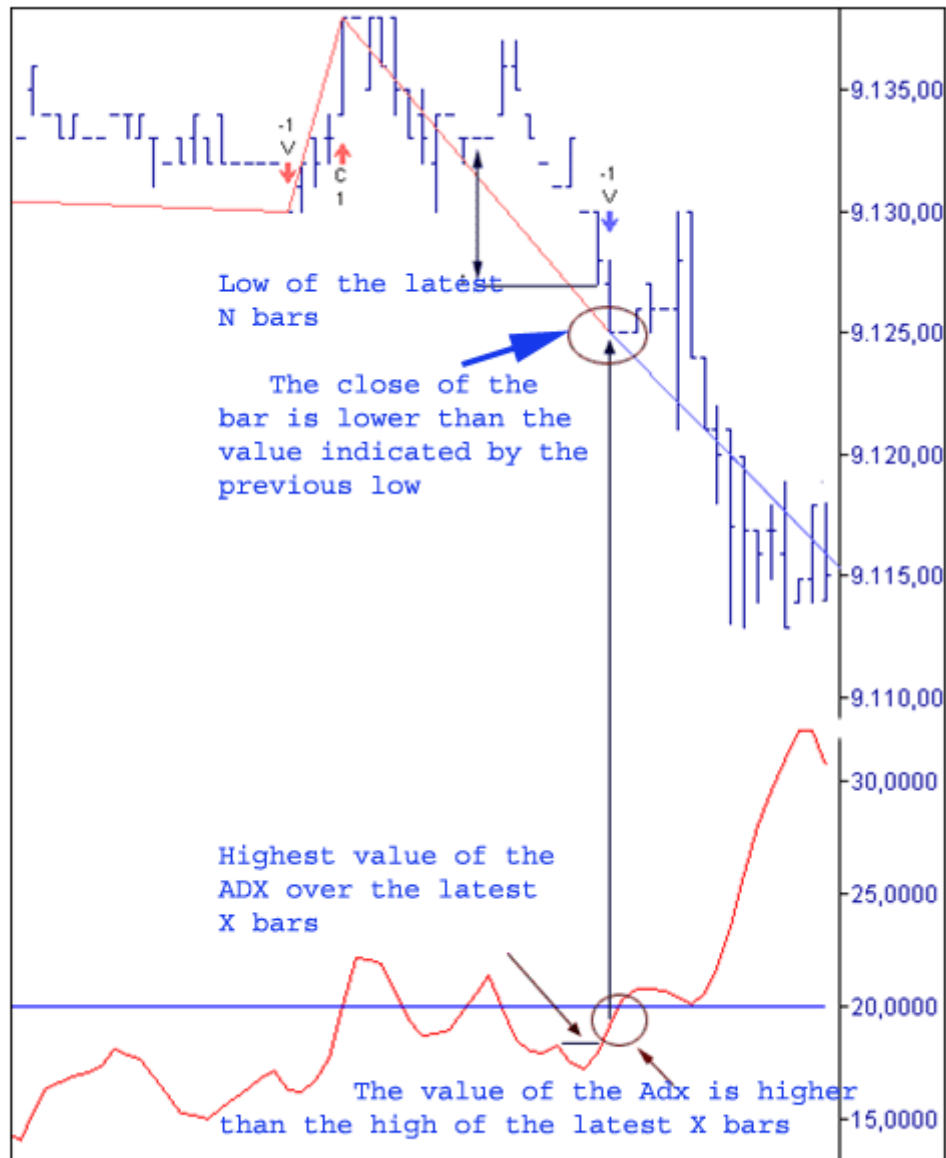
SellingFilter: Period to look for the lowest price of the quote, with which we are going to compare the close to send the sell order.

ADXFilter: Period to look for the lowest price of the quote, with which we are going to compare the close to send the sell order.

EarningsStop: Percentage profit with which the system closes a position.

ContractsNumber: Number of titles contract to be bought or sold when the conditions are given.

Chart example



■ T3 Tillson 's system

Introduction

The concept on which this system is based is very simple. It uses the indicator **T3 from Tillson**, the formula appears in the image below. T3 Tillson is made of a line consisting of applying successive exponential moving averages one on the other. It also includes a variable with the aim of adapting the line of the indicator to the chart being visualized. The higher the value of the parameters is the higher the number of entries given by the system.

System rules

- ✓ Buy at the close of the bar, when this close is above the Tillson.
- ✓ Sell at the close of the bar when this close is below the Tillson.

Parameters

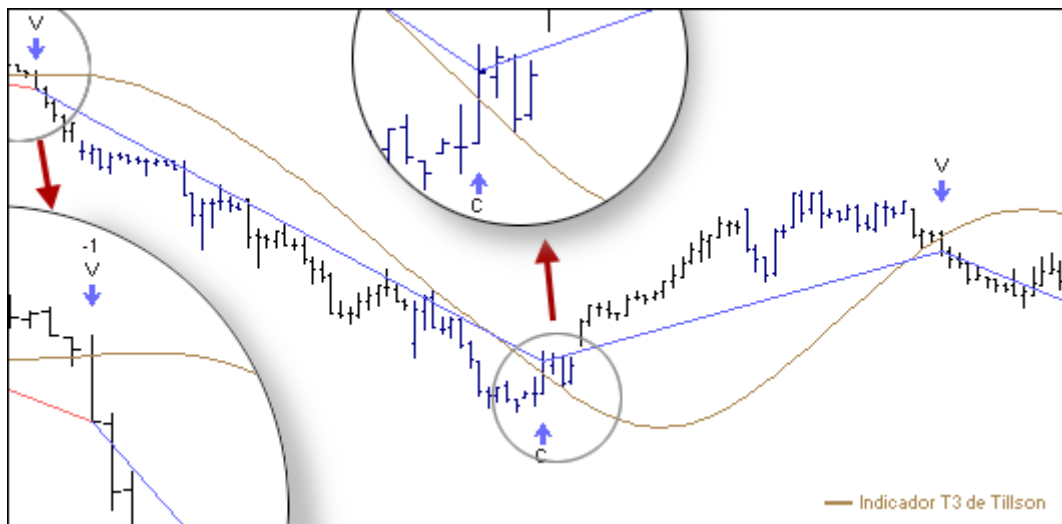
DataSource: Data source on which the system is calculated.

Range: Period used by the exponential average of the r T3 Tillson.

a. Adaptability Factor as the exponential moving average according to the formula of the Tillson (values between 0 and 5).

NumberContracts: Number of titles/contracts to be bought or sold when the conditions are given.

Chart example



Indicador T3 de Tillson

$$\begin{aligned} c1 &= -(a^2 a) \\ c2 &= 3^2 a^2 a + 3^2 a^2 a^2 \\ c3 &= -6^2 a^2 a - 3^2 a^2 a^2 \\ c4 &= 1 + 3^2 a + a^2 a^2 + 3^2 a^2 a \\ \text{res} &= c1 * \text{Indicador}(E6) + c2 * \text{Indicador}(E5) + c3 * \text{Indicador}(E4) + c4 * \text{Indicador}(E3) \end{aligned}$$

res

OSCILLATOR

RSI system

Introduction

This system is based on the RSI oscillator.

System rules

- ✓ Buy at close when the RSI uncrosses its lower band.
- ✓ Sell at close when the RSI downcrosses its upper band.

Parameters

DataSource: Data source on which the system is calculated.

Period: Period used for the calculation of the RSI indicator.

UpperBand: Value of the upper band.

LowerBand: Value of the lower band.

NumberContracts: Number of titles/contracts to be bought or sold when the conditions are given.

Chart example



TRENDFOLLOWING

■ Bands Breakthrough System01

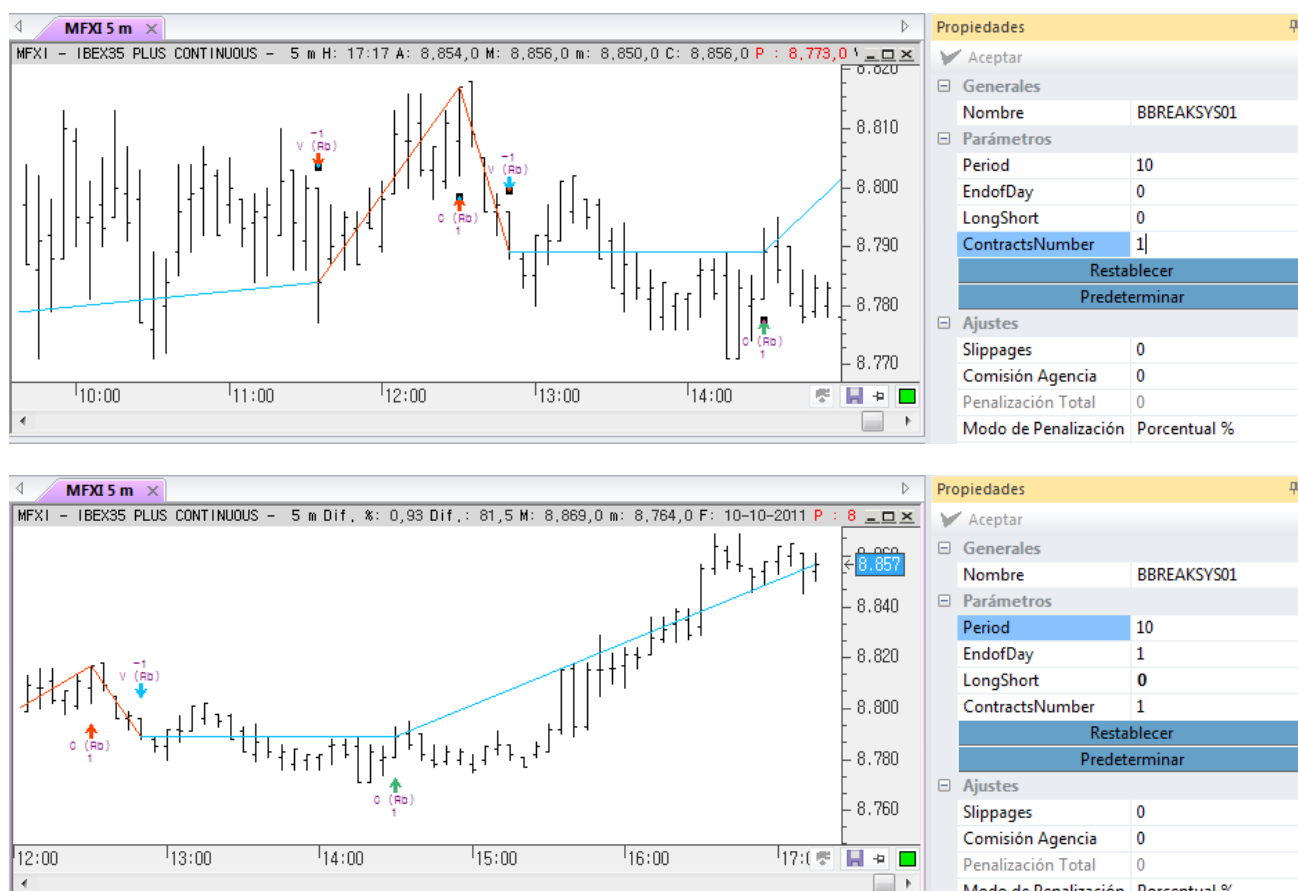
Introduction

This system is a variation of the [Bands Breathrough System](#) with 2 new parameters:

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short anf with value 1 the system only trades long.

Chart example



■ Directional Movement System

Introduction

In 1978 J. Welles Wilder, Jr published his book "New Concepts in Tecnical Trading Systems" with huge success thanks to the new concepts he presented in this book. Ths most interesting of these concepts refers to the directional movement. It tries to evaluate the directionality of a certain asset and its evolution in the time. Then the different values can be classified in function of the directional movement of each of them. This system is based on this directionall movement indicator with three additional filters, delay in the entry time, directional filter and volatility filter.

Concept definition

(For additional information on this concepts please check the help file Indicators catalog)

ATR: Value of the indicator Average True Range..

ADX: Value of the indicator ADX.

Period: Period of the exponential moving average to calculate the average on the DI+ y DI -.

ValueATR: Parameter to be compared with the indicator ATR.

ValueBandADX: Parameter to be compared with the indicator ADX.

Delay: This parameter appoints the bar where the entry stop after the crossover between DI+ and DI- will be placed.

Ticks: Percentage filter applied to the high or low of the bar to place the stops.

UpCross: We consider a bullish crossover when the exponential moving average applied to DI+ downcrosses the line of the exponential moving average applied to the DI-.

Downcross: We consider a bearish crossover when the exponential moving average applied to DI- upcrosses the line of the exponential moving average applied to the DI+.

System rules

In function of the bar selected by the variable **Retardo** different buy/sell rules are applied:

✓ **When Retardo = 0**

Upwards crossover.

The value of the indicator ADX is superior to ValorBandaADX and the value of the indicator ATR is higher than ValorATR.

If the two previous conditions are true a buy signal is generated at the close of the bar. If the first condition is true but the second one is false, the system will just liquidate the previous bearish positions.

✓ **When Retardo > 0**

Upwards crossover.

In the bar indicated by the variable **retardo**, the values of the indicators ADX and ATR must be superior to ValorBandaADX and ValorATR respectively. Also DI+ must be superior to DI-.

If the two previous conditions are true a buy stop order is placed at the high of the bar plus the filter Ticks. If the first points are true and the second false we will place a liquidation stop order in the place indicated by the third point.

✓ **When Retardo = 0**

Downwards crossover.

The value of the indicator ADX is greater than ValorBandaADX and the value of the indicator ATR is greater than ValorATR.

If the two previous conditions are true a sell signal is sent at the close of the bar.

If the first point is true and the second 1 is false we will just close the previous bullish position.

✓ **When Retardo > 0**

Downwards crossover

In the bar indicated by **retardo**, the values of the indicators ADX and ATR must be superior to ValorBandaADX and ValorATR respectively. Also, DI- must be superior to DI+.

If the two previous conditions are true a sell stop order is placed in the low of the bar minus the filter Ticks. If the first point is true and the second false we place a liquidation stop order in the place indicated by the third point.

Parameters

DataSource: Data source on which the system is calculated.

Period: Period of the exponential moving average used to calculate the average on DI+ and DI-.

ADXBandValue: Parameter to be compared with the band of the indicator ADX.

ATRValue: Parameter to be compared with the indicator ATR.

Delay: Generates buy and sell signals in function of the value of the variable **Retardo**.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

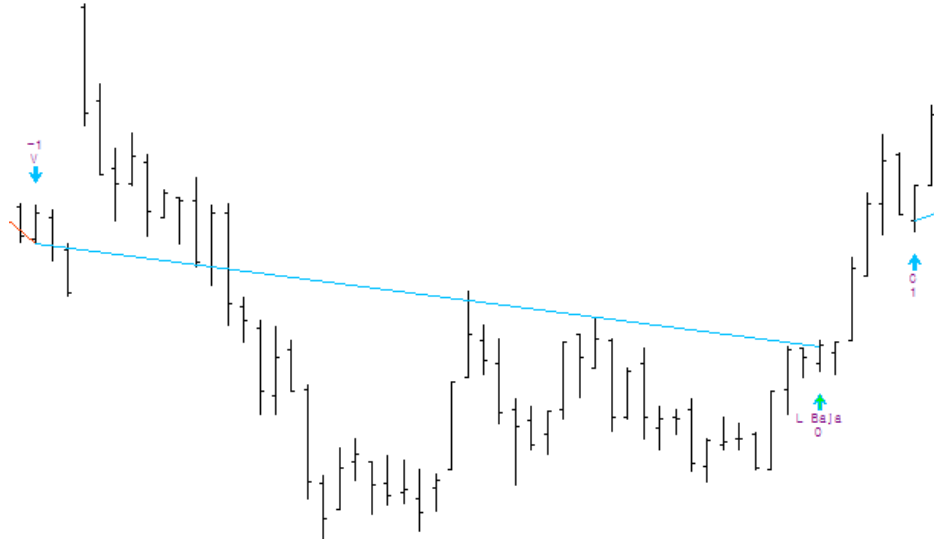
LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

Ticks: Percentage applied to the high or low of the bars to place the stops.

Comments on the system

J. Welles Wilder recommends using the system with markets where the ADX is superior to 20, in fact, markets with high directionality or, in other words, trending markets.

Chart example.



■ Force Index system

Introduction

This system is based on the indicator Force Index and also in an exponential moving average. Force index is highly sensitive to market changes, consequently when its value is positive the market is in a bullish trend while when its value is negative, the market is in bearish trend. Due to its nature this oscillator detects any change in the trend even the smallest one. Due to this characteristic, it is interesting to use it together with a trend following indicator to confirm its signals.

Concept definition

0 band used for better clarity in the indicator interpretation.

System rules

- The following conditions must occur:
- The exponential moving average confirms a bullish movement and the Force Index downcrosses its band and takes negative value.
- A buy stop order is placed in the high of the bar plus a percentage determined by the parameter Pct.

If the system is long, it places a protection mobile stop which its value is defined by the highest high since the trade was started minus the percentage determined by PctProtección.

- The following conditions must occur:
- The exponential moving average confirms a bearish movement and the Force Index upcrosses its band and takes positive value.
- .
- A sell stop order is placed at the low of the bar minus a percentage determined by the parameter Pct.

- If the system is long, it places a protection mobile stop which its value is defined by the lowest high since the trade was started plus the percentage determined by PctProtección.

Parameters

DataSource: Data source on which the system is calculated.

AvExpRange: Period used for the calculation of the exponential moving average.

ForceIndexRange: Period used for the calculation of the exponential moving average applied to the Force Index oscillator.

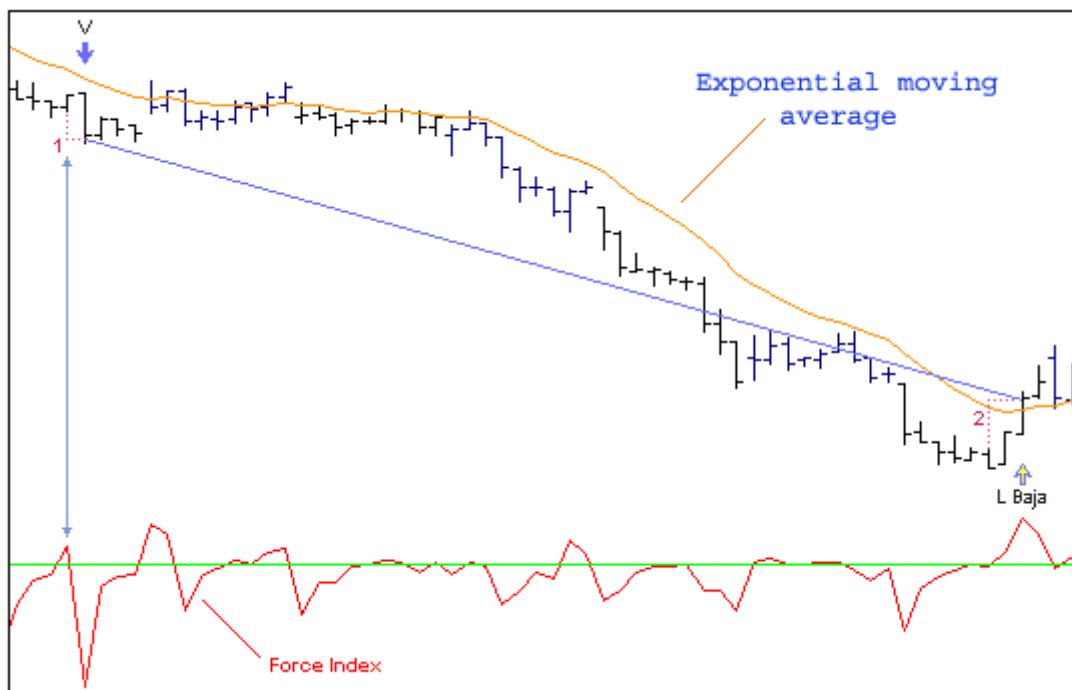
nBars: To verify the slope of the exponential moving average we compare its value in the current bar with its value n bars ago.

Pct. Percentage applied to the high or low of the bars in order to place the buy/sell orders respectively when the indicators detect an entry signal.

ProtectionPct: Percentage added to the lowest High or subtracted to the highest low acting this way as a protection stop.

NumberContracts: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Run Day

Introduction

Run Day uses two very interesting concepts to build up its signals:

- The first of them refers to the breakout of a price range as a presignal for a trade.
- The second one refers to the concept of confirmation of the trend in the bars successive to the mentioned pre signal.

The signal generation requires a signal triggering and also a subsequent confirmation. The concepts described next enable us to relax the Parameters of the systems providing it with huge plasticity and adaptability to different situations. The system was used initially in the United States with huge success in the bonds market. The reason of this success is that the system can get away with congestion zones full of false signals.

Concept definition

High: High of a certain period.

Low: Low of a certain period.

UpRunDay: The following conditions must be fulfilled to consider a bar as Run Day Up: The high OF the "Run Day" bar is higher than the high of the N1 bars previous to the "Run Day". The low of the "Run Day" is lower than the low of the N2 bars subsequent to the "Run Day".

DowRunDay: The following conditions must be fulfilled to consider a bar as Rund Day Down: The low of the "Run Day Bar" is lower than the low of the N1 bars previous to the "Run Day". The high or the "Run Day" is higher than the high of the N2 bars subsequent to the "Run Day".

System rules

- ✓ The close of the current bar is superior to the high of the "n" previous Runday. The las trun day must be bullish.
- ✓ The close of the current bar is lower than the low of the "n" previous Runday. The last Run Day must be bearish.

Parameters

DataSource: Data source on which the system is calculated.

Cleft: Number of bars preeceding the "Run Day" to be compared with the high or low of this run day.

CRight: Number of bars subsequent to the "Run Day" to be compared with the high or low of this run day.

NRunday: Number of "Run Days bars" that must be overcome by the close of the current bar to buy or sell.

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

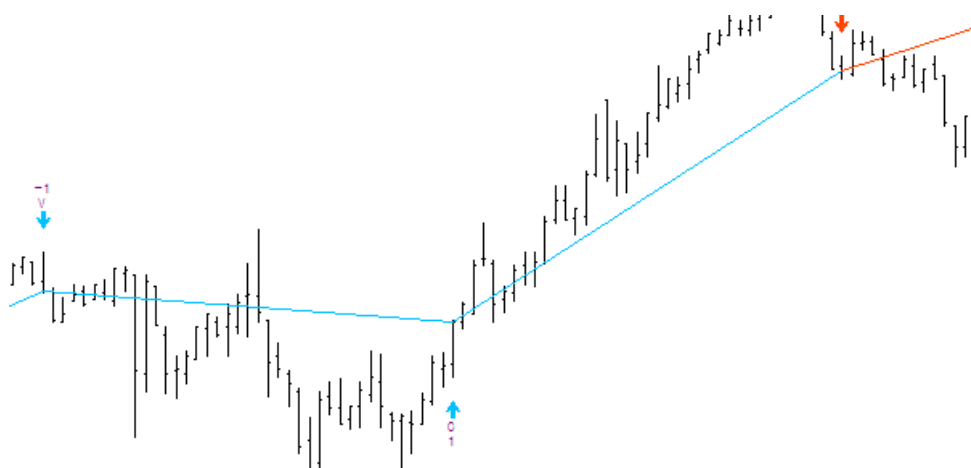
LongShort: With value -1 the system only trades short; with value 0 the system trades long and short anf with value 1 the system only trades long.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Comments on the system

Run Day is presented as a system providing reliable signals in the direction of the trend avoiding false market entreeies. The parameter NRunday enable us to define the "timing" we want to trade with; a value of this parameter above three works in the long term by generating few buy and sell signals. A value between 1 and 2 increases considerably the signals. The user must define this parameter in function of his investement style. This system is especially conceived to work in congestion zones followes by violent breakouts.

Chart example



■ Trend Balance Point

Introduction

This system is based on the concept of **momentum** with three additional concepts; acceleration, deacceleration and Point of Trend Equilibrium (**PET**). The acceleration is produced when the momentum has a positive slope and this slope increases bar by bar, in other words, the difference between the successive closes increases in relation to the previous closes causing a progressive price increase. The deacceleration is produced in the opposite conditions and this slope diminishes. At this stage the PET is calculated for the subsequent bar and this variable is used to anticipate the market movement.

Concept definition

Momentum: Difference between the close of the current bar and the close of n- previous bars.

System rules

- ✓ When the system is outside the market, it places a buy stop order in the high of the bar plus a filter when the momentums of the n previous bars are negatives and the current momentum is higher than all of them.
The system turns its position into bullish at stop placed at the high of the bar plus a filter if the close of the current bar is higher than the PET calculated in the previous bar. Then it calculates the Pet for the following bar. To do so, the lowest value of the n previous momentum is selected (including the current one). N is given by the parameter nMFactor and the close of the nth bar determined by the parameter nBars is added to it.
- ✓ When the system is outside the market it places a sell stop order in the low of the bar plus a filter if the momentum of the n previous bars are positive and also the current momentum is lower than all the other momentums.
The system turns its position into bearish at stop in the low minus a filter if the close of the current bar is lower than the PET calculated in the previous bar. Then it calculates the PET for the following bar. To do so the highest value of the n-previous momentum (including the current one) is selected, this n number is given by the parameter nMFactor to which we add the close of the nth bar determined by the parameter nBars.

Parameters

DataSource: Data source on which the system is calculated.

NBars: Number of bars backwards to calculate the difference between closes.

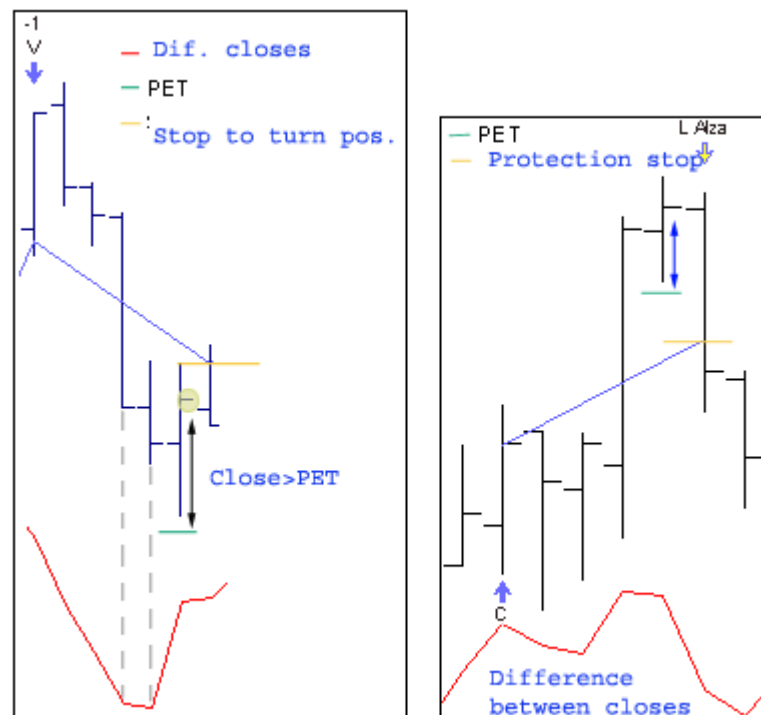
NMFactor: Lowest number of previous momentum factors to run the first entry when the system is outside the market.

Ticks: Percentage value applied to the high or low of the bar to place the protection stop.

Filter: Percentage value applied when the momentum factor forecasts a change of trend. The filter is applied to the high or low of the bar depending on the current position of the system in the market.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Trend Intensity System

Introduction

System based on the indicator Trend Indicator Index. This indicator calculates 4 data lines and its aim is to show the strength and direction of the trend. The system takes profit of these characteristics to make it trades. It takes long positions with high values of the indicators (close to the upper band) and short positions for low values of the indicator, close to the lower band.

Concept definition

Line: Red line of the indicator indicating the strength of the trend. Its value is calculated in percentage.

Upper band: Upper band of the indicator situated by default at 80%.

Lower band: Situated by default at 20%.

System rules

- The system buys at market if the value of the line one is superior to the percentage indicated for the upper band.
- ✓ The system sells at market if the value of the line one fails below the percentage value indicated for the lower band.

Parameters

DataSource: Data source on which the system is calculated.

LCalculation: Number of bars necessary for the calculation of the indicator on which the system is based.

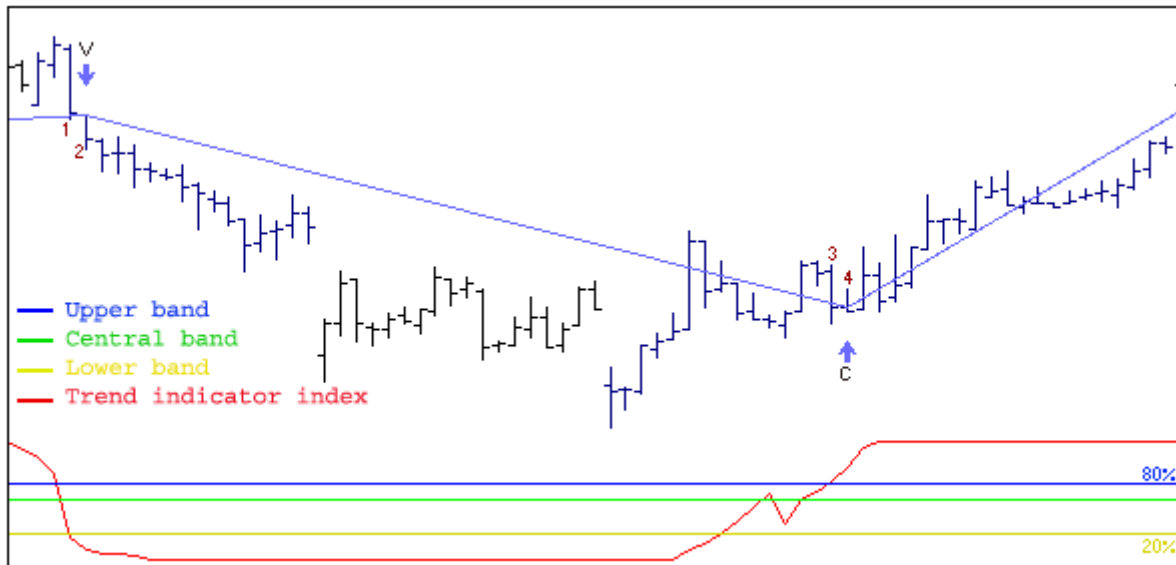
AvSimpleRange: Period used for the calculation of an exponential moving average used by the indicator on which the system is based.

UpperBand: Percentage value.

BottomBand: Percentage value.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ TurtleSoup01

Introduction

This system uses two basic concepts:

- On one side, the identification of false breakouts to enter the market in the opposite direction.
- On the other side the reactions oftenly produced in the market in the support and resistance points.

This way, a mechanism trying to combine the reaction in market important points with the false breakouts is produced.

On its original conception, the strategy was designed to obtain small benefits but the inconvenience is that, sometimes, it loses market strong movements.

This problem is no longer a problem is the investors knows about it and manages it properly. As a matter of facts this system cut the losses and let the benefits run.

Concept definition

Liquidation period: Number of bars afterwhich a trade is closed compulsorily.

False breakout: Market movement started with a breakout with straight change of direction.

Support/resistance: Values of the quote wher a significant change of trend occurred.

System rules

- ✓ The close of the current bar must be equal or lower than the previous low. This previous low must also have appeared a certain number of bars before (Sessions).
If the two previous conditions are fulfilled a sell stop order is placed in the previous low plus a filter (Ticks). If the buy order is filled a protection stop must be set at the low of the bar minus a filter (Ticks).
- ✓ The close of the current bar must be equal or superior to the previous high. This high must also have appeared a certain number of bars before (Sessions).
If the two previous conditions are fulfilled a sell stop order is placed in the high of the previous bar plus a filter (Ticks). If the sell order is touched a protection order is placed at the high of the current bar plus a filter (Ticks).

Parameters

DataSource: Data source on which the system is calculated.

Period: Number of bars to be considered.

Sessions: Minimum numbers of bars that must appear until the highest or lowest reference point for the breakout is reached.

Ticks: Filter to place the stops (points/euros).

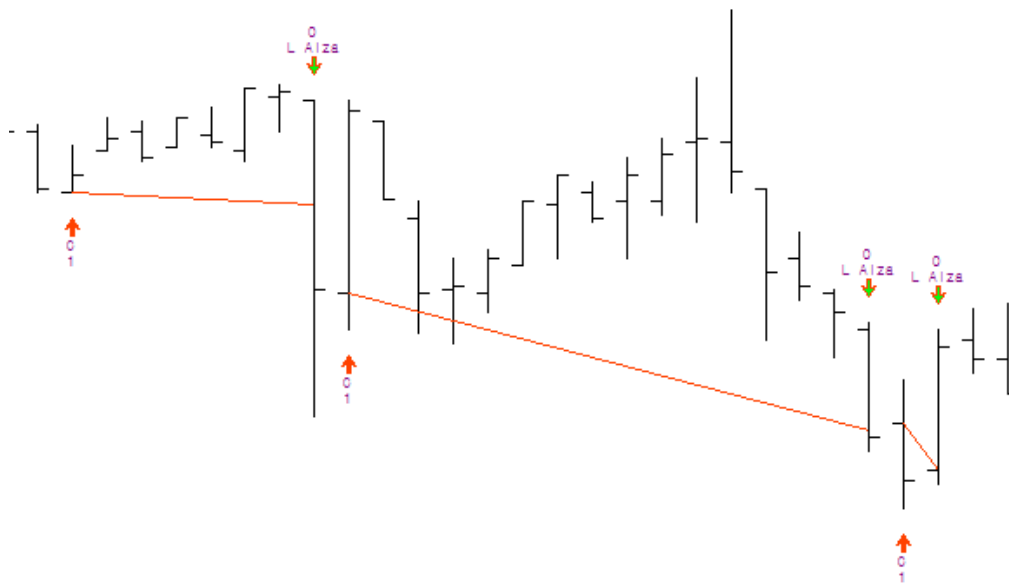
EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

nExistBars: Number of bars after which a trade is closed compulsorily. With value 0 the parameter is disabling.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Weinstein01 System

Introduction

Stan Weinstein in his book "Secrets for profiting in bull and bear markets " describes the additional requirements of the breakouts to increase the possibility of success.

It confirms that the idea of buying the breakouts and protecting the position with a stop loss works correctly in most assets and markets. He also includes a series of additional concepts to appoint the improvement of the trade's selection.

Here are the main ideas of the system:

- The RSI must be above 50 to guarantee that the asset is rising.
- The volume must move together with the price movement it must increase considerably.
- The breakout must have been preceded by a strong bullish movement of the quote.
- The RSI in the bar of the breakout must be superior to it previous values.

According to Weinstein the fulfilling of the two previous conditions increases both, the possibilities of a positive trade and the possibilities of a huge movement.

Concept definition

ShortAverage: Period used for the calculation of one of the averages used by the system, in this case it corresponds with the parameter **MediaCruza**.

Long Average: Period used for the calculation of one of the averages used by the system. In this case it corresponds with the parameter **MediaCruzada**.

RSI: Indicator used for the generation of buy/sell signals.

Volume: Demand of a huge volumen increase when the crossover happens.

Movement: Demand of a huge increase/decrease of the quotes to confirm the breakout signals.

System rules

- ✓ The close of the current bar must be superior to the short average and the long average.
The short average must be above the long average.
The value of the **RSI** in the current bar must be above 50.
The value of the RSI in the current bar must be higher or equal than the previous "n" **RSI**
The volume in the current bar must be higher than the simple moving average applied to the volume (with period nVolume) multiplied by a constant K.
The close of the current bar must be higher than the low of nBars plus a Percentage.

Once all the conditions are fulfilled, the system buys at close.

- ✓ The close of the current bar must be lower than the short average and the long average.
- ✓ The short average must be bellow the long average.
- ✓ The value of the **RSI** in the current bar must be bellow 50.
- ✓ The value of the RSI in the current bar must be lower or equal than the previous "n" **RSI**

Once all the conditions are fulfilled, the system sells at close. Then, a protection stop is placed on the entry price of the trade.

Parameters

DataSource: Data source on which the system is calculated.

RSIDataPeriod: Period used to calculate the RSI.

ShortAverage: Period used for the calculation of the short average.

LongAverage: Period used for the calculation of the long average.

nRSI: Number of bars used to compare the values of the RSI.

K: Comparison factor of the volumen on the moving average.

NVolume: Number of bars to calculate the simple moving average on the volume.

NBars: Number of bars to calculate the firs low to apply the percentage.

Percentage: Percentage applied to the low resulting from the previous parameter.

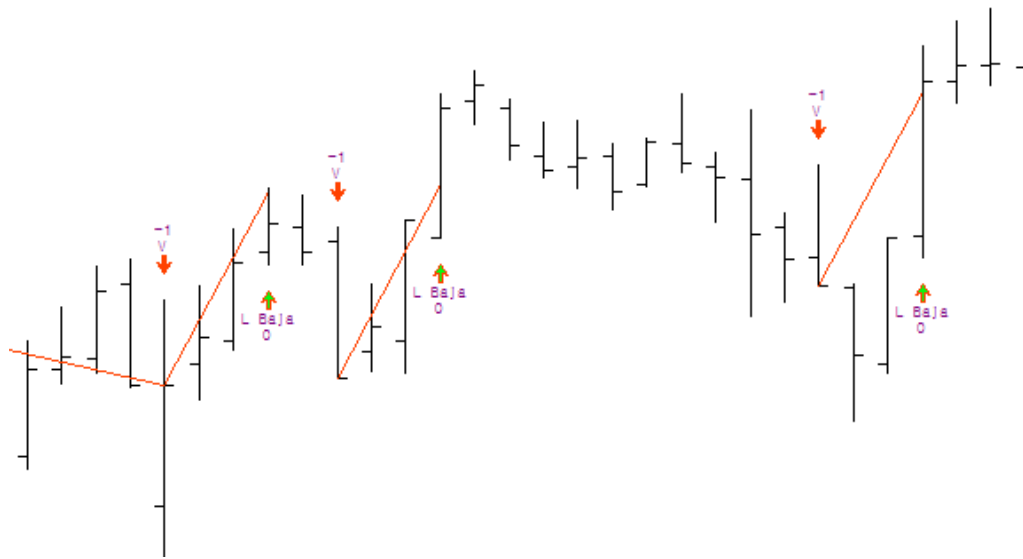
Stoploss: Percentage applied as protection for short trades.

EndOfDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short anf with value 1 the system only trades long.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



VOLATILITY

8020 System

Introduction

Some traders consider the reactions movements as the most reliable for market investment purposes. The current system can be included in this group. If a bar moves clearly in one direction and the following price moves in the same direction and then the direction changes abruptly, most of the time the market starts a strong movement in the new direction.

Concept definition

Barra 8020: This bar must fulfill one of the following conditions. The bar opens below 20% of the total range and closes above 80 % of the total range. The bars opens above 80% of the total range and closes below 20% of the total range

System rules

✓ The following conditions must occur:

- The bar preceding the current bar is an 8020 bar.
- The low of the 8020 bar minus a percentage (Filter) is higher than the low of the current bar.
- If the two previous conditions are fulfilled the system places a buy stop order at the low of the 8020 bar plus a percentage (Ticks).
- The protection stop of the long position is placed at the low of the entry bar.

✓ The following conditions must occur:

- The bar preceding the current bar is an 8020 bar.
- The high of the 8020 bar plus a percentage (Filter) is lower than the high of the current bar.
- If the two previous conditions are fulfilled a sell stop order is placed at the high of the 8020 minus a percentage (Ticks).
- The protection stop of the shortposition is placed at the high of the entry bar.

Parameters

DataSource: Data source on which the system is calculated.

Percentage5020: Percentage to set the limits where the bar must close or open.

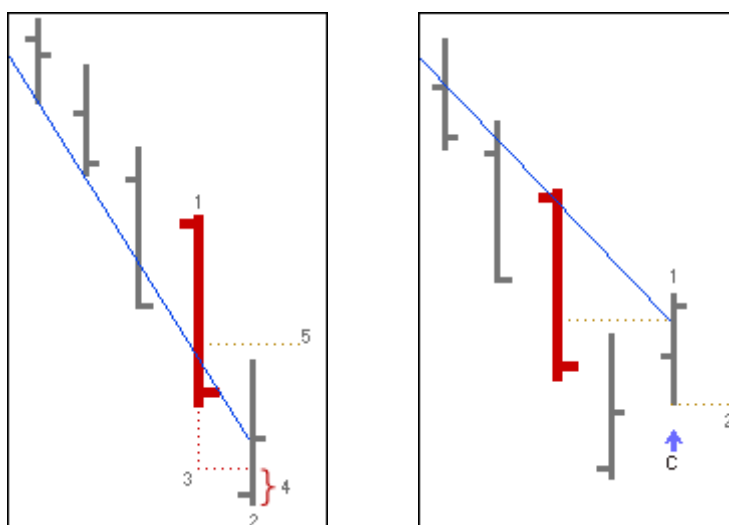
Ticks: Percentage added to the high or subtracted to the low in order to place the respective buy and sell stop orders.

Filter. Percentage subtracted to the low or added to the high of the 8020 and which its value must be higher than the low of the current bar to place the stop order or lower than the high of the following bar to place the sell stop order.

BarRange: Percentage value indicating the minimum range of the current bar in order to calculate the system.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Balance of power system

Introduction

This system is based on the indicator **Balance of Power (BOP)**, this indicator scores each bar according to the existing bullish and bearish strengths in order to try to determine the existing **trend**. The trading opportunities are related to the score obtained by each of the bars. To summarize, the system is conceived to detect possible changes of trend in order to generate the buy and sell signals.

Concept definition

Bullish turnover: A value of the indicator lower than zero that moves into positive indicates a possible bullish turnover.

Bearish turnover: A value of the indicator higher than zero that moves into negative indicates a possible bearish turnover.

System rules

- ✓ If the system detects a bullish turnover it buys at close. Once the system is long, it places a mobile protection stop situated at the low of the bar minus a percentage determined by the value of the parameter Ticks.
- ✓ If the system detects a bearish turnover it sells at close. Once the system is short a mobile protection stop is placed at the high of the bar plus a percentage determined by the parameter Ticks.

Parameters

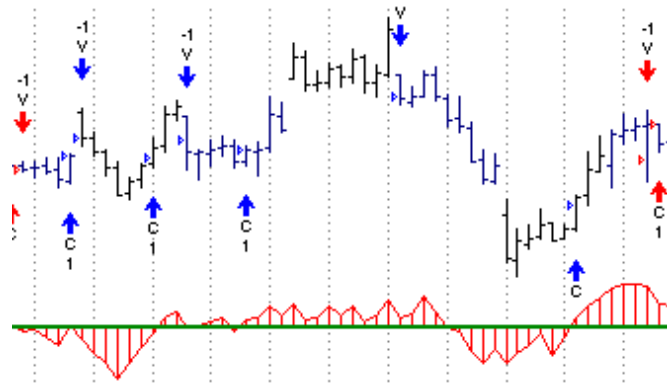
DataSource: Data source on which the system is calculated.

EXPMOAVGBOPPeriod: Period used for the calculation of the average applied to the indicator Balance of Power.

Ticks: Percentage filter applied to the high or low of the bar to place the protection stop.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



Close difference system 01

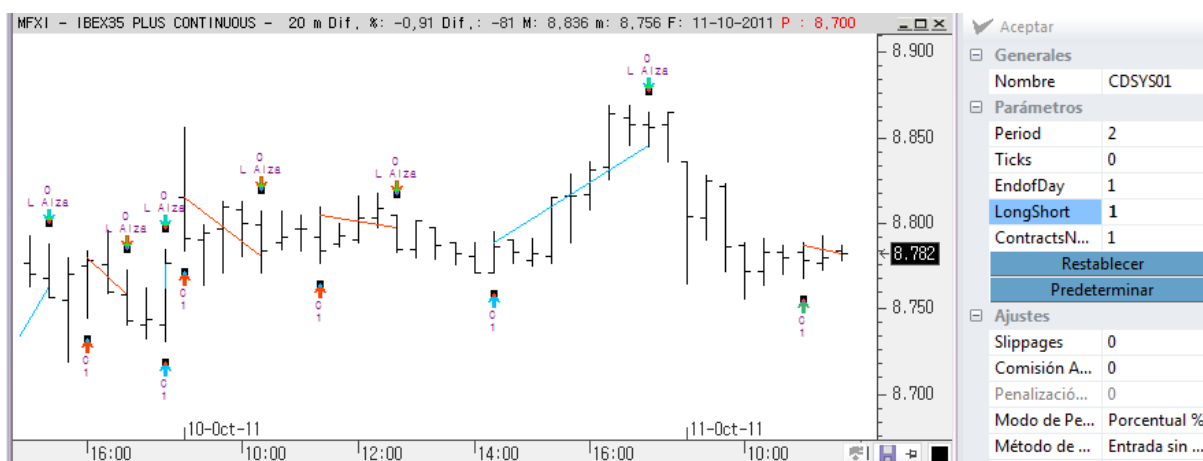
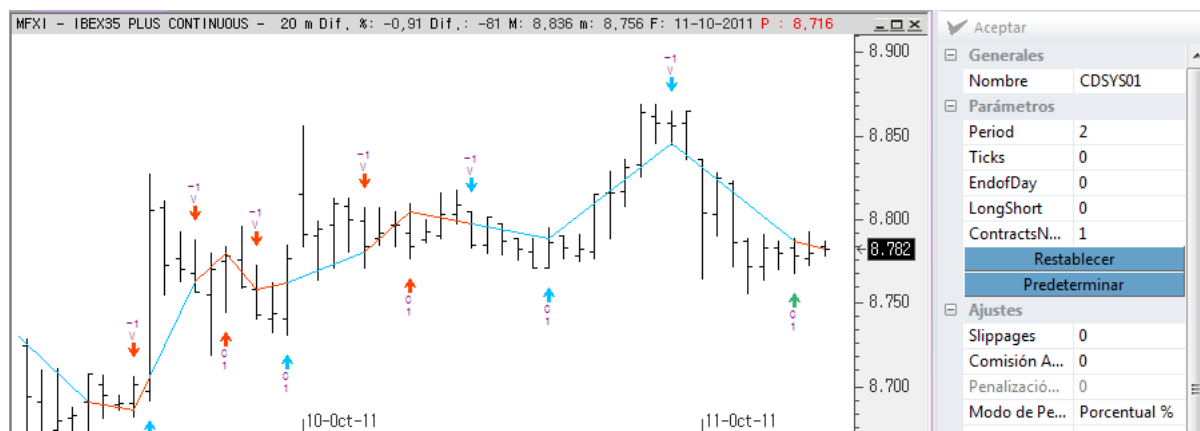
Introduction

This system works the way [Close Difference system](#) does with two additional parameters:

EndofDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

Chart example



DBS

Introduction

The bases of the system calculation are the high and low of a price period. This period is calculated by applying a series of operations to the standard deviation of a group of closes. The buy and sell stop orders are placed at the high and low of a period that are assigned as parameters to the functions calculating those stops. The value of the parameters of these functions will be included between the values of the parameters Top and Bottom and is the result of the previous mentioned process.

In order to determine the value of the stops to close long and short positions is half of the period used for the calculation of the buy and sell stop orders. In this case we use the low to close the long positions and the High to close the short ones.

System rules

- ✓ The buy stop order is placed at the high of a series of bars calculated with a function. The period of this function is included between the values of the parameter Top and Bottom.
- ✓ The sell stop order is placed at the low of a series of bars calculated with a function. The period of this function is included between the values of the parameter Top and Bottom.

✓ Parameters

✓ **DataSource:** Period of the standard deviation.

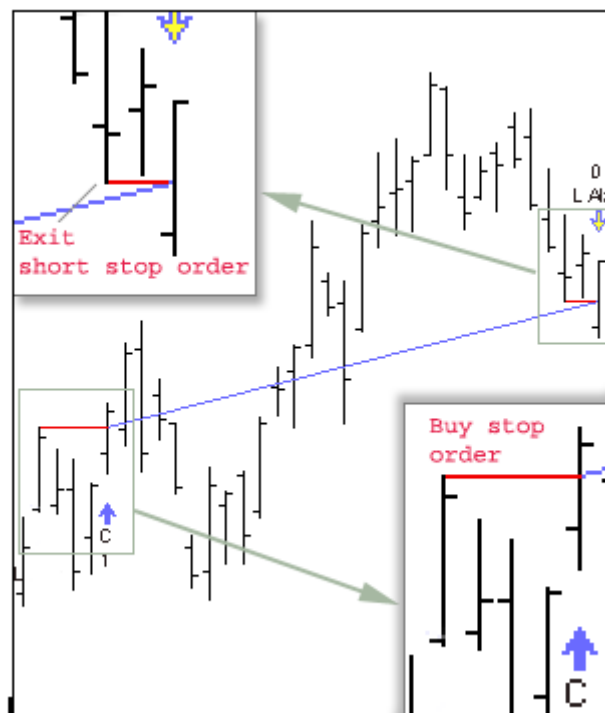
Range_N: Highest value of the period to be used for the functions calculating the high and the low.

Top: Highest value of the period to be used in the functions that calculate the high and the low.

Bottom: lowest value for the period to be used in the functions el menor valor para el periodo a utilizar en las funciones que calculan el máximo y mínimo.

ContractsNumber: Cantidad de títulos/contratos que se compran/venden cuando se cumplen las System rules.

Chart example



■ Fibonacci anti trend

Introduction

Most of the systems are trend following system. Fibonacci anti trend works exactly the opposite way, in anti trend mode. When the current price down crosses the upper Fibon level, the system will open a short position expecting a price retracement. Likewise, if the current price up crosses the lower Fibon level, the system will open a long position expecting a price rebound. The system also included a protection stop and also a time filter and a volatility filter. The volatility filter limits the operations per day if the day range is not wide enough.

Reglas de sistema

- ✓ If after an upcross of the Fibonacci lower level, the daily range (or volatility) is equal or higher than the parameter **MinimumRange**, a buy order is sent at market: (always inside the system working hours).
- ✓
- ✓ If after a downcross of the Fibonacci upper level, the daily range (or volatility) is equal or higher than the value of the parameter **MinimumRange**, a sell order is launched at market. always inside the system working hours

Parameters

DataSource: Data source on which the system is calculated.

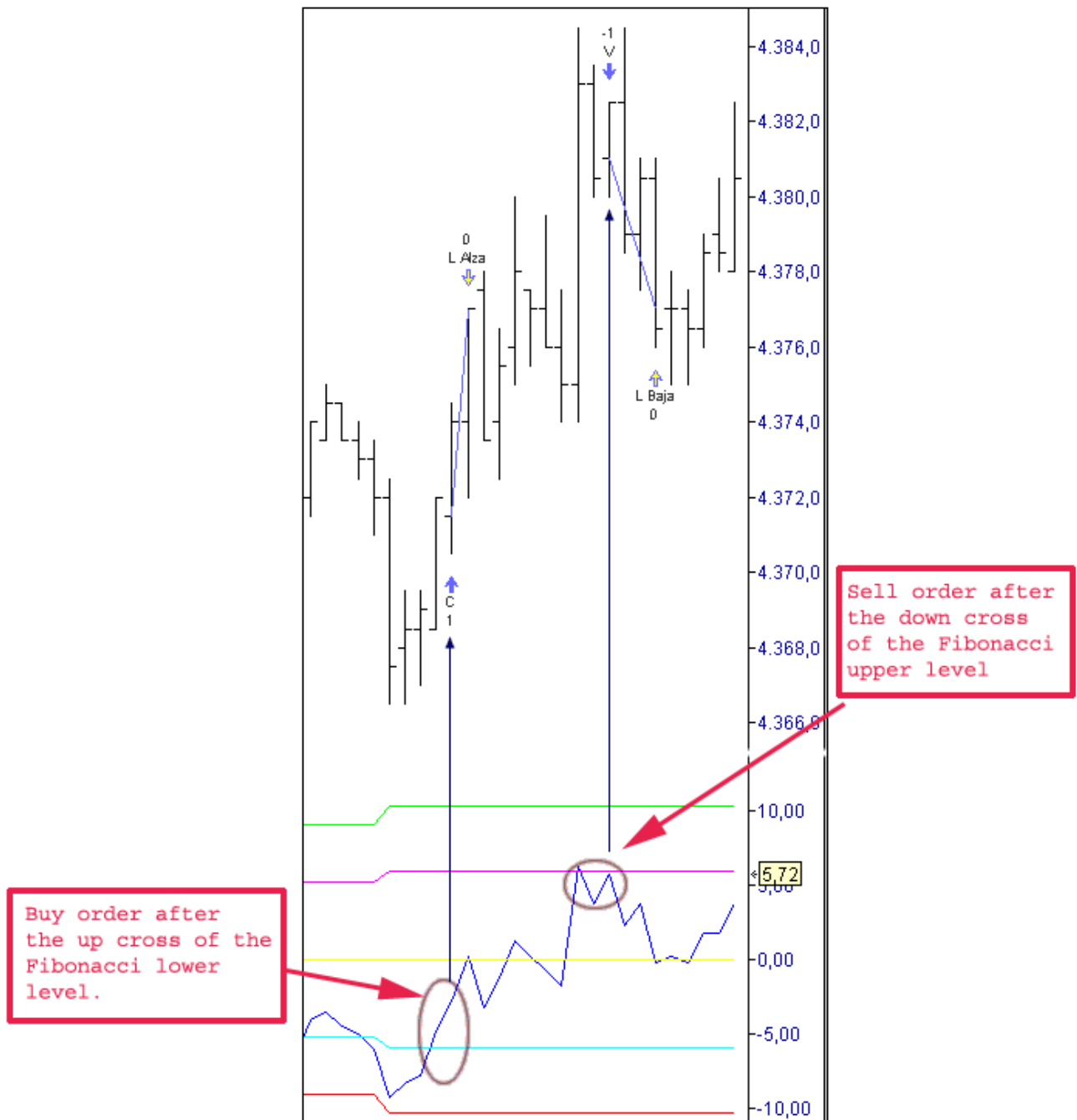
FibTrigger: Defines the Fibonacci levels on the intraday range. These levels are used to define our entries. If we use the value 0.214, we will use two Fibonacci levels: one representing the 21.4% of the total range and the other representing 78.6% ($1 - 0.214$) of the total range.

StopPoints: Indicates the amount of points used to calculate the stop losses.

MinimoRange: Refers to the lowest value with which we compare the intraday range in order to confirm the buy or sell order.

ContractsNumber: Amount of contracts to be bought or sold when the system rules are fulfilled.

Chart example



■ Historical volatility

Introduction

This system is based on the indicator Yearly Volatility (AnnVolatility) that calculates the range movement of the price over a certain period.

It has two main properties:

- The indicator is more cyclic than prices themselves.
- The indicator is more correlated to changes in the quote than prices themselves.

In top of the volatility, the system also uses the indicator IDorNR4 to determine critical points that the system will use to trigger the signals.

Concept definition

ID: Inside Day. A bar is considered as ID when its high is lower than and its Low is higher than some of the lows and highs respectively of a group of bars formed by nBars Previous.

NR. Narrowest range corresponds to the situation where the range of the bar (high-Low) is lower than the ranges of the group of bars formed by the previous nBars.

System rules

✓ A buy stop order is placed if the following conditions are fulfilled:

- The value of the indicator AnnVolatilityModified is lower than the value given by the parameter Limit.
- The current bar matches the conditions to be considered as ID or NR bar or even both.

If one of the two previous conditions is fulfilled, a buy stop order is placed at the high of the bar plus a percentage (Ticks). If the system is out of the market in top of the buy stop order, a sell stop order is placed at the low of the bar minus a percentage (Ticks).

Calculation of the stop loss:

- The system places a sell stop order in the low of the bar where it has gone long in order to change its position if the signal was a false signal.
- After the second entry bar, the protection stop of the long position is placed in the lowest value between the low of the bar preceding the entry bar and the result of subtracting a percentage (stopProtección) to the entry price.

✓ A sell stop order is placed if the following conditions are given:

- The value of the indicator AnnVolatilityModified is lower than the value given by the parameter Limit.
- The current bar matches the conditions to be considered as ID or NR bar or both at the same time.

If the two previous conditions are fulfilled a sell stop order is placed at the low of the bar minus a percentage (Ticks). If the system is outside the market in top of the sell stop order, a buy stop order is placed at the high of the bar plus a percentage (Ticks).

Calculation of the protection stop:

- In the bar where it has gone short, the system placed a buy stop order in the high of the previous bar to changes the direction of the trade in case that the signal was a false signal.
- After the second bar after the entry, the protection stop is placed at the higher value between the high of the previous bar and the result of adding a percentage (ProtectionStop) to the entry price.

Parameters

DataSource: Data source used for the system calculation.

AnnVolatilityRange: Period used by the indicator **AnnVolatility**.

AvSimpleRange: Period of the simple moving average applied to the indicator **AnnVolatilityModified**.

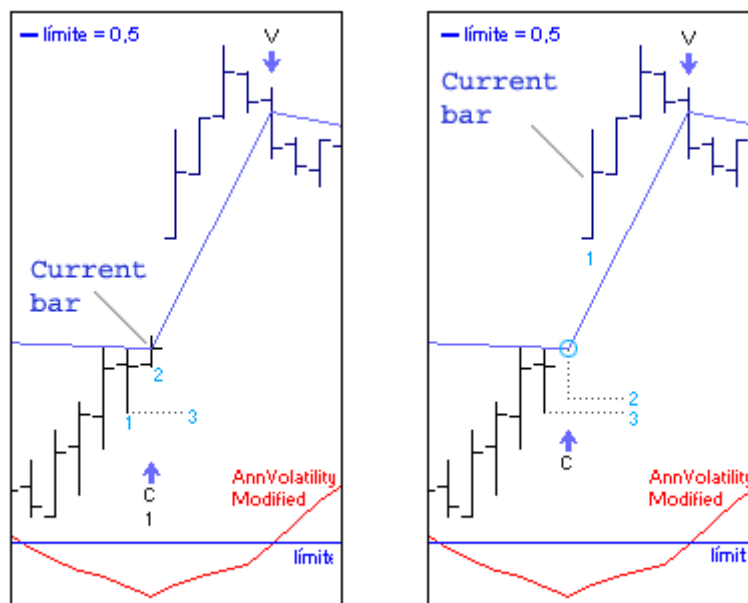
Limit. One of the conditions in order to start a trade is that the indicator **AnnVolatilityModified** is to be lower than this parameter.

Ticks: Percentage value added to the high or subtracted to the low to calculate the entry stops.

ProtectionStop: Percentage value applied to the high and low of the bar respectively in order to place the protection stops.

ContractsNumber: Amount of titles contract to be bought or sold when the conditions are given.

Chart example



■ Outside bar-close system

Introduction

This strategy tries to profit short duration trades.

Once the corresponding pattern is found the system placed buy/sell orders at the close of the bar with a protection stop in the high or low of the bar according to the direction of the trade in the market (see situation 1). If the market moves in the direction of the trade, the system will close the trade a couple of bars after the entry (see situation 2).

Concept definition

Outise bar. The outside bar must match the following conditions

- The high of the bar must be higher than the high of the previous bar.
- The low must be lower than the low of the previous bar.

System rules

- ✓ If there is an outside bar and the close is higher than the high of thre previous bar a buy sorder is placed at teh close of the bar. Once the system is long, it places a protection stop in the low of the outise bar minus a percentage filter **Ticks**. The position will be closed **NextBars** after the entry bar.
- ✓ A sell stop order is placed at the close of the bar if the close of the outside bar is lower than the low of the previous bar. Once the system is short, it places a protection stop at the high of the outside bar plus the percentage filter **Ticks**. The position will be closed **NextBars** after the entry bar.

Parameters

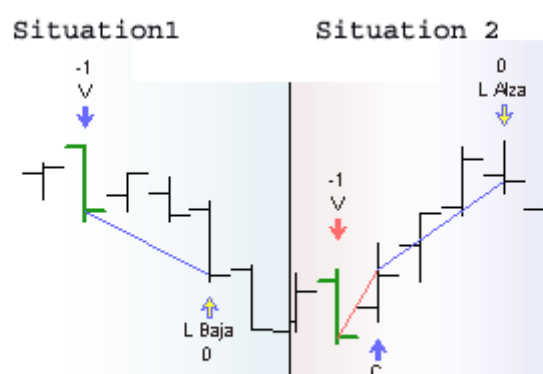
DataSource: Data source used for the calculation of the system.

Ticks. Percentage filter applied to the high or low of the bar to situate the protection stops.

NextBars. Number of bars to close the trade after the positions has been opened.

ContractsNumber. Amount of contracts to be bought or sold..

Chart example



Phil lane system

Introduction

This is a very simple system; the system buys when certain conditions are matched and the close depends on a dynamic stop.

System rules

- ✓ **Formation of three bearish bars**, (bars with a close below the open). The high of the current bar must be lower than the high of the three latest bars. The open of the current bar must higher than the close of the previous bar. The value of the indicator **AvTrueRange** must be superior to the entry parameter **Lv1**.

If the previous conditions are fulfilled a buy order is placed at the close of the bar.

- ✓ UOnce inside the market a dynamic stop is placed at the highest high and applied to the indicator **AvTrueRange**.

Parameters

DataSource: Data source used for the system calculation.

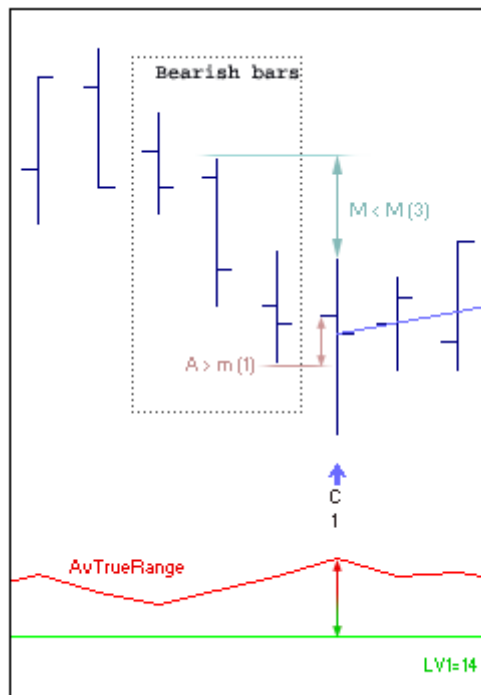
ATRLen. NUmber of bars used for the calculation of the AvTrueRange.

Lv1. Level of the indicator above which the system enters the market.

Fac. Percentage applied to teh high in order to place the liquidation stop order.

ContractsNumber: Amount of titles contracts to be bouth or dols when the system rules are fulfilled.

Chart example



Range breakout trading

Introduction

RBT can be classified as a breakout system, it is based on the construction of bands formed by the negotiation range. Here are a series of details to be taken into account with this strategy:

Range length: Number of bars to be considered for the range calculation.

Psychology: The prices of the assets reflect the collective psychology of the investors. A range extension means that the perception of the investors towards prices has changed significantly. Consecutive higher prices means that investors think prices are going to rise and viceversa in the opposite situation.

Breakout: A breakout happens when prices break upwards or downwards the established range.

Winning trades. A bullish trend occurs when prices remain above a moving average applied to the lows. A bearish trend happens when prices remain below the value of a moving average applied to the highs.

Concept definition.

Negotiating range: This range is defined by the difference between the highest high and the lowest low over the latest **PeriodoRango** bars. (see first screenshot).

System rules

- ✓ A buy stop order is placed at the high of **Periodrange** bars plus the filter **Ticks**. Once the system is long, it places a protection stop at the low of **PeriodoRango** bars minus the filter **Ticks**. If, during a long position, the close of a bar is lower than the exponential moving average on the lows, the position is liquidated.
- ✓ A sell stop order is placed at the low of PeriodRange bars minus the filter Ticks. Once the system is short, it places a protection stop at the high of PeriodRange bars plus the filter Ticks. If, during a short position the close of a bar is above the exponential moving average on the highs, the position is liquidated.

Parameters

DataSource: Data source used for the system calculation.

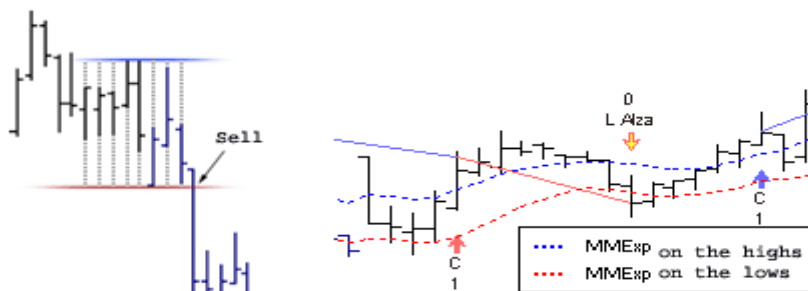
AveragePeriod: Period that is going to be used by the exponential moving average to run the calculations.

Range: Period to be used by the functions GetLowest and GetHighest in order to obtain the high and low point's respectively of this period of bars.

Ticks. FPercentage filter applied to the high or low of the bars to place the stops.

ContractsNumber: Number of titles/contracts to be bought or sold when the System rules are fulfilled.

Chart example



■ Range breakout trading01

Introduction

This system works the way [Range breakout trading](#) system works but includes two new parameters:

EndofDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.

■ Range contraction01

Introduction

This system is based on the study **ID/NR** (Inside Bar/Narrowest Range), which its aim is to identify and take profit from the market swings.

It is very difficult to forecast the direction of a breakout when it happens, what the system tries to do is forecasting the expansion of this movement. Once this factor is known good trading opportunities are given.

Concept definition:

ID: An ID bar is the bar where the low is higher than the lows of the latest n-bars and the high is lower than the high of the latest n-bars.

NR: A bar is considered as NR when its range is lower than the range of the previous n-bar.

System rules

- ✓ Once an ID/NR bar has been identified a buy stop order is placed at the high of the bar ID/NR plus the filter Ticks. Once the system is long a protection stop is placed at the low of the group of bars taken into account to form the ID/NR minus the filter Ticks.
- ✓ Once an ID/NR bar has been identified a sell stop order is placed at the low of the ID/NR bar minus the filter Ticks. Once the system is short a protection stop is placed at the high of the group of bars taken into account to consider the latest ID/NR bar plus the filter Ticks.

Parameters

DataSource: Data source used for the system calculation.

nBars: Number of bars from the current one to verify if it is a bar ID/NR.

Ticks: Percentage filter applied to the high or low of the bar to place the stops.

EndofDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

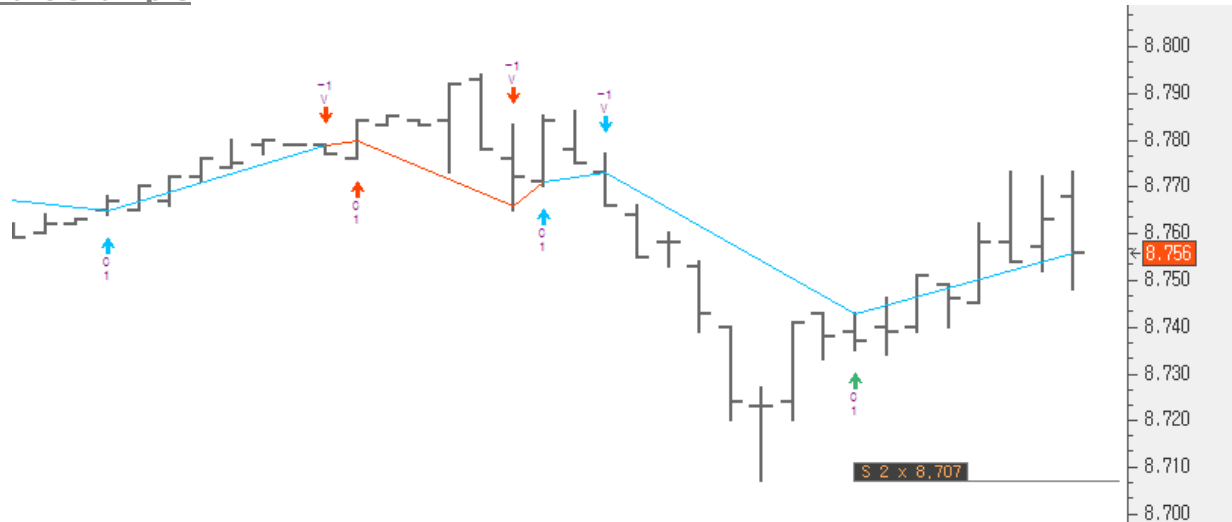
LongShort: With value -1 the system trades only short, with value 0 long and short and finally, with value 1 only long.

ContractsNumber: Amount of contracts to be bought or sold when the system rules are fulfilled.

Comments on the system

- 1.- Losses are small as the system stops are very adjusted.
- 2.- In periods of high volatility the system always works in the direction of the trend.

Chart example



TCF System

Introduction

This strategy uses the indicator **Trend continuation factor** to calculate its trades. This indicator shows the existing trades by using two lines called **TCF+** and **TCF-**.

When the quote is in a bullish trend **TCF+** takes positive values and the system goes long. When the trend is bearish **TCF-** takes positive values and the system goes short.

Concept definition

TCF + Red line of the indicator indicating a bullish trend if its value is superior to Zero.

TCF - Red line of the indicator indicating a bearish trend if its value is superior to Zero.

System rules

- ✓ The system buys at market when the **TCF+** line of the indicator takes a positive value. If the parameter **ExitType** is equal to zero the system remains long for the number of bars indicated in the parameter **nBars**. If **ExitType** is equal to one, the system keeps the long position until the selling conditions are given.
- ✓ The system sells at market when the **TCF-** line of the indicator takes positive value. If the parameter **ExitType** is equal to zero the system remains short for the number of bars indicated in the parameter **nBars**. If **ExitType** is equal to one the system keeps its short position until the buying conditions are given.

Parameters

DataSource: Data source on which the system is calculated.

Range. Number of bars used to run the calculations of the indicator TCF.

nBars. Number of bars used to run the calculations of the TCF.

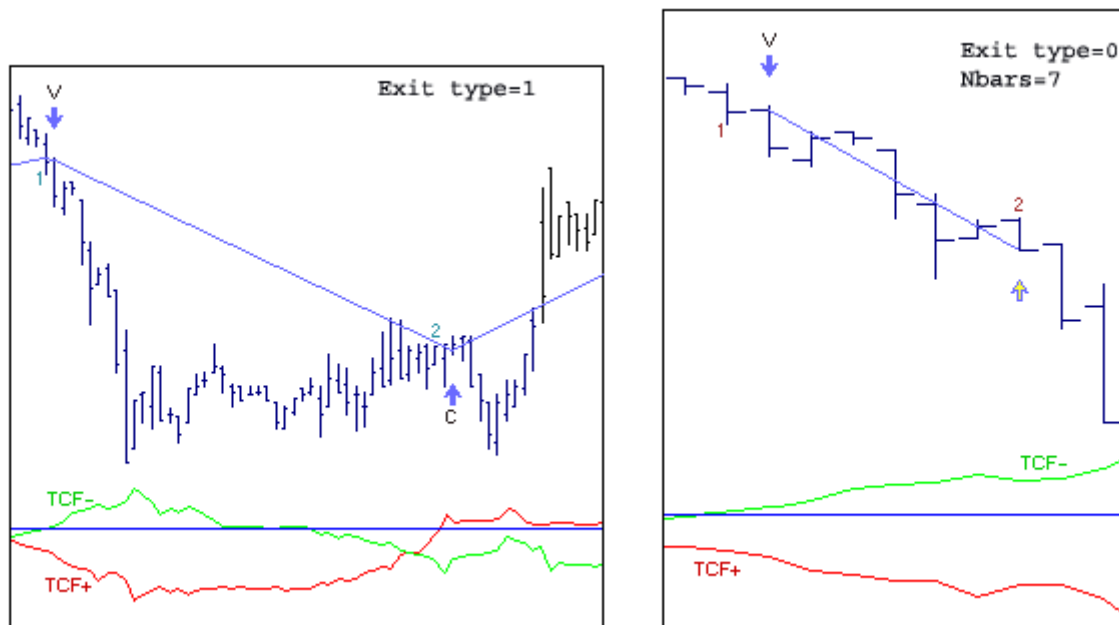
ExitType: This parameter only takes the values 0 and 1, these are the two possibilities:

ExitType = 0 Exits the trade nBars after the entry.

ExitType = 1 Changes the position when the system rules are fulfilled and is always in the market.

ContractsNumber. Amount of contracts to be bought or sold when the system rules are fulfilled..

Chart example



■ TFS System

Introduction

The following system is very simple and is based on the indicator TFS.

Indicator description:

- **TFS_Line:** This indicator calculates and draw the medium point between the high and low of a group of bars defined by the variable **nBars** (see image 1).
- **TFS Vol:** Its function is to accumulate the amount of volumen negotiated during a group of bars specified via the parameter **VolLength**. If the close of the bar is superior to the open, the volume is added and in the opposite condition the volumen is subtracted (see second image).
- **TFS MBO:** is in charge of calculating the difference between two simple moving averages with periods **FastAverage** and **SlowAverage** respectively.

System rules

- ✓ The close of the previous bar must be lower than the indicator **TFS_Line** and the close of the current bar superior to it. The second condition must fulfill that the value of the indicator **TFS Vol** must be higher than 0. The last condition is that the value of the indicator **TFS MBO** in the current bar must be above the value of the same indicator in the previous bar.

If the previous conditions are fulfilled a buy stop order is sent at market.

Parameters

DataSource: Data source on which the system is calculated.

FastAveragePeriod: Number of bars used for the calculation of the fast average.

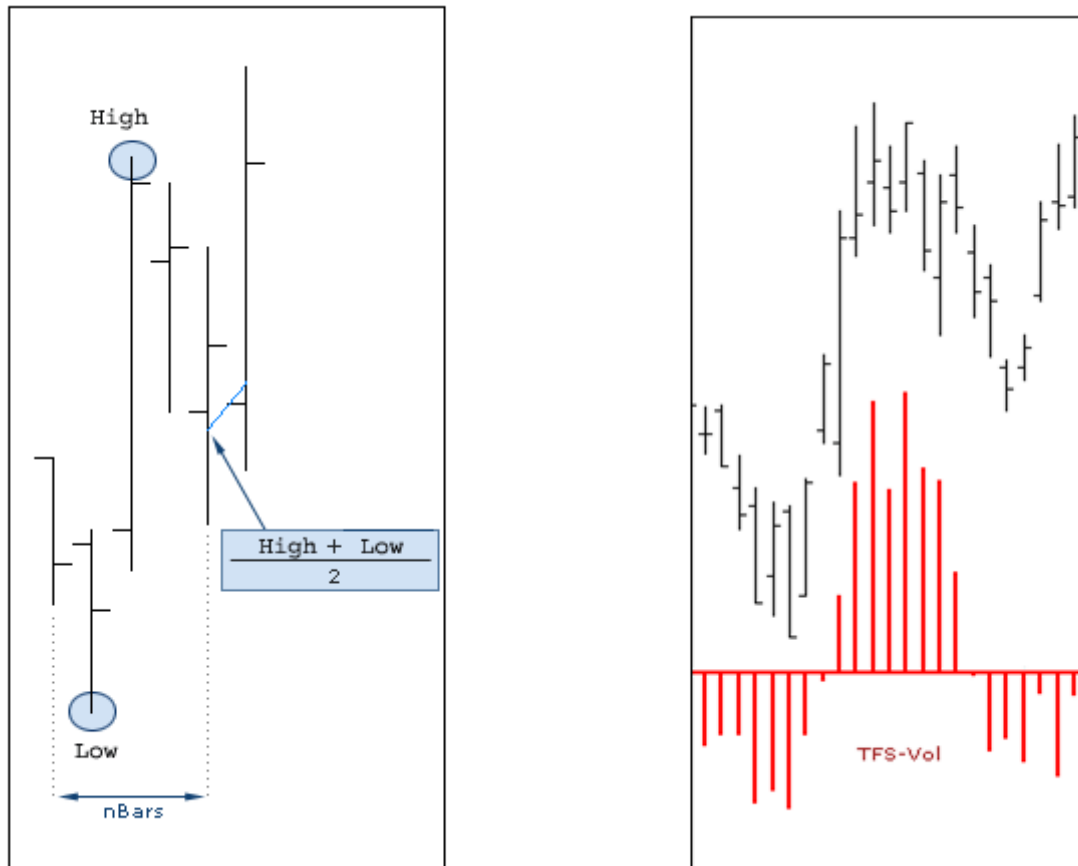
SlowAveragePeriod: Number of bars used for the calculation of the slow average

nBars: Amount of bars used to find the highest and lowest value. This parameter is used by the indicator **TFS_Line**.

VolLength: Bars necessary to calculate the volumen. This parameter is used by the indicator **TFS Vol**.

ContractsNumber: Number of contract/titles to be bought or sold when the conditions are given.

Chart example



■ Thrustbar_system01

Introduction

This system uses for its calculation the bars qualified as **Thrust Bars**. These bars give clues about possible market breakouts also introducing the factor of the bar close.

System rules

- ✓ The system places a buy stop order at the high of the group of bars matching the conditions to be considered as **UpThrustBar**. The number of **UpThrustBar** necessary to calculate the stop depends on the value of the parameter **nThrustBar**. Each new bar matching the conditions will replace the most ancient bar. When the quote reaches the buy stop order the previous values of **UpThrustBar** and **DownThrustBar** are disallow and the system gets back to the previous point.
- ✓ The system places a sell stop order at the low of the group of bars matching the conditions to be considered as **DownThrustBar**. The number of **DownThrustBar** necessary to calculate the stop depends on the value of the parameter **nThrustBar**. Each new bar matching the conditions will replace the most ancient bar. When the quote reaches the buy sell order the previous values of **UpThrustBar** and **DownThrustBar** are disallow and the system gets back to the previous point.

Parameters

DataSource: Data source on which the system is calculated.

nThrustbar: Number of bars necessary to consider the bar as **UpThrustBar / DownThrustBar** in order to obtain the high and low to place the respective stops.

PreviousBars: Group of previous bars to be compared with the close of the current bar.

ContractsNumber: Number of contract/titles to be bought or sold when the conditions are given.

Chart example



■ Volatility stop system01

Introduction

This system combines the volatility indicator **Volatility Stop** with the **Exponential moving average** that is used as a filter to avoid the generation of false signals.

If uses the bands of the above mentioned indicator to forecast possible changes of trend in the quote and use them to generate long or short signals depending on the cases.

By using the lower band, the system verifies the change of trend from bullish to bearish while with the upper band it verifies the change of trend from bullish to bearish. We can say that the indicator tries to anticipate the market by taking profit of its trend.

System rules

✓ The following conditions must occur to start a long trade:

- The close of the bar is above the EMA.
- If the previous condition is fulfilled the system places a buy stop order at the high of the bar plus a filter (1).
- If the previous condition is fulfilled but the buy stop order has not been touched yet and also the high of the previous bar plus the filter is lower than the value of the stop, the value of the stop is updated.

✓ In order to close the long positions the following conditions must take place:

- The protection stop of the long position is placed in the value of the lower band (2).
- The protection stop of the long position is modified if the value of the indicator is higher than the protection stop.

- ✓ The following conditions must occur to start a short trade:
 - The close of the bar is below the exponential moving average (1).
 - If the previous condition is fulfilled, the sell stop order is placed at the low of the bar minus a filter.
 - If the previous conditions are fulfilled but the stop order has not been touched and also the low of the current bar minus the filter is higher than the stop price, the value of the stop is updated to the low of the bar minus a filter.

- ✓ The following conditions must occur to close the short position:
 - The protection stop of the short position is placed at the value of the upper band (2).
 - The protection stop of the short position is modified if the value of the indicator is lower than the protection stop of the short position.

Parameters

DataSource: Data source on which the system is calculated.

AvExpRange. Number of bars used to calculate the exponential moving average.

ATRRange: Period of the ATR indicator used as base for the trading system.

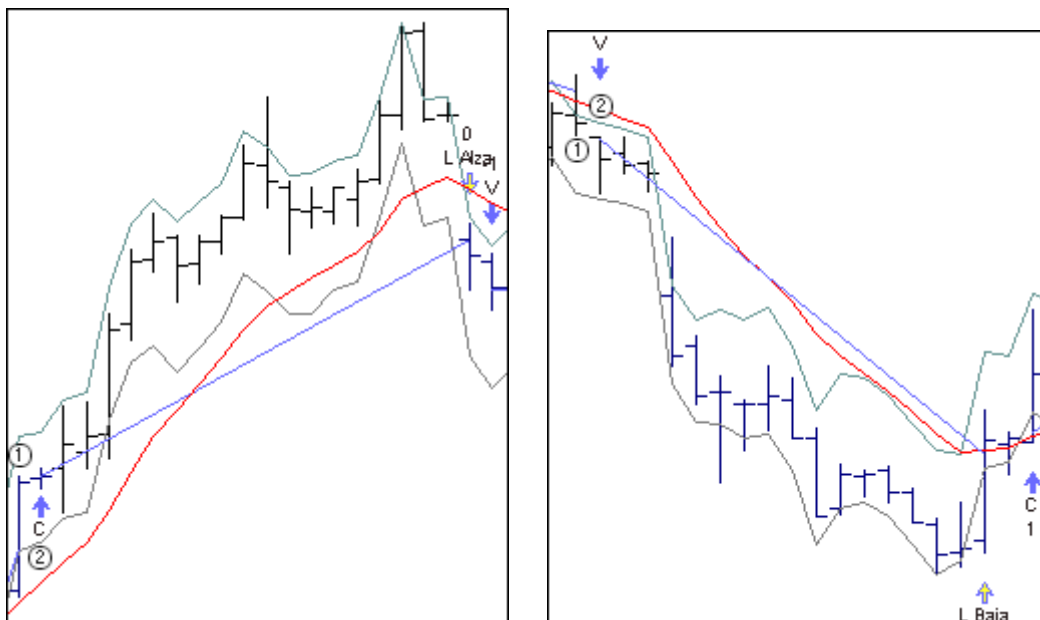
Factor: Number of times that the ATR is added or subtracted to obtain the bands of the indicator.

BuyFilter: Percentage filter added to the high to obtain the price of the buy stop order.

SellFilter: Percentage filter subtracted to the low of the bar to obtain the price of the sell stop order.

ContractsNumber. Number of titles contracts to be bought or sold when the conditions are given.

Chart example



■ Weinstein system

Introduction

Stan Weinstein in his book "Secrets for profiting in bull and bear markets " describes the additional requirements of the breakouts to increase the possibility of success.

It confirms that the idea of buying the breakouts and protecting the position with a stop loss works correctly in most assets and markets. He also includes a series of additional concepts to appoint the improvement of the trade's selection.

Se trata de las siguientes cuatro ideas:

Here are the main ideas of the system:

- The RSI must be above 50 to guarantee that the asset is rising.
- The volume must move together with the price movement it must increase considerably.
- The breakout must have been preceded by a strong bullish movement of the quote.
- The RSI in the bar of the breakout must be superior to its previous values.

According to Weinstein the fulfilling of the two previous conditions increases both, the possibilities of a positive trade and the possibilities of a huge movement.

Concept definition

ShortAverage: Period used for the calculation of one of the averages used by the system, in this case it corresponds with the parameter **MediaCruza**.

Long Average: Period used for the calculation of one of the averages used by the system. In this case it corresponds with the parameter **MediaCruzada**.

RSI: Indicator used for the generation of buy/sell signals.

Volume: Demand of a huge volume increase when the crossover happens.

Movement: Demand of a huge increase/decrease of the quotes to confirm the breakout signals.

System rules

The close of the current bar must be superior to the short average and the long average.

The short average must be above the long average.

The value of the RSI in the current bar must be above 50.

The value of the RSI in the current bar must be higher or equal than the previous "n" RSI

The volume in the current bar must be higher than the simple moving average applied to the volume (with period nVolume) multiplied by a constant K.

The close of the current bar must be higher than the low of nBars plus a Percentage.

Una vez cumplidas todas las condiciones se realiza una compra al cierre.

Once all the conditions are fulfilled, the system buys at close.

The close of the current bar must be lower than the short average and the long average.

The short average must be below the long average.

The value of the RSI in the current bar must be below 50.

The value of the RSI in the current bar must be lower or equal than the previous "n" RSI

Once all the conditions are fulfilled, the system sells at close. Then, a protection stop is placed on the entry price of the trade.

Parameters

DataSource: Data source on which the system is calculated.

RSIDataPeriod: Period used to calculate the RSI.

ShortAverage: Period used for the calculation of the short average

LongAverage: Period used for the calculation of the long average

nRSI: Number of bars used to compare the values of the RSI.

K: Comparison factor of the volumen on the moving average.

nVolume: Number of bars to calculate the simple moving average on the volume.

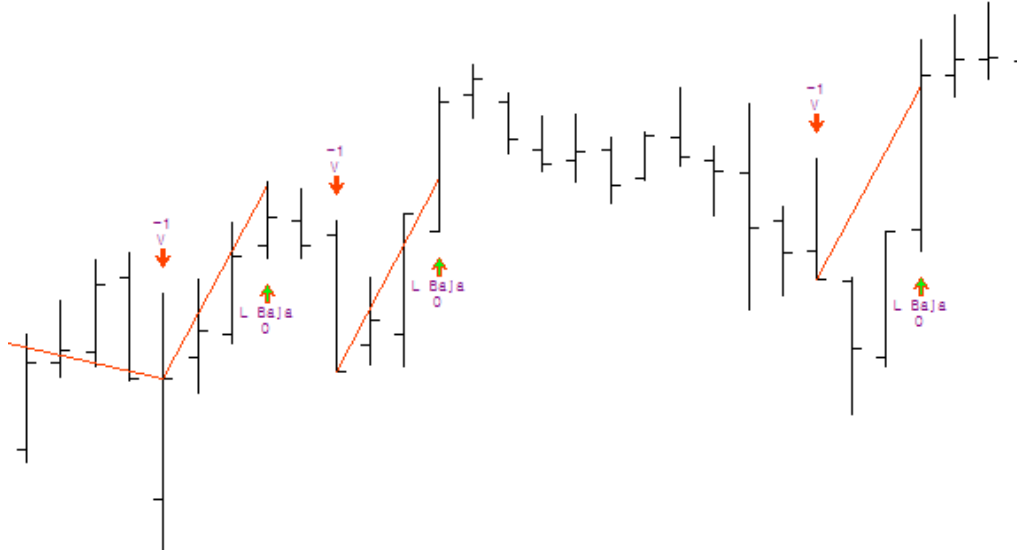
nBars: Number of bars to calculate the first low to apply the percentage..

Percentage. Percentage applied to the low resulting from the previous parameter.

Stoploss: Percentage applied as protection for short trades.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Chart example



■ Wide Range Day System

Introduction

This system uses the concept of volatility as main concept to generate quotes range to trigger long or short signals. The system is very useful to avoid false signals in congestion zones. Also the series of losses in the system are very moderated so its exposition to risk is quite small. The system belongs to the group of breakout systems.

Concept definition

True High. This is the highest value included between the close of the previous bar and the high of the current bar.

True Low. This is the lowest low between the close of the previous bar and the low of the current bar.

True Range (TR): Difference between True High and True Low.

Volatility Percentual. $VP = TR * 100 / CLOSE$.

Volatility Ratio: Summatory VR.

K. Is the multiplying coefficient of VR.

Wide Ranging Day. Is defined as the bar matching the following condition:
 $VPH > K * VR$.

Entry points. The entry and exit points are obtained the following way:

- PS: We use the function GetHighest for the calculation of this point.
- PI: We use the function GetLowest for the calculation of this point.

System rules

- ✓ If the close of the current bar is higher than the value of PS the system generates a buy stop order at close.
- ✓ If the close of the current bar is lower than the value of PI the system generates a sell stop order at close.

Parameters

DataSource: Data source on which the system is calculated.

VolatilityPeriod: Period of the indicator AvTrueRange.

Multiplier. This is the constant **K** used to multiply the result obtained by the indicator **AvTrueRange** and compare the result with the bar we are trying to define as **Wide Range Day**.

PreviousBars. Number of bars previous to the "Wide Range" to find the points PS and PI.

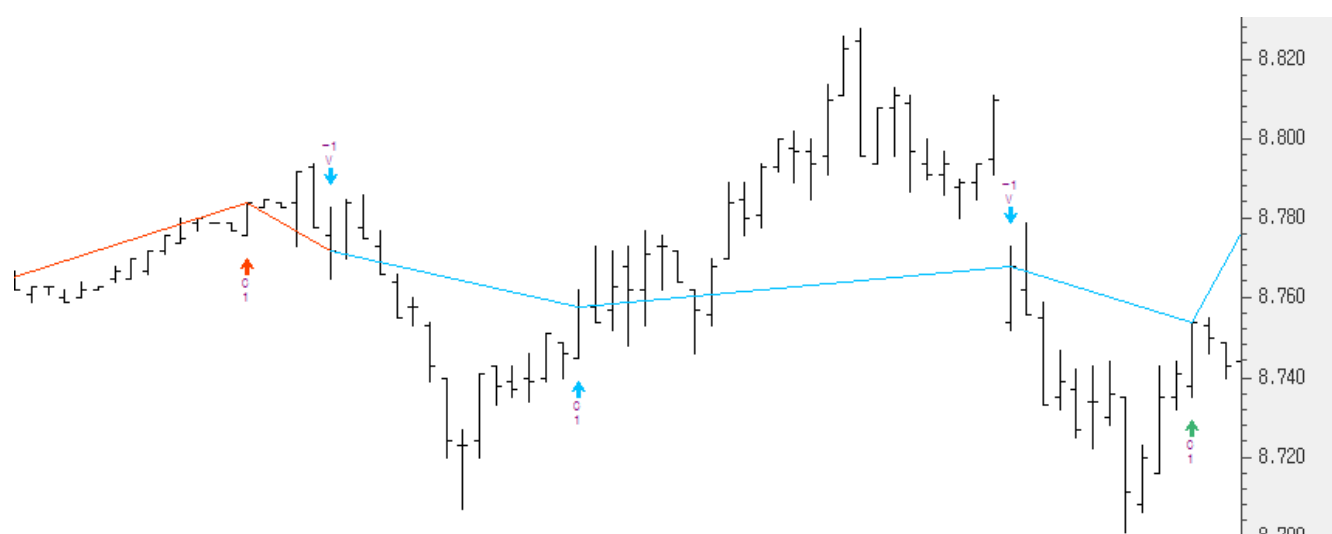
NextBars. Number of bars subsequent to the "Wide Range" to find the points PS and PI.

ContractsNumber: Number of contracts to be bought or sold when the conditions are given.

Comments on the system

Wide Range Day presents reliable signals in the direction of the trend avoiding false market entries in the market. The coefficient K enables us to determine the "timing" we want to trade with. A K value above 2 means that the system will generate few buy/sell signals, while a k value close to 1 will increase the signals considerably.

Chart example



■ Wide Range Day 01 System

Introduction

This system works the way the previous ones does but includes two new parameters:

EndofDay: With value 0 the system has a normal functioning and with value 1 the system will liquidate its position at the end of the session.

LongShort: With value -1 the system only trades short; with value 0 the system trades long and short and with value 1 the system only trades long.