



Sharechart Indicators

Indicators in ShareChart

February 2011

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INTRODUCTION

ShareChart has incorporated most of the popular indicators such as Moving average, MACD, Stochastic oscillator, Price Rate of Change (ROC), On Balance Volume (OBV), and Bollinger Bands. To use these popular indicators, simply click on the Indicator dropdown box and select the desired indicator.

If an indicator is selected, it will be preceded by a '+' sign in the Indicator dropdown box. To click the indicator with '+' will deselect the indicator and '+' will disappear in front of the indicator.

Alternatively, you can select indicators from the Chart Settings dialog box, which can be opened by selecting Settings < Chart Settings.

If you are using Standard Version or higher of ShareChart, you will be able to open the proprietary Indicator dropdown box. The indicators in this dropdown box are powerful indicators developed by Sharechart, such as Price Cluster, Stop Loss, etc. You can operate the proprietary indicators in the same way as the popular indicators.

For most indicators, parameters such as periods and color of lines can be customized according to your preference. Setting these parameters is described in Section 6.1 *Setting Indicators*.

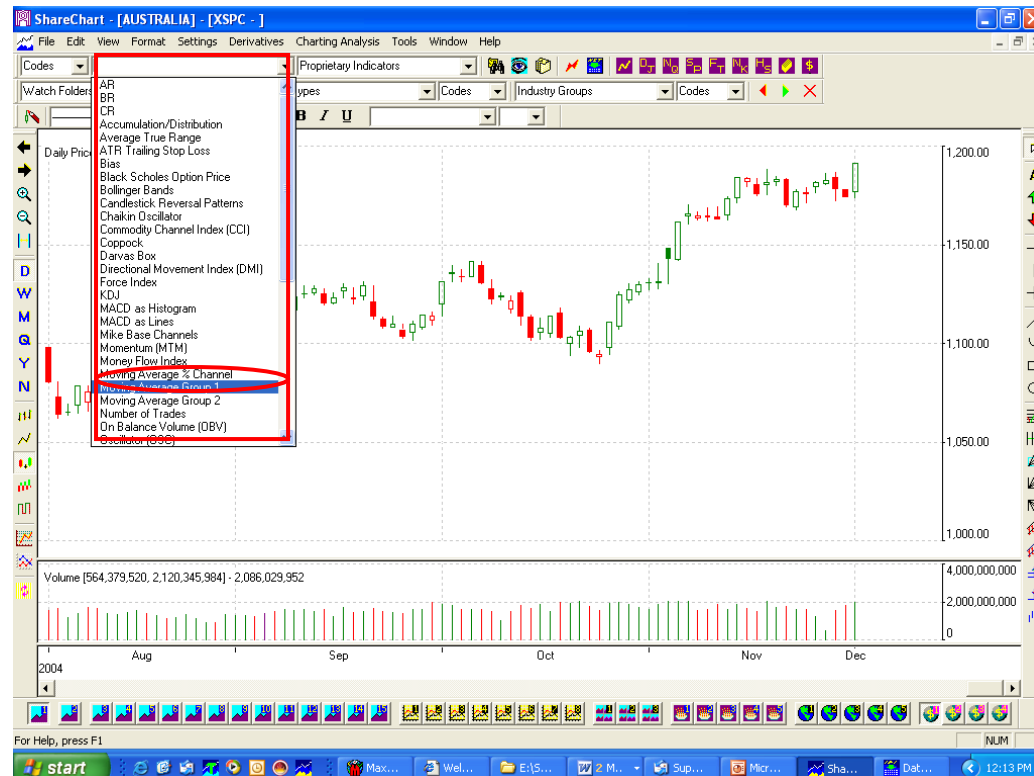
Our website: www.sharechart.com.au has provided a wide range of comprehensive technical documents on all indicators covered in ShareChart. Please visit our website to view more details about these indicators.

Selecting Indicators

Indicators

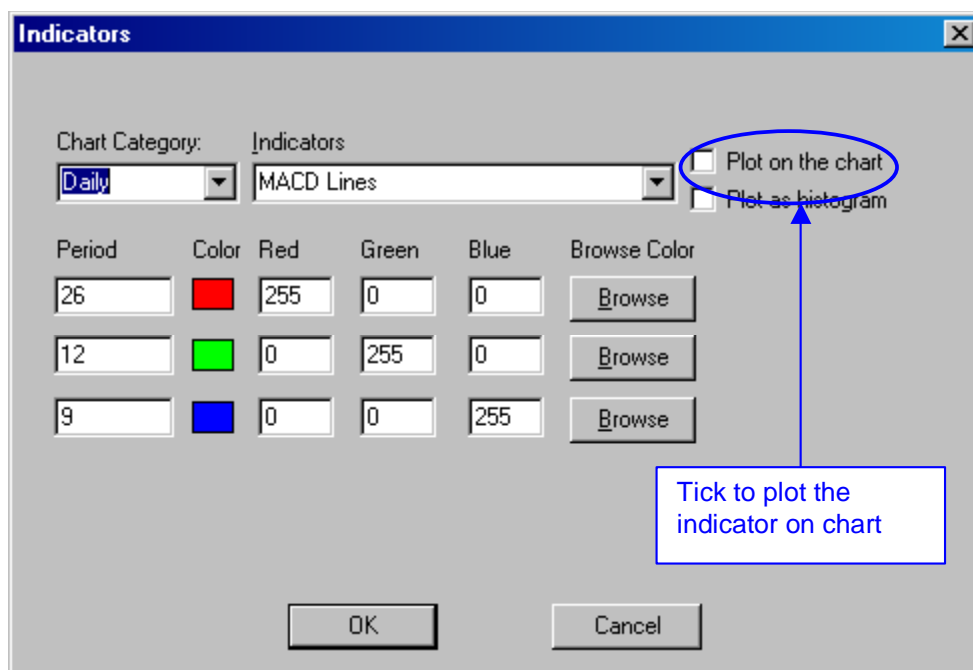
SELECTING INDICATORS

While chart open, you can select an indicator from the Indicator dropdown box, as shown below.

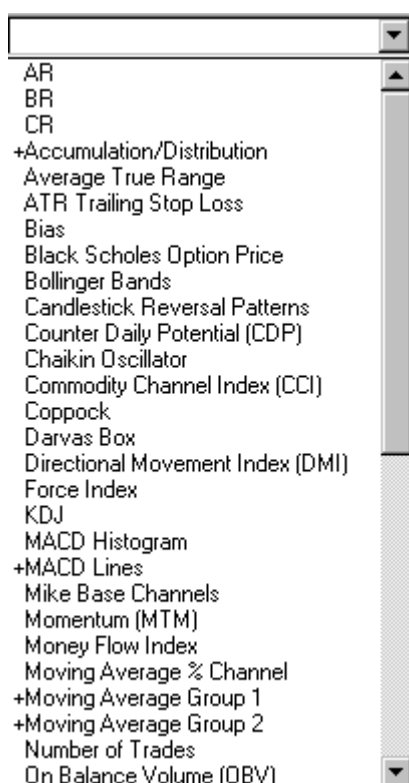


Most trend follow indicators, such moving averages, will be plotted on the same chart window. Most oscillator and volatility indicators are plotted in a separate window. However, you can decide whether you want to plot on chart or in a separate window by ticking "Plot on chart" check box, as shown below. This box can be accessed from Settings < Indicators.

Selecting Indicators



Once the indicator is turned on, there will be a cross sign '+' in front of the indicator in Indicator dropdown box, as shown below.



In the above figure, Accumulation/Distribution, MACD Lines, and Moving Averages Groups 1 & 2 are selected and are displayed. To turn off the indicator, simply click the indicator again. The cross sign will disappear.

You can also turn off the indicator by pointing the cursor to the indicator window and right click. Then select Delete Indicator from the popup menu. To turn off all indicators,

Selecting Indicators

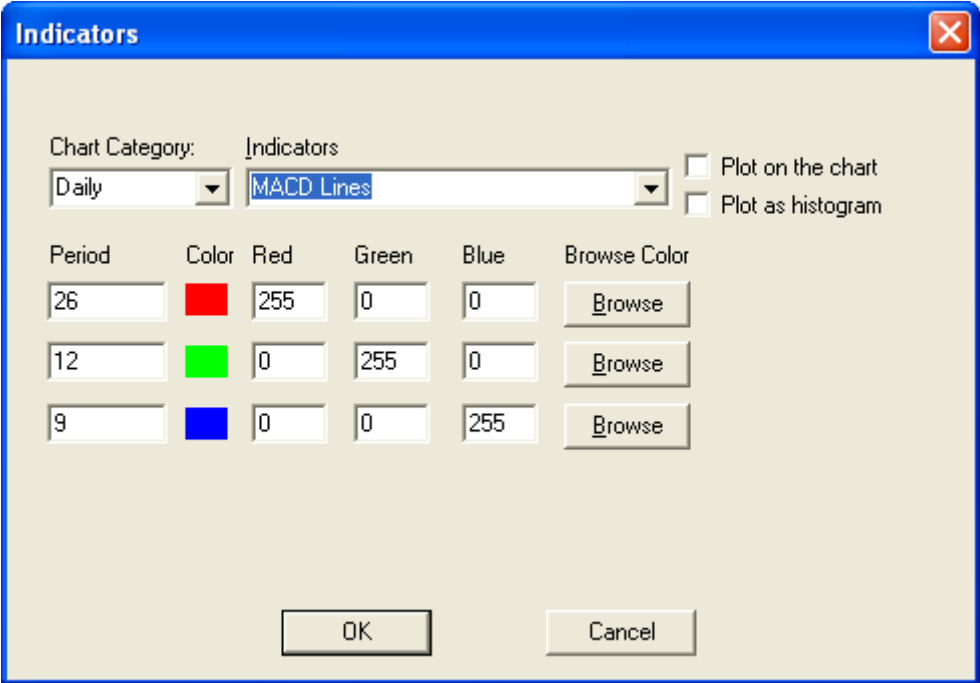
Indicators

simply right click anywhere on the chart window and select Delete All Indicators from the popup menu.

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INDICATOR PROPERTIES

You can set properties for an indicator. To set indicator properties, select Settings < Indicators. The following dialog box will appear.

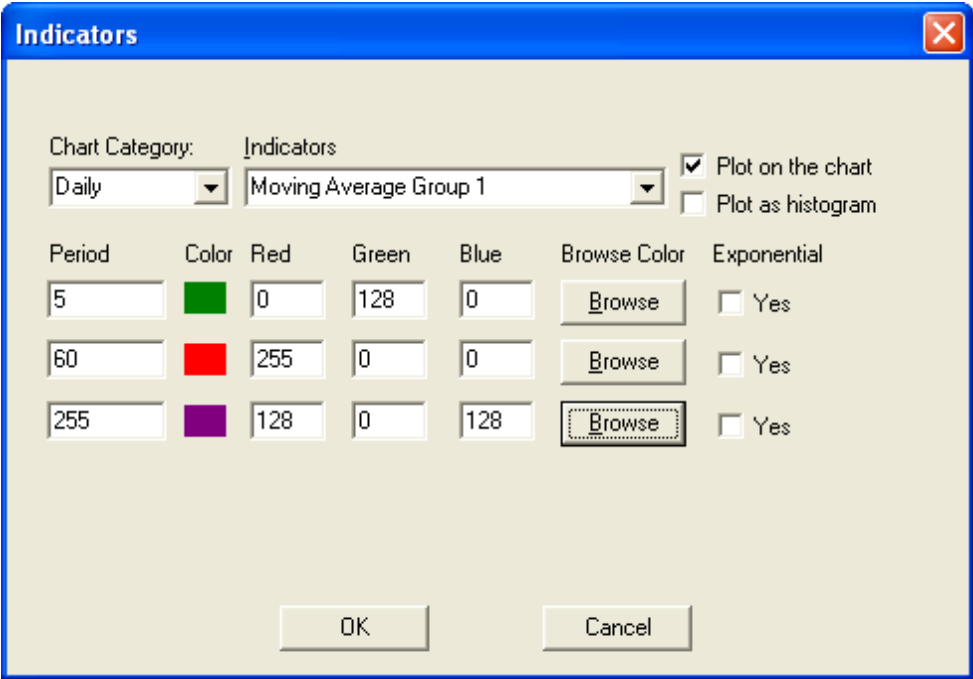


The 'Indicators' dialog box is shown with the 'Chart Category' set to 'Indicators' and the indicator selected as 'MACD Lines'. The 'Daily' time frame is chosen. There are checkboxes for 'Plot on the chart' and 'Plot as histogram'. Below these are three rows of color settings for different periods: 26, 12, and 9. Each row includes a 'Color' swatch, 'Red', 'Green', and 'Blue' value inputs, and a 'Browse Color' button. The 'OK' and 'Cancel' buttons are at the bottom.

Period	Color	Red	Green	Blue	Browse Color
26	[Red Swatch]	255	0	0	[Browse]
12	[Green Swatch]	0	255	0	[Browse]
9	[Blue Swatch]	0	0	255	[Browse]

The above indicator settings box is a standard setting box for all indicators.

Due to different parameters for indicators, there will be additional fields to be added to the standard Indicator Setting box. For example, when you select Moving Averages Group 1 from the Indicator Dropdown box, the following parameters pertinent to the moving averages will appear, allowing you to turn on/off exponential moving averages.



The 'Indicators' dialog box is shown with the 'Chart Category' set to 'Indicators' and the indicator selected as 'Moving Average Group 1'. The 'Daily' time frame is chosen. There are checkboxes for 'Plot on the chart' (checked) and 'Plot as histogram'. Below these are three rows of color settings for different periods: 5, 60, and 255. Each row includes a 'Color' swatch, 'Red', 'Green', and 'Blue' value inputs, a 'Browse Color' button, and an 'Exponential' checkbox. The 'OK' and 'Cancel' buttons are at the bottom.

Period	Color	Red	Green	Blue	Browse Color	Exponential
5	[Green Swatch]	0	128	0	[Browse]	<input type="checkbox"/> Yes
60	[Red Swatch]	255	0	0	[Browse]	<input type="checkbox"/> Yes
255	[Purple Swatch]	128	0	128	[Browse]	<input type="checkbox"/> Yes

Indicator Properties

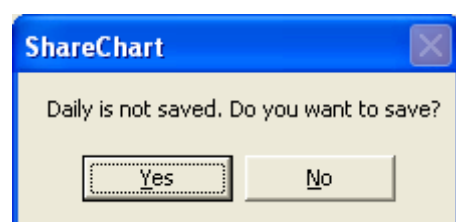
INDICATORS

Each indicator settings box has three periods that allow you to plot up to three lines with different periods for an indicator. You can enter zero in the period field to turn off the lines. For example, If you only want use 2 moving averages periods as oppose to the 3 setting periods provided, then enter 0 (zero) in one of the period spaces.

You can use the Browse button to browse colors. Depending on the number of fields for an indicator, the unused fields will be grayed. For example, the Relative Strength Comparison (RSC) indicator has only one period, the settings in Period 2 and Period 3 will be grayed when you select RSC from the Indicator dropdown box.

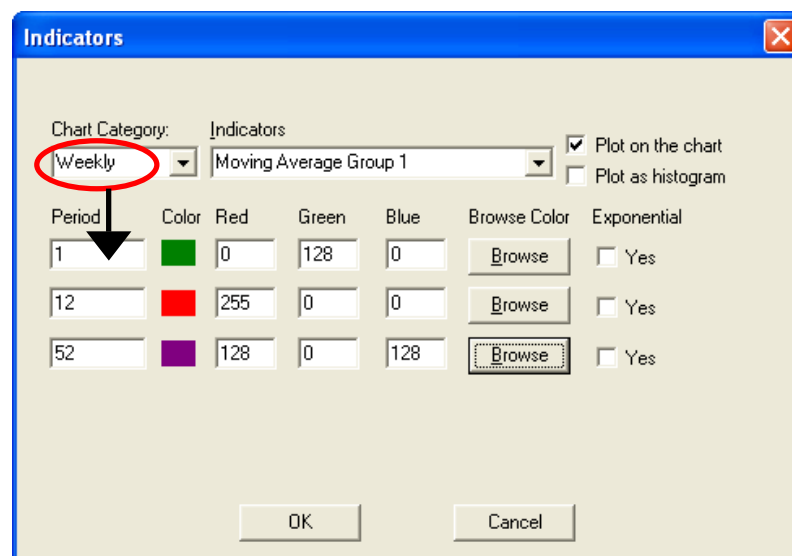
You can choose whether you want to plot the indicator on the chart window by checking the 'Plot on chart window' check box. If you uncheck the 'Plot on chart window' check box, the indicator will be plotted in a separate window. Because of the different scales of indicators and the chart, it is recommended that you do not change the default setting for this check box unless you want to see different results. For volume indicators such as volume and value, the check box represents 'Plot moving average' which allows you to plot moving averages on the indicators.

You can change indicator properties for each chart category. When you then attempt to set settings for another chart category, it will prompt you for saving the settings for the current chart category. For example, when you change the weekly chart settings for moving averages from daily to weekly, the following box will appear:



Press "yes" to save. The weekly periods can be modified for settings and color as well. Notice we have chosen same settings/colors as the daily chart:

- 1 week = 5 trading days
- 12 weeks = 60 trading days
- 52 weeks = 260 days – 5 non-trading days = 255 trading days



Indicator Properties

INDICATORS

Similarly, you can change settings for other categories in the same way as setting weekly indicators.

The following are the list of indicators in alphabetic order with their definition, use,

Sharechart

LIST OF INDICATORS

AR

Type

Momentum – Leading Indicator of price movement

History

Originates from Japan. It derives from Chinese philosophy of two opposite principles: the extreme of positive is negative and the extreme of negative is positive.

How does it work?

It compares the buying power with the selling power in relation to the opening price. If the price moves higher, the buying power tends to weaken and vice versa.

Normal Value Ranges

The normal value range for AR is between 50 and 200. If AR goes below 50, it signals oversold. If it goes above 200, it signals overbought.

Settings

Sharechart Default: 10, 15, 20 days

Example

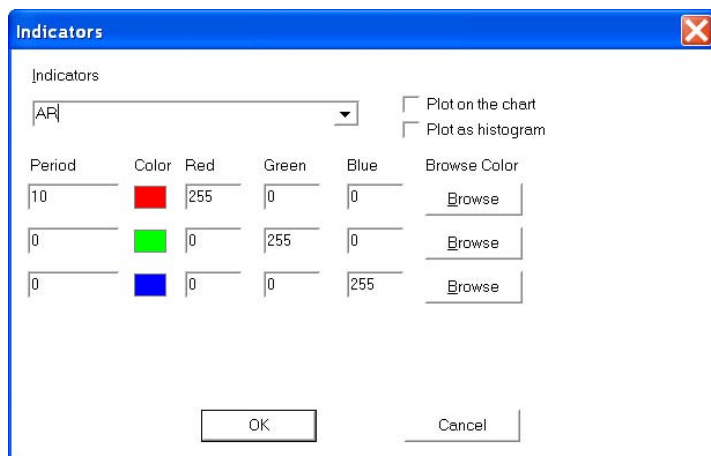
The graph below is Coca Cola Amatil Ltd. The AR indicator below graph shows the oversold area at or below 50, while the overbought area at or above 200.



AR

INDICATORS

The setting for the AR indicator for the graph above was 10 periods, as shown below. It can be modified by going to Settings > Indicators > AR. Note you can use multiple periods.



The screenshot shows the 'Indicators' dialog box in ShareChart. The 'AR' indicator is selected in the dropdown menu. The 'Period' is set to 10. The 'Color' is set to Red, with RGB values of 255, 0, 0. The 'Plot on the chart' checkbox is checked, and the 'Plot as histogram' checkbox is unchecked. There are 'Browse' buttons for each color component. At the bottom are 'OK' and 'Cancel' buttons.

Period	Color	Red	Green	Blue	Browse Color
10	Red	255	0	0	Browse
0	Green	0	255	0	Browse
0	Blue	0	0	255	Browse

BR

Type

Momentum – Leading Indicator of price movement

History

Originates from Japan. It derives from Chinese philosophy of two opposite principles: the extreme of positive is negative and the extreme of negative is positive.

How does it work?

It compares the buying power with the selling power in relation to its previous closing price.

It is based on the relationship between price movement and traders' willingness. BR is an emotion indicator based on the opposite theory, i.e. go short when market is extremely bullish and go long when market is extremely bearish.

Normal Value Ranges

The normal value range for BR is between 50 and 300. If AR goes below 50, it signals oversold. If it goes above 300, it signals overbought.

Settings

Sharechart Default: 10, 15, 20 days

Example

The graph below is Coca Cola Amatil Ltd. The BR indicator below graph shows the oversold area at or below 50, while the overbought area at or above 300.



BR

INDICATORS

The setting for the BR indicator for the graph above was 10 periods, as shown below. It can be modified by going to Settings > Indicators > BR. Note you can use multiple periods.

Indicators

Indicators

BR

Plot on the chart

Plot as histogram

Period Color Red Green Blue Browse Color

10 255 0 0 Browse

0 255 0 Browse

0 255 Browse

OK Cancel

CR

Type

Momentum – Leading Indicator of price movement

History

Originates from Japan.

How does it work?

CR is similar to AR and BR with the only difference in its formula. It compares the buying power with the selling power in relation to its previous mid price. There are several ways of calculating the mid price. The mid price in ShareChart is derived by the average of high and low.

Normal Value Ranges

The normal value range for CR is between 40 and 300. If AR goes below 40, it signals oversold. If it goes above 300, it signals overbought. If prices make a new high (low) but CR fails to make new high (low), it signals up (down) trend divergence.

Settings

Sharechart Default: 10, 15, 20 days

Example

The graph below is Coca Cola Amatil Ltd. The CR indicator below graph shows the oversold area at or below 40, while the overbought area at or above 300.

During August, the price makes a new high; its CR fails to make a new high and thus signals divergence from its uptrend.



CR

INDICATORS

The setting for the CR indicator for the graph above was 10 periods, as shown below. It can be modified by going to Settings > Indicators > CR. Note you can use multiple periods.



Indicators

CR

☐ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
10	Red	255	0	0	Browse
0	Green	0	255	0	Browse
0	Blue	0	0	255	Browse

OK Cancel

ACCUMULATION/DISTRIBUTION

Type

Momentum/Volume – Leading Indicator of price movement

History

The Accumulation/Distribution Line was developed by Marc Chaikin to assess the cumulative flow of money into and out of a security.

How does it work?

The Accumulation/Distribution is a momentum indicator based on the premise that the more volume that accompanies a price move, the more significant the price move.

The Accumulation/Distribution is actually a variation of the more popular On Balance Volume indicator. Both of these indicators attempt to confirm changes in prices by comparing the volume with prices.

When the Accumulation/Distribution moves up, it shows that the security is being accumulated (buying pressure), as most of the volume is associated with an upward price movement.

When the indicator moves down, it shows that the security is being distributed (selling pressure), as most of the volume is associated with a downward price movement.

Divergences between the Accumulation/Distribution and the security's price imply a change is imminent. When a divergence does occur, prices usually change to confirm the Accumulation/Distribution. For example, if the indicator is moving up and the security's price is going down, prices will probably reverse.

Trading Signals

Long – when there is a bullish divergence

Short – when there is a bearish divergence

Settings

Sharechart Default: 14 days

Example

Coca Cola Amatil Limited was in a trading range of \$5.65 and \$5.94 for quite a few months.

However, while the price of the stock moved down towards the bottom of the range in mid October, the Accumulation/Distribution line was heading up signalling accumulation when it broke through resistance – possible entry point (approx \$5.80-88).

The price of the stock then broke through the trading range and headed towards \$6.23 where the Accumulation/Distribution line showed signs of distribution – possible exit point (approx \$6.20).

Also, note Coca Cola Amatil was in a 29c trading range. Once it broke through resistance at \$5.94 it moved up 29c to \$6.23 where there were signs of distribution.

The Accumulation/Distribution line may have resulted in a profitable trade of approx 5 to 7% in less than 13 trading days.

Accumulation/Distribution

INDICATORS



Average True Range (ATR)

INDICATORS

AVERAGE TRUE RANGE (ATR)

Type

Volatility – based on daily range

History

Developed by J. Welles Wilder in 1978

How does it work?

The Average true range indicator is a measure of a securities volatility. The indicator does not provide an indication of the securities price direction or duration, but the degree of price movement or volatility.

In order to accurately reflect the volatility associated with commodities, Wilder sought to account for gaps. A volatility formula based on only the high/low range would fail to capture the actual volatility created by the gap.

As a volatility-based indicator the ATR cannot predict price direction or duration, simply activity levels. Low levels indicate quiet trading (small ranges) and high levels indicate violent trading (large ranges).

Trading Signals

High values are normally found just before market tops and bottoms
Low values are usually found in ranging markets

Settings

Sharechart Default: 14 days

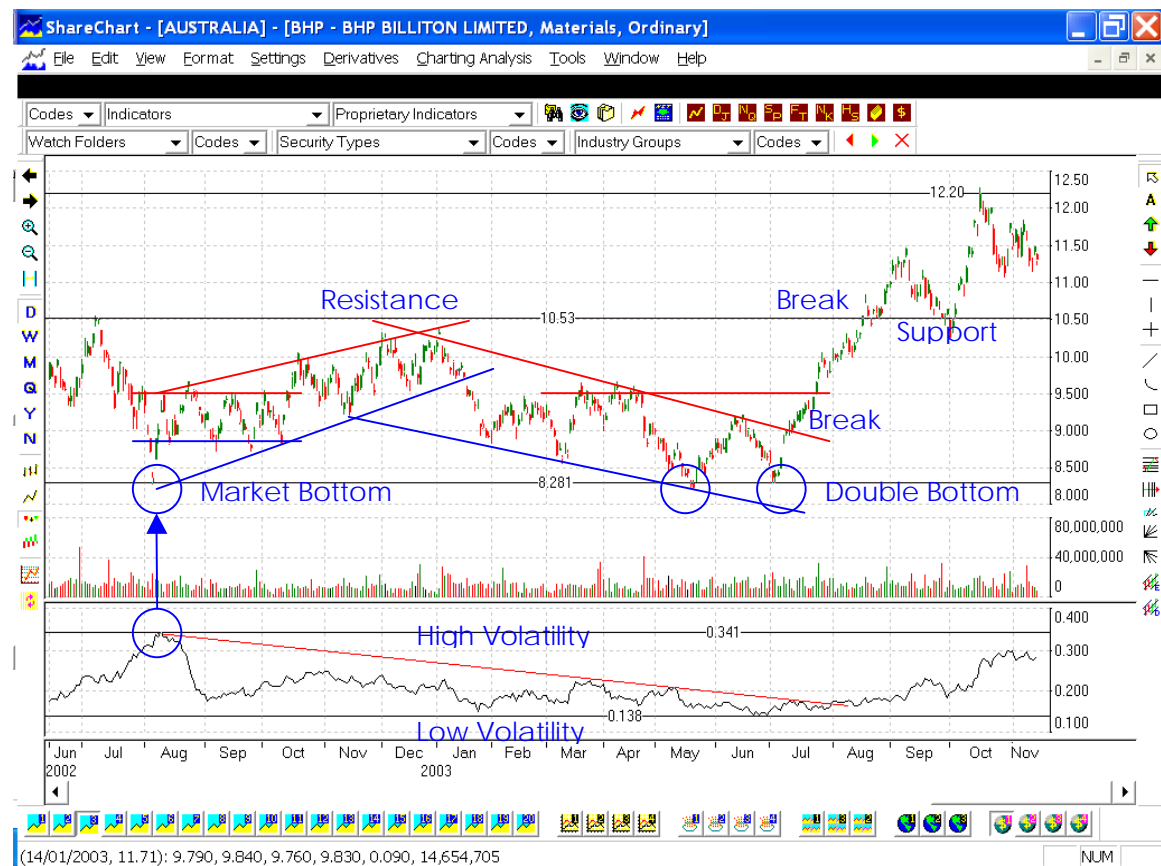
Example

BHP Billiton Limited experienced a high reading on ATR in august 2002 signalling high volatility, which occurred before a market bottom. The price then rallied from above \$8.30 to under \$10.50 in four months (approx 20 - 25% gain).

In mid 2003 the market confirmed that bottom at approx \$8.30, which was followed by a break of long term ATR trend and then a break of long term price trend at \$10.50. The ATR indicator, throughout the rally from \$8.30 to approx \$12.20 headed higher (high volatility) once again – **possibly** edging towards a market top signal.

Average True Range (ATR)

INDICATORS



AVERAGE TRUE RANGE (ATR) TRAILING STOP LOSS

Type

Volatility based Trailing Stop Loss

History

Taken form Average True Range developed by J. Welles Wilder in 1978

How does it work?

Setting an arbitrary stop based on your own whims, rather than the past behavior of the share, it is likely that you will get stopped out of a trade without a logical reason. You can choose to exit your position when the volatility of the instrument increases dramatically, or beyond a pre-defined level. To assist in this goal, an indicator called average true range (ATR) can be utilised.

ATR trailing stop loss indicator provides both a long and/or short trailing stop.

Trading Signals

Set up a long trailing stop loss if you are long the market and close out of your position when candlestick closes below the trailing stop loss.

Set up a short trailing stop loss if you are short the market and close your position when candlestick closes above the trailing stop loss.

Settings

Sharechart Default: ATR 5 period – Long 10 period & Short 10 period

Sharechart Default Multiplier: Long 2.5 & Short 2.5

Example

Say you were bullish on Lend Lease Corporation Limited on a break above \$9.00 in mid August 2003; the ATR trailing stop loss (the red line under the share price) would have given an exit at approx \$10.50, as shown below. Note, the ATR trailing stop loss is a protection mechanism in case price moves rapidly in the other direction protecting profits and/or minimising losses. It does not mean that the price can't recover in future and eventually move up again.

ATR Trailing Stop Loss

INDICATORS



Note: Setting for the above ATR trailing stop loss was:

Indicators

Indicators

ATR Trailing Stop Loss

Plot on the chart

Plot as histogram

Period Color Red Green Blue Browse Color ATR Price Multiples

3 0 0 0 Browse

10 255 0 0 Browse 2.50

0 0 255 0 Browse 2.50

OK Cancel

ATR Period 3

Long Period 10

ATR Price Multiplier 2.5

No Short Period required for a long position - if you were short the stock then you would use this as your stop loss period and it would trail above the share price.

BIAS

Type

Momentum – Overbought/Oversold Indicator

How does it work?

Bias is an indicator derived from moving averages. It measures the divergence of the price from the moving averages during a price movement.

Granville J. indicates that prices will eventually move back to the moving average no matter how far the prices diverge away from the moving average.

Trading Signals

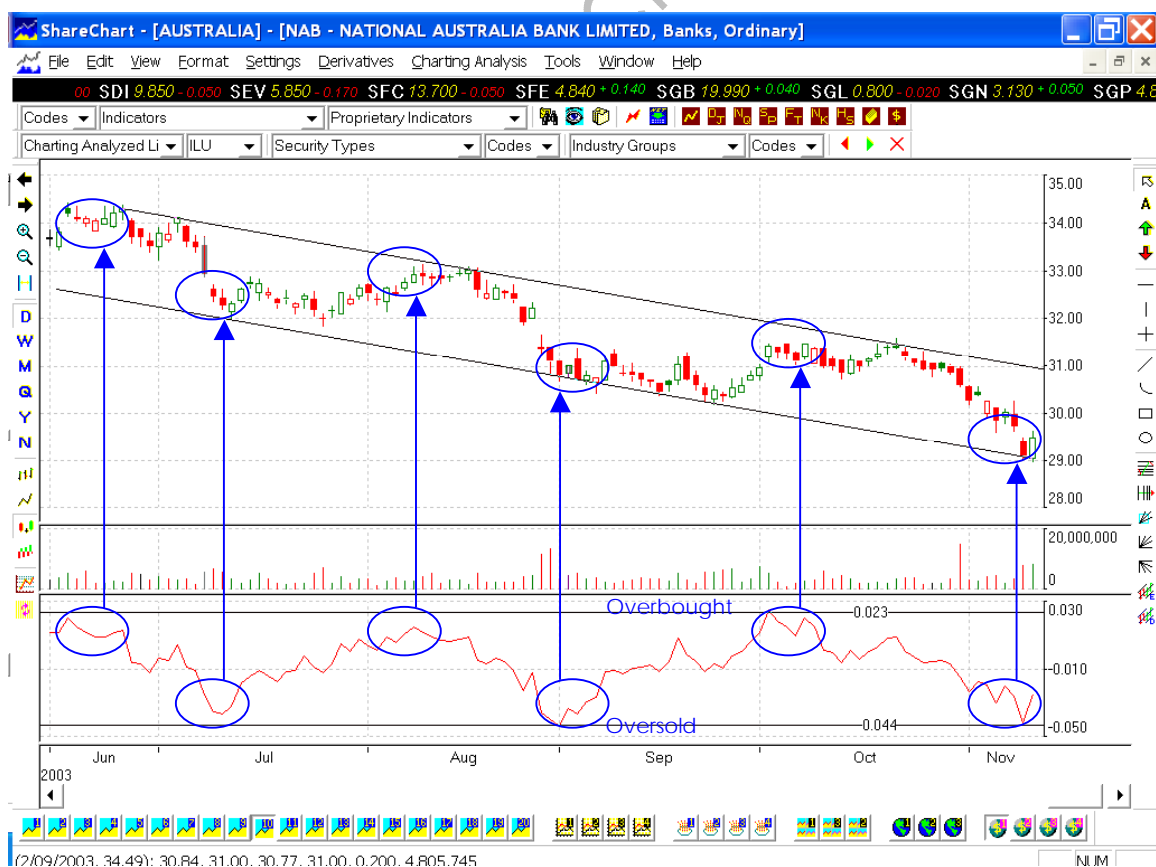
The value of the bias is a ratio. If it is below -10 , it indicates that the price is far below its moving average and thus is a signal that stocks have been oversold. If it is above 10 , it indicates that the price is far above its moving average and thus a signal that stocks have been overbought.

Settings

Sharechart Default: 5, 10, 15 periods

Example


The chart below of National Australia Bank Limited is clearly in a downtrend. The Bias indicator illustrates the oversold and overbought territories very much in sync with the share price fluctuation as it is trending down.



Note: The Bias setting for the chart above is shown below. Also, note you can have up to 3 different period lines on the Bias indicator.

Bias




INDICTATORS



Indicators

Bias

☒ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
13		255	0	0	<u>Browse</u>
13		255	0	0	<u>Browse</u>
13		255	0	0	<u>Browse</u>

Note, you can choose to have multiple (3) periods. In this example we have chosen one period (13 days).

OK Cancel

Sharechart

BLACK AND SCHOLES OPTION PRICE MODEL

Type

Option Price Model – estimates fair value

History

The 1997 Nobel Prize in Economics was awarded to Robert C. Merton and Myron S. Scholes for their work, along with Fischer Black, in developing the Fischer-Black options pricing model. (Black, who died in 1995, would undoubtedly have shared in the prize had he still been alive.)

Black and Scholes derived a stochastic partial differential equation governing the price of an asset on which an option is based, and then solved it to obtain their formula for the price of the option.

How does it work?

They showed that the fair price today of **any** financial instrument is determined by time, uncertainty, and the risk-free rate of return.

The Black and Scholes Option Pricing Model is a valuation model for stock options. This work involved calculating a derivative to measure how the discount rate of an option varies with time and stock price.

The first part of the model derives the expected benefit from acquiring a stock outright. This is found by multiplying stock price by the change in the call premium with respect to a change in the underlying stock price.

The second part of the model, gives the present value of paying the exercise price on the expiration day.

The fair market value of the call option is then calculated by taking the difference between these two parts.

Trading Signals

The Black-Scholes Formula is a way to determine how much an option is worth at any given time.

Example

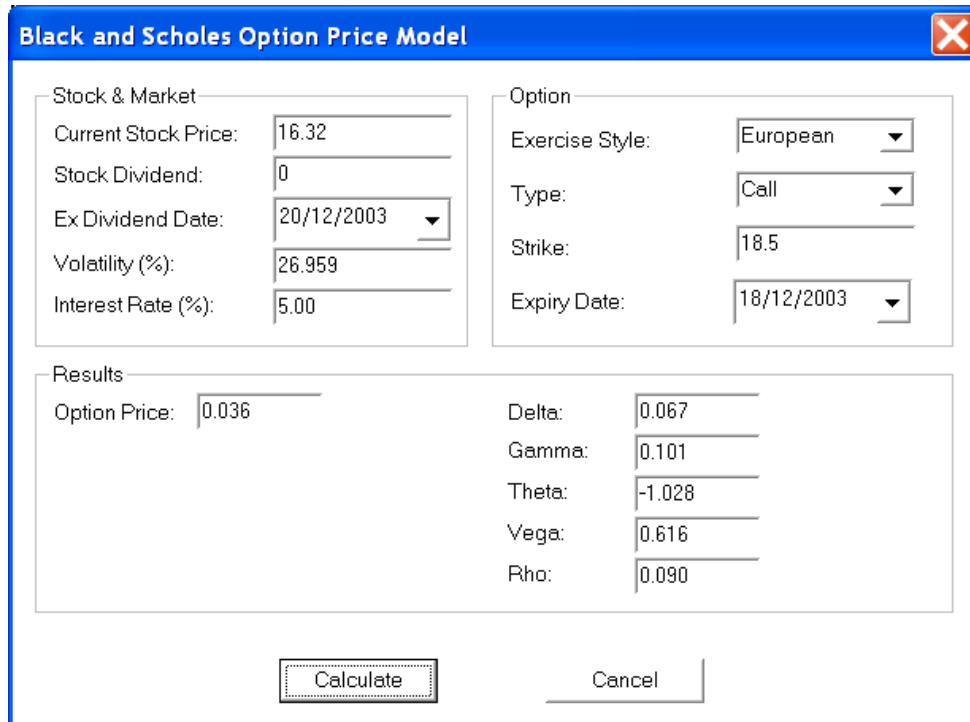
Australia and New Zealand Banking Group (ANZ) on the 14/11/2003 was trading at \$16.32. The \$18.50 Call Option expiring on 18 December 2003 was trading at \$0.045, however the Black and Scholes Option Price Model had fair value at \$0.036

AUSTRALIA OPTIONS] - [ANZWT - 1...			
Date:	14/11/2003	Time:	
Open:	0.045	Close:	0.045
High:	0.045	Low:	0.045
Volume:	20		
Volatility:			
Historical(13, 1.402) Implied(26.959)			

AUSTRALIA] - [ANZ - AUSTRALIA AN...			
Date:	14/11/2003	Time:	
Open:	16.48	Close:	16.32
High:	16.48	Low:	16.26
Volume:	7,509,971		

Black & Scholes Model

INDICTATORS



The dialog box is titled "Black and Scholes Option Price Model" and contains three main sections: "Stock & Market", "Option", and "Results".

Stock & Market:

- Current Stock Price: 16.32
- Stock Dividend: 0
- Ex Dividend Date: 20/12/2003
- Volatility (%): 26.959
- Interest Rate (%): 5.00

Option:

- Exercise Style: European
- Type: Call
- Strike: 18.5
- Expiry Date: 18/12/2003

Results:

- Option Price: 0.036
- Delta: 0.067
- Gamma: 0.101
- Theta: -1.028
- Vega: 0.616
- Rho: 0.090

Buttons: Calculate, Cancel

Note: To use this go to Derivatives > Options Black Scholes Model

Note: To attain implied volatility go to the Option in the Options market and select the Volatility indicator, which will give you a historical and implied volatility.

BOLLINGER BANDS

Type

Self –adjusting Volatility Envelope

History

John Bollinger invented Bollinger Bands.

How does it work?

Bollinger Bands are an indicator that allows users to compare volatility and relative price levels over a period time. The indicator consists of three bands designed to encompass the majority of a security's price action.

Bollinger Bands are plotted at standard deviation levels above and below a moving average. A distinct characteristic of Bollinger Bands is how the spacing between bands varies based on the volatility of prices.

Trading Signals

Since the standard deviation is a measure of volatility, the bands are self-adjusting: widening during volatile markets and contracting during calmer periods.

Bollinger bands can help generate buy and sell signals, but they do not determine the future direction of a security. By themselves Bollinger bands serve two primary functions: Identify periods of high and low volatility
Identify periods where securities are at extreme, and possibly unsustainable, levels.

Mr. Bollinger notes the following characteristics of Bollinger Bands:

Sharp price changes tend to occur after the bands tighten, as volatility lessens.
When prices move outside the bands, a continuation of the current trend is implied.
Bottoms and tops made outside the bands followed by bottoms and tops made inside the bands call for reversals in the trend.
A move that originates at one band tends to go all the way to the other band. This observation is useful when projecting price targets.

Settings

Short term: 10 day Simple Moving Average, with bands at 1.5 standard deviations

Medium term: 20 day Simple Moving Average, with bands at 2 standard deviations

Long term: 50 day Simple Moving Average, with bands at 2.5 standard deviations

Sharechart Default: 20 day Simple Moving Average, with bands at 2 standard deviations

Note: Mr. Bollinger recommends using "20" for the number of periods in the moving average. He has also found that moving averages of less than 10 periods do not work very well.

Example

Axa Asia Pacific Holdings Limited is used as an example below:

Band tightens as share price remains in narrow range

Price breaks through narrow range, with bands expanding – note that the share price stays close to the upper band as it rises

Price share channels sideways with band narrowing – note that the share price ran down to touch bottom band where it found support

Price breaks up with the expansion of the band – note once again the share price hugs the upper band on the way up

Band narrows as price runs down to touch bottom band

Bollinger Bands

INDICATORS

Band begins to expand, this time price moves down – note price is hugging lower band on the way down



CANDLESTICK REVERSAL PATTERNS

Type

Japanese Reversal Charting Patterns

History

In the 1600s, the Japanese developed a method of technical analysis to analyse the price of rice contracts. This technique is called candlestick charting.

Candlestick reversal pattern analysis is based on Japanese Candlestick reversal patterns.

How does it work?

The candlestick reversal pattern analysis identifies reversals based purely on the candlestick theory. It does not involve the volume confirmation.

When you see the reversal signal on the chart, you should carry out further analysis on its price pattern, trend lines, and appropriate indicators. The reversal patterns are plotted on the chart as one of the indicators.

The letter on each reversal signal represents the first letter of the reversal pattern. The following is the list of patterns and corresponding symbols that are shown on the chart.

Candlestick Reversal Pattern	Symbol on chart
Doji	d
Hammer	h (in the down trend)
Hanging man	h (in the up trend)
Shooting star	s
Morning star	m
Evening star	e
Dark cloud cover	D
Piercing line	P
Engulfing pattern	E

Settings

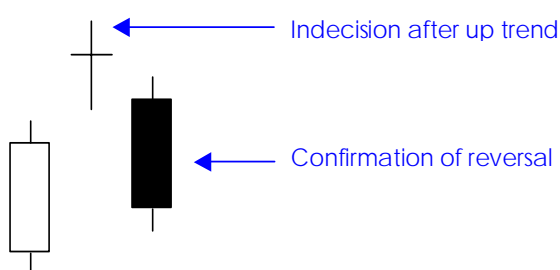
Sharechart Default: 3 period

Doji

A doji is formed when the opening and closing prices are near exact. This forms a candle that looks like a cross and signals indecision.



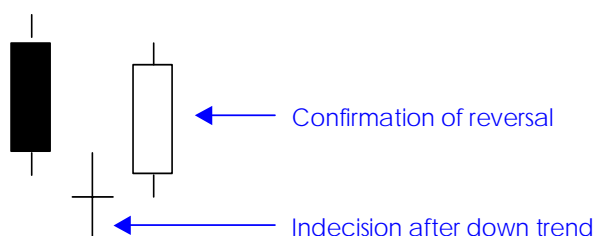
One trading technique used with doji's is the Doji star; it is very similar to the evening star, however the second candle consists of a small doji followed by a strong red candle signalling the reversal. The doji will warn you that there is indecision and that a trend reversal is possible.



Candlestick Reversals

INDICATORS

The opposite pattern to this is also tradeable, it is the morning doji star, this is exactly the same as the morning star pattern, but with the second candle being a doji. A morning doji star and a doji star are both stronger signals than the ordinary morning star and evening star.

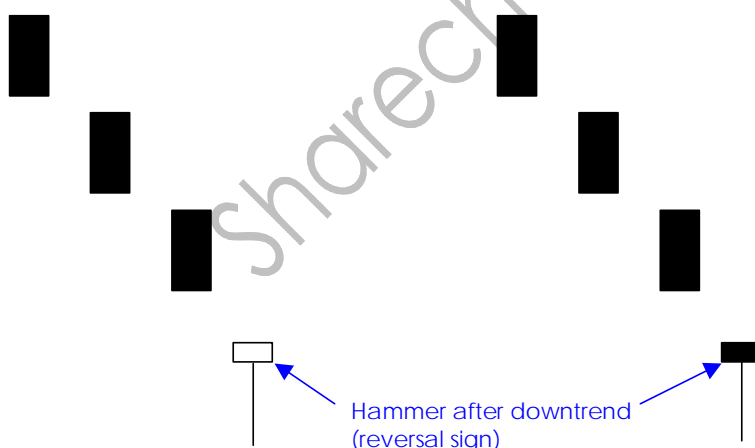


Hammer & Hanging Men

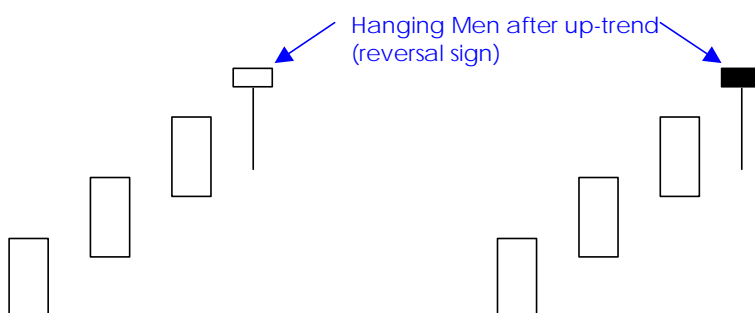
Hammers and Hanging men are one- day price reversals.

Hammers are umbrella shaped candles occurring after a price decline and get their name because they are 'hammering' out a bottom.

They are characterised by a day in which prices slip sharply from the opening price during the trading session, then return to close near the high of the day. This signals that the bears tried to gain control but were unsuccessful.



Hanging men, on the other hand, are umbrella shaped candles that develop after a rally. The small real body can be compared to the head of a man, and the long shadow his legs dangling down. The shadow needs to be at least twice the size of the body.



Candlestick Reversals

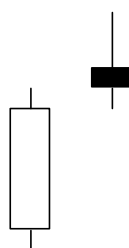
INDICATORS

Note: The colour of the candles does not matter for both the hanging man and the hammer.

Shooting Star

The shooting star is a short-term top in which, after a strong advance, the price action creates a small gap up and a small green filled real body appears at the end of a long wick or upper shadow.

This shows that the bulls could not gain control and that the bears are resisting, forcing a possible retreat of the upward trend.



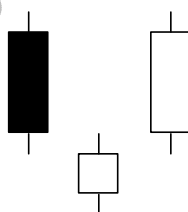
Morning Star

The morning star is a bottom reversal pattern, named after the sunrise (market rise) that follows the pattern. It takes three candles to form a Morning star:

Candle 1: An extended red real body. Showing that the bears are in command.

Candle 2: A small real red body that doesn't touch the prior real body. The small real body means sellers are losing the capacity to drive the market lower.

Candle 3: The final candle of the morning star is a green real body that intrudes deeply into the first session's red candle. This indicates that the bulls have gained control and the stock is preparing to rise.



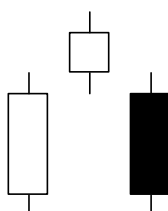
Evening Star

The evening star is the bearish version of the morning star pattern. It is named after the planet Venus, which appears just before the darkness sets in. The evening star is a top reversal and is seen at the end of an up trend. Again it takes three candles to form the pattern:

Candle 1: An extended green real body. Showing that the bulls are in command.

Candle 2: A small green real body that doesn't touch the prior real body. The small real body means buyers are losing the capacity to drive the market higher.

Candle 3: The final candle is a red real body that penetrates deep into the first session's green candle. This indicates that the bears have gained control and the stock is preparing to dive.



Candlestick Reversals

INDICATORS

Note: Morning Star & Evening Star

Factors increasing the likelihood of either the evening star or morning star being a reversal include:

There is no overlap among the first, second and third real bodies.

If the third candle closes deeply into the first candle's real body.

If there is light volume on the first candle session and heavy volume on the third candle session. This shows a reduction of the force for the prior trend and an increase in force for the new trend.

Dark Cloud Cover

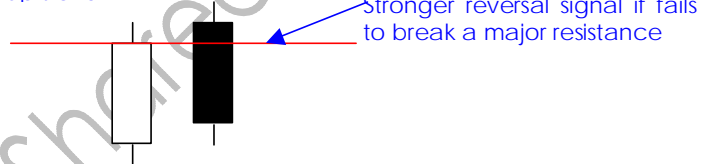
The Dark-Cloud cover is a double candle pattern that is a top reversal after an up trend, or sometimes at the top of a congestion band.

The first day candle is a strong green real body; the second day's candle opens above the prior session's high (above the top of the upper shadow). However, by the end of the second day's session the market closes deeply within the prior day's green body.

The further the second candle penetrates into the prior day's green body, the more likely it is to be a top.

It can heighten the chance of a top if the second candle opens above a major resistance level then fails, this signals the bulls were unable to take control.

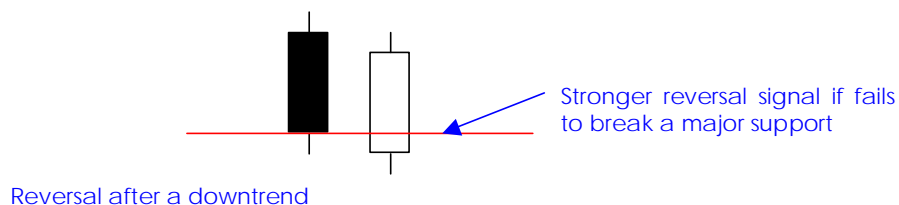
Reversal after an up trend



Dark Cloud Cover

The piercing pattern is the reverse of the Dark cloud cover. It is a bottom reversal that occurs after a downtrend.

The first candle is a strong red filled candle; the second day's candle opens below the prior session's low (below the bottom of the bottom shadow). However, by the end of the second day's session the market closes deep within the prior day's candle.



Engulfing Pattern

Engulfing patterns are two-day affairs. A bearish engulfing pattern develops after a rally. The first day consists of a long real green body, followed by a red real body, whose opening price is higher than the first day's and whose closing price is below that of the

Candlestick Reversals

INDICATORS

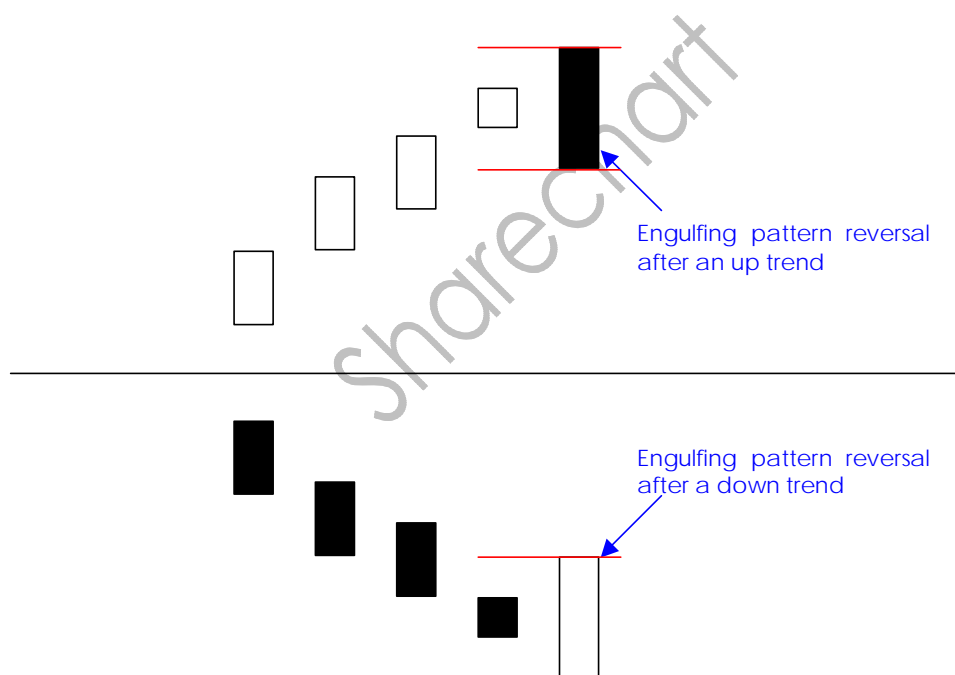
first days. So that in effect the second day candles real body totally engulfs that of the first day.

A bullish engulfing pattern is the exact opposite of the bearish pattern; it develops after a decline and consists of a long red real body followed by a long green real body that engulfs the first day candles entire real body.

It is the second day's candle that gives us the clue as to the psychology underlying the pattern. Following the trend prices open higher / lower continuing the trend, but as the session proceeds the bulls / bears lose enthusiasm as prices close down / up for the day. This one- day reversal of upside to downside, downside to upside momentum is sufficiently great to result in a changed sentiment of the trend.

There are three criteria for an engulfing pattern:

- The market has to be in a clearly identifiable up trend (for bearish engulfing pattern) or downtrend (for bullish engulfing pattern), even if the trend is short term.
- Two candles comprise the engulfing pattern. The second real body must engulf the first real body (does not have to engulf the shadows).
- The second real body of the engulfing pattern should be the opposite colour of the first real body. The exception is that if the first candle is a doji.



COUNTER DAILY POTENTIAL (CDP)

Type

Price Momentum Indicator – divides the previous price into five values.

History

CDP divides the previous price movement into five values and make the intraday trading decision based on the five values. CDP is different from other indicators in that it only suitable for day traders. It does not suit position traders.

How does it work?

Based on the previous price movement, CDP calculates five values: CDP, high (AH), near high (NH), low (AL), near low (NL). Their calculations are as follows.

$$CDP = (H + L + 2C) / 4$$

$$AH = CDP + (H - L)$$

$$AL = CDP - (H - L)$$

$$NH = CDP + (CDP - L)$$

$$NL = CDP - (H - CDP)$$

Day traders can use the five values to make trading decisions based on the current open price. CDP is suitable for sideways market and should close any position for the current day. In order to not miss the overall trending of a market, traders may also look at longer-term indicators or trending indicators.

Trading Signals

If today's open is between NH and NL, it shows that price does not fluctuate significantly. Traders may consider buy at NL and sell at NH.

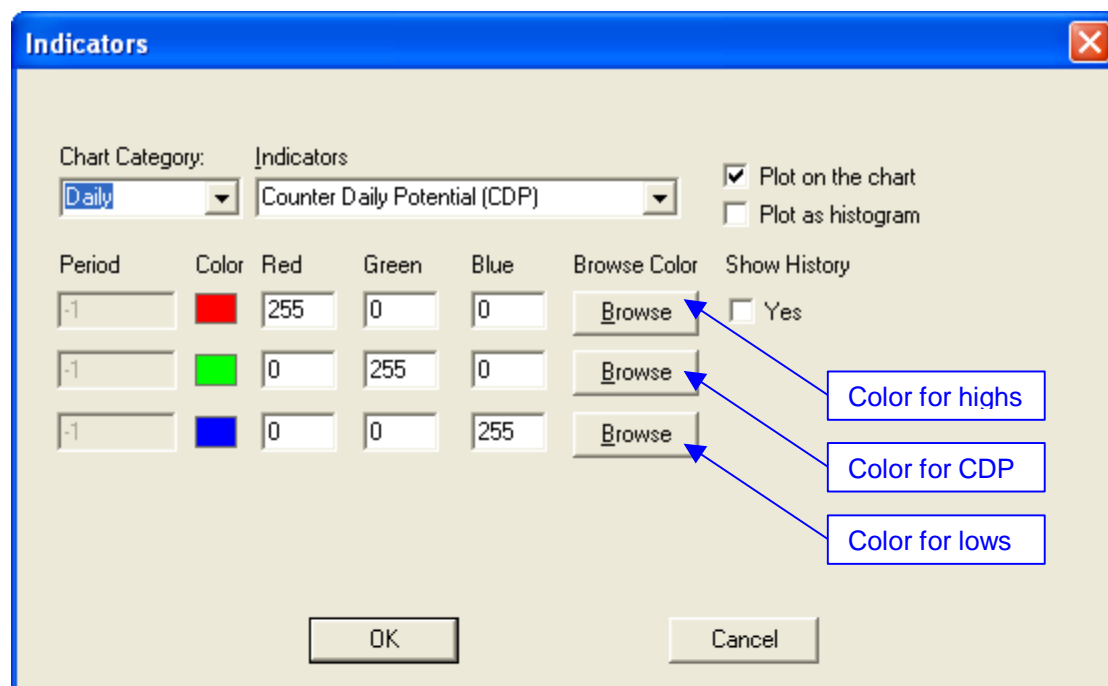
If today's open is near AH, it shows that buy power is in control. Traders may consider buy around AH.

If today's open is near AL, it shows sell power is in control. Traders may consider sell around AL.

Settings

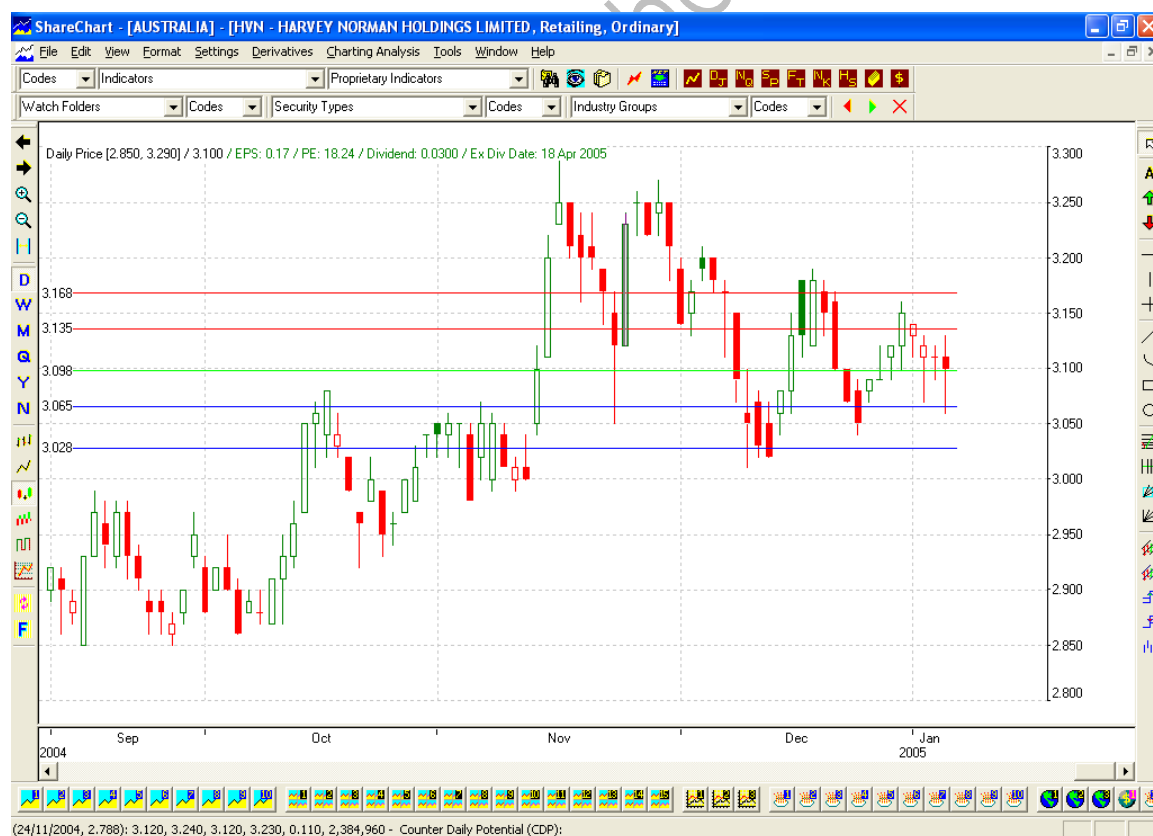
There is no period for CDP. However, you can select the colors for highs, CDP, and lows, as illustrated in the following figure.

As CDP only shows the five horizontal lines of AH, NH, CDP, NL and AL for the last day on the chart, you will have the option to show historical CDP values for each day along the chart. To show the historical CDP values, just tick "Show History" check box.

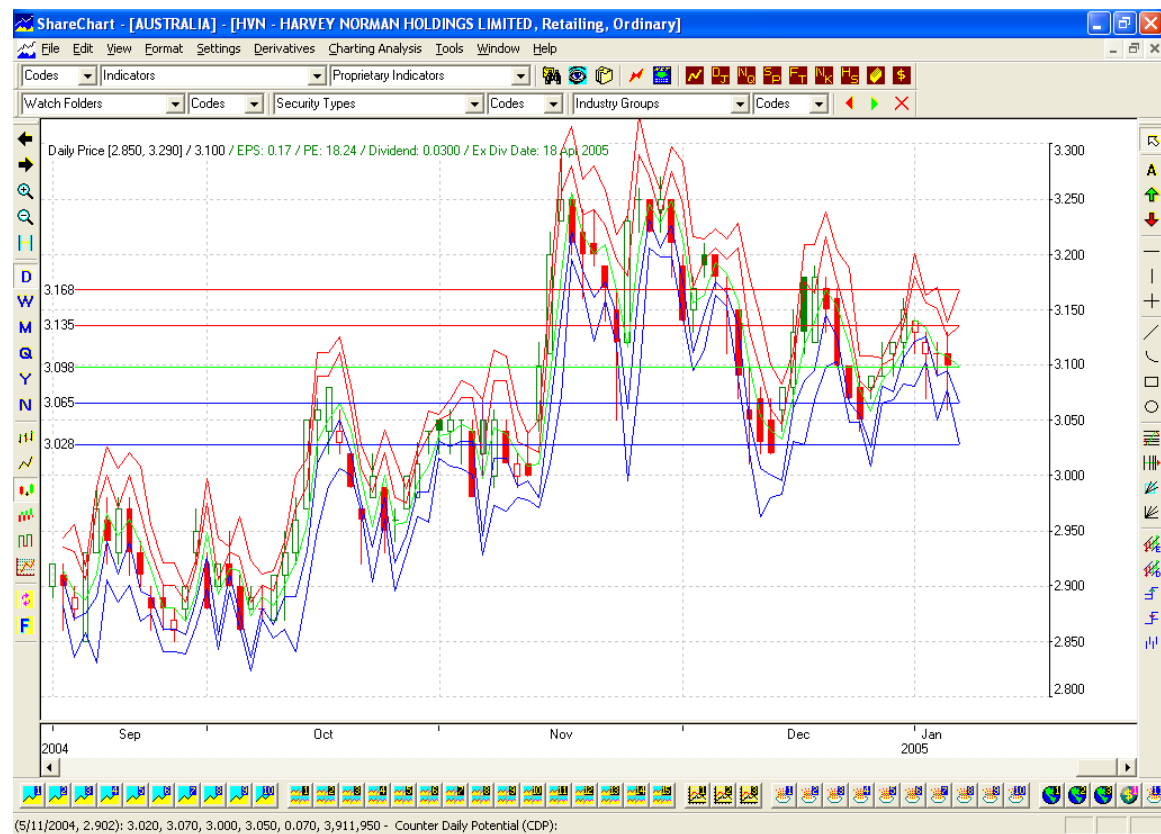


Example

The following figure shows the Harvey Norman Holdings Limited (HVN) chart where CDP values are displayed as horizontal lines.



If you tick "Show History" check box, the historical CDP values will be shown as bands below.



CHAIKIN OSCILLATOR

Type

Momentum/Volume Indicator – compares closing price, range and volume

History

The Chaikin Indicator or Chaikin Oscillator was derived from the Accumulation / Distribution line and was developed by Marc Chaikin.

Marc Chaikin uses the Chaikin Oscillator to monitor the flow of money in and out of the market - comparing money flow to price action helps to identify tops and bottoms in short and intermediate cycles. He suggests that it be used in conjunction with a 21 day Price Envelope and an Overbought/Oversold Indicator.

How does it work?

The Chaikin Indicator is basically the Moving Average Convergence Divergence (MACD) applied to the Accumulation / Distribution line. This makes the Chaikin Indicator an indicator to predict changes in the Accumulation / Distribution line.

Many of the same signals that apply to the MACD are also applicable to the Chaikin Indicator, but, it must be remembered that the Chaikin signals refer to the Accumulation / Distribution line and not the stock itself.

The Chaikin Indicator is good for adding momentum to the Accumulation / Distribution line, but can sometimes add too much and be hard to interpret. If the Chaikin seems too sensitive to movements from the Accumulation / Distribution Line then the moving averages may need altering. Change these within Settings<Indicators.

Trading Signals

The Chaikin can produce two Bullish signals:

- Positive divergence
- Centerline crossovers

As the Chaikin is an indicator of an indicator, a positive divergence should be confirmed by a bullish centerline crossover.

In direct contrast to the bullish signals, there are also two bearish signals generated from the Chaikin indicator:

- Negative divergence
- Bearish centerline crossover

A negative divergence should be confirmed with a bearish centerline crossover.

Settings

The Chaikin Oscillator is calculated by subtracting a 10 period exponential moving average from a 3 period exponential moving average of the Accumulation / Distribution line.

Sharechart Default: 14 period – 10 period (exponential moving average), 3 period (exponential moving average)

Example

In the example below, Coca Cola Amatil Limited showed a Chaikin Oscillator divergence as price was falling. The reversal came from an engulfing day candlestick, which sparked a short-term rally from \$5.80 to \$6.20 approx.

Chaikin Oscillator

INDICTATORS



Note: The example above was using a 13 period Chaikin indicator as shown below:

Indicators

Chaikin Oscillator

Period: 13 Color: Black Red: 0 Green: 0 Blue: 0 Browse Color: Browse

10 0 0 0 Browse

3 0 0 0 Browse

OK Cancel

COMMODITY CHANNEL INDEX (CCI)

Type

Momentum – closing price compared to Moving Average

History

Developed by Donald Lambert, the Commodity channel index was designed to identify cyclical turns in commodities.

How does it work?

The CCI measures the variation of a security's price from its statistical mean. High values of CCI usually indicate that prices are unusually high compared to average prices. While low values indicate that prices are unusually low.

Although CCI was originally developed for trading commodities, the CCI index can be used effectively on any type of security.

Trading Signals

There are two methods of interpreting the CCI: looking for divergences and as an overbought/oversold indicator.

A divergence occurs when the security's prices are making new highs while the CCI is failing to surpass its previous highs. This divergence is usually followed by a correction in the security's price.

The CCI typically oscillates between ± 100 . To use the CCI as an overbought/oversold indicator, readings above +100 imply an overbought condition. Readings below -100 imply an oversold condition.

Settings

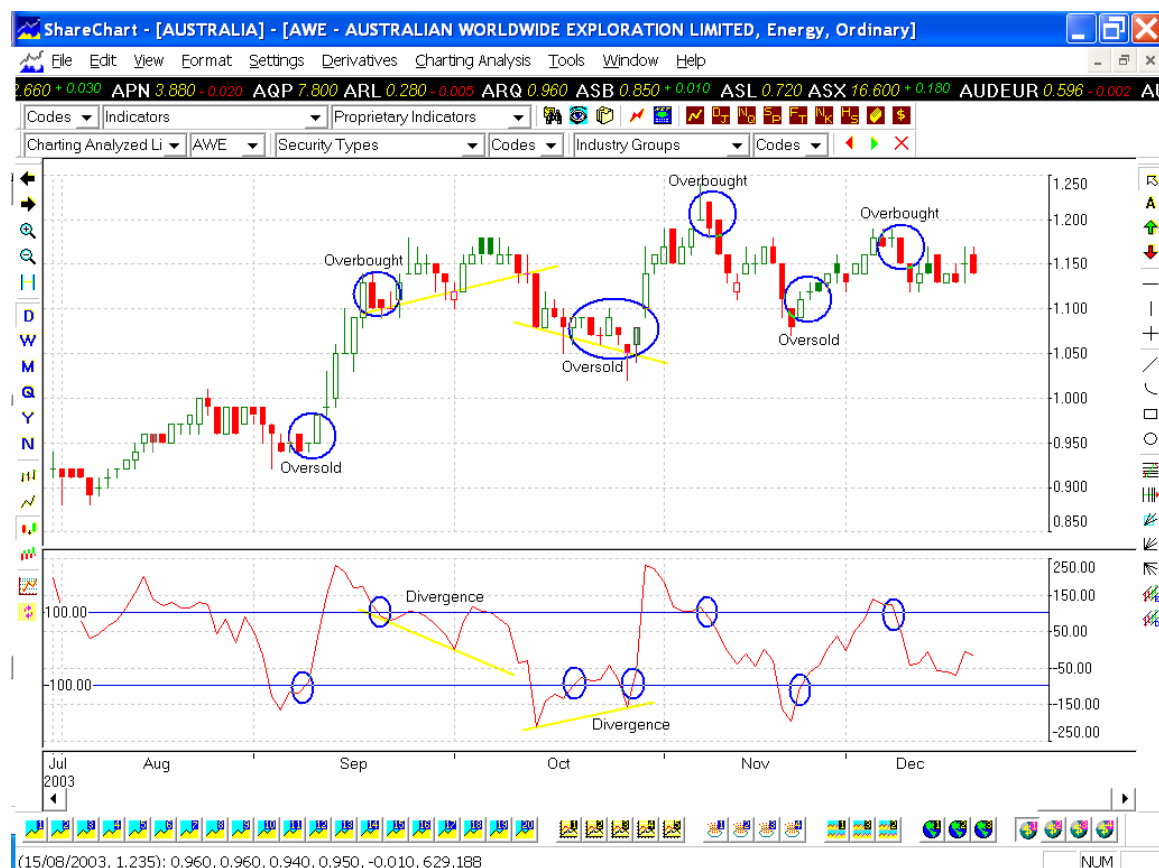
Sharechart Default: 10 period, 15 period, 20 period

Example

The chart below is of Australian Worldwide Exploration Limited. Using the CCI indicator we can determine oversold and overbought areas. Note in September and October there was 2 divergences from the share price and the CCI and the share price then turned to the opposite direction.

Commodity Price Index

INDICATORS



The setting for the CCI indicator for the graph above was 13 periods, as shown below. It can be modified by going to Settings > Indicators > CCI. Note you can use multiple periods.

Indicators

Indicators

Commodity Channel Index (CCI)

☐ Plot on the chart
 ☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color	Horizontal Lines
13	■	255	0	0	<div>Browse</div>	100
0	■	0	255	0	<div>Browse</div>	-100
0	■	0	0	255	<div>Browse</div>	

OK

Cancel

COPPOCK

Type

Bull market Indicator

History

Developed by Edwin Coppock with one sole purpose: to identify the commencement of bull markets. The indicator was devised for use on the Dow Jones Industrial Average but is suitable for use on other market indices or averages

How does it work?

The Coppock indicator was devised to identify the commencement of bull markets. Although often late, the Coppock indicator can provide very reliable signals.

A bull market is signalled when the Coppock turns up from below zero. At this point Coppock advised on buying a diversified portfolio of the strongest stocks relative to the market over recent months. This is due to the fact that the Coppock is telling us that the market has already bottomed out and the bull-run has begun. The strongest stocks tend to be the leaders of the coming bull market.

Trading Signals

The Coppock is only useful for identifying the start of a bull trend, and does not provide any exit signals. A bull market is signalled when the Coppock Indicator turns up from below zero

Settings

ShareChart:

Calculate 11 period Rate of Change (price)

Calculate 14 period Rate of Change (price)

Add the results of both

Calculate a 10 period weighted moving average of the result

Sharechart Default: 10 period - 11 period, 14 period

Example

TAB Limited in mid October, as illustrated with the Coppock Indicator, began a bull run when the Coppock turned up from below zero. The price ran from approx \$3.50 to over \$4.00 – a profit increase of over 14% in under 3 weeks, with possibility of further gains with a UniTab Ltd and Tabcorp Holdings merger war on the cards.



The setting for the Coppock indicator for the graph above was 10 periods, as shown below. It can be modified by going to Settings > Indicators > Coppock.

Indicators

Coppock

Plot on the chart

Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
10	Red	255	0	0	Browse
11		0	0	0	Browse
14		0	0	0	Browse

OK Cancel

DARVAS BOXES

Type

Trend Indicator

History

Developed by Nicholas Darvas in his book entitled "How I Made \$2,000,000 In The Stock Market". In his book, Mr. Darvas started out with around twenty thousand dollars and turned it into over two million dollars, by looking through the finance section of newspapers and applying the "Darvas Box Formula".

How does it work?

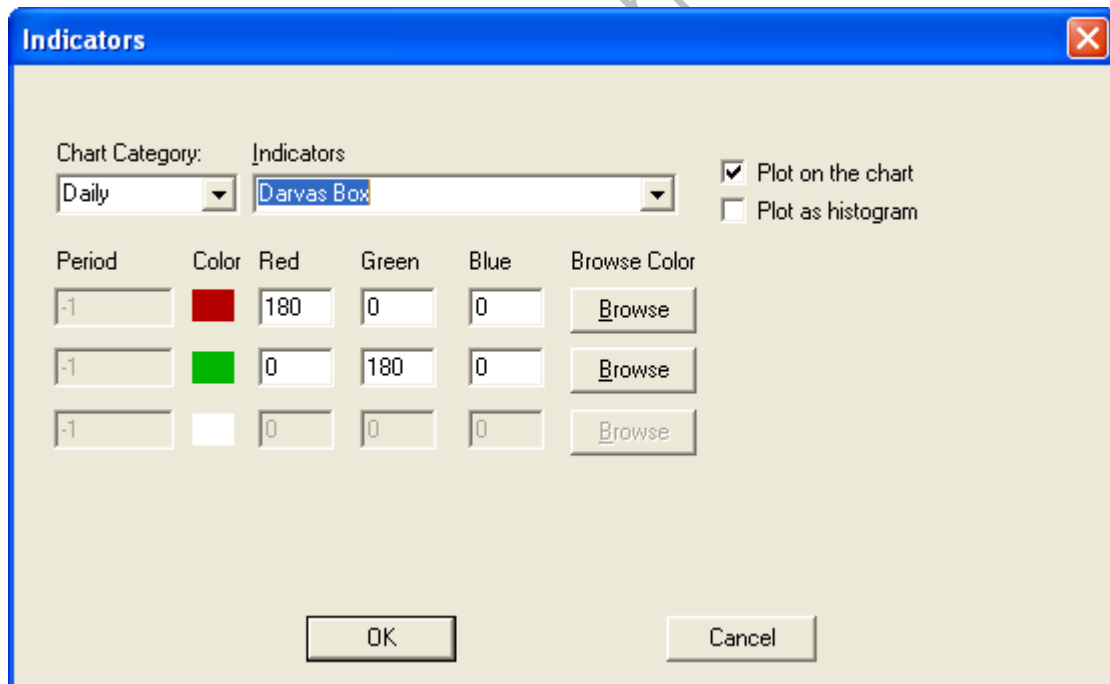
The algorithm to calculate Darvas boxes is described as a complex state machine. He uses several steps to identify a top and bottom, or acceptable trading range. The detailed explanation of each box is complex and is referred to his book for description.

Trading Signals

When prices broke above the top of the box, a buy signal is generated. Once the long position is entered, stay and add new long positions as new higher boxes developed. When the prices move below the bottom of Darvas box, a sell signal is generated.

Settings

There is no period for Darvas Boxes. However, you can set colors for the top and bottom of the Darvas boxes, as shown in the following figure.

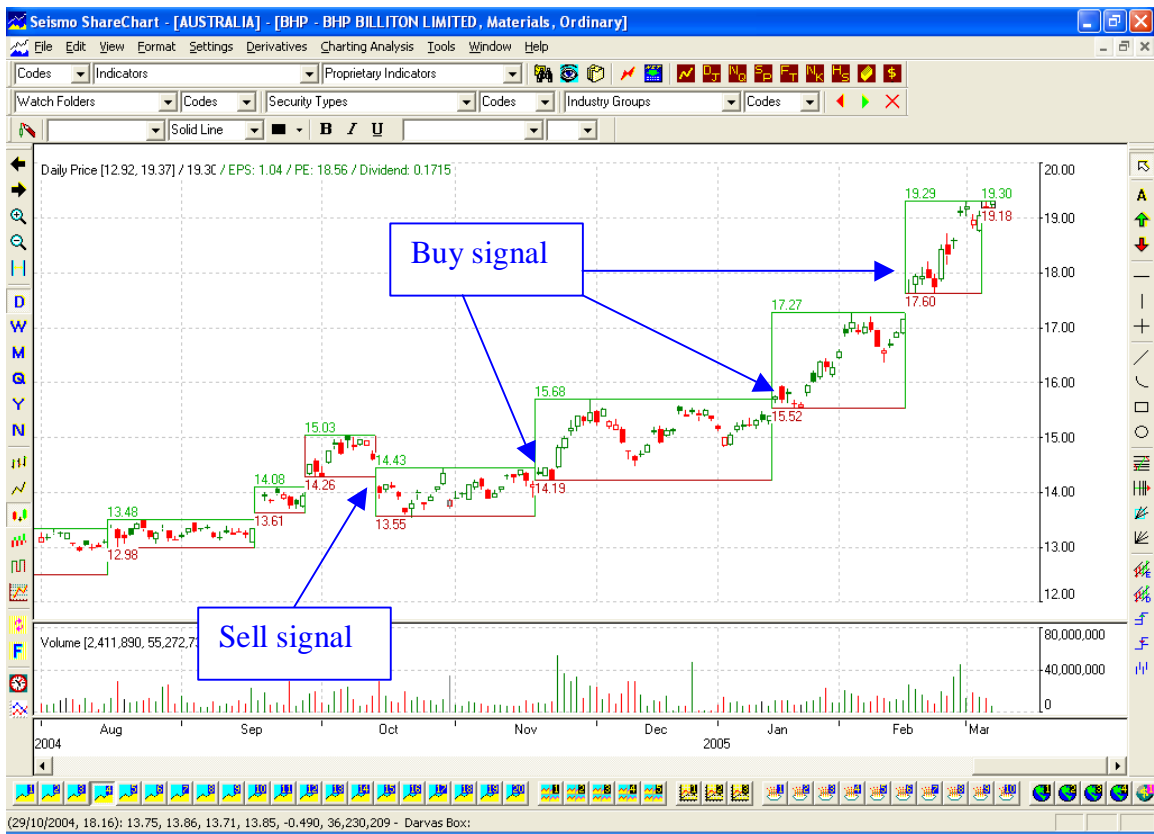


Example

Below is the daily chart for BHP Ltd with Darvas boxes displayed along the chart. Each price bar above the Darvas boxes generates buying signal and each price bar below the Darvas boxes generates selling signal.

Darvas Boxes

INDICATORS



DIRECTIONAL MOVEMENT INDEX (DMI)

Type

Trend Indicator

History

Developed by Welles Wilder the Directional Movement Index helps determine if a security is "trending."

How does it work?

The Directional Movement Index measures the ability of bulls and bears to move price outside the previous day's trading range. The index consists of three lines:

The Positive Direction Indicator (+DI) summarizes upward trend movement

The Negative Direction Indicator (-DI) summarizes downward trend movement

The Average Directional Movement Index (ADX) indicates whether the market is trending or ranging - it will move up when the +DI and -DI are converging, and move down when the +DI and -DI are separating

Trading Signals

The values of DI 's are between 0 and 100. The greater the value of the +DI, the stronger the bullish market. Likewise, the greater the value of the -DI the stronger the bearish market.

When the +DI rises above the -DI, a buying signal is generated.

When the +DI falls below the -DI, a selling signal is generated.

To avoid whipsaws these signals should only be taken when the ADX turns up from below both DI lines.

Profits should be taken if the ADX line turns down from the DI lines.

Even though the DI scale is from 0 to 100 readings above 60 are relatively rare. Low readings below 20 reflect a weak trend, whilst higher readings above 40 reflect a strong trend.

Settings

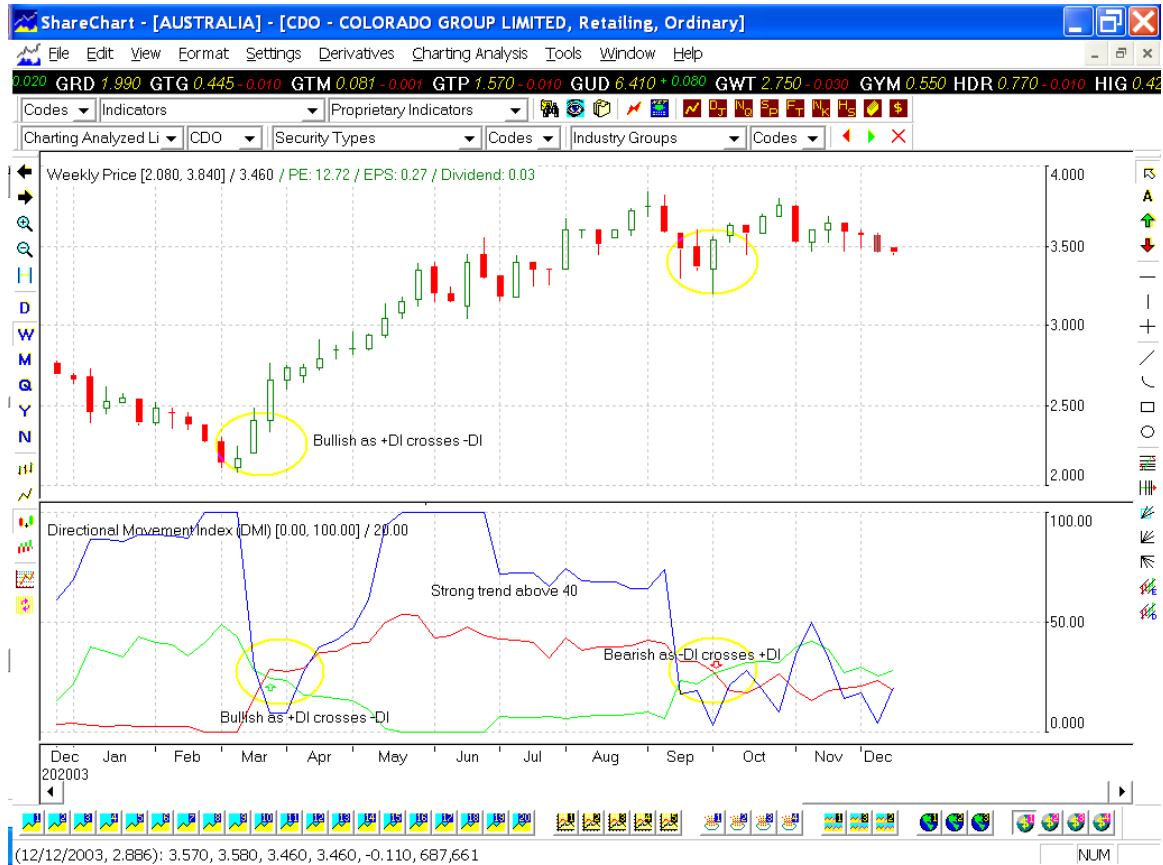
Sharechart Default: +DI 10 period, -DI 10 period, ADX 0 period

Example

Below is the weekly chart for Colorado Group Ltd. The Directional Movement Index is shown below the graph. Note there is a bullish crossover in March at approx \$2.50 – then in October there is a bearish crossover at approx \$3.50; a gain of approx 40% in 7 months.

Directional Movement Index

INDICATORS



The setting for the DMI indicator for the graph above was +DI 10 period, -DI 10 period, ADX 0 periods, as shown below. It can be modified by going to Settings > Indicators > Directional Movement Index (DMI).

Indicators

Directional Movement Index (DMI)

Plot on the chart

Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
10	Red	255	0	0	Browse
10	Green	0	255	0	Browse
0	Blue	0	0	255	Browse

OK Cancel

ELDER RAY

Type

Momentum Indicator

History

Developed by Dr Alexander Elder, the Elder Ray combines price movements and moving average to measure the power of bulls and bears in the market.

How does it work?

The Elder Ray consists of three parts: moving average, bull power, and bear power. Bull power is calculated by subtracting high of a price bar by the moving average. Bear power is calculated by subtracting low of a price bar by the moving average.

In general, the higher the bull power, the stronger the bulls, and lower the bear power, the stronger the bears. When bull power turns to negative, it shows that bulls are completely overpowered by bears. When bear power turns to positive, it shows that bears are completely overpowered by bulls.

Trading Signals

Long signal is generated when the trend is up and the bear power is negative but rising. The signal would be stronger if it is accomplished by the following conditions.

1. The latest bull power peak is higher than the previous peak.
2. Bear power is rising from a bullish divergence.

The bullish divergence is given when prices fall to a new low, but bear power fails to make a new low.

Short signal is generated when the trend is down and the bull power is positive but falling. The signal would be stronger if it is accomplished by the following conditions.

3. The latest bear power trough is lower than the previous trough.
4. Bull power is falling from a bearish divergence.

The bearish divergence is given when prices rise to a new high, but bull power fails to reach a new high.

Settings

As an extension to the original Elder Ray that uses only exponential moving average. ShareChart will also allow you to use simple moving average. Instead of plotting bull power and bear power as histogram and in two separate windows, ShareChart draw bull power and bear power as two lines with two different colors in a window. This will allow more space for chart. The time period and colors can be set in Elder Ray setting box, as follows.

Elder Ray

INDICTATORS

Indicators

Chart Category: Indicators

Daily

Elder Ray

Plot on the chart

Plot as histogram

Period: 13

Color: Green

Red: 0

Green: 255

Blue: 0

Browse Color

Exponential

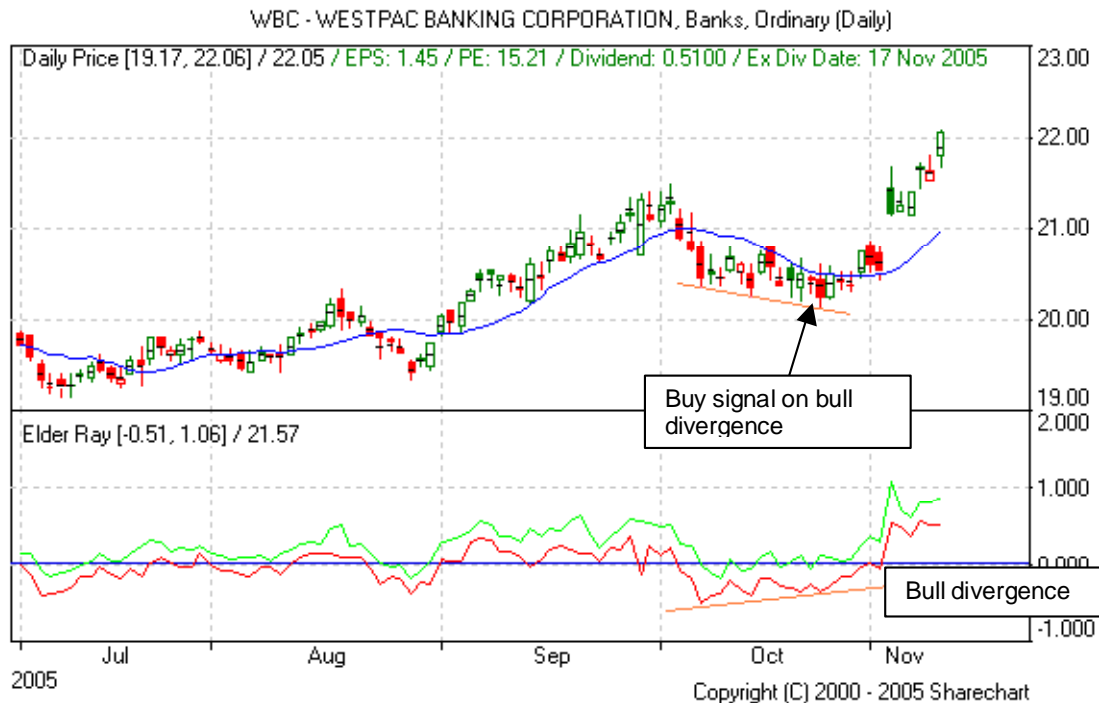
OK

Cancel

In the above box, you can set time period for the moving average. You can decide whether you want to use simple, or exponential. The first color is for bull power and the second color is for bear power.

Example

The following shows Westpac Banking Corporation with Elder Ray indicator for 13 days exponential moving average. The trading signals are shown in the figure.



ELLIOTT WAVE OSCILLATOR

Type

Momentum Indicator

History

Initiated by Perry Kaufman, the Elliott Wave Oscillator (EWO) takes the difference between two simple moving averages as an oscillator to measure the divergence between price and the oscillator.

How does it work?

The Elliott Wave Oscillator is simply the difference between two simple moving averages with different time periods. From its formula, it is essentially identical to MACD histogram. The only difference is that MACD takes the difference between exponential moving averages. Time periods are also set differently.

As an addition, ShareChart also draws a moving average on EWO to make it consistent with MACD Histogram. This may offer further information for you.

Trading Signals

Combined with Elliott Wave Theory, EWO is mainly used to identify divergence between price and the oscillator that may show potential reversal of trend. As indicated by Kaufman, a new upward trend is identified when the EWO makes a higher high than the previous EWO high.

Settings

Settings for EWO are simple. You need only set periods for the two simple moving averages and colors for positive and negative histogram bars. You may also set the period and color for the simple moving average on EWO.

Example

The following shows BHP Billiton Limited with EWO of periods 35 and 5. The divergence of EWO with price movement is shown in the following figure.

Elliott Wave Oscillator

INDICTATORS



FORCE INDEX

Type

Momentum Indicator, using a divergence line

History

Developed by Dr Alexander Elder, the Force index combines price movements and volume to measure the force, or the power, of bulls and bears in the market.

How does it work?

The raw force index is calculated by subtracting previous close from today's close and multiplying the result by today's volume. The raw force index is plotted as a histogram, with the center line set to zero.

A moving average will be used to smooth the raw force index that can be either simple, exponential, or weighted moving average. The smoothed average becomes force index.

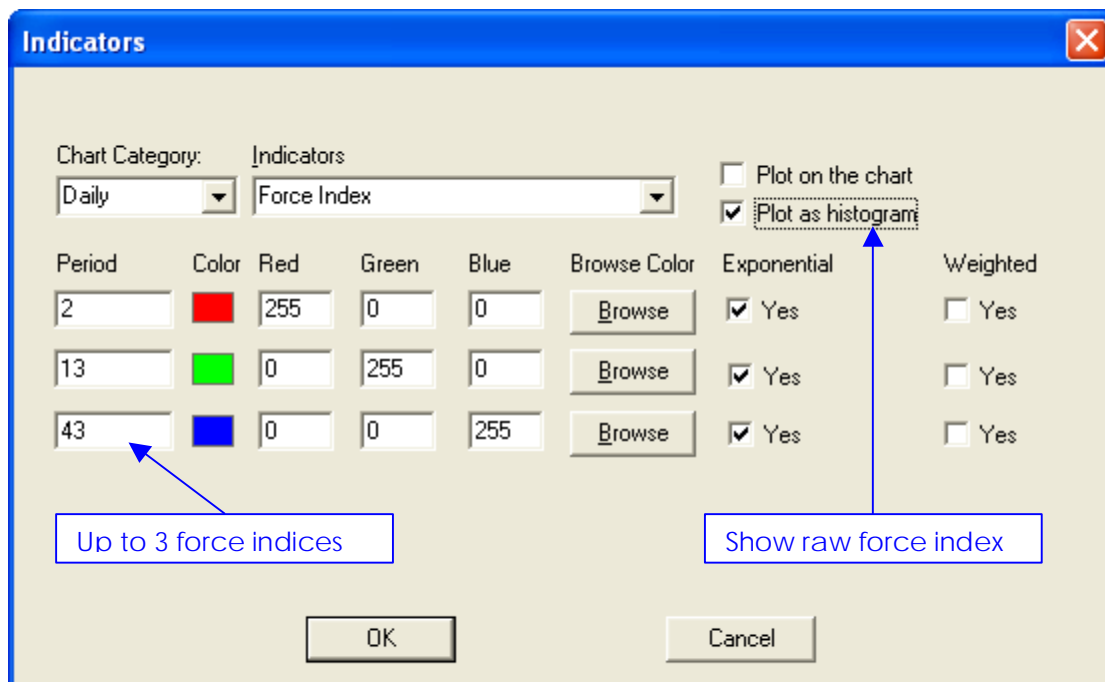
In general, 2 period and 13 period moving averages are used for short and longer term trading. If MA of force index is positive, bull controls the market, and if is negative bear is in control.

Trading Signals

The force index generates buy signal when it goes below zero and is trending up;
The force index generates sell signal when it becomes positive but is trending down;
Higher value of the force index signals the strong bull power;
Lower value of the force index signals the strong bear power;
Go long if the force index is below zero and there is a bullish divergence;
Go short if the force index is above zero and there is bearish divergence.

Settings

Sharechart allows you to plot the raw force index as histogram on the indicator window by ticking the Plot histogram check box and up to three moving averages (known as force indices) with different smoothing periods, as shown in the following figure.



Force Index

INDICATORS

You can decide whether you want to use simple, exponential, or weighted moving average to smooth the raw force index, as shown in the above figure.

Example

The following shows Adelaide Bank with raw force index histogram turned off, and 13 days force index. The trading signals are shown in the figure.



Internal Volatility

INDICATORS

INTERNAL VOLATILITY

Type

Momentum Indicator

How does it work?

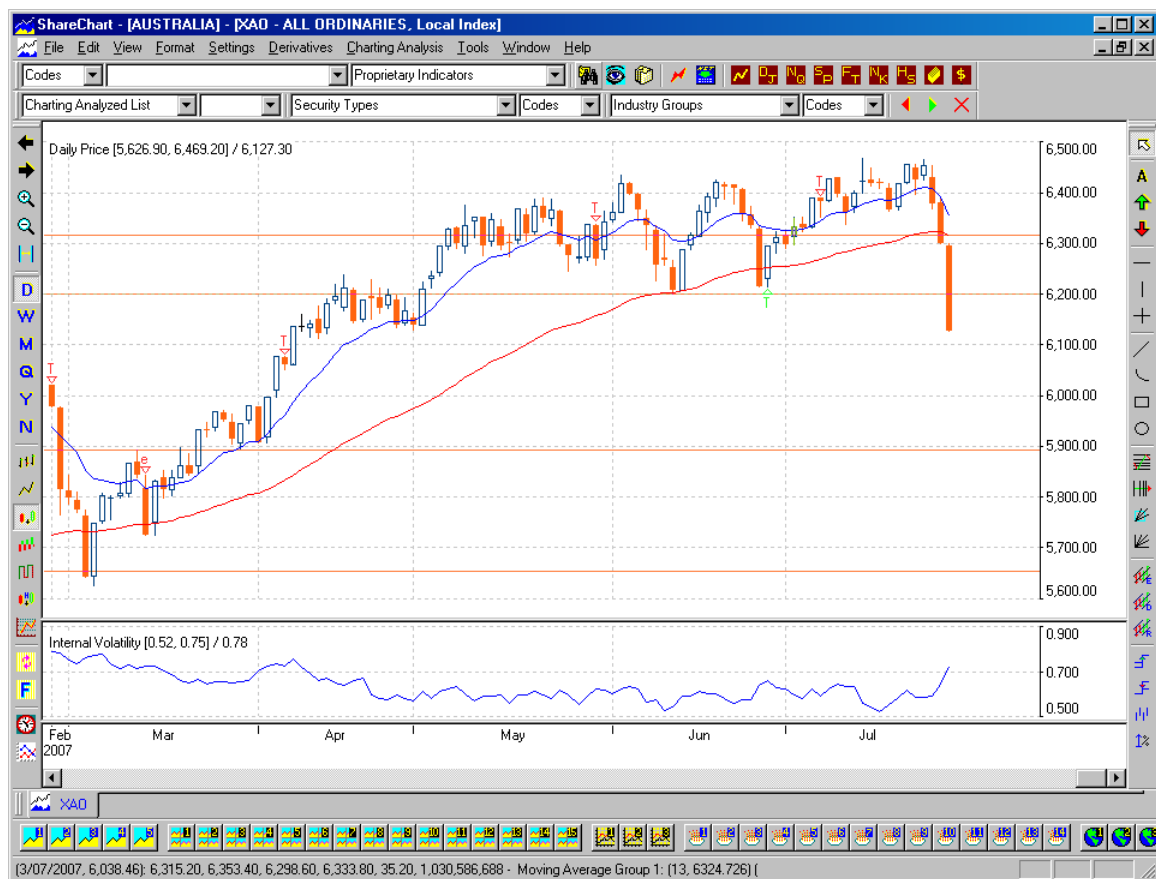
The internal volatility measures the open minus the close of the current price bar, candle or price tick divided by the true range of the current price bar, candle or price tick to show what % of the range the open to close represents.

Trading Signals

The internal volatility is used to measure how volatile the market is. High values are normally found just before market tops and bottoms. Low values are usually found in ranging markets.

Example

The following shows the Internal Volatility indicator for Australia All Ordinary Index.



KELTNER BANDS – ATR

Type

Self-adjusting Volatility Envelope that measures the movement of stocks in relation to an upper and lower moving-average band.

History

The indicator was originally developed by Chester Keltner and later modified by Linda Raschke to use an average true range (ATR) calculated over 10 periods. It is used by sophisticated investors to predict the trend of the market.

How does it work?

The Keltner Bands is made up of two bands plotted around an Exponential Moving Average (EMA), usually the 20-day EMA. Prices breaking through the bands often generate buy and sell signals.

As with all trend following systems, the Keltner Bands works well in trending markets, but doesn't work well in a sideways market.

Keltner Bands should be used in combination with other indicators, such as RSI or MACD, to provide confirmation of the strength of a market. An exit strategy utilizing trendlines and other indicators can be very useful. It will prevent eroding much of the potential profits if waiting for the price to close below the lower band.

Trading Signals

An over bought signal occurs when prices move above and close below the upper band, and an over sold when prices move below and close above the lower band.

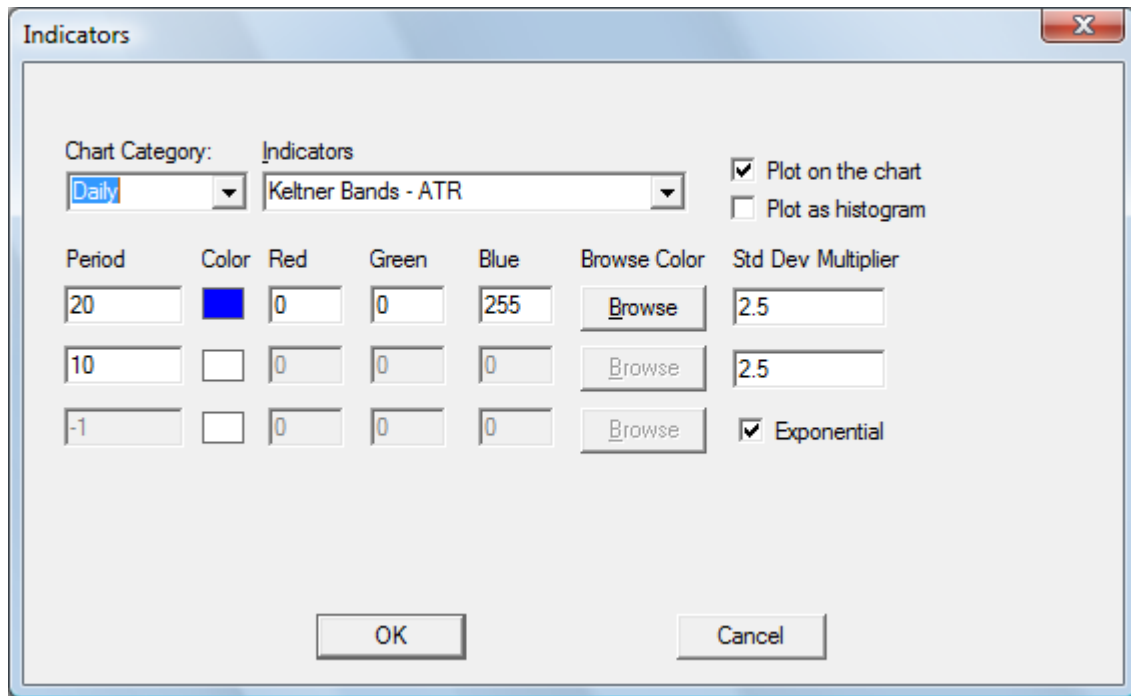
When prices close above the upper band, this means a breakout in upward volatility to be followed by higher prices. When prices close below the lower band, prices are expected to move lower.

Settings

In the Keltner Bands setting box below, the first period is for middle band of exponential moving average. The second period is for ATR calculation that is multiplied by Std Dev Multiplier to construct band width for the indicator.

Keltner Bands

INDICATORS



The 'Indicators' dialog box in ShareChart is shown. It has a title bar with a close button. Inside, the 'Chart Category' is set to 'Indicators'. Below it, a dropdown menu shows 'Daily'. To the right, 'Keltner Bands - ATR' is selected in another dropdown. There are two checkboxes: 'Plot on the chart' (checked) and 'Plot as histogram' (unchecked). Below these are three rows of settings for different periods. The first row is for period '20', with a blue color swatch, and values of 0 for Red, 0 for Green, and 255 for Blue. The second row is for period '10', with white color swatches and values of 0 for Red, 0 for Green, and 0 for Blue. The third row is for period '-1', with white color swatches and values of 0 for Red, 0 for Green, and 0 for Blue. Each row has a 'Browse Color' button. To the right of these rows is a 'Std Dev Multiplier' field set to '2.5'. At the bottom right, there is a checked checkbox for 'Exponential'. At the bottom center are 'OK' and 'Cancel' buttons.

Period	Color	Red	Green	Blue	Browse Color	Std Dev Multiplier
20	Blue	0	0	255	Browse	2.5
10	White	0	0	0	Browse	2.5
-1	White	0	0	0	Browse	2.5

☒ Plot on the chart
☐ Plot as histogram
☒ Exponential

Example

BHP Limited is used as an example below:

You will see that prices move outside the bands and then return back to bands generates trading signals.



KDJ

Type

Momentum Indicator, using a divergence line

How does it work?

The KDJ indicator is actually a derived form of the Stochastic with the only difference being an extra line called the J line.

The J line represents the divergence of the %D value from the %K. The value of J can go beyond [0, 100] for %K and %D lines on the chart.

Trading Signals

A negative value of J combined with %K and %D at the bottom range indicates a strong over sold signal.

Likewise, when the J value goes above 100, combined with %K and %D at the top range, it will indicate a strong over bought signal.

Settings

Sharechart Default: 14 period, 3 period, 1 period

Sharechart

Linear Regression

INDICATORS

LINEAR REGRESSION

Type

Trend following indicator

How does it work?

The linear regression line is derived from the construction of linear regression for each price point using the specified period. The connection of the linear regression value at each price point forms the linear regression value.

Trading Signals

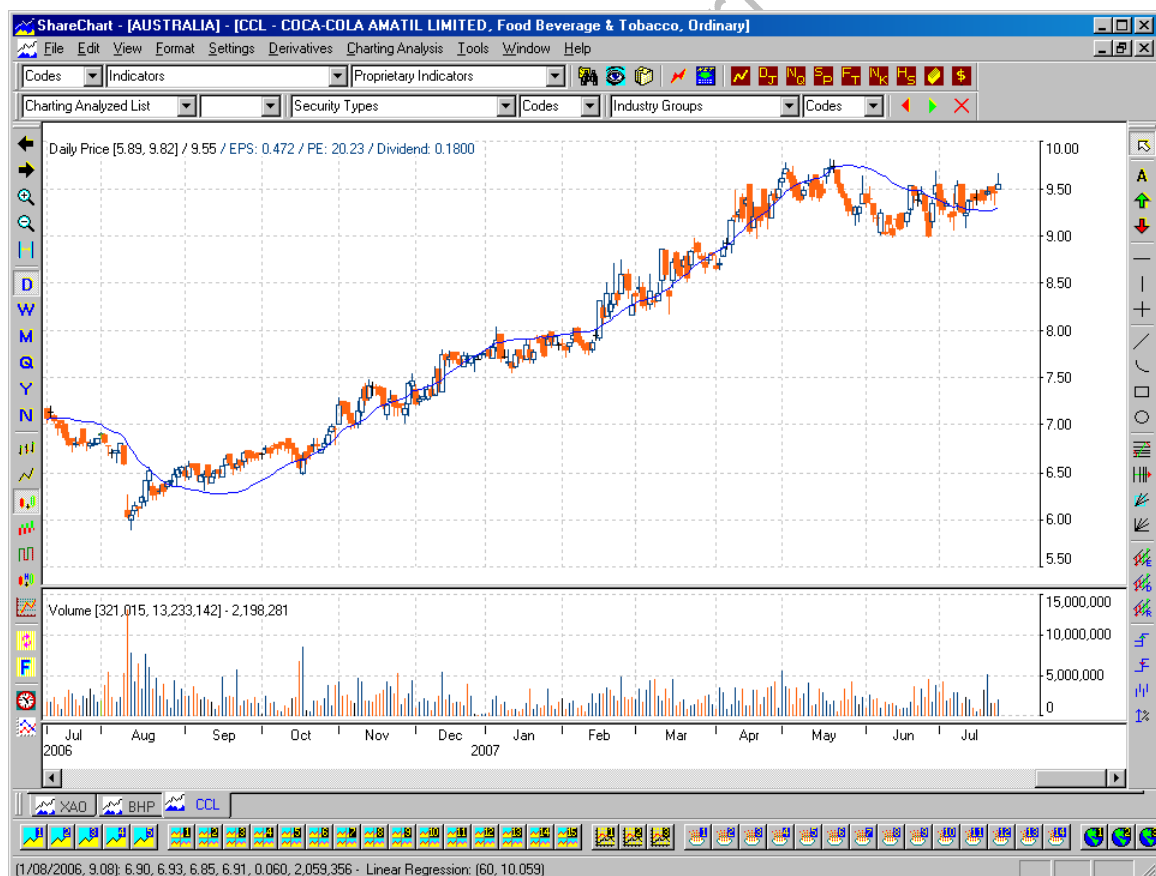
The linear regression line can be used identify trend. When the slope of the linear regression line is positive, the market is trending up. If the slope is negative, the market is trending down.

Settings

Sharechart Default: 60 period.

Example

Below is the daily chart for Coca-cola Amatil Limited, where the trending of the stock can be identified by its 60 days linear regression line.



MOVING AVERAGE CONVERGENCE DIVERGENCE (MACD) AS HISTOGRAM

Type

Trend following oscillator that shows the relationship between two moving averages of prices.

History

Thomas Aspray developed the MACD-Histogram in 1986; it was devised in order to solve the problem of the MACD lagging important moves of a security.

What Aspray wanted to do was to anticipate MACD crossovers, what was developed was the MACD-Histogram.

How does it work?

The MACD-Histogram represents the difference between the MACD and the 9-day EMA of the MACD, which is also referred to as the trigger line. The difference is then plotted as a histogram making centreline crossovers and divergences easily identifiable.

A centreline crossover for the MACD-Histogram is the same as a moving average crossover for MACD. If you will recall, a moving average crossover occurs when the MACD moves above or below the signal line.

If the value of the MACD is larger than the value of its 9-day EMA, then the value on the MACD-Histogram will be positive. Conversely, if the value of the MACD is less than its 9-day EMA, then the value on the MACD-Histogram will be negative.

Further increases or decreases in the gap between MACD and its 9-day EMA will be reflected in the MACD-Histogram. Sharp increases in the MACD-Histogram indicate that MACD is rising faster than its 9-day EMA and bullish momentum is strengthening. Sharp declines in the MACD-Histogram indicate that the MACD is falling faster than its 9-day EMA and bearish momentum is increasing.

Trading Signals

The main benefit of the MACD-Histogram is its ability to anticipate MACD signals. Divergences usually appear in the MACD-Histogram before MACD moving average crossovers. Armed with this knowledge, traders and investors can better prepare for potential trend changes.

The MACD-Histogram is an indicator of an indicator, and is therefore further away from the underlying price movement. The greater the distance between indicator and price, the more chance there is of a false signal. Thus, the MACD-Histogram should not be compared directly to the price movement of the security.

Settings

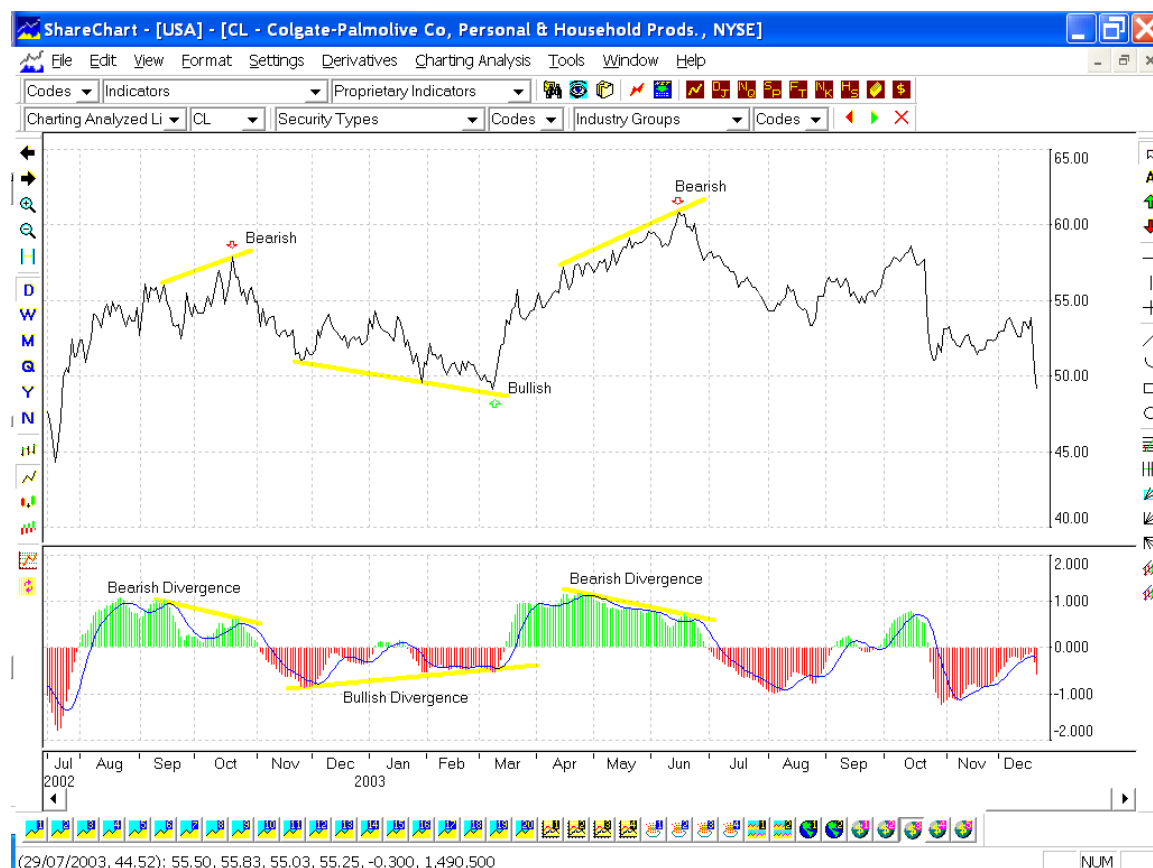
Sharechart Default: 10 period, 5 period, 5 period

Example

Below is the daily chart for Colgate-Palmolive Co. There are quite a few examples of divergence in share price from MACD as histogram indicator.

MACD as Histogram

INDICATORS



The setting for the MACD as histogram indicator for the graph above was 26 periods, 12 periods, and 9 periods, as shown below. It can be modified by going to Settings > Indicators > MACD as histogram.

Indicators

MACD as Histogram

☐ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
26	Red	255	0	0	Browse
12	Green	0	255	0	Browse
9	Blue	0	0	255	Browse

OK Cancel

MOVING AVERAGE CONVERGENCE DIVERGENCE (MACD) AS LINES

Type

Trend following oscillator that shows the relationship between two moving averages of prices.

History

The MACD, developed by Gerald Appel, is one of the simplest and most reliable indicators available.

How does it work?

The most popular formula for the MACD is the difference between a securities 26- day exponential moving average and its 12- day exponential moving average. A 9-day exponential moving average, called the "signal" (or "trigger") line is then plotted on top of the MACD to show buy/sell opportunities.

The MACD measures the difference between two moving averages. A positive MACD indicates that the 12-day EMA is trading above the 26-day EMA. A negative MACD indicates that the 12-day EMA is trading below the 26-day EMA.

Trading Signals

If the MACD is positive and rising, then the gap between the 12-day EMA and the 26-day EMA is widening. This indicates that the rate-of-change of the faster moving average is higher than the rate-of-change for the slower moving average. Positive momentum is increasing and this would be considered bullish.

If the MACD is negative and declining further, then the negative gap between the faster moving average and the slower moving average is expanding. Downward momentum is accelerating and this would be considered bearish.

The MACD proves most effective in wide-swinging trading markets. There are three popular ways to use the MACD:

Crossovers

Overbought/oversold conditions

Divergences

MACD centreline crossovers occur when the faster moving average (red line) crosses the slower moving average (blue line). The basic MACD trading rule is to sell when the MACD falls below its signal line. Similarly, a buy signal occurs when the MACD rises above its signal line. It is also popular to buy/sell when the MACD goes above/below zero. See example.

The MACD is also useful as an overbought/oversold indicator. When the shorter moving average pulls away dramatically from the longer moving average (i.e., the MACD rises), it is likely that the security price is overextending and will soon return to more realistic levels. MACD overbought and oversold conditions vary from security to security.

An indication that an end to the current trend may be near occurs when the MACD diverges away from the security. A bearish divergence occurs when the MACD is making new lows while prices fail to reach new lows. A bullish divergence occurs when the MACD is making new highs while prices fail to reach new highs. Both of these divergences are most significant when they occur at relatively overbought/oversold levels

Settings

MACD as lines

INDICATORS

Sharechart Default: 10 period, 5 period, 5 period

Example

The chart below is of US stock Exxon Mobil Corp.

MACD as lines in overbought area and forms bearish crossover – price then falls

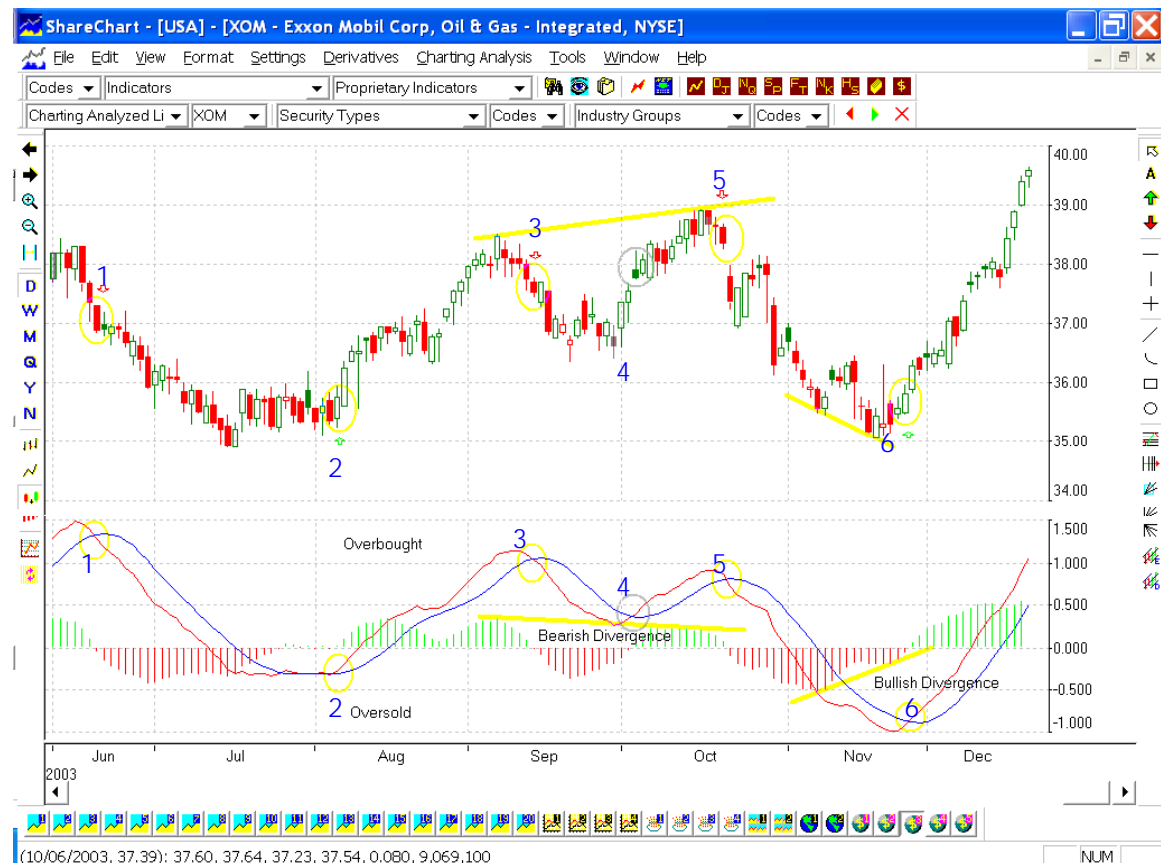
MACD as lines below zero forms bullish crossover – share price then rises

MACD as lines in overbought area and forms bearish crossover – price then falls

MACD as lines above zero forms bullish crossover – share price then rises

MACD as lines forms a bearish divergence & bearish crossover – price then falls

MACD as lines in oversold area forms a bullish divergence & bullish crossover – price then rises



The setting for the MACD as lines indicator for the graph above was 60 periods, 12 periods, and 9 periods. It can be modified by going to Settings > Indicators > MACD as lines.

MIKE BASE CHANNELS

Type

Self –adjusting Volatility Envelope

History

Mike Base Channels is based on the concept of channels. It uses typical price as base and consists of three channels classified as weak, medium and strong. The typical price is the weighted average of high, low and close of a day. The weak channel is determined by the difference between base and high/low as the distance to the base. The medium channel is determined by the difference between low and high as the distance to the base. The strong channel is determined by the difference between high and low as the distance to high/low.

How does it work?

Mike Base Channels allows users to analyze one-day volatility based on the high, low and close of the day. It tries to use the typical price to reflect the price movement during the day.

The three channels of Mike Base Channels represent weak, medium, and strong support/resistance, which are plotted at volatility levels above and below the typical price. A distinct characteristic of Mike Base Channels is that it uses a day's high, low and close to derive possible support/resistance. This approach tries to overcome the lagging weakness of moving average in Bollinger Bands.

Mike Base Channels is not a trend following indicator. It is used to analyze possible weak, medium, or strong support/resistance by its three channels.

Trading Signals

The three channels of Mike Base Channels have the following interpretations.

The weak channel compares the high/low with typical price. If the typical price is near low, it is likely that prices tend to move lower and may have trouble returning to its high. The resistance level should be the upper band, which is lower than its high. On the other side, if the price closes into upper band during its downtrend, the lower band will become its support. Similar analysis applies to its up trend.

The medium channel assumes that the current price range is same as the previous range. During up trend, the upper band is the resistance. During down trend, the lower band is the support. In many cases, prices move along either upper band or lower band. It is very rare that one-day prices (high, low and close) will respect both bands.

The strong channel is the extreme limits of price movement. It places the previous price range on top of the previous high and below the previous low. It is very rare that prices would go out of the strong channel.

Settings

There are no periods in calculating Mike Base Channels. However, you can set them non-zeros to show the respective channels and zeros to turn channels off.

Sharechart Default: 1 in the first period to show the first channel (weak channel), and 0s in other periods.

Example

Mike Base Channels

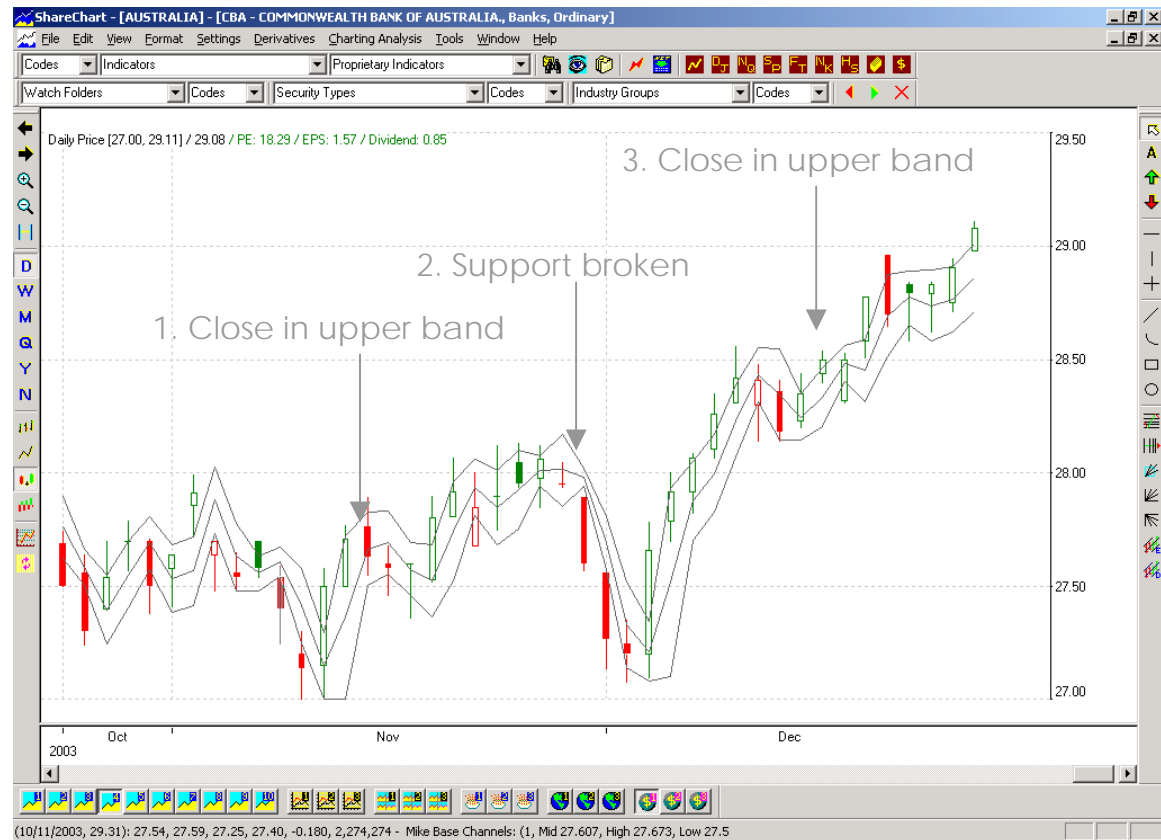
INDICATORS

Commonwealth Bank of Australia is used as an example below to illustrate the weak bands:

Prices close in the upper band for most cases with lower band as support.

Prices break the lower band that is the support and thus form down trend.

Prices break the upper band (as resistance) and thus form upper trend. The prices close in the upper band for most cases with lower band as support.



MOMENTUM

Type

Momentum Indicator

How does it work?

Momentum measures how much a securities price has changed over a given time span. It is interpreted in the same way as the Price rate of change (ROC); both indicators display the rate-of-change of a securities price. The difference being that the ROC displays it as a percentage, whereas the momentum indicator displays the rate-of-change as a ratio.

Trading Signals

There are two ways to use the Momentum indicator:

You can use the Momentum indicator as a trend-following oscillator similar to the MACD. Buy when the indicator bottoms and turns up, and sell when the indicator peaks and turns down. You can use the short-term (e.g., 10-period, red line) moving average of the indicator to determine when it is bottoming or peaking.

If the Momentum indicator reaches extremely high or low values (relative to its historical values), you should assume a continuation of the current trend. For example, if the Momentum indicator reaches extremely high values and then turns down, you should assume prices to probably climb higher. In either case, only trade after prices confirm the signal generated by the indicator (e.g., if prices peak and turn down, wait for prices to begin to fall before selling).

You can also use the Momentum indicator as a leading indicator. This method assumes that market tops are typically identified by a rapid price increase (when everyone expects prices to go higher) and that market bottoms typically end with rapid price declines (when everyone wants to get out). This is often the case, but it is also a broad generalization.

As a market peaks, the Momentum indicator will climb sharply and then fall off--diverging from the continued upward or sideways movement of the price. Similarly, at a market bottom, Momentum will drop sharply and then begin to climb well ahead of prices. Both of these situations result in divergences between the indicator and prices.

Settings

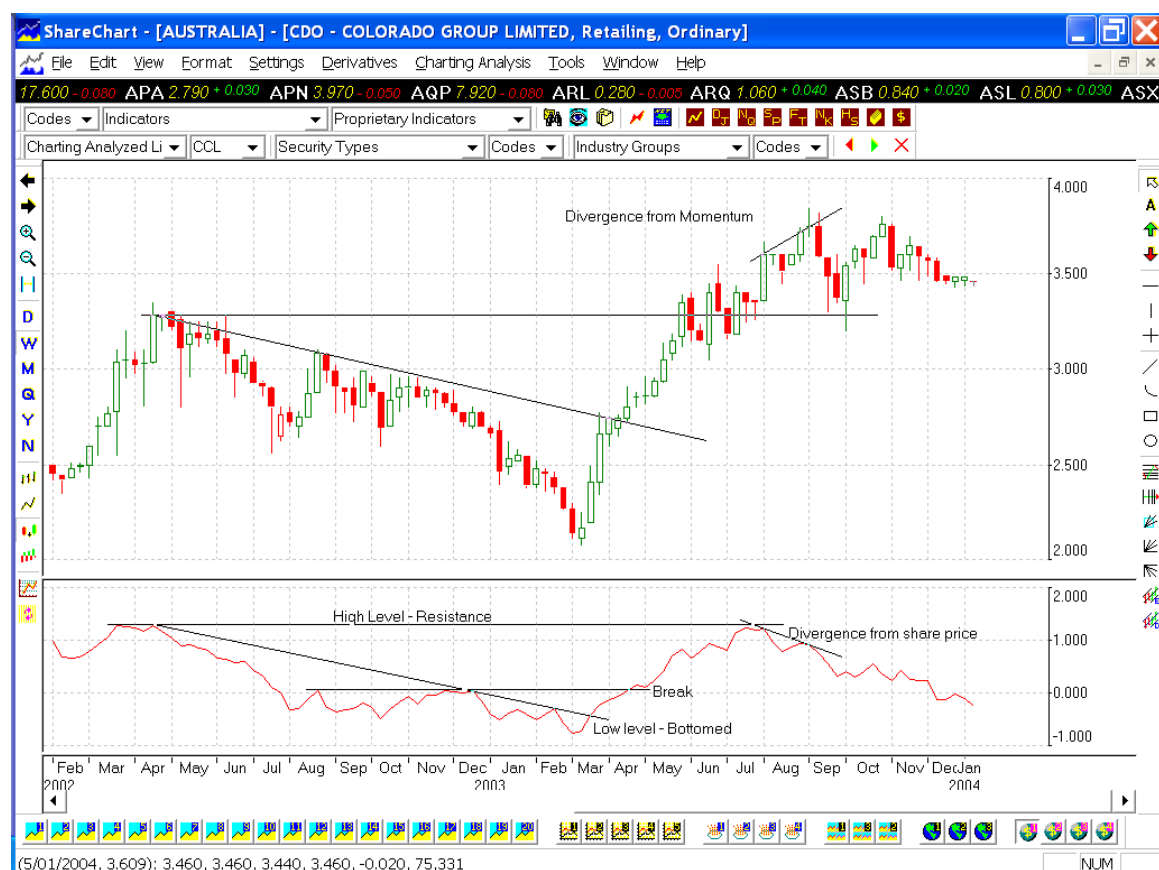
Sharechart Default: 10 period, 15 period, 20 period

Example

Below is the weekly chart for Colorado Group Ltd. The chart was in a downtrend until the momentum indicator bottomed just above -1. It then broke through the downtrend and proceeded to break through previous short-term resistance on momentum indicator in May. The price rallied over \$1.00 (40% gain) until a bearish divergence was formed into September. The share price made higher highs, while the momentum indicator made lower highs at a high level at approx +1.

Momentum

INDICATORS



The setting for the Momentum indicator for the graph above was 20, as shown below. It can be modified by going to Settings > Indicators > Momentum. Note you can use multiple periods simultaneously.

Period	Color	Red	Green	Blue	Browse Color
20	Red	255	0	0	Browse
0	Green	0	255	0	Browse
0	Blue	0	0	255	Browse

MONEY FLOW INDEX

Type

Volume/Momentum Indicator - Compares Closing Price, Range and Volume

How does it work?

The Money Flow Index measures the strength of money flowing in and out of a security. The indicator compares the value traded on up-days to value traded on down-days.

It is related to the Relative Strength Index, but where the RSI only incorporates prices, the Money Flow Index accounts for volume.

Trading Signals

Look for market tops to occur when the indicator is above 80. Look for market bottoms to occur when the indicator is below 20

Ranging markets can be identified by Money Flow Index fluctuating close to the 50 level

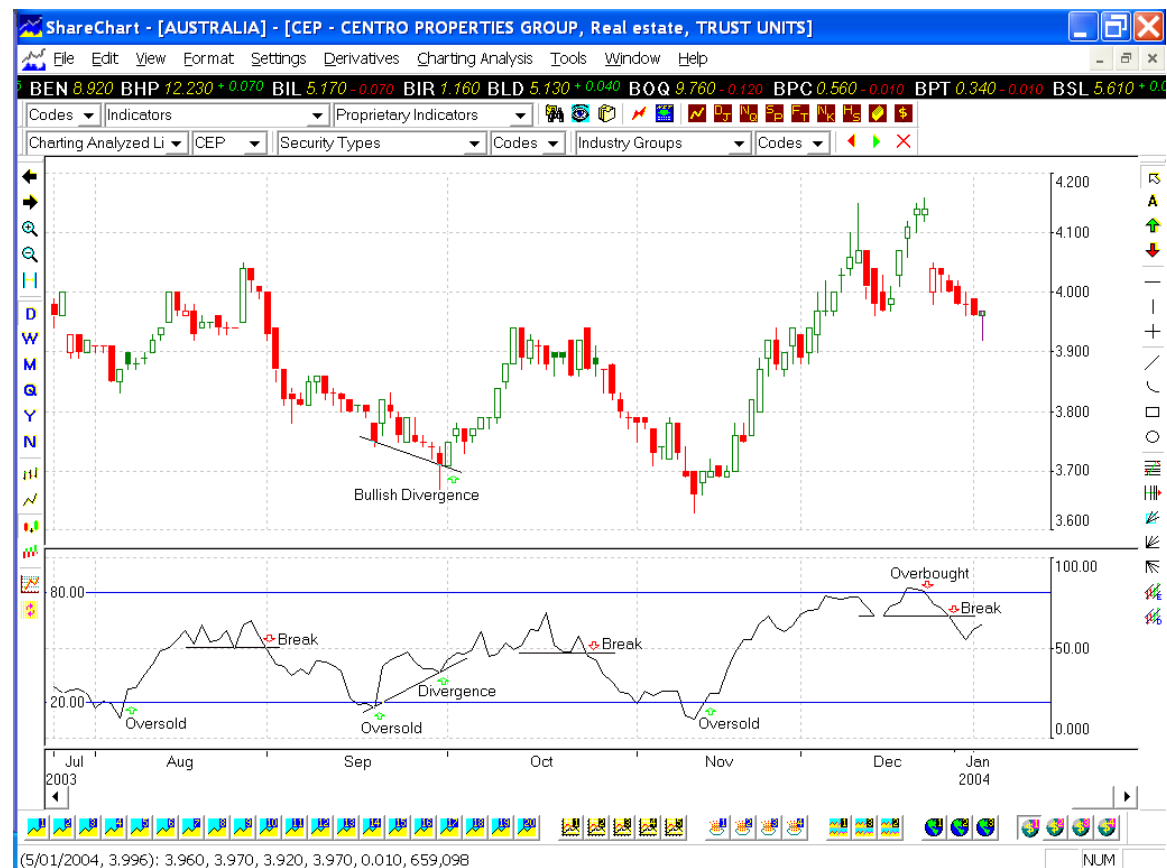
Look for divergences between the indicator and the price action. If the price trends higher and the indicator trends lower, a reversal may be imminent (and vice versa)

Settings

Sharechart Default: 20 periods

Example

The daily chart below is of Cento Properties Group. Note that using the Money flow indicator you can determine overbought and oversold areas, breaks and divergences. If money is flowing in then share price should rise, if money is flowing out then share price should fall. In September, the Money Flow Index was in oversold territory and then proceeds to form a bullish divergence (money flowing in while share price came down), the share price then rose.






The setting for the Money Flow Index for the graph above was 13, as shown below. It can be modified by going to Settings > Indicators > Money Flow Index.

Indicators

Money Flow Index

☒ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
13		0	0	0	Browse
-1		0	0	0	Browse
-1		0	0	0	Browse

OK Cancel

MOVING AVERAGES % CHANNEL

Type

Trend Indicator – Moving Averages – Overbought/Oversold

How does it work?

Moving Averages % Channels (or Price envelopes) are plotted at a set percentage above and below a moving average. They are used to indicate overbought and oversold levels.

The length of the moving average should be varied according to the cycle that you are trading. The Percentage should be set so that about 90% of price activity is contained within the bands. Adjust the bandwidth if volatility increases over time.

Trading Signals

When price swings back and forth across the moving average it is ranging

When price stays above the moving average it is in an up-trend

When price stays below the moving average it is trending down

Bearish when price turns down near the upper band

Bullish when price turns up near the lower band

You might want to close any short position if price turns up near the lower band or crosses back above the moving average (from below)

You might want to close any long position if price turns down near the upper band or if it crosses back below the moving average (from above)

Settings

Sharechart Default: 5 period, 5% upper band & 5% lower band

Example

The chart below of Deutsche Diversified Trust shows share price fluctuating within the Moving Averages % Channel. When share price was in the lower band the share price remained in a clear downtrend. When share price was in the upper band the share price remained in a clear uptrend. There was a false break below the moving average line for 5 days.

Moving Averages % Channel

INDICATORS



The setting for the Moving Average % Channel for the graph above was 20, shown below. It can be modified: go to Settings > Indicators > Moving Average % Channel.

Indicators

Moving Average % Channel

☒ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color	Percentage (%)
20	Blue	0	0	255	Browse	5
-1		0	0	0	Browse	5
-1		0	0	0	Browse	

OK Cancel

MOVING AVERAGES

Type

Trend Indicator – Moving Averages – Closing Price

How does it work?

Moving Averages are one of the most popular and easy to use tools available to traders and investors.

A moving average is an indicator that shows the average value of a security's price over a period of time. As the security's price changes, its average price moves up or down.

Using the average of prices, moving averages smooth a data series, making it easier to spot trends. This can be especially helpful in volatile markets. Because past price data is used to form moving averages, they are considered lagging, or trend following, indicators.

There are five popular types of moving averages:

Simple - apply equal weight to the prices

Exponential - apply more weight to the current days value

Weighted - apply more weight to recent prices

Triangular - apply more weight to prices in the middle of the time period

Variable - change the weighting based on the volatility of prices

Sharechart shows simple averages on prices and exponential averages on the MACD indicator.

Moving averages can be calculated on any data series including a security's open, high, low, close, volume, or another indicator. Interpreting the moving average on an indicator is similar to that of a securities, when the indicator moves above the moving average, it signifies continued upward movement of the indicator. When the indicator moves below the moving average, it indicates continued downward movement of the indicator. A moving average of another moving average is also common. Sharechart uses a stocks close price to form its moving averages.

Moving averages do not predict a change in the trend, but rather they follow behind the current trend. They are therefore best suited to trend identification and trend following purposes, not prediction.

As moving averages follow the trends they work best when a security is trending and are not effective when a security is moving within a range. Keeping this in mind traders and investors should first identify securities that are trending before analysing with moving averages.

Trading Signals

To interpret the moving averages for trading and investing purposes, a buy signal is generated when the fast moving average has crossed the slow moving average and is moving above the slow moving average.

A sell signal is generated when the fast moving average has crossed below the slow moving average and is moving below the slow moving average.

This is known as the double moving average crossover with the idea being that the slower moving average is more responsive to price movement, and so acts as the signal to buy or sell. The longer moving average acts as a stable base against the security.

Settings

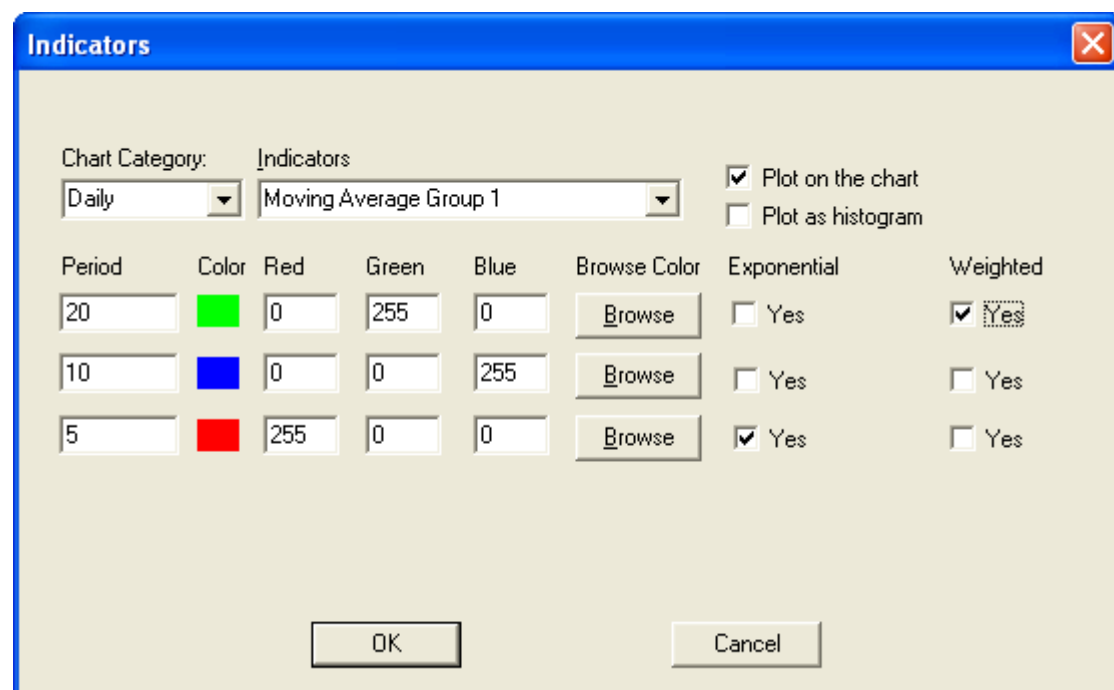
Moving Averages

INDICATORS

Shorter length moving averages are more sensitive and identify new trends earlier, but also give more false alarms. Longer moving averages are more reliable but only pick up the big trends.

It is best to use a moving average that is half the length of the cycle that you are tracking. If the peak-to-peak cycle length is roughly 40 days then a 20-day MA is appropriate.

ShareChart provides four groups of moving averages. You can draw up to three moving averages for each group. Therefore, you can draw up to twelve moving averages in ShareChart. For each group, you can set periods and colors for each moving average, and their types (simple, exponential, or weighted) by ticking appropriate check boxes as follows.



The image shows the 'Indicators' dialog box in ShareChart. It has a blue title bar with the text 'Indicators' and a close button. The main area is light beige. At the top, there are two dropdown menus: 'Chart Category:' set to 'Daily' and 'Moving Average Group 1'. To the right of these are two checkboxes: 'Plot on the chart' (checked) and 'Plot as histogram' (unchecked). Below these are three rows of settings for moving averages. Each row has a 'Period' input, a 'Color' dropdown (with a color swatch), and three input fields for 'Red', 'Green', and 'Blue' values. To the right of these is a 'Browse Color' button. Further right are two checkboxes: 'Exponential' and 'Weighted'. At the bottom are 'OK' and 'Cancel' buttons.

Period	Color	Red	Green	Blue	Browse Color	Exponential	Weighted
20	Green	0	255	0	Browse	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
10	Blue	0	0	255	Browse	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
5	Red	255	0	0	Browse	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes

A moving average without any check box ticked implies a simple moving average. As in the above example, the moving average of period 10 is a simple moving average.

EXAMPLE

The graph below is of Deutsche Industrial Trust and the 2 Moving Averages (MA) show bearish and bullish crossovers. When the short term MA crosses above the longer term MA it is bullish and when it crosses below it is bearish.

Moving Averages

INDICTATORS



The setting for the Moving Averages for the graph above was 5 and 13 periods.

NUMBER OF TRADES

Type

Volume Indicator

How does it work?

Number of trades shows how many trades were placed on a security for a particular day. It can be used to gauge the enthusiasm for the buyers and sellers on the security.

Being independent of price, the number of trades is another tool in which you can use to analyse the security. It can be seen beneath the chart below in histogram form.

Trading Signals

The volume of trades can be used to analyse the activity of a security. The number of trades shows the intensity of a price move.

If a price move is associated with a large number of trades then the move is strong, if the move is associated with a small number of trades then the price move is weak and may not hold.

Low levels of trades are characteristic of the indecisive expectations that are present in consolidation periods and market bottoms.

A higher number of trades will occur at market tops when there is a strong consensus that prices will continue to rise. It is also very common for the number of trades to rise at the beginning of new trends.

ON BALANCE VOLUME (OBV)

Type

Volume/Momentum Indicator – compares closing price and volume

History

The On Balance Volume (OBV) indicator was developed by Joseph Granville and is explained in his book "New Strategy of Daily Stock Market Timing for Maximum Profit".

How does it work?

OBV shows whether volume is flowing into or out of a security.

When the security closes higher than the previous close, all of the day's volume is considered up-volume. When the security closes lower than the previous close, all of the day's volume is considered down-volume.

The basic assumption, regarding OBV analysis, is that OBV changes precede price changes. The theory is that smart money can be seen flowing into the security by a rising OBV. When the public moves into the security, both the security and the OBV will surge ahead.

The OBV is in a rising trend when each new peak is higher than the previous peak and each new trough is higher than the previous trough.

Likewise, the OBV is in a falling trend when each successive peak is lower than the previous peak and each successive trough is lower than the previous trough.

When the OBV is moving sideways and is not making successive highs and lows, it is in a doubtful trend.

Trading Signals

During a ranging market watch for a rising or falling On Balance Volume:

Rising OBV warns of an upward breakout

Falling OBV warns of a downward breakout

During a trending market watch for a rising or falling On Balance Volume:

Bullish divergence between OBV and price warns of market bottoms

Bearish divergence between OBV and price warns of market tops

Settings

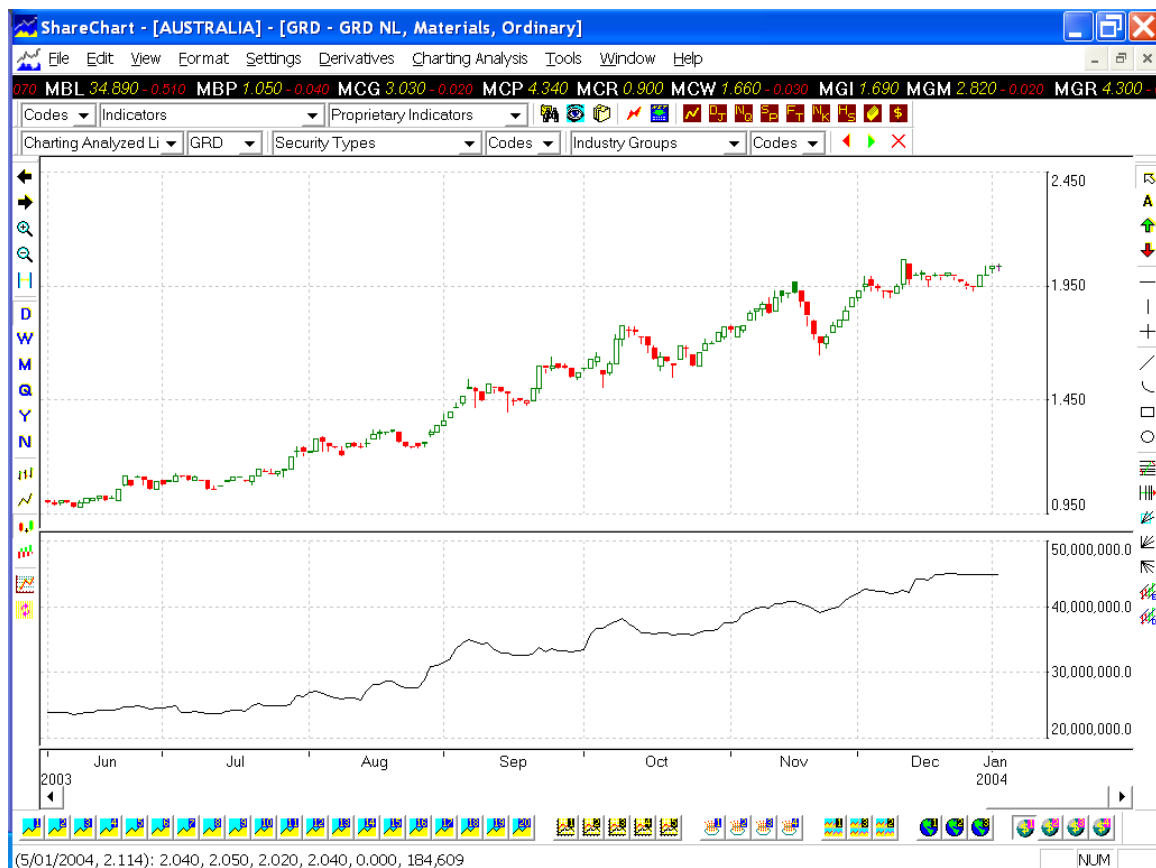
Sharechart Default: 14 period

Example

The chart below is GRD, notice that the share price rises in sync with the On Balance Volume indicator.

On Balance Volume (OBV)

INDICATORS



The setting for the On Balance Volume for the graph above was 13 periods. It can be modified: go to Settings > Indicators > On Balance Volume.

The Indicators dialog box shows the settings for the On Balance Volume (OBV) indicator. The indicator is selected from the dropdown menu. The 'Period' is set to 13. The 'Color' is set to Red. The 'Plot on the chart' and 'Plot as histogram' checkboxes are both checked. The 'Browse Color' button is available for each color selection.

Period	Color	Red	Green	Blue	Browse Color
13	Red	0	0	0	Browse
-1	Green	0	0	0	Browse
-1	Blue	0	0	0	Browse

OK Cancel

OSCILLATOR (OSC)

Type

Trend following Indicator

How does it work?

The oscillator displays the difference between two moving averages. It can be expressed as either points or as a percentage. ShareChart uses the percentage price oscillator.

A centreline crossover by the oscillator signals the shorter moving average crossing above or below the longer moving average. A 5% percentage price oscillator means that the shorter moving average is 5% higher than the longer moving average.

Trading Signals

The price oscillator is a trend following indicator, and thus can do an outstanding job of keeping you on the right side of the market during trending periods.

Keeping an eye on the price oscillator can provide buy signals, as when the oscillator passes through the zero centreline the short moving average has crossed the longer moving average, which may lead to trading opportunities.

Settings

Sharechart Default: 10 period, 15 period, 20 period

Example

The daily chart below is of the Australian company Genetic Technologies Ltd. The Oscillator indicator below the chart forms a bullish crossover on 28/04 and begins an uptrend at approx 30c and the share price rallies to above 80c before retreating to approx 60c where a bearish crossover is formed on 24/09. The share price enters a downtrend and re-treats even further to under 50c.

Oscillator (OSC)

INDICATORS



The setting for the Oscillator (OSC) for the graph above was 60 periods and 5 periods. It can be modified: go to Settings > Indicators > Oscillator (OSC).

Indicators

Oscillator (OSC)

Plot on the chart
Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
60	Green	0	255	0	Browse
5	Red	255	0	0	Browse
0	Blue	0	0	255	Browse

OK Cancel

PARABOLIC SAR

Type

Trend Indicator – Stop and Reverse System

History

Parabolic SAR was developed by J. Welles Wilder Jr. and is described in his book “New Concepts in Technical Trading Systems”.

How does it work?

The Parabolic Time / Price System is used to set trailing price stops and is referred to as the SAR (Stop-and –Reversal).

Parabolic SAR should only be employed in trending markets - when it provides excellent entry and exit points.

You should close long positions when the price falls below the SAR and close short positions when the price rises above the SAR.

If you are long (i.e., the price is above the SAR), the SAR will move up every day, regardless of the direction the price is moving. The amount the SAR moves up depends on the amount that prices move.

Trading Signals

Go long when price meets the Parabolic SAR stop level, while short
Go short when price meets the Parabolic SAR stop level, while long

Settings

Sharechart Default: 6 period

Example

The daily share price for Harvey Norman (HVN) broke through the Parabolic SAR (from the downside) just above \$2 and rallied to well over \$3 before breaking through the Parabolic SAR (from the upside). The Parabolic SAR is the pink dotted line trailing below the share price as the share price rises. Once the share price breaks below this line it trails above the share price.

Parabolic SAR

INDICATORS



The setting for the Parabolic SAR for the graph above was 60 periods. It can be modified: go to Settings > Indicators > Parabolic SAR.

Indicators

Parabolic SAR

☒ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
60		255	0	255	<input type="button" value="Browse"/>
-1		0	0	0	<input type="button" value="Browse"/>
-1		0	0	0	<input type="button" value="Browse"/>

PRICE RATE OF CHANGE (ROC)

Type

Momentum Indicator – closing price relative to previous closing price

How does it work?

The Price Rate-of-Change (ROC) indicator displays the difference between the current price and the price n-time periods ago. The difference can be displayed in either points or as a percentage.

It is well recognized that security prices surge ahead and retract in a cyclical wave-like motion. This cyclical action is the result of the changing expectations as bulls and bears struggle to control prices.

The ROC displays this wave-like motion in an oscillator format by measuring the amount that prices have changed over a given time period. As prices increase, the ROC rises; as prices fall, the ROC falls.

Trading Signals

The higher the ROC, the more overbought the security; the lower the ROC, the more likely a rally. However, as with all overbought/over-sold indicators, it is prudent to wait for the market to begin to correct (i.e., turn up or down) before placing your trade. A market that appears overbought may remain overbought for some time. In fact, extremely overbought/oversold readings usually imply a continuation of the current trend.

Settings

The time period used to calculate the ROC may range from 1-day (which results in a volatile chart showing the daily price change) to 200-days (or longer). The most popular time periods are the 12 and 25-day ROC for short to intermediate-term trading. Sharechart uses the 12-day ROC.

Sharechart Default: 12 period, 12 period

Example

The Price Rate of Change (ROC) indicator is illustrated below the daily share chart of Ion Ltd. Notice that ROC was very high before the share drop.

Price Rate of Change (ROC)

INDICATORS



The setting for the Price Rate of Change (ROC) for the graph above was 25 periods and 25 periods. It can be modified: go to Settings > Indicators > Price Rate of Change (ROC).

The 'Indicators' dialog box is shown, with 'Price Rate of Change (ROC)' selected in the 'Indicators' list. The 'Plot on the chart' checkbox is checked, and the 'Plot as histogram' checkbox is unchecked. The 'Period' is set to 25. The 'Color' is set to Red. The 'Red' value is 255, 'Green' is 0, and 'Blue' is 0. The 'Browse Color' button is visible. The 'OK' and 'Cancel' buttons are at the bottom.

Period	Color	Red	Green	Blue	Browse Color
25	Red	255	0	0	Browse
25	Green	0	255	0	Browse
-1	Blue	0	0	0	Browse

Psychological Line (PSY)

INDICATORS

PSYCHOLOGICAL LINE (PSY)

Type

Momentum – ratio of rising periods over total periods

How does it work?

PSY, as an indicator, is the ratio of the number of rising periods over the total number of periods. It reflects the buying power in relation to the selling power.

If PSY is above 50%, it indicates that buyers are in control. Likewise, if it is below 50%, it indicates the sellers are in control. If the PSY moves along the 50% area, it indicates balance between the buyers and sellers and therefore there is no direction movement for the market.

Trading Signals

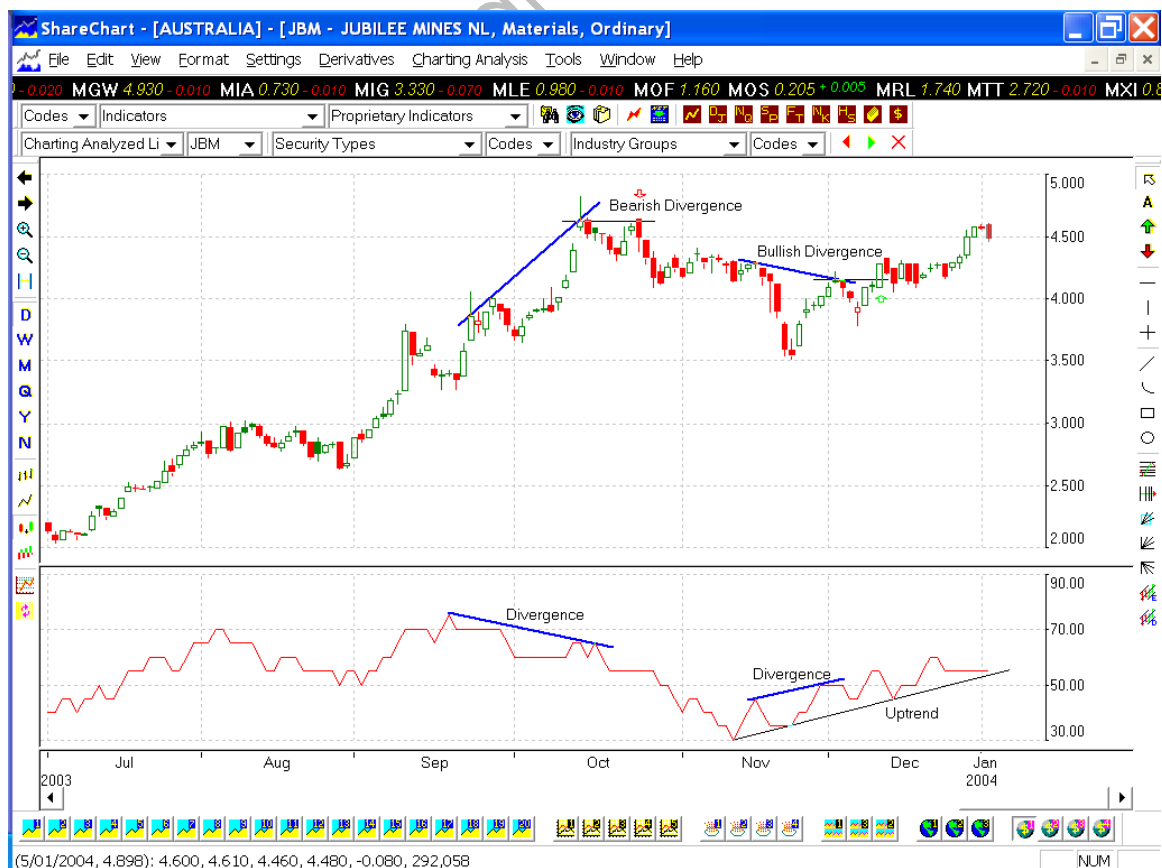
You may also look for a divergence signal. When the stock prices make a new high (low) while PSY does not make a new high (low), it signals the divergence. You should take caution when you trade.

Settings

Sharechart Default: 10 period, 15 period, 20 period

Example

The daily share chart for Jubilee Mines in October 2003 rose to over \$4.50 where it formed a bearish divergence with the Psychological Line indicator. The share price tried to re-test the resistance before falling to approx \$3.50. The share moved down to \$3.50 while the Psychological Line started to move up forming a bullish divergence in December 2003. The share price then moved up to over \$4.50.



Psychological Line (PSY)

INDICTATORS

The setting for the Psychological Line (PSY) for the graph above was 20 periods. It can be modified: go to Settings > Indicators > Psychological Line (PSY).

Indicators

Psychological Line (PSY)

☐ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
20	<div></div>	<input type="text" value="255"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="button" value="Browse"/>
0	<div></div>	<input type="text" value="0"/>	<input type="text" value="255"/>	<input type="text" value="0"/>	<input type="button" value="Browse"/>
0	<div></div>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="255"/>	<input type="button" value="Browse"/>

Rate of Return

INDICATORS

RATE OF RETURN (ROR)

Type

Evaluation Indicator

How does it work?

The Rate of Return (ROR) indicator can be used to calculate the annual rate of return of stocks. It is not an indicator that is used to generate trading signals. Rather, it is used to compare the profitability of different trading opportunities.

The Rate of Return is derived from the difference or change between the values of linear regression lines of two points over a specified period. The difference is then annualised to form the rate of return or ROR.

Settings

Sharechart Default:

The period for calculating linear regression line is set 120. The period for two points is set to 60.

Example

The following chart shows the Rate of Return indicator.



Relative Strength Comparison INDICATORS

RELATIVE STRENGTH COMPARISON (RSC)

Type

Trend Indicator – price comparison

How does it work?

The relative strength comparison compares two securities to see how they are performing comparatively.

Relative strength compares a securities price with that of a 'base' security. Sharechart uses the XAO (All Ordinaries index) as its default base security whilst in the Australian Market.

The default can be easily changed, if for any reason you wish to compare two different securities against each other. To do this go to Settings<Indicators and from the drop down box select Relative strength comparison. Insert the nominated security into the base code box and the date from when you wish to compare the security.

Trading Signals

When the relative strength comparison is moving up, the security is out-performing better than the base.

When the relative strength is moving down, the security is performing worse than the base (not rising as fast or falling faster).

When the relative strength is moving sideways the security and the base are performing the same (rising and falling at the same percentages).

Settings

Sharechart Default:

All Ordinaries Index (XAO)

Australian Market

Dow Jones Ind. Index (DJI)

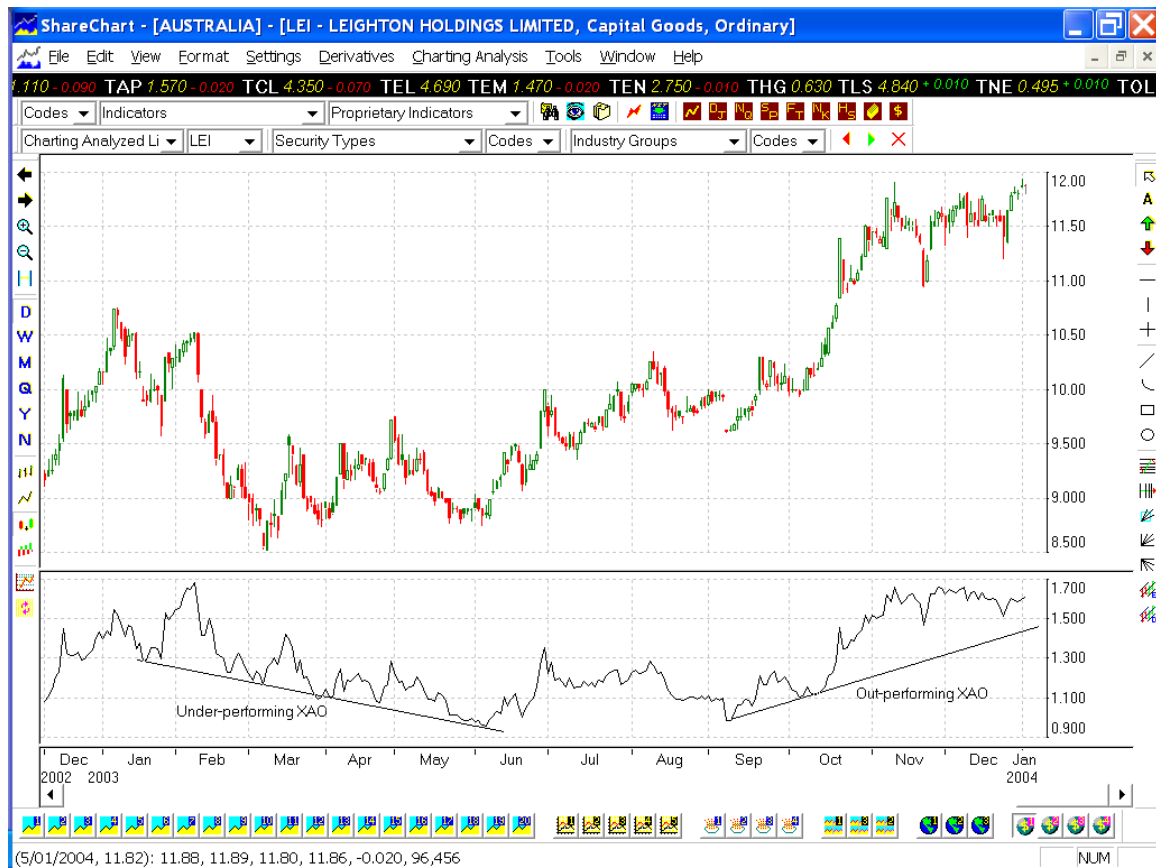
USA Market

Note: Adjust comparison "date from" accordingly to your trading time frame

Example

The share price for Leighton Holdings Ltd (LEI) under-performed the Australian All Ordinaries Index (XAO) between February and June 2003. However, LEI out-performed the XAO from September through to November 2003.

Relative Strength Comparison INDICATORS



The setting for the Relative Strength Comparison (RSC) for the graph above was 13 periods. It can be modified: go to Settings > Indicators > Relative Strength Comparison (RSC).

Indicators

Relative Strength Comparison (RSC)

Plot on the chart

Plot as histogram

Period 13 Color Red Green Blue Browse Color Base Code and Date

13 0 0 0 Browse XAO

-1 0 0 0 Browse 20/09/2000

-1 0 0 0 Browse

OK Cancel

RELATIVE STRENGTH INDEX (RSI)

Type

Momentum – closing price relative to previous closing price

History

Developed by J. Welles Wilder in 1978 the RSI is a very popular and extremely useful momentum oscillator.

How does it work?

The RSI is a price following oscillator that compares the magnitude of a stock's recent gains to the stock's recent losses and computes that data into a number that ranges between 0 and 100. It is a strong measure of momentum and its construction provides absolute levels of Overbought and Oversold.

The RSI is the indicator shown under the chart. The red line, the RSI, oscillates between 0 and 100. Generally staying between 30 and 70. Wilder recommended using 30 and 70 as the overbought and oversold levels respectively.

Trading Signals

Bullish when RSI falls below the 30 level and rises back above it
or on a bullish divergence where the first trough is below 30
Bearish when RSI rises above the 70 level and falls back below it
or on a bearish divergence where the first peak is above 70

Settings

The RSI takes a single parameter, the number of time periods to use in the calculation. The three most popular time periods are the 9-day RSI, 14-day RSI and the 25-day RSI.

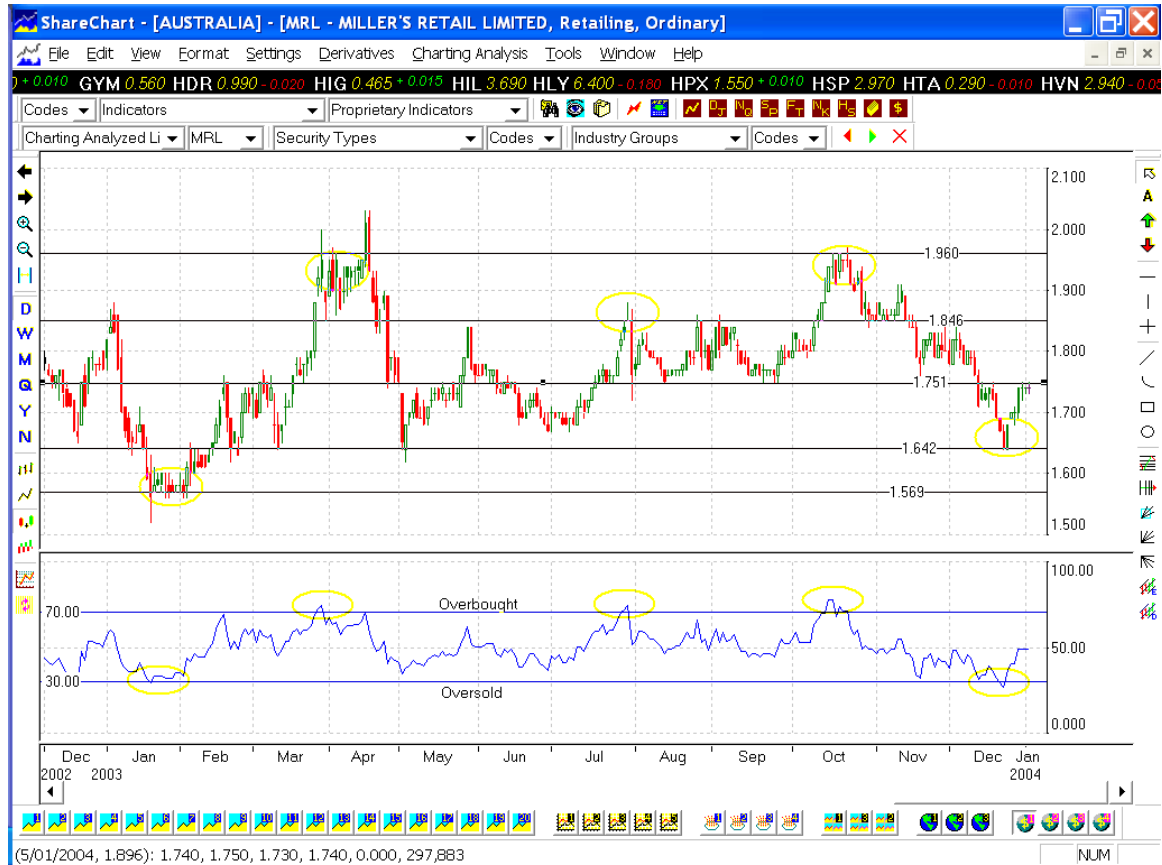
Sharechart Default: 14 period

Example

The daily share chart for Miller's Retail Ltd shows the RSI indicator underneath. The RSI is overbought above 70 and oversold below 30.

Relative Strength Index

INDICATORS



The setting for the Relative Strength Index (RSI) for the graph above was 14 periods. It can be modified: go to Settings > Indicators > Relative Strength Index (RSI).

Indicators

Chart Category: Daily Indicators: Relative Strength Index (RSI)

☐ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color	Horizontal Lines	Basic
14	Blue	0	0	255	Browse	70	<input type="checkbox"/> Yes
	Green	0	255	0	Browse	30	
	Red	255	0	0	Browse		

OK Cancel

If Basic check box is ticked, it indicates that RSI is calculated using the simple formulae published in most technical analysis book. Otherwise, the original algorithm created in J. Welles Wilder's book, *New Concepts in Technical Trading Systems*, is used.

REVERSAL POINTS

Type

Candlestick Reversal points

How does it work?

Short-term reversal analysis is used to analyse stocks that are one of the six types of common short-term reversals on the analysis date. They are: closing price reversal, open/close reversal, key reversal, hook reversal, island reversal, and pivot point reversal.

The candlestick reversal point analysis identifies reversals based purely on the candlestick theory. It does not involve the volume confirmation. When you see the reversal point on the chart, you should carry out further analysis on its price pattern, trend lines, and appropriate indicators.

The reversal points are plotted on the chart as one of the indicators. You can show reversal points on the chart by selecting "Reversal Points" from the indicator dropdown box on the Stock Selection Bar.

The letter on each reversal point represents the first letter of the reversal pattern. The following is the list of patterns and corresponding symbols that are shown on the chart. . For example, the reversal signal with the letter 'p' indicates a pivot point reversal. The following is the list of short-term reversals and corresponding symbols on the chart.

The signals are most reliable if they occur after a strong trend. If the trend is weak, so is the signal.

Short-term Reversal	Symbol on chart
Key reversal	k
Open close reversal	o
Closing price reversal	c
Hook reversal	h
Pivot point reversal	p
Island reversal	i

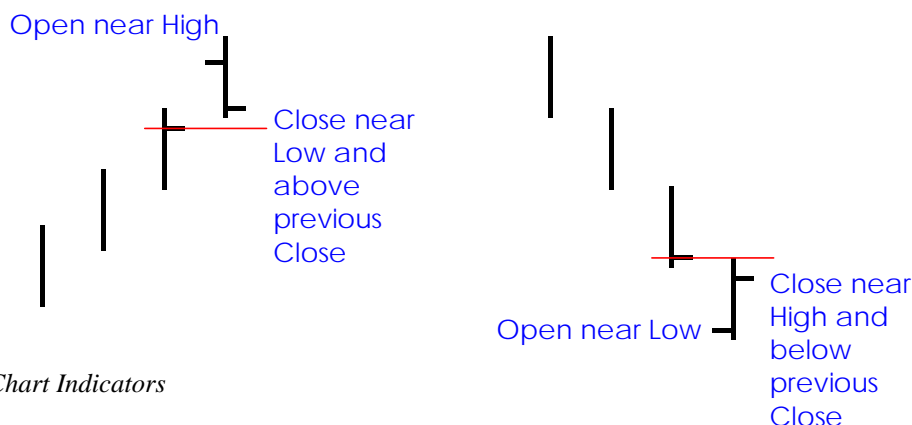
Settings

Sharechart Default: 3 period

Open-Close Reversal

After an up-trend a new high forms, with the open near the high and the close near the low, the close must be above the prior days close.

After a downtrend a new low forms, with the open near the low and the close near the high, the close must be below the prior days close.



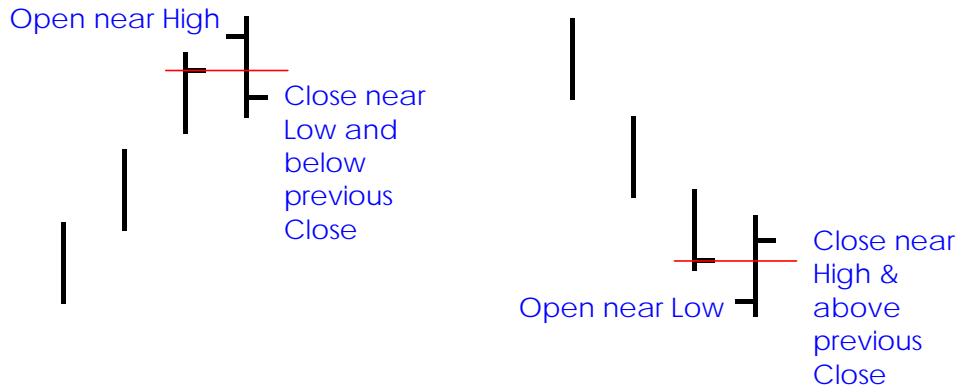
Reversal Points

INDICATORS

Closing Price Reversal

After an up-trend, price opens near the high and closes near the low; the close is below the prior days close.

After a downtrend, price opens near the low and closes near the high; the close is above the prior days close.

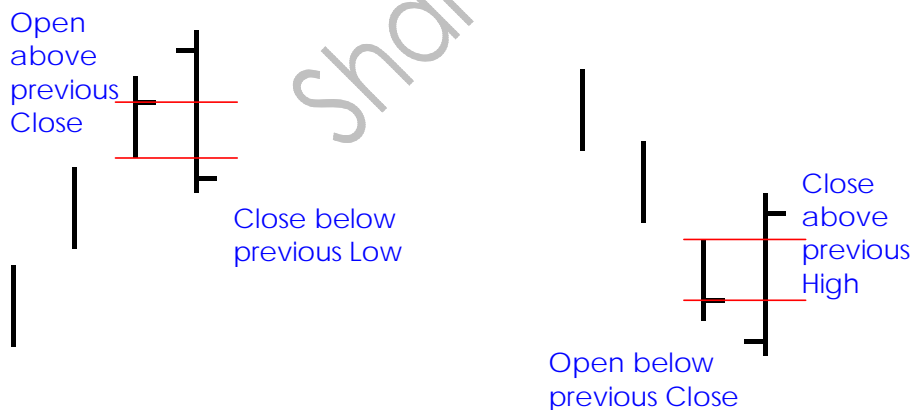


Key Reversal

The Key Reversal does not occur very often, but it is very reliable when it does.

After an up-trend the open must be above prior days close, the day must make a new high then the close must be below the prior days low.

After a downtrend the open must be below the prior days close, the day must make a new low then the close must be above the prior days high.

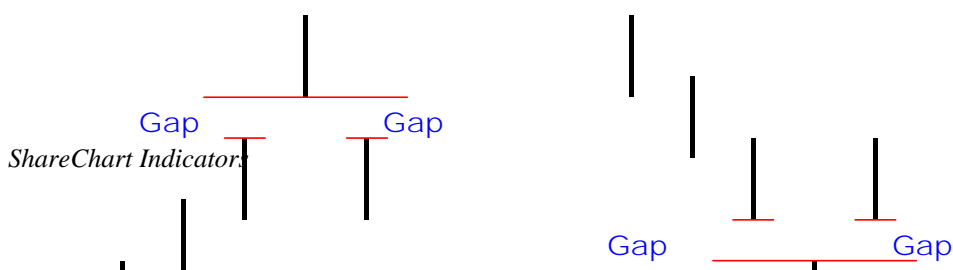


Island Reversal

An island reversal is identified by gaps between the signal day and the days to either side, thus forming an island.

After an up-trend the days low is above both the prior day and following days high, forming a gap reversal.

After a downtrend the days high is below both the prior and following days lows, thus forming a gap reversal.



Reversal Points

INDICATORS

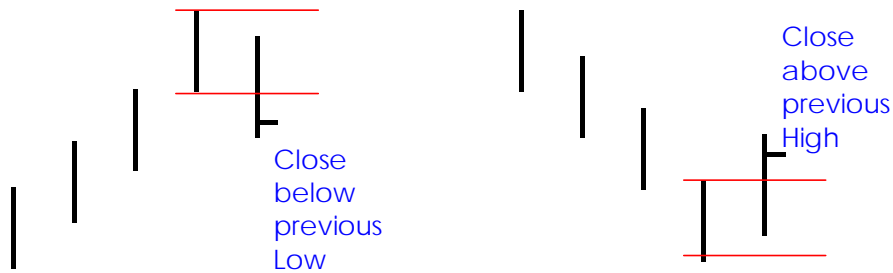
Point Pivot Reversal

One of the most common reversal signals used. The pivot point reversal focuses on the closing price relative to the bar with the highest high (or lowest low).

After an up-trend the close is below the low of the day with the highest high.

After a downtrend the close is above the high of the day with the lowest low.

Note: Complex pivot points can occur where it can take several days to form a pivot.



Hook Reversal

The hook reversal has the same bar as the Open-Close and Closing Price reversals, but it is positioned differently in relation to the range of the previous day. The high and low must be within the trading range (high and low) of the prior days candle.

After an up-trend the open must be near high and the close near the low, but there is a lower high and a higher low compared to the previous day.

After a downtrend the open must be near the low and the close near the high, but there is a lower high and a higher low than the previous day.



STANDARD DEVIATION

Type

Volatility Indicator – dispersion between close price and average

How does it work?

The Standard Deviation is a statistical measurement of volatility. It measures how widely values (closing prices for example) are dispersed from the average.

Dispersion is the difference between the actual value (closing price) and the average value (average closing price).

The larger the difference between the closing prices and the average price, the higher the standard deviation will be and the higher the volatility.

The closer the closing prices are to the average price, the lower the standard deviation and the lower the volatility.

The Standard Deviation is typically used as a component of other indicators, rather than as a stand-alone indicator. For example, Bollinger Bands are calculated by adding a security's Standard Deviation to a moving average. However, Sharechart also plots it as a stand-alone indicator.

High Standard Deviation values occur when the data item being analysed (e.g., prices or an indicator) is changing dramatically. Similarly, low Standard Deviation values occur when prices are stable.

Trading Signals

Many analysts feel that major tops and bottoms are accompanied with high volatility as investors struggle with both euphoria and fear. Ranging markets are expected to be calmer.

Settings

Sharechart Default: 14 period

Stochastic Oscillator

INDICATORS

STOCHASTIC OSCILLATOR

Type

Momentum Indicator

History

Developed by George C. Lane in the late 1950s

How does it work?

Stochastic shows the current close price relative to the high/low range over a set number of periods.

Closing levels that are consistently at the top of the range indicate accumulation (buying pressure), above 80 indicates the stock is overbought.

Closing levels that are consistently at the bottom of the range indicate distribution (selling pressure), below 20 indicates the stock has been oversold.

It is quite a popular indicator for intra-day and end of day traders, as it is intended to be traded for the short- term.

What is %K and %D?

The Stochastic Oscillator is displayed as two lines. The main line is called "%K." The second line, called "%D," is a moving average of %K. The %K line is displayed as a solid red line and the %D line is displayed as the black dotted line within Sharechart.

Settings

You can set periods and colors for %K and %D lines. The Stochastic becomes fast if either "Slow Period" check box is unticked or its preceding period is set to a value less than 2, as shown in the following figure. If the third line of the period is set to a value greater than 1 and "Slow Period" is ticked, the Stochastic becomes slow Stochastic.

Period	Color	Red	Green	Blue	Browse Color	Horizontal Lines
14	Red	255	0	0	Browse	80
3	Green	0	255	0	Browse	20
1	Blue	0	0	255	Browse	<input checked="" type="checkbox"/> Slow Period

Example

Stochastic Oscillator

INDICATORS

Below is the stock chart for St George Bank (SGB), where trading signals can be found at its over-bought/over-sold lines and divergence.



SWING CHART

Type

Trend following Indicator

How does it work?

Swing charts plot a line on the chart, following the current trend until it is broken and then switching to follow the new trend.

When the candle makes a Higher High, the swing chart line will now begin plotting an upwards-sloping line. This line will continue following the up-trend until such time that the candle breaks the up trend by forming a Lower Low, the swing chart will now begin to follow the downtrend and plot a downward sloping line.

Trading Signals

As the swing chart is a trend following indicator it is not used to predict prices. It is simply a guide as to the current direction of the trend over the past days. This can be helpful in keeping you with the trend rather than trading against the trend.

Settings

Sharechart Default: 1 period

Note: If you select 1 period then it would take one Lower Low to swing down or one Higher High to swing up.

If you select 2 periods then it would take 2 Consecutive Lower Lows to swing down or 2 Consecutive Higher Highs to swing up. And so forth.

Example

Below are duplicate copies of the daily graph for stock Jubilee Mines (JBM). The first graph shows the traditional Gan style Swing Chart, while the second shows Bar Swing Chart.

Swing Chart

INDICATORS



To change from one to the other simply go to Settings<Indicators<Swing Chart and select or un-select the box 'Bar Swing Chart' and/or change the settings period- shown below:

Indicators

Indicators: Swing Chart

☒ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color
2	 	255	128	255	Browse
-1	 	128	128	255	Browse
-1	 	0	255	0	Browse

☒ Bar swing chart

OK Cancel

TIER VOLUME

Type

Volume Indicator

How does it work?

Tier volume divides volume into two parts: buy volume and sell volume. Buy volume is accumulated from trades that are initiated by buyers and sell volume is the accumulated volume from trades that are initiated by sellers. The buy and sell volumes are marked by a cross bar in the Tier Volume histogram where the lower part presents buy volume and upper part represents sell volume.

Trading Signals

If buy volume is greater than sell volume, it shows buyers are in control and there is a bullish sign. If buy volume is less than sell volume, it shows that buyers have lost control and is a bearish sign.

Sharechart

Top Volume / Trade

INDICATORS

TOP VOLUME / TRADE

Type

Volume Indicator

How does it work?

Top volume trade displays the trade with the most volume for the day. It is in a histogram form, exactly alike to total volume.

Trading Signals

The top volume trade can be helpful in assessing whether the corporations are targeting a particular stock. This could signify a price change or trend reversal with big volumes entering or exiting a particular security. Viewed simultaneously with total volume, the makeup of the total days trading can be seen relative to the largest trade of the day volume wise.

Sharechart

VALUE

Type

Volume Indicator

How does it work?

Value indicates the total amount, in dollar terms, that was traded during the day on a particular security. This is a good indication to the amount of dollars passing through the market for a particular stock.

Value is derived by taking the sum of the number of trades multiplied with the price they were traded at. Value is then presented as a histogram and seen below the chart.

Trading Signals

Sharechart

VALUE / TRADE

Type

Volume Indicator

How does it work?

Value trade is the average value per trade for the day. It is displayed in histogram form below the chart.

Trading Signals

The value trade can show who the big players were for the day. If value per trade is low then it can be assumed that small groups were participating. If the value per trade is high it could be assumed that corporate groups are trading. This can signify a possible change in a trend or of the price of the underlying security.

Sharechart

VOLATILITY

Type

Volatility Indicator – price compared to moving average

How does it work?

The indicator does not provide an indication of the securities price direction or duration, but the degree of price movement or volatility.

Volatility cannot predict price direction or duration, simply activity levels. Low levels indicate quiet trading (small ranges) and high levels indicate violent trading (large ranges).

Trading Signals

High values are normally found just before market tops and bottoms

Low values are usually found in ranging markets

Settings

ShareChart Default: 10 period

Note: When analysing stock options you can also analyse implied volatility by indicating current interest rate and dividends if any. Implied volatility is a theoretical value designed to represent the volatility of the security underlying an option as determined by the price of the option. The factors that affect implied volatility are the exercise price, the risk-less rate of return, maturity date and the price of the option. Implied volatility appears in several option pricing models, including the Black and Scholes Options Model.

VOLATILITY BANDS

Type

Self –adjusting Volatility Envelope

History

It is based on the concept of Bollinger Bands. The difference is that volatility is used as the bands instead of standard deviation.

How does it work?

Volatility Bands are an indicator that allows users to compare volatility and relative price levels over a period time. The indicator consists of three bands designed to encompass the majority of a security's price action.

Volatility Bands are plotted at volatility levels above and below a moving average. A distinct characteristic of Volatility Bands is how the spacing between bands varies based on the volatility of prices.

Trading Signals

Similar to Bollinger Bands, the bands are self-adjusting: widening during volatile markets and contracting during calmer or trending periods.

Volatility bands can help confirm trend, but they do not determine the future direction of a security. Similar to Bollinger bands, Volatility Bands serve two primary functions:

Identify periods of high and low volatility

Identify periods where securities are at relatively sustainable levels during consolidate or trending period.

The following characteristics apply to Volatility Bands:

Trend reversals tend to occur after the bands expand, as volatility increases.

When prices move outside the bands, a continuation of the current trend is implied.

Bottoms and tops made outside the bands followed by bottoms and tops made inside the bands call for reversals in the trend.

A move that originates at one band tends to go all the way to the other band. This observation is useful when projecting price targets.

Settings

Short term: 10 day Simple Moving Average, with bands at 1.5 volatility

Medium term: 20 day Simple Moving Average, with bands at 2 volatility

Long term: 50 day Simple Moving Average, with bands at 2.5 volatility

Sharechart Default: 20 day Simple Moving Average, with bands at 2 volatility

Example

Axa Asia Pacific Holdings Limited is used as an example below:

Prices go alongside the upper band during up trend.

Band expands during the reversal of up trend.

Prices go alongside the lower band during down trend.

Band expands during the reversal of down trend.

Volatility Band

INDICATORS



VOLUME

Type

Volume Indicator

How does it work?

Volume is simply the number of shares traded during a specified time frame (e.g., hour, day, week, month, etc). The analysis of volume is a basic yet very important element of technical analysis. Volume provides clues as to the intensity of a given price move.

Volume is an indicator that is totally independent of price; this makes it an excellent tool for confirming other price related indicators.

Trading Signals

Low volume levels are characteristic of the indecisive expectations that typically occur during consolidation periods (i.e., periods where prices move sideways in a trading range). Low volume can also occur during the indecisive period during market bottoms.

High volume levels are characteristic of market tops when there is a strong consensus that prices will move higher. High volume levels are also very common at the beginning of new trends (i.e., when prices break out of a trading range). Just before market bottoms, volume will often increase due to panic-driven selling.

Volume can help determine the health of an existing trend. A healthy up-trend should have higher volume on the upward legs of the trend, and lower volume on the downward (corrective) legs. A healthy downtrend usually has higher volume on the downward legs of the trend and lower volume on the upward (corrective) legs.

VOLUME/TRADE

Type

Volume Indicator

How does it work?

Volume / Trade shows the average volume per trade. This can be useful for seeing who the market movers are. Volume / Trade is presented as a histogram below the chart.

If the average volume per trade is very high then it can be assumed that corporations are running the trend for the day.

If the average volume per trade is much lower it could be assumed that smaller groups are trading.

Trading Signals

Viewed simultaneously with the Volume indicator, the Volume / Trade indicator will show exact points where a corporation has accounted for most of the volume on certain days.

If Volume is low but Volume / Trade is high it could be assumed that corporations have accounted for most of the action.

If Volume were to be low and Volume / Trade also low it could be assumed that the market was characterised with many smaller groups on that day.

VOLUME BY PRICE TO DATE

Type

Volume Indicator

How does it work?

Volume by price to date divides the current price window into several price levels and calculates the accumulated volume up to the last date for each price level according to the specified time period. The calculated volume levels are plotted as horizontal lines with the longest representing the biggest trading volume and thus strongest support/resistance level. It is an excellent indicator that combines both price and volume into one tool. Volume by price to date can be used see which prices invoke the most volume and activity.

Trading Signals

Support and resistance levels can be seen clearly using volume by price to date. Volume by price to date can also help in picking price changes or reversals. A price change is usually associated with large volume, thus if price is hovering around a level of high volume a price direction change could be expected. Low levels of volume can be associated with times of uncertainty or consolidation.

Settings

In the Volume by Price to Date settings box, the first period represents the number of price bars to the last date on the chart, as shown below, and the second period represents the number of price levels.

The screenshot shows the 'Indicators' settings dialog box. The 'Chart Category' is set to 'Indicators' and the indicator is 'Volume By Price to Date'. The 'Plot on the chart' checkbox is checked, and 'Plot as histogram' is unchecked. The settings table is as follows:

Period	Color	Red	Green	Blue	Browse Color
260	Blue	0	0	255	Browse
10	White	0	0	0	Browse
-1	White	0	0	0	Browse

At the bottom are 'OK' and 'Cancel' buttons.

In the above example, 260 is the number of days to the last date in the calculation for a daily chart, and 10 is the number of price levels on the current price window.

Example

The following chart shows the Volume by Price to Date for Telstra Corporation Limited (TLS), for 10 price levels and 260 time periods. From the chart, it can be seen that the

Volume by Price to Date

INDICATORS

strongest price support/resistance level is around \$4.7 and the next support/resistance level is around \$5.3.



VOLUME BY PRICE TO ZOOM

Type

Volume Indicator

How does it work?

Volume by price to zoom is similar to volume by price to date. The only difference is that it calculates the cumulated volume for price bars in the current price window. This makes it possible to view the volume to price for any time period that you are interested in, by zooming in and out of the chart to the desired time.

Trading Signals

Support and resistance levels can be seen clearly using volume by price to zoom. Volume by price to zoom can also help in picking price changes or reversals. A price change is usually associated with large volume, thus if price is hovering around a level of high volume a price direction change could be expected. Low levels of volume can be associated with times of uncertainty or consolidation.

Settings

In the Volume by Price to Zoom settings box, there is no period because the number of price bars in calculation is the number of prices in the current price window. Therefore, in the first period line, period is not relevant, while color is used to plot the Volume by Price to Zoom line, as shown below. The second period represents the number of price levels.

The screenshot shows the 'Indicators' settings dialog box. The 'Chart Category' is set to 'Indicators' and the indicator is 'Volume By Price to Zoom'. The 'Plot on the chart' checkbox is checked, and 'Plot as histogram' is unchecked. The settings table is as follows:

Period	Color	Red	Green	Blue	Browse Color
260	Blue	0	0	255	Browse
10		0	0	0	Browse
-1		0	0	0	Browse

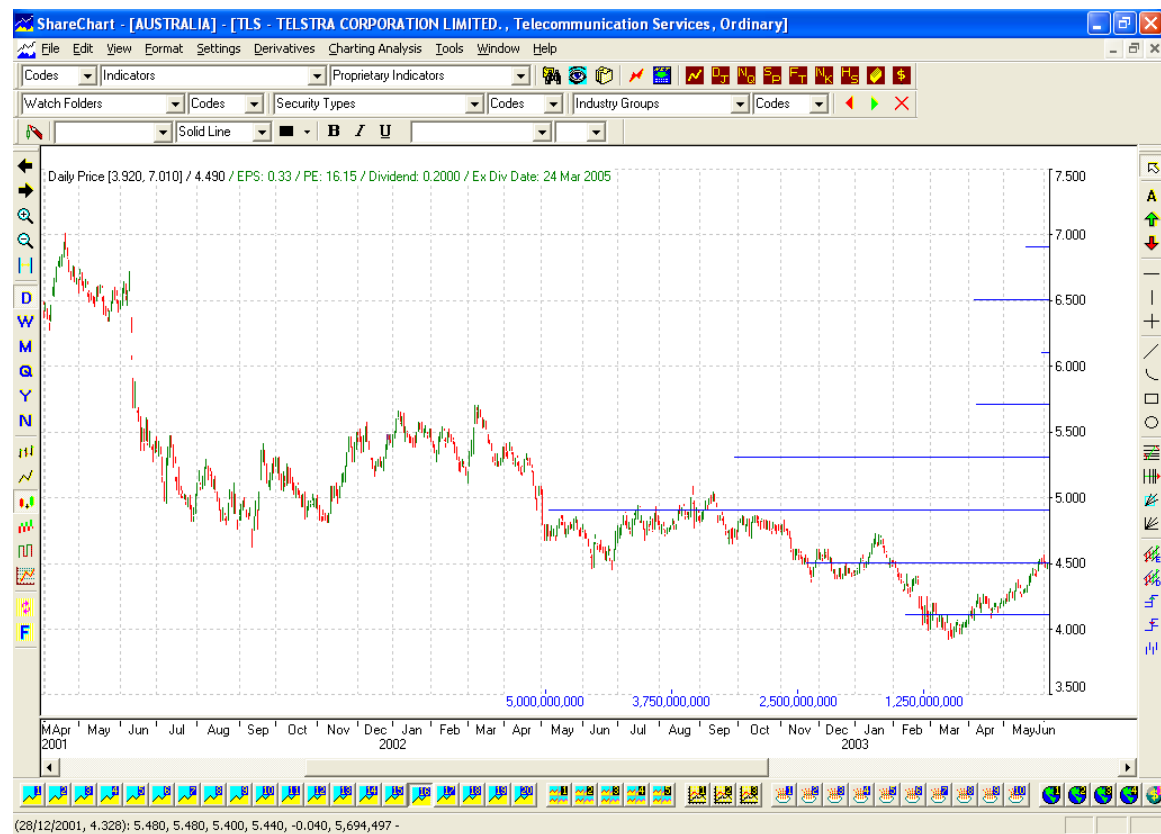
At the bottom are 'OK' and 'Cancel' buttons.

Example

The following chart shows the Volume by Price to Zoom for Telstra Corporation Limited (TLS) for period Jan 2000 to Jan 2001. The number of price levels is set to 10. From the chart, it can be seen that the strongest price support/resistance level for the period is around \$6.7.

Volume by Price to Zoom

INDICATORS



WILLIAMS' % R

Type

Momentum Indicator -

History

Developed by Larry Williams, the Williams % R, pronounced percent r, is a momentum indicator that measures overbought and oversold levels.

How does it work?

The %R works very much like the Stochastic oscillator, it has a range of 0 to 100, with readings from 0 to 20 considered overbought, and readings between 80 to 100 considered oversold.

Williams' %R shows the relationship of the close relative to the high-low range over a set period of time.

Typically, Williams' %R is calculated using 14 periods and can be used on intra-day, daily, weekly or monthly data. The timeframe and number of periods will likely vary according to desired sensitivity and the characteristics of the individual security.

Trading Signals

As with all overbought/oversold indicators, it is best to wait for the security's price to change direction before placing your trades.

For example, if an overbought/oversold indicator, such as the Stochastic Oscillator or Williams' %R, is showing an overbought condition, it is wise to wait for the security's price to turn down before selling the security.

It is not unusual for overbought/oversold indicators to remain in an overbought/oversold condition for a long time period as the security's price continues to climb/fall. Selling simply because the security appears overbought may take you out of the security long before its price shows signs of deterioration. One method might be to wait until the Williams %R to cross above or below 50 for confirmation.

An interesting phenomenon of the %R indicator is its uncanny ability to anticipate a reversal in the underlying security's price. The indicator will almost always form a peak and turn down a few days before the security's price peaks and turns down. Likewise, the %R usually creates a trough and turns up a few days before the security's price turns up.

Settings

You can show up to three Williams' %R lines in a window. With the Williams' %R settings box, you can set over-bought and over-sold levels, as shown below.

William %R

INDICATORS

Indicators

Chart Category: Indicators

Daily

William's % R

☐ Plot on the chart
☐ Plot as histogram

Period	Color	Red	Green	Blue	Browse Color	Horizontal Lines
14	■	255	0	0	<div>Browse</div>	<div>-20</div>
28	■	0	0	255	<div>Browse</div>	<div>-80</div>
0	■	255	0	0	<div>Browse</div>	

OK

Cancel

Example

Below is the stock chart for St George Bank (SGB), where trading signals can be found at its over-bought/over-sold lines. With 14 and 28 periods respectively, Williams' %R illustrates 14-day %R appears quite choppy and produces whipsaws while 28-day smooths the data series and the signals became more reliable.



WILSON RELATIVE PRICE CHANNEL

Type

Trend Indicator

History

Developed by Leon Wilson in his article "The Wilson Relative Price Channel" in the July 2006 Stocks and Commodities magazine, Wilson Relative Price Channel introduces a new way to show overbought and oversold conditions.

How does it work?

The Wilson Relative Price Channel consists of overbought and oversold bands. The overbought line is created by adding closing price with a value that is based on the multiplication of closing price and the difference between a value greater than 0.5 and RSI value. The oversold line is created by subtracting closing price with a value that is based on the multiplication of closing price and the difference between RSI value and a value less than 0.5 and.

In addition, Upper and lower neutral lines are added that are lower than overbought line and higher than oversold line respectively. The upper and lower lines are calculated in the same way as overbought and oversold lines with smaller value than upper line and greater value than lower line respectively.

The bullish band between overbought and upper neutral lines defines the range of bullish activities. The bearish band between lower neutral and oversold lines defines the range of bearish activities. The neutral zone between upper and lower neutral lines defines neutral activities.

Trading Signals

Overbought region – when the prices move into overbought region, you can look to lock in profits by closing long positions.

Bullish band – when the prices move into bullish band, you should long the stock. You can continue to hold long as long as the prices are trades in the bullish band. If the prices move back to bearish band, you may consider closing your long position.

Neutral zone – the neutral zone usually defines non-trending activities. You should not open a position until the prices move beyond the region.

Bearish band – when the prices move into bearish band, you should short the stock. You can continue to hold short as long as the prices are trades in the bearish band. If the prices move back to bullish band, you may consider closing your short position.

Oversold region – when the prices move into oversold region, you can look to lock in profits by closing short positions.

Settings

You can modify the parameters for Wilson Relative Price Channel by opening its settings box, as shown below.

Wilson Price Channel

INDICATORS

The screenshot shows the 'Indicators' settings window for the 'Wilson Relative Price Channel'. The 'Chart Category' is set to 'Daily', the 'Indicators' list shows 'Wilson Relative Price Channel' selected, and the 'Price Category' is 'Close'. The 'Period' is 34, and the 'Color' is blue. The 'Red', 'Green', and 'Blue' values are 0, 0, and 255 respectively. The 'Browse Color' button is available. The 'Show neutral line' checkbox is unchecked. The 'Over Bought' value is 70.00, 'Over Sold' is 30.00, 'Upper Neutral' is 55.00, 'Lower Neutral' is 45.00, and 'Smooth' is 1.00. The 'Plot on the chart' checkbox is checked, and 'Plot as histogram' is unchecked. The 'OK' and 'Cancel' buttons are at the bottom.

Chart Category:	Indicators	Price Category:
Daily	Wilson Relative Price Channel	Close

Period	Color	Red	Green	Blue	Browse Color	Show neutral line
34	Blue	0	0	255	Browse	<input type="checkbox"/>
-1	Light Blue	220	220	255	Browse	Over Bought
-1	Grey	220	220	220	Browse	Over Sold

Over Bought	Over Sold	Upper Neutral	Lower Neutral	Smooth
70.00	30.00	55.00	45.00	1.00

☒ Plot on the chart ☐ Plot as histogram

OK Cancel

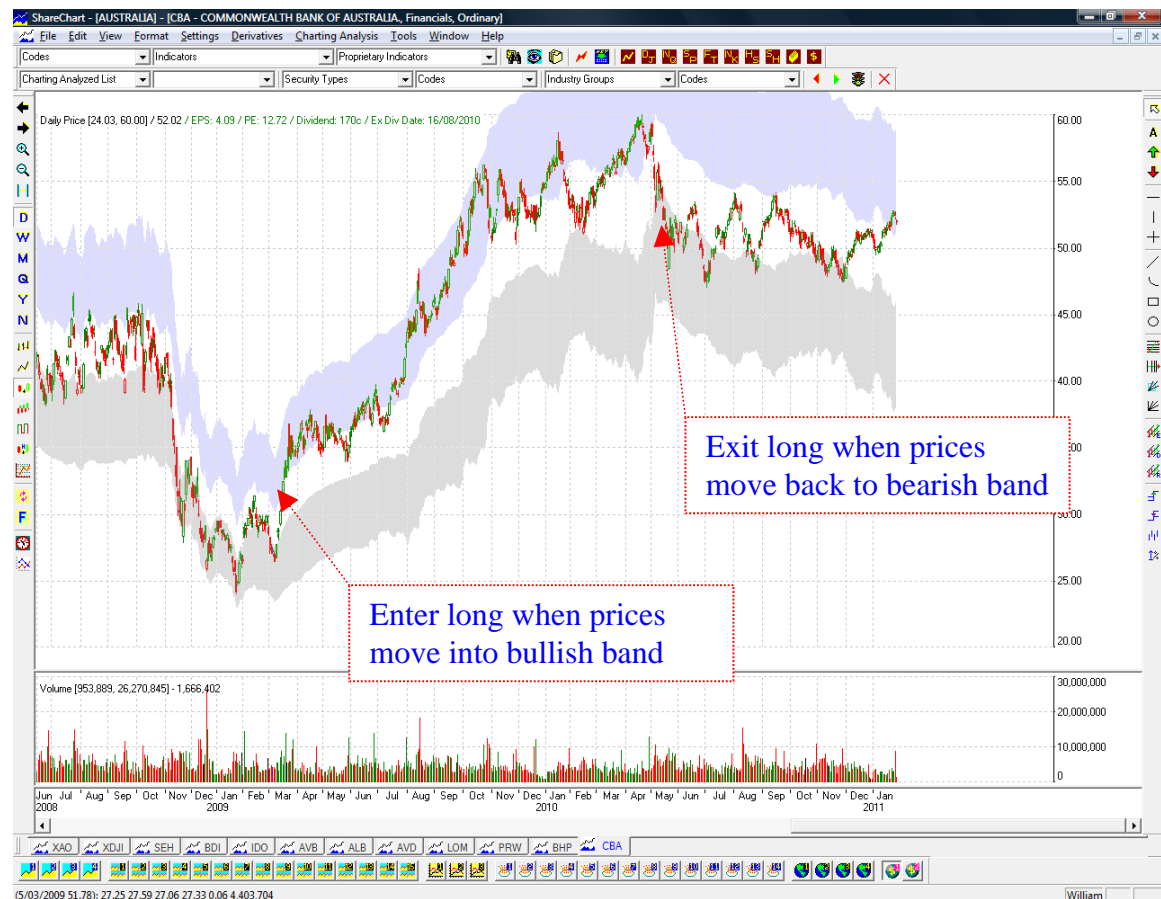
With its settings box, you can change values for overbought, oversold, upper neutral and lower neutral lines. The smooth entry is used to smooth line values from RSI by moving average technique. You can opt to show neutral line by ticking the Show neutral line checkbox. You can also change the colors for overbought and oversold bands.

Example

Below is the stock chart for Commonwealth Bank (CBA), where trading signals are illustrated with arrows.

Wilson Price Channel

INDICATORS



In the above chart, enter long when prices move into bullish band from the bearish band, and hold while the prices are along the bullish band. When the prices move back into bearish band, close the long position.