



COLLINS SARRI STATHAM
INVESTMENTS

The Advanced guide to CFD trading

- **CFD's an insiders' view**
- **Define and determine the long-term portfolio and how it should operate**
- **Define and determine the trading portfolio and how it should operate**
- **Monitoring an open position**
- **CFD / stock portfolio trading & risk management**
- **"Pairs trading"**
- **Direct Market Access (DMA)**
- **Fundamental trading; building a diary of events**
- **Charting and Technical analysis, MACD, Stochastics, Relative Strength Index**
- **In house seminars and education programmes**



CFD's an insiders' view

Anyone trading CFDs appreciates the need to stay ahead of the game.

Advanced traders need to be nimble and fast in a volatile environment. It is like running through a jungle. It is essential to have the right approach, be using the right tools and equipment to unearth the jungle's hidden treasures.

It is essential to maintain a focused approach and emotional detachment from what you are doing.

Whether you agree that stock valuations are determined by fundamental or by technical analysis, it is worth being aware of factors that pertain to other investors' decision making to explain, understand and profit from market movements. Advanced techniques enable CFD traders to be aware of factors that pertain to both fundamentals and the charts improving their predictive ability.

Advanced trading is a bit like driving a car, you may be a careful driver, but you need to look out for other drivers who may not be.

Recent experience, i.e. since 2000 has shown the UK and US stockmarkets are inherently volatile with sharp upward movements within a secular bear trend. Other countries notably the BRIC group have shown divergent long term trends but are even more volatile in the short-term.

The participants have changed, the fund managers, pension funds and institutional investors are still there, but in diminishing number, however increasingly the focus has shifted from long-term "buy and hold" to short term factors and short-term investors. Around one third of traded stock volumes are linked to CFD trading which is very heavily biased towards short-term trading where investors may take a view based on the following days or weeks.

The main clients of prime brokerage departments of firms like Morgan Stanley and Goldman Sachs are hedge funds taking short term positions.

Increasingly portfolios are "open positions" i.e. they are tradable and volatile.

Define and determine the long-term portfolio

A long-term "buy and hold" portfolio also needs to be managed, in a more conservative way, infrequently perhaps, but it does need experienced management.

Long term "Buy and hold" portfolios come in many guises. It could be a pension fund, a trust fund, a share save scheme, a retirement lump sum award, a long term bonus plan or a cherished portfolio of "Sid" type 1980s privatisations.

One example:-

Staff at the major banks and brokers, were amongst the biggest losers in the 2008 bear market, because bonuses were split between cash and stock option awards but increasingly in 2007 and 2008 much more of the latter than the former. Good news in a bull market, but destructive in a bear market.

Due to the 3-5 year lock-ins and other methods designed to smooth out the stock issuance of major bonus payers, employees found themselves hamstrung. Many bonus plan recipients worried that a large portion of their net worth in addition to their job, was with one company and out of their control. Many wanted to hedge the exposure to their employee. You can privately buy insurance against job loss, and cover your stock held under bonus plans.

The main challenge is the long lead times of stock awards – it is difficult to hedge precisely against stock awards five years hence.

But you can do it effectively with nearer term awards. The plan is to short sell the near-term awards if possible balancing the value of the short sale with the "longs" i.e. the long-term incentive plan awards. Say you were expecting a previous bonus of 1,000 XYZ shares to vest in February – the advanced trader would sell these forward via a CFD or put option.

A hedge against a bonus entitlement is more complex given the long stop dates, i.e. hedges become less effective over longer periods but more effective over short periods:-

- a) One method is to buy put options i.e. “insurance” over the existing exposure or a multiple of the existing exposure with the surplus representing the bonus. This effectively locks in a price for the existing shares and the bonus shares. This assumes the company awarding the bonus is a listed company and traded options are available.
- b) Use stock CFDs to sell the position against a portfolio of announced bonus entitlements; clearly this approach will lead to an ongoing moving bear position that will require financing against an existing portfolio of assets (obviously not including the bonus entitlement). The position will unwind when the bonus is received when the stock position can “convert” against the CFD of the same stock. However the advantage over options is the likelihood of better availability and liquidity of CFDs than options.
- c) Using index CFDs to sell a bonus entitlement against the market is an approximate hedge that would be expensive if the market rose suddenly but very positive in the event of a big bear market such as 2008.

A hedge against an existing long-term portfolio can be rough, approximate or exact depending on the nature of the asset mix or asset/ liability being hedged against. The following is a guide on the various options:-

- a) Portfolios of FTSE 100 shares, such as an index tracker fund; an appropriate hedge would be a FTSE 100 put option; with a one year expiry date. This is portfolio insurance and is a relatively costly way of covering the downside risk. Alternatively an index short CFD position achieves the same objective but will need to be collateralised against a portfolio of FTSE 100 securities or cash.
- b) A diversified portfolio of ten/twenty UK shares; a hedge may be a FTSE 250 put option, an imperfect hedge or writing put options against individual shares. Alternatively a short on a FTSE 250 CFD will amount to an approximate hedge.
- c) A portfolio consisting of fewer than 5 shares with large exposures to one or two companies. Given the limited availability of traded options in many cases, short CFD positions should be used against the larger exposures.

Define and determine the trading portfolio and how it should operate

The first key question is which portfolios should be trading portfolios.

The biggest mistakes are made when CFD traders become “emotionally attached” to individual stocks or to portfolios. This may be due to a fondness for the company itself, a keen understanding of the business and its inherent value or simply due to a long association. Shares or portfolios that investors are emotionally attached to should not form part of a trading portfolio. They should be segregated from a trading portfolio and treated separately like a long term portfolio.

Stock portfolios or individual stockholdings that are pledged as collateral against loans or held against other portfolios or held in employee savings accounts should not form part of a trading portfolio.

Trading portfolios should essentially be those portfolios consisting solely of stocks, CFDs or any other instrument that is an open position for short-term trading that the advanced trader is willing to trade.

Stock and CFD portfolios are “marked to market”. This is an accounting convention that means valuations are determined by the market place and movements in market prices are automatically reflected in portfolio valuations. Marking to market means portfolios are regularly changing and investors should be watchful of price movements.

Monitoring an open position

The key issue is who does the job of monitoring, and managing the trading portfolio. This job should be either done by the advanced trader, on the advice of their brokers or by computers via automated buy and sell orders.

This means that an advanced approach must encompass and use the tools for stock monitoring, essentially these days this job is done via online advisory or execution only accounts.

Monitoring portfolio open positions is essential and determining how and who should monitor "open positions" is a key question for advanced traders.

DECISION: Which portfolios or securities should comprise the trading portfolio?

DECISION: Do we appoint an experienced CFD / stockbrokers to manage the trading account or do we become day traders ourselves?

CFD / stock portfolio trading & risk management

With advanced trading, risk management is essential. Volumes have been written on portfolio risk management so we are summarising below:-

The starting point must be the level of risk tolerance that the trader is willing to accept.

Only the trader or investor can know and determine their risk tolerance on their portfolio and by extension on individual positions. This should be decided at the outset i.e. if I have a £50,000 portfolio – I am willing to lose £15,000 or 30%. With a stop loss at this level the portfolio should be sold if the portfolio hits this level.

DECISION: Key trading rule is to decide on absolute loss limits on the portfolio.

DECISION: Should it be a rolling stop loss i.e. should it be at an adjustable level that moves up when the portfolio moves up but stays static against a market fall.

DECISION: The advanced trader should also decide on upside gains limits; at what point should profits be bagged i.e. what triggers should be in place.

Assuming a portfolio with 20 positions of equal value then if one company goes into administration, assuming the others stay the same, the portfolio has lost 5%. A loss may be reduced or augmented by movements in other portfolio positions.

If the portfolio has only 10 positions then the loss on one failure is 10%. The amount of risk at any one point is a function of the number of positions and the weighting of each position.

Risk management at the portfolio level is the most effective way of managing overall risk. A big mistake is to start trading with just one or two positions and a cash balance and expecting immediate performance.

Risk management at the individual stock level is essential to avoid the situation where the advanced trader is reliant on the portfolio to diversify out risk by itself.

We recommend setting stop loss levels as a rule at both open position and portfolio level.

Firstly with CFDs and spread betting, it's important to recognise that short selling has the potential to be very expensive if you get it wrong.

Secondly in a trading environment the right tools need to be implemented.

We would recommend the advanced trader makes use of the following:-

1. Portfolio analysis functions; risk and return calculations against their required level of return or their stop loss.
2. Portfolio asset/ sector allocation, optimization and simulation functions (basically monitoring the portfolio against the Markowitz efficient frontier). This analysis will offer views on which stocks should be added or removed from a portfolio to become more closely aligned with the efficient frontier.

3. Value at Risk (VaR) tools helping the trader determine the maximum amount of daily loss using statistical analysis incorporating standard deviations, hence the relative position of the portfolio to the VaR.
4. Research and changes in recommendations on companies from major institutions and economic data releases.
5. The timing of dividend, scrip, and corporate actions. These can have a significant short term impact on stock/CFD prices.

These are primarily analytical risk management tools.

The advanced trader will also have to use inputs for risk managements, to summarise these are:-

1. Limit and stop orders at individual stock levels and at portfolio level i.e. once the price meets a limit it is sold
2. Trailing stop trading system; used to cement gains and is triggered when the stock/ CFD starts to fall
3. Pound Cost Averaging; building a portfolio over a period of days, weeks or months.
4. Conversely taking profits or reducing positions or portfolio size at portfolio reviews i.e. every week or every month.
5. Use an Excel spreadsheet to allocate and monitor portfolio assets, monitor income and returns
6. Monitor any leverage or debt held against portfolio assets

Pairs Trading

"Pairs" trading was developed in the 1980s by quantitative analysts at Morgan Stanley. The theory is based on the inter-sector correlation between similar types of companies. This often works well in sectors where there are set valuation benchmarks such as discounts to adjusted net asset value.

Some examples include:-

- Land Securities (LAND) and British Land (BLND)
- BHP Billiton (BLT) and Rio Tinto (RIO)
- Barclays (BARC) and Lloyds TSB (LLOY)
- Tesco (TSCO) and Marks & Spencer (MKS)

The "pairs" trade is focused on the trade in the direction of the shares relative to each other. The trade would be to go LONG on one stock and SHORT on the other.

A long / short strategy is essentially self financing and market neutral i.e. if the market moves lower then gains on the short would be similar to losses on the long position.

Step 1: The trick is to choose the right pair. Multinationals with similar operations, in the same countries, similar sized companies in the same sector such as BHP and Rio Tinto have similar Betas and move in similar ways relative to the market.

Step 2: Balance the trade; If Tesco is trading at 400p and M&S is trading at 200p then buying 1,000 shares of Tesco and selling 1,000 M&S would be an unbalanced trade and the overall market direction would not be totally nullified. If the overall market fell 15% then spread trader would lose money as they would be in effect only half short of M&S. To get both sides right simply divide one into the other i.e. for every 1 share long in Tesco should have 2 shares short of M&S.

Step 3: [OPTIONAL] It might be worth considering using Beta analysis to test different sides of trades. Beta (β) analysis tests the sensitivity of the stock to the market index. According to β theory there is a relationship between the company's share price movement and that of the market.

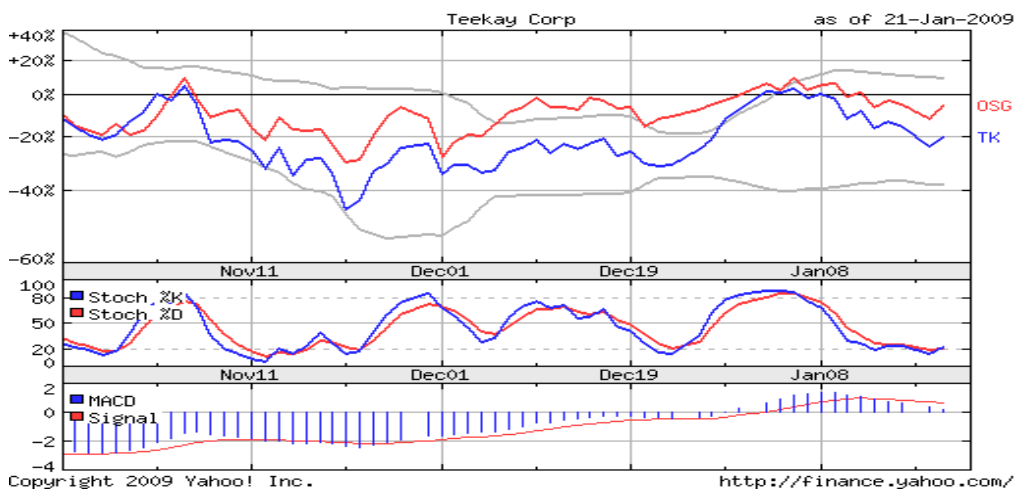
- $\beta > 1$; share price movement will be greater than the market
- $\beta = 1$; share price movement should approximate the market's movement
- $\beta = 0$ no relationship between the share price movement and the market's movement
- $\beta = -1$ the share price will move inversely to the market i.e. if the market moves up 5% the stock will move down 5%
- $\beta = >-1$; share price movement will be greater than the market in the opposite direction i.e. if the market rose 2% a stock with a β of -3 would move down 6%

In relation to pairs trading, companies with very different betas should produce larger swings in price relative to market movements.

Step 4: Deciding for and against a suitable "pairs" trade. It might not be worthwhile to trade a pair where the relationship is between the two is not showing divergence.

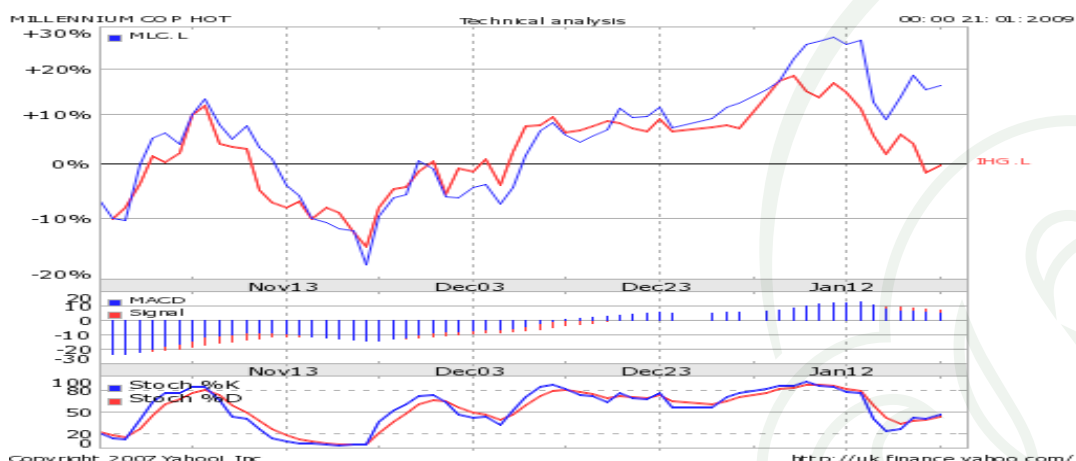
The below example is from NYSE; we have applied MACD and Stochastic indicators. The two stocks are TK Corporation (TK) a large oil tanker company and Overseas Ship holding Group (OSG), another large oil tanker company.

As the technical chart below shows the stock movements are closely correlated with the stochastic indicators very close together and the MACD also close to the signal. This is not a good pairs trade as gains in a LONG position in TK Corporation is likely to be netted off against a SHORT position in OSG.



The below example is a much better pairs trade. Again we use two very similar companies in the same industry, the first Millennium & Copthorne (MLC) and Intercontinental Hotels (IHG).

As the chart shows normally these stocks move very tightly together however very recently the divergence has increased; a relative gap of 15% has opened up. This suggests a LONG position in IHG and a SHORT position in MLC.



This example is a decent "pairs" trade.

Direct Market Access

Direct Market Access (DMA) is a service that allows private investors to buy and sell shares directly with other investors on the London Stock Exchange electronic order book.

Private investors have traditionally placed buy and sell orders with their brokers who normally execute these with specialist market makers known as Retail Service Providers (RSPs).

What DMA means is that investors can now take control of their trades by placing buy and sell orders directly with other market participants on the order book. DMA allows visibility on the buyers and sellers i.e. the order book. It gives the advanced trader a higher chance of getting their transaction done at the asking price.

With DMA you still need to trade via a broker but through one that offers a DMA service. Collins Sarri Statham Investments does offer DMA, please contact us to find out further information about this service.

In short, DMA enables you to set your price inside the bid/offer spread which is visible to the entire market and allows access to the UK's deepest pool of liquidity where most trading takes place. DMA provides you with the greatest opportunity to trade at the best price possible.

A DMA simulator is available on the www.londonstockexchange.com website.

DECISION: We would recommend advanced traders use DMA. However this is a decision for the individual.

It is important that advanced trading incorporates real time prices and as much pricing transparency as possible. DMA is appropriate to this objective.

Fundamental trading; building a diary of events!

An advanced trader strategy using fundamentals uses a distinct approach. Let us assume it is the 1980s and we are armed with a Filofax diary planner!

Using fundamentals, the approach should be to get a picture of companies reporting over the next week. Forthcoming results are published in the Financial Times Companies Section.

Step 1: Pick a number of companies preparing to report; preferably a liquid blue chip company; Diarise the dates of their results

Step 2: [Obtain research notes from the company's public relations] optional step. This helps build an understanding of the company's key value drivers.

Step 3: Identify from published data the consensus revenue, EPS and dividend forecasts; these can be obtained on Yahoo! Finance and www.bloomberg.com

Step 4: Where the company has published interim results or quarterly results then briefly review these to assess what EPS the company reported at H1 and the outlook statement from the board on the full year results. This should give a guide as to the likelihood of the company meeting or exceeding forecasts.

Step 5: If the market is confident of better than consensus earnings then ahead of the results the research forecasts would have on balance seen more upgrades than downgrades. The reverse also holds true. Try to avoid companies whose forecasts have some down prior to the results.

Step 6: On the day of the results, review the results; these are released prior to market open. Assuming the EPS forecasts are ahead of consensus numbers then the shares should rise at the open. If the shares open unchanged then they are likely to improve during the day.

It is important in reviewing the results to check both the reported results and the outlook statement. Earnings forecasts ahead of consensus and positive outlook statements are the most bullish indicator. On target earnings can be offset by a mixed or negative outlook statement.

Step 7: Many companies host analyst presentations on the morning of the results announcements leading to reports emerging around midday. A positive slew of reports at midday often leads to further buying of the stock around midday/ early afternoon.

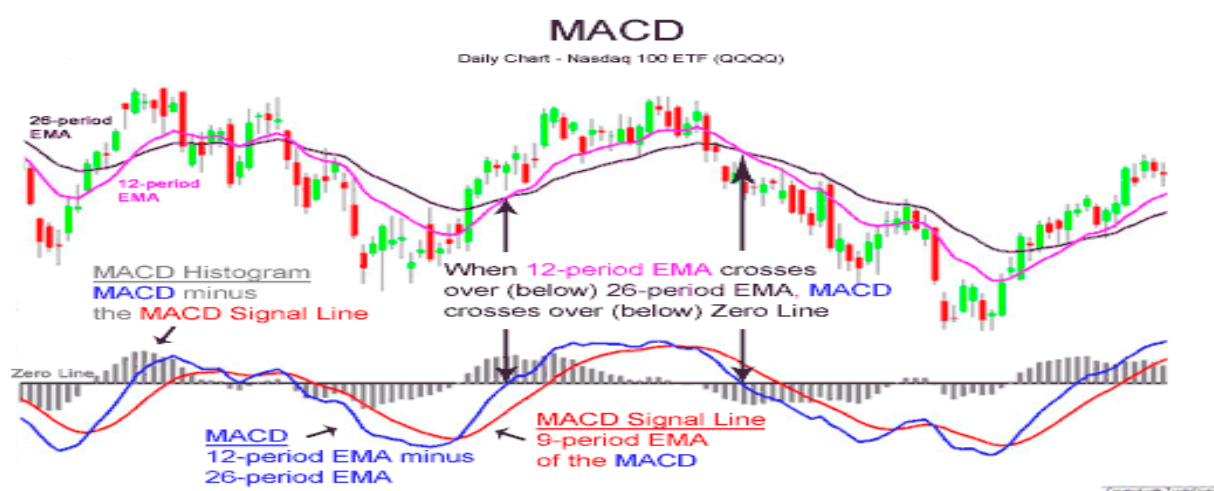
Step 8: Diarise the dividend payments into the calendar for stocks that are traded, as there is often a run-up in the share price in the third working day prior to the ex-dividend date.

Charting and Technical Analysis in CFD

DECISION: Which tools are available for monitoring technical trading patterns?

There are a number of useful websites for charting and technical analysis; in www.uk.finance.yahoo.com and www.stockchart.com. You could also sign up for a demo account with Collins Sarri Statham at www.css-investments.com which provides you with a full charting package.

The MACD “moving average convergence divergence” indicator



The MACD shows the difference between the exponential moving averages (EMA) of two periods typically a “slow” 26 day period and a “fast” 12 day period; i.e. $MACD = EMA [12] \text{ of price} - EMA [26] \text{ of price}$. A signal line is then created by smoothing with a further shorter EMA. The signal = $EMA [9] \text{ of MACD}$. A pictorial histogram is then generated which shows up as a candlestick chart.

The histogram = $MACD - \text{signal}$. The MACD is a trend following indicator used to identify trend changes. It provides three signals

When the MACD falls below the signal line; it is a bearish signal

The MACD rises above the signal line then that is a bullish signal

Divergence when the price diverges from the MACD it is the end of the current trend and possibly a “bull” signal if the divergence is on the upside

Moves relative to the zero line signal are important. When the MACD is above zero this signals upwards momentum ; the reverse is true when the MACD is below zero

The MACD is an advanced technique in CFD trading as it gives a clear glimpse of relative strength and weakness and is closely followed by traders. We recommend CFD traders review the MACD for bullish and bearish signals.

The Stochastic Oscillator

This is a momentum indicator used in technical analysis to compare closing prices of a commodity to its price range over a given time span. Like the MACD indicator it operates to smooth out prices and enable trend discovery. The idea is prices tend to close near recent highs in bull markets and near their lows in bear markets. Bull and bear signals can be spotted when the stochastic oscillator crosses its moving average.

$$STS = 100 \times \frac{\text{closing price} - \text{low price}}{\text{high price} - \text{low price}}$$

The "Fast" stochastic oscillator or Stoch %K calculates the ratio of two closing price statistics: the difference between the latest closing price and the lowest price in the last N days divided by the difference between the highest and lowest prices in the last N days.

$$\%K = 100 \times \frac{\text{CP today} - \text{Low lowest 14 Days}}{\text{High highest 14 days} - \text{Low lowest 14 Days}}$$

$$\%D = 100 \times \frac{\text{CP today} - \text{Low lowest 3 Days}}{\text{High highest 3 days} - \text{Low lowest 3 days}}$$



Example: Land Securities share price (29TH Dec 2008 to 16th January 2009)

Periods	High	Low	Close
29 Dec 08	922	887	899
30 Dec 08	923	897	909
31 Dec 08	928	895	921
2 Jan 09	953	906	949
5 Jan 09	983	918	937
6 Jan 09	1034	948	1005
7 Jan 09	1051	990	999
8 Jan 09	1010	960	984
9 Jan 09	998	953	965
12 Jan 09	965	923	939
13 Jan 09	929	881	892
14 Jan 09	903	804	812
15 Jan 09	827	752	765
16 Jan 09	784	746	751

$$\%K = 100 \times \frac{(751 - 746)}{(1051 - 746)} = 1.64$$

$$\%D = 100 \times \frac{(751 - 746)}{(903 - 746)} = 3.18$$

The stochastic oscillator provides signals above 80 then “overbought”; or under 20 “oversold”.

The above measures show that the stock is oversold.

There are three types of stochastic oscillator; fast, slow and full.

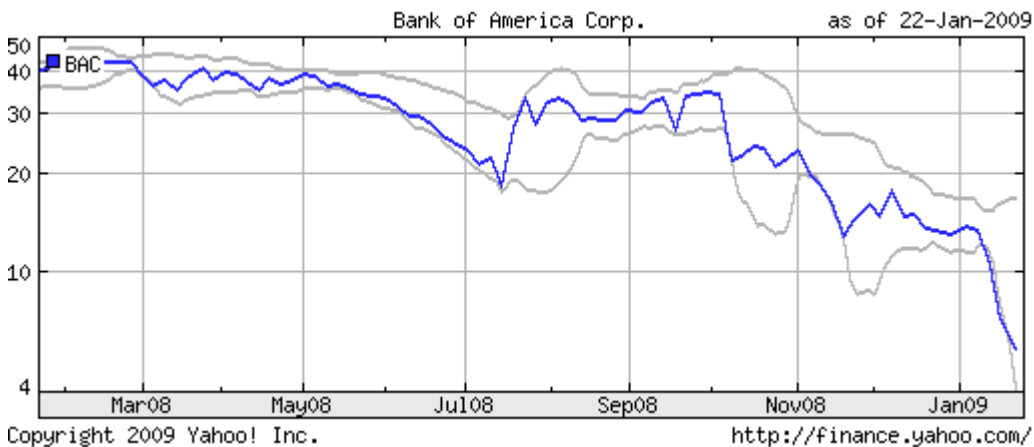
Traders do not need to calculate the stochastic oscillator it is often added in as a device / tool.

Bollinger Bands

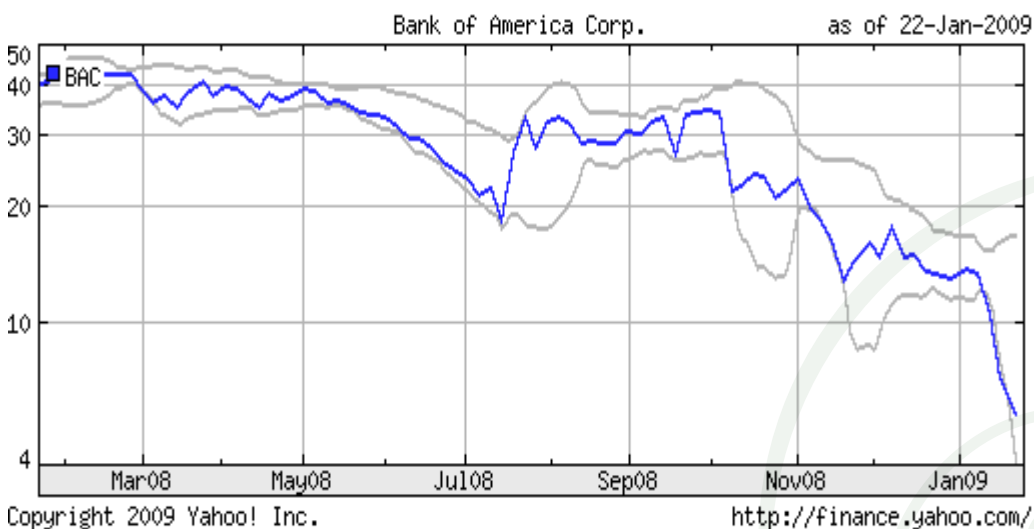
Another technical trading tool created in the early 1980s providing a relative definition of highs and lows. This feature can aid in pattern recognition and in comparing price action for decision making.

The Bollinger bands consist of :-

- a) A middle band being an N period of simple moving average
- b) An upper band at K times an N period standard deviation above the middle band
- c) A lower band at K times an N period standard deviation below the middle band.



Typical values for N and K are 20 and 2



The Bollinger band is a tool often available on charting websites and is a useful tool in providing a channel pattern of trading ranges.

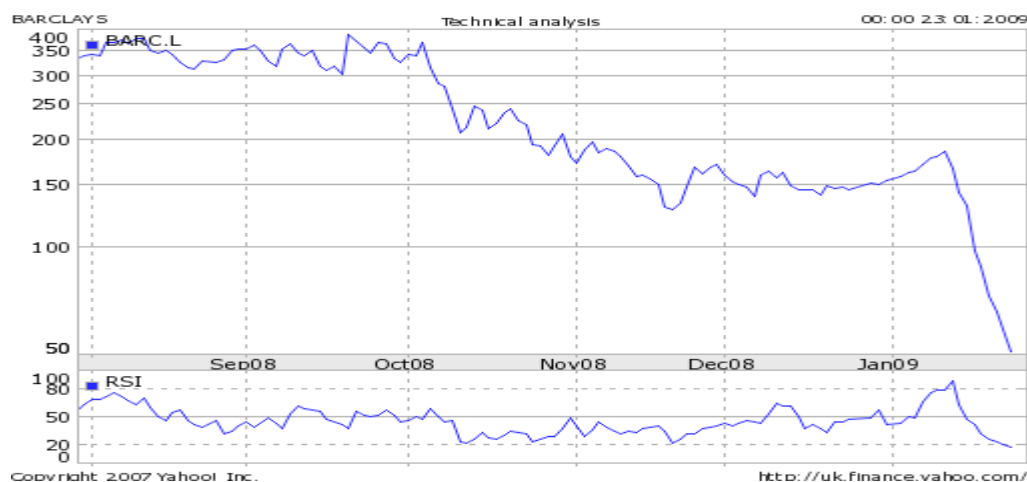
Relative Strength Index

This is a technical momentum indicator that compares the magnitude of recent gains to recent losses in an attempt to define overbought and oversold conditions. It is calculated using the formula:-

$$RSI = 100 - 100 / 1 + RS$$

$$RS = \text{average of } x \text{ day's up closes} / \text{average of } x \text{ days down closes}$$

An RSI reading must be between 0 and 100; readings of over 70 suggest overbought; whilst under 30 suggest oversold. The RSI index on the Barclays chart below is 20 ie oversold.



In house seminars and educational programmes

Attending training on these techniques is to be recommended. Courses are available on line or via tutorials, many of which can be done in a day or two days. You can sign up for Collins Sarri Statham seminars at www.css-investments.com/seminars.

An easy way to start is using the trading simulator.

<http://www.geocities.com/daytradingtutor/currency-day-trading-form.htm>

Recommend reading: "Advanced Financial Risk Management; Tools and Techniques for Integrated Credit Risk and Interest Rate Risk Management" by Donald Van Deventer

Summary

Our advanced guide is intended to give you a flavour but "you can only learn by trying!"

Feel free to sign up on our website at www.css-investments.com

We hope this guide has been informative and clarified some of the more technical points to CFDs.

Please send us any questions you might have.

General Risk Warning

The market information relating to the past performance of an investment is not necessarily a guide to its performance in the future. The value of investments or income from them may go down as well as up. As stocks and shares are valued from second to second, their bid and offer value fluctuates sometimes widely. The value of investments may rise or fall due to the volatility of world markets, interest rates and capital values or, for investments held in overseas markets, changes in the rate of exchange in the currency in which the investments are denominated. You may not necessarily get back the amount you invested.

You should carefully consider in the light of your financial resources whether investing in stocks and shares is suitable for you.

CFD & Spread Bet Risk Warning

You should not deal in CFDs or Spread Bets unless you understand their nature and the extent of your exposure to risk. You should also be satisfied that the product is suitable for you in the light of your circumstances and financial position. Although CFDs/Spread Bets can be utilised for the management of investment risk, it may not be suitable for some investors. In deciding whether to trade in CFDs/Spread Bets, you should be aware of the following points.

CFDs/Spread Bets can only be settled in cash. Investing in a CFD/Spread Bets carries the same risks as investing in a future or an option or other derivative product. Transactions in CFDs/spread Bets may also have a contingent liability and you should be aware of the implications of this as set out below.

Contingent liability investment transactions, which are margined, require you to make a series of payments against the purchase price, instead of paying the whole purchase price immediately. If you trade in contracts for differences, you may sustain a total loss of the margin you deposit with your firm to establish or maintain a position. If the market moves against you, you may be called upon to pay substantial additional margin at short notice to maintain the position. If you fail to do so within the time required, your position may be liquidated at a loss and you will be responsible for the resulting deficit. Even if a transaction is not margined, it may still carry an obligation to make further payments in certain circumstances over and above any amount paid when you entered the contract.

Before you begin to trade, you should obtain details of all commissions and other charges for which you will be liable. If any charges are not expressed in money terms (but, for example, as a percentage of contract value), you should obtain a clear and written explanation, including appropriate examples, to establish what such charges are likely to mean in specific money terms. In the case of futures, when commission is charged as a percentage, it will normally be as a percentage of the total contract value, and not simply as a percentage of your initial payment.