MACD - Moving Average Convergence/Divergence

What is it?
MACD is one of the most commonly used technical indicators for market price and it is relatively simple to apply and understand. It uses 2 sets of moving averages to determine trend characteristics. Momentum is determined by subtracting the longer moving average from the shorter moving average and plotting the results, which may be above or below zero, as a line. The standard model uses a 12 day exponential moving average and a 26 day exponential moving average. A positive MACD indicates that the 12 day moving average is trading above the 26 day moving average and conversely a negative MACD indicates that the 12 day moving average is trading below the 26 day moving average.

Bullish Trend:
If MACD is positive and rising, then the 12 day moving average is increasing at a faster rate than the 26 day moving average and the gap between the two is widening. Positive momentum is gathering pace. This trend is considered bullish - a signal that the price is going up.

Bullish Signals:
1)   Positive Divergence
        Positive divergence occurs when MACD advances upwards at a time when the price is still in a down trend. MACD forms a sequence of higher lows (each low higher than the previous day or period). Positive Divergence is the least common of the 3 bullish signals but it is the most reliable and leads to the greatest price moves.

2)   Bullish Moving Average Crossover
        This occurs when MACD moves above its 9 day EMA or trigger line. These are the weakest of the 3 bullish signals, are very common and are not very reliable as market signals in their own right. They should never be used in isolation.

3)   Bullish Centreline Crossover
        This occurs when MAC moves upwards from a negative value and crosses the 0 axis to a positive value. Of the 3 bullish signals, a centreline crossover is the second most common. It is generally regarded as a confirmation signal.

Bearish Trend:
If MACD is negative and decreasing, then the 12 day moving average is falling at a faster rate than the 26 day average and the gap between the two is expanding. Downward momentum is accelerating. This trend is considered bearish - a signal that the price is falling.

Bearish Signals:
1)   Negative Divergence
   Negative divergence occurs when the price advances or moves sideways and

MACD declines. The divergence can either take the form of a lower high or a straight decline. Although this is the least common of the 3 bearish signals, it is the most significant and reliable one.

2) Bearish Moving Average Crossover
This is the most common signal. It occurs when MACD falls below its 9-day EMA signal level. Be warned! These signals are so common that they often produce false signals. The moving average crossover should be read in conjunction with other signals to avoid expensive mistakes.

3) Bearish Centreline Crossover
This occurs when MACD moves below the zero line and into negative territory. It is a clear indication that the momentum has shifted from positive to negative and from a bullish to a bearish trend. This signal can be a confirmation on its own or may be used as a confirmation together with negative divergence or a bearish moving average crossover. Either way, once MACD is negative, it means the trend has become bearish, even if it is short-lived.

MACD Rules of thumb:

I) Buy/Sell when MACD goes above/below the signal line (9 Day EMA).

II) Buy/Sell when MACD goes above/below zero.

III) When MACD crosses the signal line it is an indication of a strong market.

III) When MACD rises dramatically, i.e. pulls away from the 9 day EMA, it is an indication that the price is over-extended and that the market is either overbought or oversold and will soon return to more realistic levels.

EUR/USD 10 Day MACD
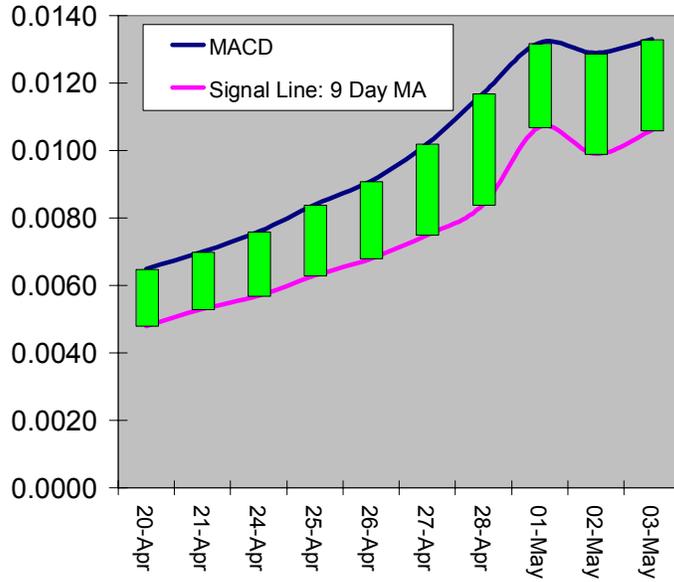
May 03

MACD: +0.0133
Signal Line: +0.0106
Gap: +0.0027

Interpretation:
MACD is above the signal line indicating a strong upward trending market. Gap to signal line shortened from previous day - price may be over-extended and overbought.