Guide to Technical Indicators

SAVI TRADING

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About Savi Trading

Who is Savi Trading?

Savi Trading is a proprietary trading company that was founded by Investment Bank and Hedge Fund traders with combined experiences of over 60 years in the industry. Within their previous trading roles, they were responsible for training and developing new members of their teams. With this experience, coupled with their trading skills and knowledge, Savi Trading was formed to provide unparalleled training and support to individuals looking to develop a career in the trading industry.

Since inception, the company has grown significantly by continually adapting over time to the requirements of the traders and the markets. From initially only focusing on recruiting trainee traders, the company changed emphasis by placing greater importance on having a balance of experienced and entry level candidates creating an environment in which traders can develop their skillset and generate new ideas and strategies.

Savi Trading have successfully attracted talented and exceptional traders from across the world who share the same idea of success as the company – strong and consistent returns. We underline this approach by the resources and the backing we provide our traders who demonstrate and fulfill their potential.

The partners and the experienced traders all have extensive backgrounds within the industry and have excellent contacts with the main players that ultimately move the markets. We provide vast amounts of information similar to that available to the investment bank and hedge fund communities. These range from detailed economic analysis, market analysis and the ability to speak to other traders to share ideas and information.

The world markets are ever changing on a daily basis with breaking news and economic data only ever a few minutes away. In times of such volatility, Savi Trading appreciate that it is vitally important to support its traders with fast paced news, information and an understanding of the markets when it matters. It places high priority to the speed of the information flow to each trader to ensure they are able to react and make the best possible decisions.

The founders thoroughly believe that investment in their traders will transform into prosperity for the business as the company is only as good as its traders and they always aim to provide them with the platform to excel.

About the Authors

Sachin Shah – Partner and Co-Founder

Sachin is a partner and mentor. He also lectures on behalf of Savi on trading the financial markets at leading UK universities such as UCL as well as a number of other universities globally. He began his career at Goldman Sachs. Prior to joining Savi, he was a Vice President on the currency trading desk at Bank of America Merrill Lynch where he was responsible for trading the Japanese Yen book, which was one of the largest currency books at the bank, and he was seen as being one of the biggest players in the London currency market. He studied at University College London where he has a degree in Statistics and Economics. Sachin is regularly interviewed by CNBC for his views on the markets as well as other broadcasts and publications.

Vishal Dattani – Partner and Co-Founder

Vishal is a partner and mentor. He helps with the training and development of traders at Savi Trading. He also lectures at various universities on behalf of Savi. He started his career as a trader at a hedge fund where he used to trade the fixed income markets, before trading equities at large proprietary firms in both London and New York. He concentrated mainly on the Futures side and holds a EUREX qualification. He studied at University College London, where he obtained a degree in Chemistry with Management. Vishal is also regularly interviewed by CNBC for his views on the markets as well as other broadcasts and publications.

Chapter 1 - Introduction

This guide has been created to introduce you to Technical Indicators which are found on the Metatrader trading Platform. You will also learn how to set them up, what the settings mean and how to use them. Further strategies on some of these indicators are available in the Savi Trading Member's area and the Premium Member's area.

What are Technical Indicators?

Technical indicators are a created by applying various formulas to the Historical and present price data of a security/asset. After the calculation is done, a graphical representation of the results is presented. This helps to provide you with:

- Information on what the security price has been doing.
- Confirmation of other technical indicators/analysis. The more indicators and analysis which is conducted, the stronger the signal becomes.
- Predictions on future price action.

How to add a Technical Indicator to your chart

To add an indicator on your Metatrader platform, it is very easy. You can add the indicator by following the steps:

1. Select the chart
2. Click Insert from the toolbar to the top of the platform.
3. When you hover the mouse over Indicators, you will have options show up to the right of Indicators.
4. Then select the Indicator
5. For example, for a moving average, which is a trend indicator, go to trend, and then on dropdown select moving average. Figure 1-1 shows an example of how to select Moving Averages.

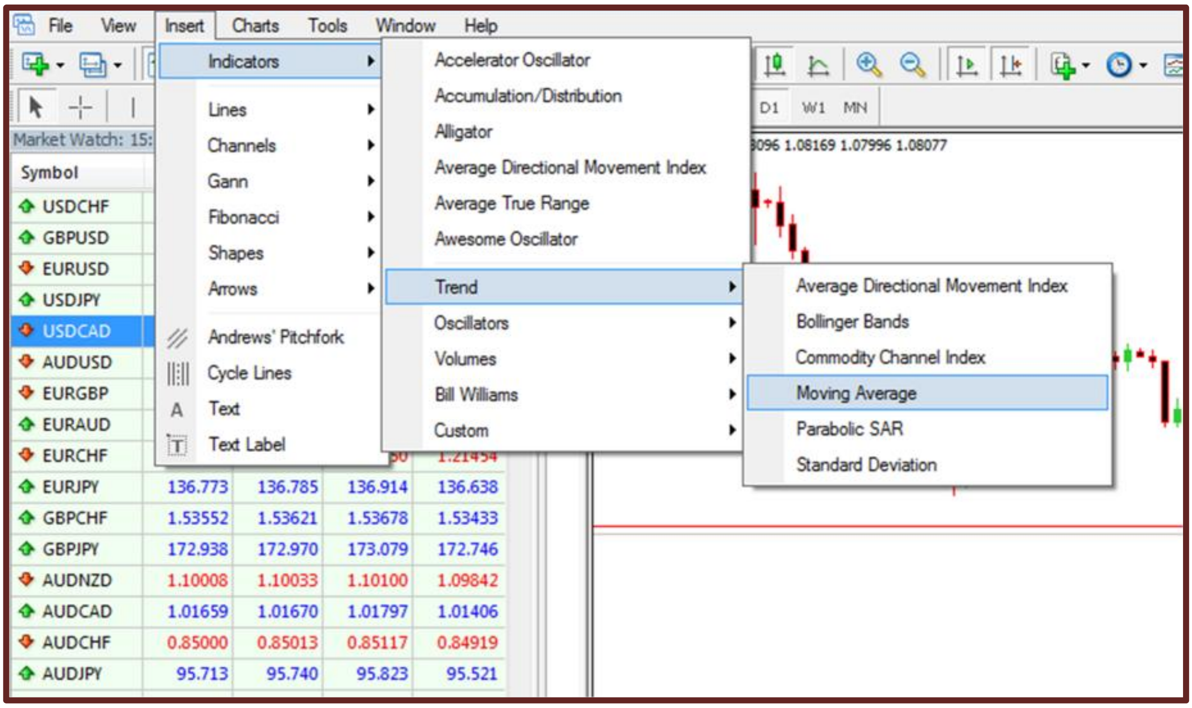

Figure 1-1

Once selected, you will be presented with the following box:

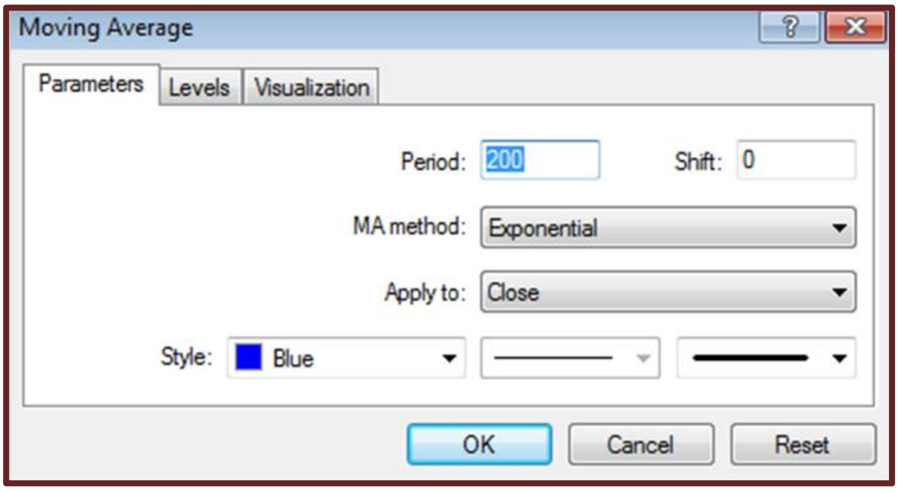

Figure 1-2

From here, you can select all the settings for the indicator, which we will teach you throughout this guide how to set.

Once set, the difference in the chart will be like the following:

Figure 1-3

Figure 1-4

As can be seen, by adding this Exponential Moving average to the chart gives you some more information on potential future direction based on past prices. We will however go into this in more detail in this guide.

Using the Data Window

The Data window is a great tool, to help you to pinpoint exactly where the indicator calculation is at any point of time. To Add the Data Window to your trading platform, you should select it from the Toolbar at the top, as shown by Figure 1-5.

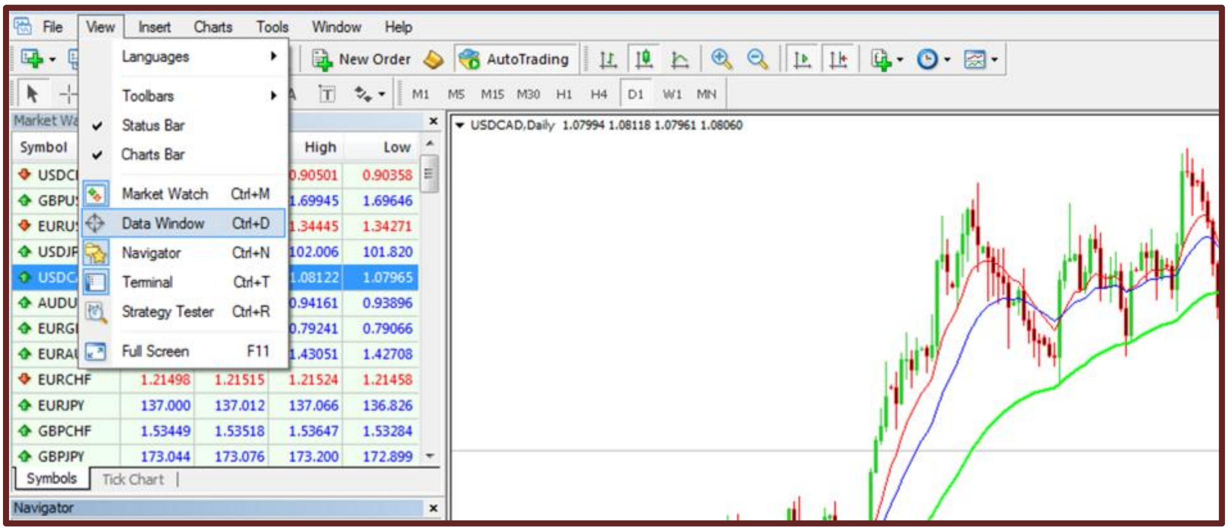

Figure 1-5

So once selected, you can see how it is displayed in Figure 1-6. In this case, the EMA comes in at 1.07477 which is where the mouse is hovering on the chart

Figure 1-6

Chapter 2 – The Indicators

Average Directional Movement Index (ADX)

What is it?

The Average Directional Index (ADX) provides you with the trend strength but not direction. It is usually accompanied by 2 further indicators which are Plus Directional Movement (+DM) and Minus Directional Movement (-DM) which provide information on the trend direction.

Common Settings

- Period: 14

Chart

Figure 2-1

Interpretation

In general, when the ADX indicator is below 20, (below the grey horizontal line in Figure 2-1), the market is not trending. When the ADX is above 20, the (+DM) and (-DM) lines give you an idea of the direction of trend. When the D+ is greater than D-, then the trend is up. When D- is above D+, the trend is down.

You can also use a crossover of the D+ and D- lines, to provide a change in trend direction, as long as the ADX line is above 20.

Average True Range (ATR)

What is it?

Shows the volatility of a security over a given period. Does not tell you whether up or down. A moving average of a certain amount of periods of the true range is calculated and plotted.

Common Settings

- Period: 14

Chart

Figure 2-2

Interpretation

The ATR helps you to understand the price volatility of an asset/security. The higher the ATR, the more volatility there is. Traders will also look to use the ATR to help them to work out potential ranges for the day or whichever period the indicator is calculated for, as well as helping to place stops and take profits. For example, the higher the ATR, the higher the potential price move of a security, hence stop loss and take profit orders can be further apart.

Bollinger Bands

What are they?

Lines that are plotted two standard deviations above and below a Moving Average. Wider bands show increased volatility. The bands also provide support and resistance areas.

Common Settings

- Period: 20
- Deviations: 2

Chart

Figure 2-3

Interpretation

When the market approaches the top band it is considered overbought providing potential opportunities to sell, and when the market approaches the bottom band it is considered oversold, providing potential opportunities to buy.

Ichimoku Kinko Hyo

What is it?

A series of lines that indicate support and resistance levels, as well as entry and exit points. A technique developed in Japan, where it means 'one glance'.

Common Settings

- Tenkan–Sen: 9 – red line
- Kijun-Sen: 26 – blue line
- Chinkou-span: 26 – green line
- Senkou-span B: 52

Chart

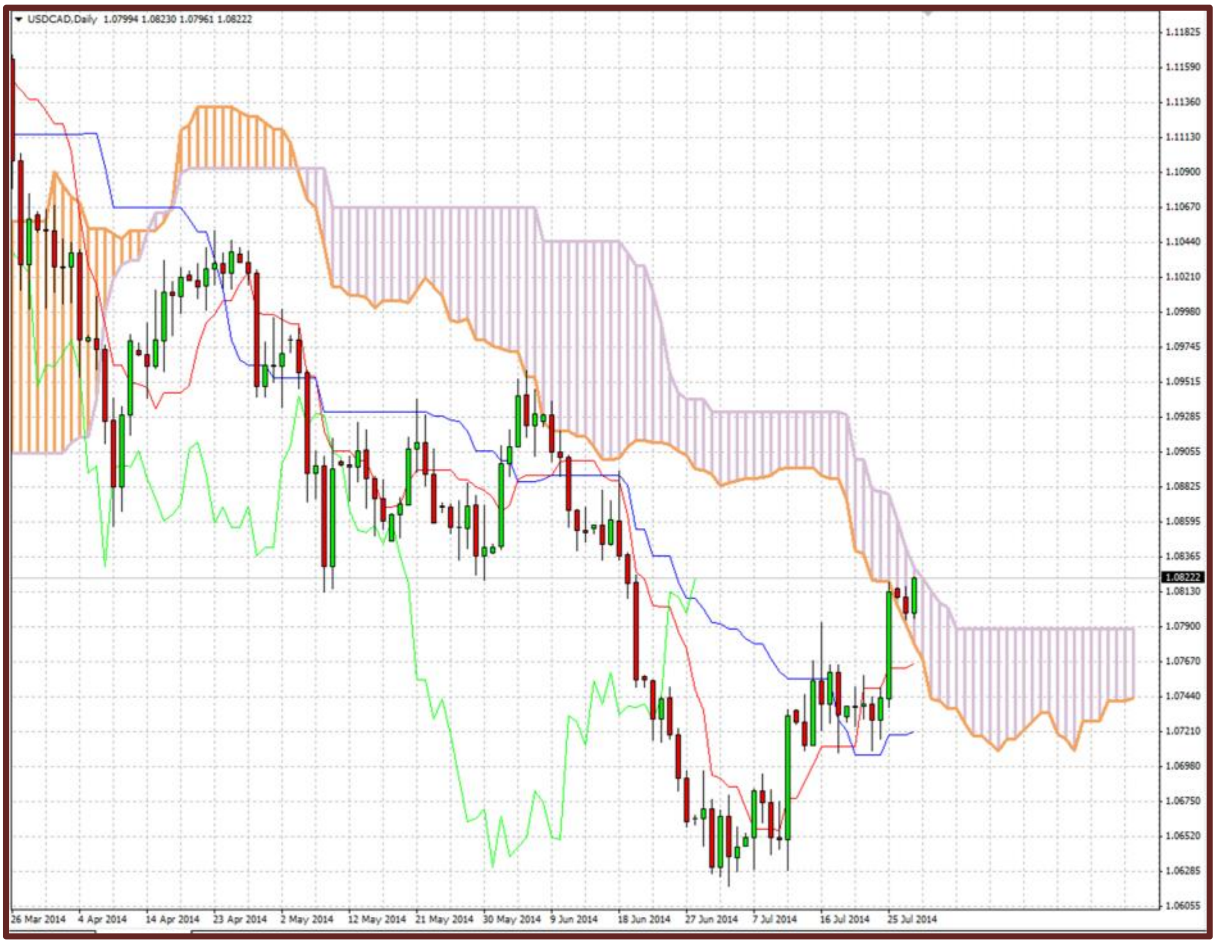

Figure 2-4

Interpretation

If the price of the security is above the cloud (kumo), a buy signal is created when the Tenkan-sen crosses above the Kijun-sen from below. If the price of the security is below the cloud, a sell signal is when the Tenkan-sen crosses above the Kijun-sen from above. If a trader is short a security, one of the places they can place their stop loss is above the cloud, depending on their strategy.

Moving Averages

What are they?

This is generally the most popular Technical Indicator used. It is trend following or lagging indicator because it is based on past prices. The 2 main indicators which are used is the, Simple Moving Average (SMA) which gives all the periods the same weighting and calculates the average, and the Exponential Moving Average (EMA), which gives bigger weighting to more recent prices.

Common Settings

- Period: 10,20,50,55,100 and 200 are all common periods

Chart

Figure 2-5

Interpretation

In Figure 2-5, the Red line is the 20 period EMA, and the blue line is the 20 period SMA. As you can see, the red line is more responsive to price moves, which is why traders generally will use the EMA. Traders will generally use at least 2 moving averages, whether they are both EMA, SMA or mixed and will use crossover's as potential trend direction. In figure 2-5, you can see that when the EMA is below the SMA, the market is generally trending downwards, with the opposite being true also. You can also use for example 2 EMA'S, so 1 10 period EMA and a 20 period EMA. The 10 period will be the fast moving average, reacting quicker to price moves, and the 20 being the Slow. Therefore the 10 being above the 20 will signal an uptrend, whilst the 10 being below the 20 will signal a down trend. In Figure 2-6, the red line is the 10 EMA, and the blue is the 20.

Figure 2-6

As well as using the moving averages to provide you with the trend direction, traders also use them to place entry and exit orders also. In our courses we go into this in more detail.

Parabolic SAR

What is it?

This indicator helps you to determine the direction of a security's price, whilst providing you with the point in time when this momentum has a higher than normal probability of switching direction which is known as the "Stop and Reversal System".

Common Settings

- Step: 0.02
- Maximum: 0.2

Chart

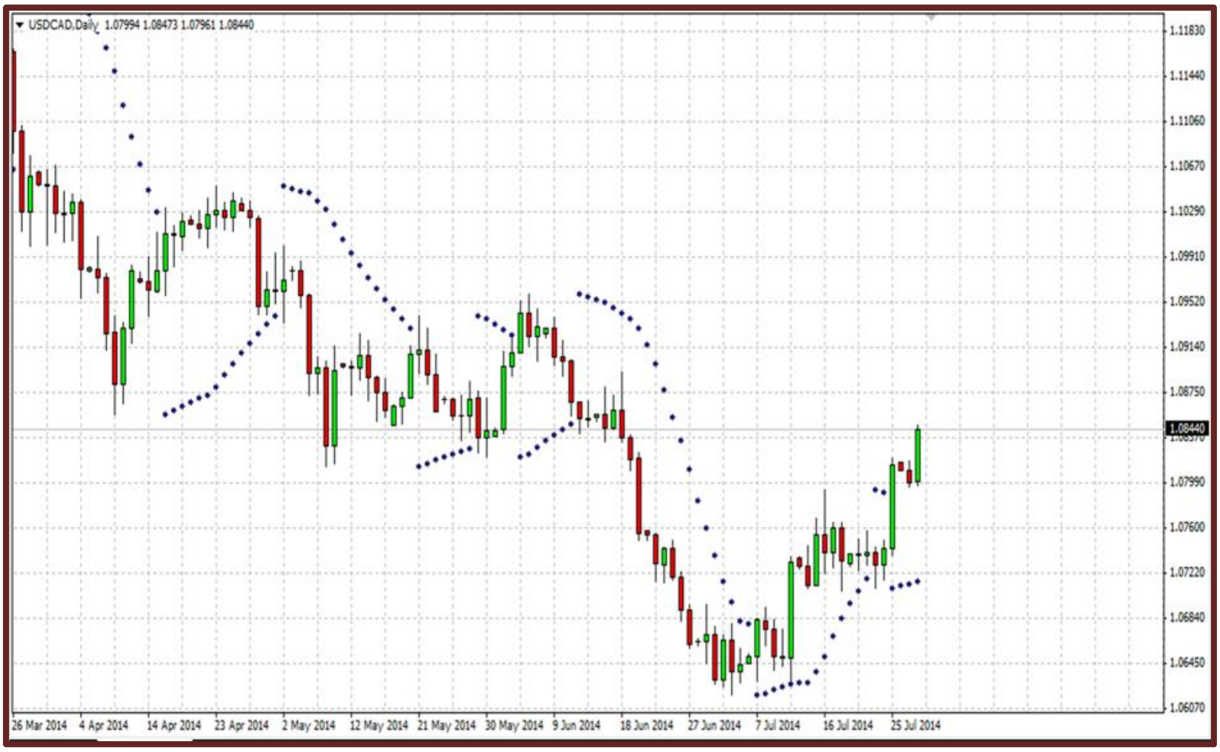

Figure 2-7

Interpretation

A sell signal is generated when the prices crosses below the dot from above. A buy signal is the opposite. Once in the trade the stop is placed above the dot if you are short, or below the dot if you are long.

Commodity Channel Index (CCI)

What is it?

The CCI is an oscillator which helps to determine whether a security is overbought or oversold. This can be used with other indicators to provide a very powerful tool.

Common Settings

- Period: 14
- Levels 100 and -100

Chart

Figure 2-8

Interpretation

When the CCI reading is above 100 it is trending upwards. When the reading then turns and goes below 100, this signals the security is overbought and has the potential for a reversal. The opposite is also true when the reading is below -100.

Moving Average Convergence/Divergence (MACD)

What is it?

This is a trend-following momentum indicator which shows the relationship between 2 moving averages of prices. The MACD is calculated by subtracting the slow Exponential moving average from the fast Exponential Moving Average. A signal line is then created by calculating a 9 period Simple Moving Average of the MACD.

Common Settings

- Slow EMA: 26

- Fast EMA: 12
- Signal Line: MACD SMA 9

Chart

Figure 2-9

Interpretation

There are many ways the MACD can be used. The most popular method is to buy or sell the security when the signal line crosses the MACD. So in Figure 2-9, when the Grey histogram (MACD) crosses above the Red Signal Line, that provide a signal to buy. The opposite is also true when it crosses below the signal line.

Relative Strength Index (RSI)

What is it?

The RSI measures the magnitude of gains over a period to the magnitudes of losses over the same period. It provides you with a signal when the market is overbought or oversold.

Common Settings

- Period: 14

Chart

Figure 2-10

Interpretation

When the RSI is above 70, it is said to be overbought and could signal a potential area to sell the security. When it is below 30, it is said to be oversold and provides a potential area to buy the security. This is a very powerful tool to use, especially when you use it with other indicators as it can also signal the end of a trend.

Stochastic Oscillator

What is it?

The Stochastic Oscillator compares a security's closing price to its price range over a given period of time. In a rising market the security will normally close near the highs, while in a falling market they will close near the lows. This Oscillator provides you with oversold and overbought areas.

Common Settings

- %K: 5
- %D: 3
- Slowing: 3

Chart

Figure 2-11

Interpretation

This indicator is used similarly to how you would use the RSI. When the Stochastic Oscillator is above 80, it is said to be overbought, whilst when it is below 20, it is said to be oversold. In this case, you will generally sell when the stochastic oscillator goes above 80, and then turns and goes below it. You will buy it when it is below 20, and then turns and goes above it.

Chapter 3- Creating a Trading Strategy

What is a Trading System?

A trading system is a mixture of different technical analysis and indicators. Traders can also include fundamental risk management. The idea behind a system is that it should be something which can consistently be replicated for different trading scenarios.

The key to any successful system is to apply strict risk management parameters to ensure it will help you to grow your account rather than increasing potential losses. Most systems will play on probabilities meaning, as long as the (Profits x % of trades won) is greater than (Losses x % of trades loss), then the trading account will grow. Traders should accept the fact that they will get trades wrong; hence risk management is a very important tool.

Psychology is also used to ensure trades are placed in accordance with the system. The common fault which traders make is stepping away from the system, and using emotions to trade which is not the right way to trade.

Example of a Trading Strategy – The Parkers Strategy

Indicators used:

- 2 Exponential Moving Averages
- MACD
- RSI

By placing all these indicators on the chart, they will be displayed as in Figure 3-1.

Figure 3-1

Using this strategy, we will typically look to buy when:

- The market trades at the fast moving average
- 90% of the MACD is greater than the signal line and both are above 0
- The RSI is greater than 30, and less than 70

We will sell when:

- The market trades at the fast moving average
- 90% of the MACD is less than the signal line and both are below 0
- The RSI is greater than 30, and less than 70

What to do when we get a buy/sell signal

- Trade at the right level
- Use the Risk Management Spreadsheet to calculate risk/rewards as well as the well as areas to place the orders
- Place the stop-loss at the right place along with the take profit
- Profitability - Get more than 50% of the trades correct, with a risk/reward ratio >1
- Follow the strategy to trade repeatedly

How to make the strategy more effective

By adding more indicators, you will have less trade set-ups but when you get a signal, the potential probability of success should increase. One thing to remember is that picking the correct mixture of indicators will provide the best signals. By adding more indicators without testing will potentially provide bad signals, so testing is also very important. So in the chart Figure 3-2, we have added the CCI indicator to give a further level of confirmation:

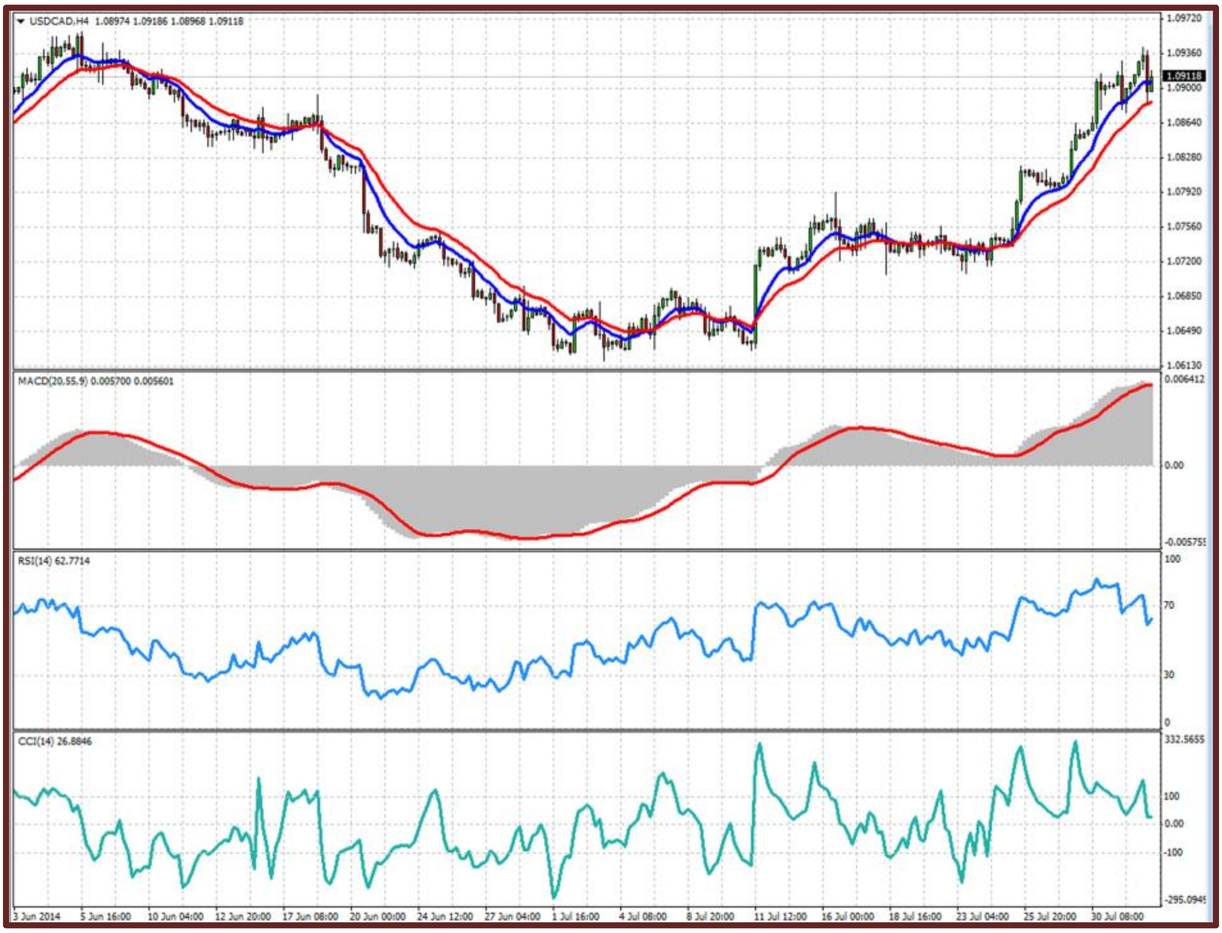

Figure 3-2

Mixing Oscillators and Trend Following Indicators

Traders can aim to mix oscillators and trend following indicators to help them refine their strategy. The main advantages of doing this will stop you from buying or selling the tops or bottoms of the market

You can also look to apply to strategies to multiple time frames again to refine the strategy.

The common way that Multiple Time Frames are used is as follows:

- Higher time frames can be used to define trends and ranges, whilst lower time frames can be used for entry and exits.
- Lower time frames helps to find better levels to trade by providing short term overbought/oversold areas, as well as short term trends, before the market realigns into the longer term trend

So for example, the Higher Time Frame will tell us that the trend is up, but the lower time frame provides confirmation and areas to buy.

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