



australian
stock
report

Short Term Trading Plan



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1 Trading Objectives

1.1 Mission Statement

The mission of this trading plan is to achieve the minimum return objectives whilst also adhering to the stated risk objectives. Notwithstanding the above, the *most important* task of the trading plan is to protect the allocated trading capital. The specific objectives of this trading plan are as follows:

1.1.1 Return Objective

Achieve a long-term rate of return of 20.0% or more in excess of inflation from a combination of trading activities and interest earned on the trading capital. This is an approximate monthly return of 1.5%.

Ensure that sufficient liquid assets will be available to meet all obligations as and when they fall due.

1.1.2 Risk Objective

The maximum allowable drawdown from the commencement of the trading plan will be referred to as the *maximum starting drawdown limit (Start DD%)* and will be set at 7.5%. If this limit is breached only virtual trades will be allowed (see Section 8.6.3 for a definition of virtual trades).

The maximum permissible drawdown from any new equity high will be referred to as the *maximum drawdown limit (Max DD%)* and will be set at 15.0%. If this limit is breached only virtual trades will be allowed.

1.2 Specific Goals

In order to meet the objectives defined by the mission statement, it is necessary to have goals which are specific, measurable, realistic, and time-bound. In support of the mission objectives, it is important that the following goals are also achieved:

1.2.1 Expectancy

Item 1: Reward to Risk Goal

The initial reward to risk on any trade opportunity will vary as per the conditions set out in Section 6.4, but the long run target reward to risk ratio for this trading plan is 2:1. In other words, for every \$1 risked on a trade, the realised reward must average at least \$2 over a large sample of trade outcomes.

Item 2: Strike Rate Goal

The long run target strike rate for this trading plan is 50%. In other words, on average at least 1 in every 2 trades should be a winning trade over a large sample of trade outcomes.

By achieving the goals in Item 1 and Item 2, the trader will have an expectancy approaching \$0.50 for each dollar risked and therefore be profitable over an extended period of time.



2 Trading Capital

2.1 Capital Allocation

The trading capital is the most valuable resource of this trading plan. A starting capital of \$500,000 will be applied to the following markets over the chosen periodicities.

Asset Class	Main Periodicity	Typical Capital Allocation
ASX Equities	Daily	25%
USA Equities	Daily	75%

A more detailed explanation of how the capital is to be allocated within these markets can be found in Section 8.2. An explanation of periodicity and trading style can be found in Section 3.

2.2 Handling of Capital

All domestic broker trading accounts must be a segregated client account held with an Australian Government-backed financial institution.

All capital not being used for trading activity is to be held in a high interest bearing at-call savings account with an Australian Government-backed financial institution.

For leveraged securities which attract a financing fee, the maximum amount which can be held in a broker's account at any time is the total margin required plus 15% of the trading capital. This will ensure that the bulk of the trading capital remains in the savings account earning interest to offset any financing costs.

3 Trading Style

The trading style will be predominantly *short term (ST)* with trades typically lasting a few days to a few weeks. *Medium term (MT)* trades which typically last for a few weeks to a few months may also be identified from time to time – typically for extended periods of time when the trader does not have the ability to be consistent with the daily periodicity. Note however that whilst the strategies used will identify ST or MT trades at the outset, the trader will attempt to retain profitable trades for as long as practicably possible whilst disposing of unprofitable trades as soon as practicably possible.

3.1 Periodicity

Periodicity refers to the amount of time apportioned to each period on a chart. Selecting the correct periodicity is integral to achieving the stated trading style and meeting the trading plan's objectives.

3.1.1 Individual Trade Management

The periodicities used to manage existing trades and identify new trade opportunities are as follows:

Asset Class	Periodicity ST Trading	Periodicity MT Trading
ASX Equities	Daily	Weekly
USA Equities	Daily	Weekly

Analysis sessions during which the trading plan will be enacted must occur with a frequency consistent with the respective periodicity for each asset class. The specific analysis times are listed in Section 9.1.1. Analysis sessions are to follow the schedule detailed in Section 9.

3.1.2 Portfolio Management

The periodicity for the application of the portfolio management provisions in Section 8.2 is daily.

3.2 Trade Frequency

It is best left to the trading plan's systems to determine trade frequency, but it is noted that if the systems employed do not identify enough trading opportunities, it may not be possible to achieve the stated return objective. For short term trades the goal is to identify an average of approximately 15-20 trades per month. When medium term trading is in use, the goal is to identify an average of approximately 5-10 trades per month.

3.3 Average Hold Time

The average duration of a typical trade identified by the methodologies of this trading plan will be referred to as the *average hold time*. The average hold time for this trading plan is approximately 21 trading periods.

4 Trading Universe

The universe will contain, but not be limited to:

ASX Equities

- All ASX fully paid ordinary

USA Equities

- All USA equities available on the specified broker's trading platform

5 Trading Methodology

Consistency is the key to profitable trading. To ensure consistency, the trader will act in a methodical fashion and follow a number of systems and processes to identify trading opportunities and protect the trading capital. The systems and processes within this plan will be divided into the following areas:

S - Setup

T - Trigger

O - Objective

P - Protection

P - Process

Setup

A *setup* is a condition or series of conditions which need to be met to qualify a trade opportunity. A setup consists of two key components: A *signal* which is an event validating a trade opportunity, and *filters* which are extra conditions designed to filter out lower quality signals but retain higher quality signals. A setup occurs when a signal and all required filters can be observed on the chart of a security. A security which has a valid setup may then be considered by other parts of this trading plan to receive some of the trading capital. The setup conditions within this plan will be discussed in Section 6.

Trigger

The trigger for a trade opportunity may only occur after a setup is observed i.e. in a *setup market*. The trigger price is a hurdle price required to activate a contingent trade entry order such as an on-stop order. The trigger conditions within this plan will be discussed in Section 6.

Objective

The objective is the expected potential reward identified for a trading opportunity. The achievement of the objective will cause some or all of the position to be exited depending on the nature of the objective achieved. The objective conditions within this plan will be discussed in Section 7.

Protection

Protection refers to individual trade risk management, portfolio risk management and drawdown management. Collectively these concepts are referred to in this plan as *Capital Management*. The capital management conditions within this plan will be discussed in Section 8.

Process

Process refers to the consistent way in which the methodology will be applied and the documentation which will be kept to record the trading plan's activities and performance. The process aspects of this plan will be discussed in Section 9 and Section 10. To assist the efficient application of processes within the trading plan a number of detailed checklists are provided in Section 11.

6 Trade Entries

The trader will follow a methodical system for identifying trade opportunities as this promotes consistent and easily measurable outcomes. This section will define the parameters of the entry systems within the trading plan.

6.1 Price Action Model

All price action is reflective of demand and supply. All demand and supply is reflective of all publically available and publically unavailable information in the markets. Investors will act in a rational manner with the information they have, and therefore prices will move to reflect the true fundamental situation at any one point in time. For this reason, for any security, a rising price over time indicates investors perceive strong fundamentals, whilst a declining price indicates investors perceive weak fundamentals, and a stagnating price indicates investors perceive neutral fundamentals.

In addition to the above, investors can be categorised as having different investment horizons and investment styles. For example, there are those who have a shorter term bias choosing to trade frequently in and out of the market for small returns and those who take a longer term view and trade less frequently for larger returns. There are of course many other investors which fall in between and beyond each of these styles.

When the buying and selling activities of traders of all time horizons are mostly in opposition, the resultant conflicting forces of demand and supply will largely be in balance and prices will stagnate. Alternatively, when the majority of investors of all timeframes choose to buy, and simultaneously too few consider to sell, demand will outstrip supply and prices will rise relatively unhindered. Conversely, when the majority of traders of all timeframes choose to sell, and simultaneously too few consider to buy, supply will outstrip demand and prices will fall relatively unhindered.

A directional trade is one which profits from a price move in a particular direction. The strongest and most sustainable directional movements will occur when traders of all timeframes agree on the fundamentals and are therefore trading accordingly. As a result of this fact it is advantageous for the trader conducting a directional trade to measure the trend in price over a number of different timeframes and trade only when each of the trends is in alignment. In assessing a potential trade entry the trend over a short term (ST), medium term (MT), and long term (LT) basis will be measured.

Trend Degree	Example	Trade A	Trade B	Trade C
Primary	Short Term (ST)	✓	✓	✓
Secondary	Medium Term (MT)	✓	✓	X
Tertiary	Long Term (LT)	✓	X	X
Probability of Success:		Higher	Lower	Lowest

From the table above, in Trade 'A' the trader has identified a setup where the ST, MT, and LT trends are all in alignment. All things being equal this will give the trade setup the highest probability of success. As a result trade 'A' may be considered for a trade entry in other parts of the trading plan, whilst Trade 'B' and Trade 'C' should be discarded.

6.1.1 Individual Candles

A single trading session as per the chosen periodicity may be depicted on a chart as a *candle* with a specified open (O), high (H), low (L) and close (C) price. It could also be depicted as a *bar*.

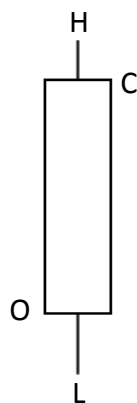


Figure 6.1: Trading session depicted as a 'candle'



Figure 6.2: Trading session depicted as a 'bar'

6.1.1.1 Strong Demand Candles

When demand is forcefully outstripping supply during a trading session, the price will close well above its low for the session and at or very near its high. When the price closes at the high of the session one can interpret that only the end of trading halted any further price appreciation. It is therefore likely that the same strong demand will continue into the next session causing prices to increase even further. Candles where the open is at or very near the low of the session, and the close is at or very near the high of the session will be referred to as *strong demand candles*.

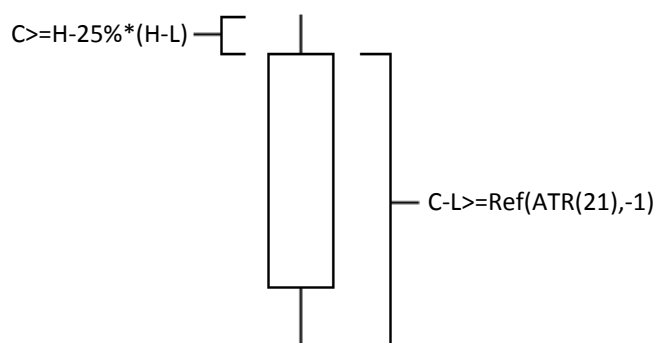


Figure 6.3: Strong demand candle

Criteria for strong demand candle:

- ☐ The demand component of the candle defined as the close minus the low (C-L) is greater than or equal to the average true range (ATR) over the prior 21 periods (Ref(ATR(21),-1); and
- ☐ The close is greater than or equal to the high minus 25% of the candle's range (H-L).

Strong demand candles are a continuation (of the prevailing trend) candles and therefore act as signals to potentially enter the prevailing uptrend.

6.1.1.2 Strong Supply Candles

A *strong supply candle* is the opposite of a strong demand candle. Supply is forcefully outstripping demand during a trading session causing the price to close well below its high for the session and at or very near its low. Again, it's likely that only the end of trading halted further selling and prices will likely continue to decline in the next session. Strong supply candles are continuation candles and therefore act as signals to potentially enter the prevailing downtrend.

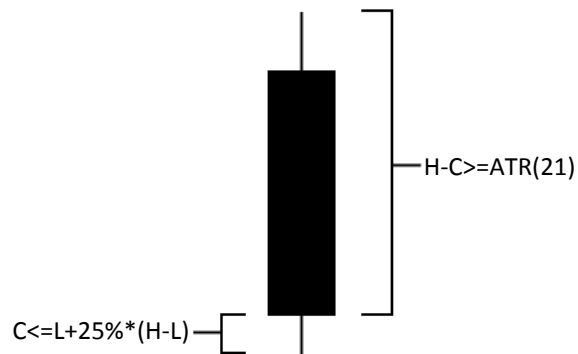


Figure 6.4: Strong supply candle

Criteria for strong supply candle:

- ☐ The supply component of the candle defined as the high minus the close (H-C) is greater than or equal to $\text{Ref}(ATR(21), -1)$; and
- ☐ The close is less than or equal to the low plus 25% of the range.

6.1.1.3 Pinbars

Pinbars are transition candles caused by the change in the supply-demand balance at a particular price. For a *bullish pinbar*, the trend on the day is initially bearish with excess supply. The market reaches equilibrium intraday and then swings to excess demand causing the price to close at or very near the highs of the session. The low of the bullish pinbar demonstrates an area of demand which will subsequently hinder downwards price movement until it is breached.

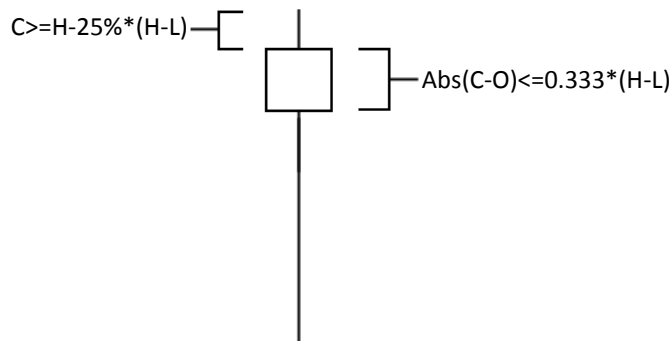


Figure 6.5: Bullish pinbar criteria

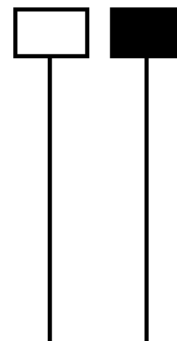


Figure 6.6: Bullish pinbar examples

Criteria for bullish pinbar candle:

- ☐ The body (absolute value of C-O) is less than or equal to $\frac{1}{3}$ of the candle's range;
- ☐ The close is greater than or equal to the high minus 25% of the range;
- ☐ The average true range ($ATR(1)$) is greater than or equal to $\frac{2}{3}$ of $\text{Ref}((ATR(21), -1))$.

For a *bearish pinbar*, the trend on the day is initially bullish with excess demand. The market reaches equilibrium intraday and then swings to excess supply causing the price to close at or very near the lows of the session. The high of the bearish pinbar demonstrates an area of supply which will subsequently hinder upwards price movement until it is breached.

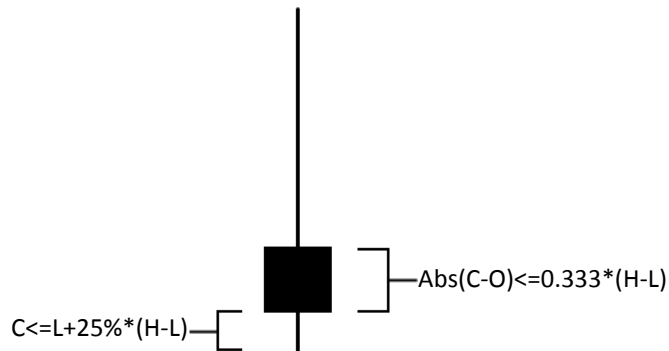


Figure 6.7: Bearish pinbar criteria

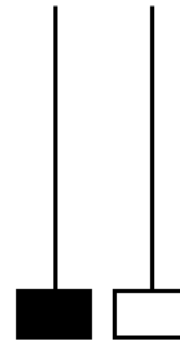


Figure 6.8: Bearish pinbar examples

Criteria for bearish pinbar candle:

- ☐ The body (absolute value of C-O) is less than or equal to $\frac{1}{3}$ of the candle's range;
- ☐ The close is less than or equal to the low plus 25% of the range;
- ☐ The average true range (ATR) is greater than or equal to $\frac{2}{3}$ of $\text{Ref}((\text{ATR}(21), -1))$.

6.1.1.4 Blended Candles

Strong demand candles, strong supply candles, bullish pinbars and bearish pinbars may also be constructed from two consecutive candles which when combined meet the criteria described in the previous sections for a single-candle signal. This process of blending two candles involves using the highest high of the two candles as the high of the blended signal, the lowest low of the two candles as the low of the blended signal, the open of the first candle as the open of the blended signal, and the close of the second candle as the close of the blended signal. Both the single-candle and blended versions of these scenarios may be used as aggressive entry signals to enter a trade (See also Section 6.5.1.2).

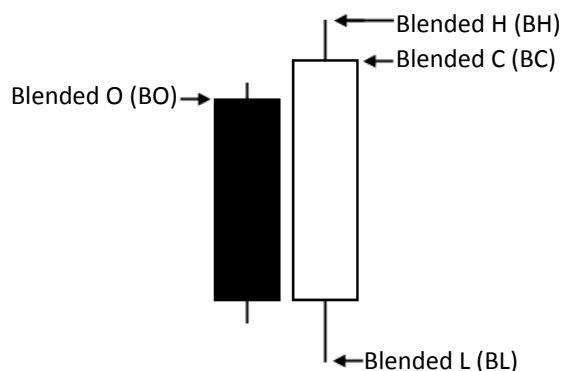


Figure 6.9: Bullish blended pinbar

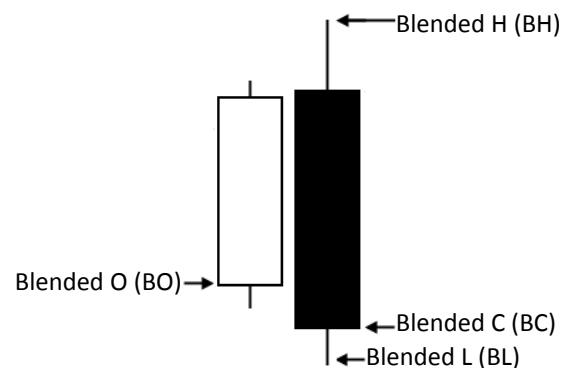


Figure 6.10: Bearish blended pinbar

6.1.2 Short Term Trends

Buyers tend to gravitate around the previous period's low price expecting another good entry into a long trade or an attractive point to cover back existing shorts. This causes latent demand around the low price into the near future and therefore each period's low represents a potential *point of demand*. Sellers tend to gravitate around the previous period's high price expecting another good entry into a short trade or an attractive point to existing exit longs. This causes latent supply around the high price into the near future and therefore each period's high represents a potential *point of supply*. These basic concepts of supply and demand within an individual trading session will assist in the establishment of a model to explain short term price action over two or more trading sessions.

6.1.2.1 Short Term Trends – Motive Phases

When the current period's low is higher than the previous period's low, this is a confirmatory sign of excess latent demand at lower prices. When the current period's high moves above the previous period's high, it represents demand in excess of any latent supply at the previous period's high. In combination, higher highs and higher lows over consecutive periods indicates strong demand and diminished supply. This is the definition of a *short term uptrend motive phase (STUTMP)*. Long trades will only be made in short term uptrend motive phases.

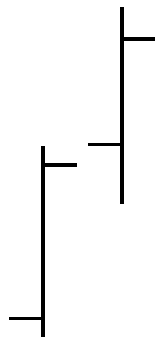


Figure 6.11: Short term uptrend motive phase

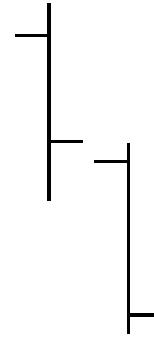


Figure 6.12: Short term downtrend motive phase

When the current period's high is lower than the previous period's high, this is a confirmatory sign of excess latent supply at higher prices. When the current period's low moves below the previous period's low, it represents supply in excess of any latent demand at the previous period's low. In combination, lower highs and lower lows over consecutive periods indicates strong supply and diminished demand. This is the definition of a *short term downtrend motive phase (STDTMP)*. Short trades will only be made in short term downtrend motive phases.

6.1.2.2 Short Term Trends – Stagnation Phases

It is possible that the current period's high is below the previous period's high indicating that there is significant short term supply in the system, whilst the current period's low is above the previous period's low indicating that there is conflicting significant short term demand in the system. This occurrence of lower highs and higher lows indicates a temporary equilibrium between supply and demand, and therefore a temporary stagnation of the short term trend. This price action is called an *inside day* (Figure 6.13).

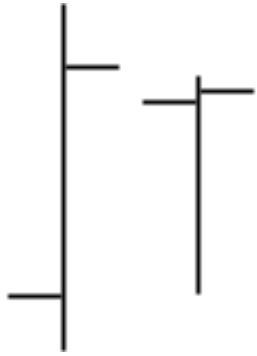


Figure 6.13: Inside day stagnation

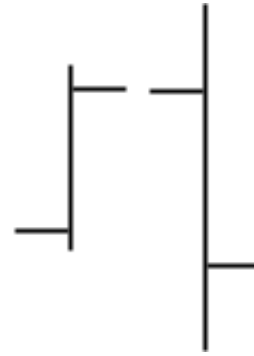


Figure 6.14: Outside day stagnation

It is also possible that the current period's high is above the previous period's high indicating that there is significant short term demand in the system whilst the current period's low is below the previous period's low indicating that there is conflicting significant short term supply in the system. This occurrence of higher highs and lower lows also indicates a temporary equilibrium between supply and demand, and therefore a temporary stagnation of the short term trend. This price action is called an *outside day*.

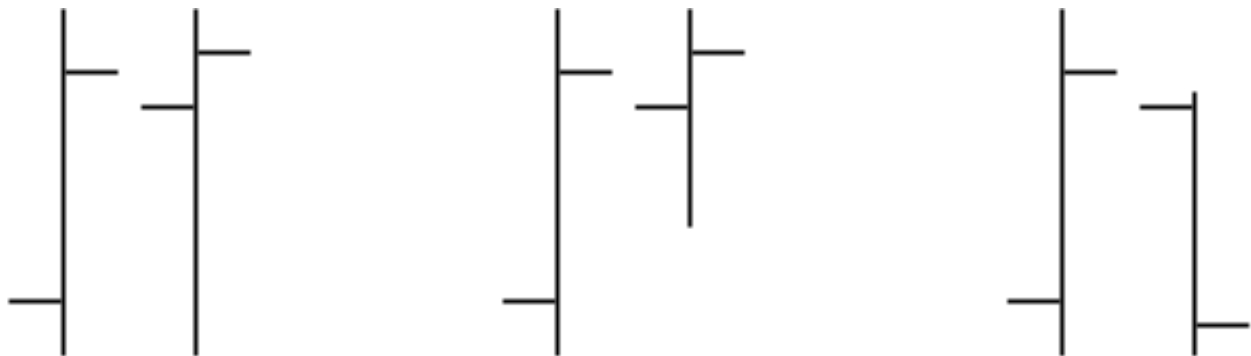


Figure 6.15: Equal day stagnation patterns

It is also possible that the current period's high is equal to the previous period's high and the current period's low is equal to the previous period's low. This is an indication of temporary equilibrium between supply and demand, and therefore temporary stagnation of the short term trend. This price action is called an *equal day*. Note also there can be variations on the this type of stagnation phase of the short term trend including: equal highs and lower lows, equal highs and higher lows, higher highs and equal lows and lower highs and equal lows. Each will also be referred to as an equal day.

6.1.2.3 Determining the Short Term Trend in the Stagnation Phase

In the case of all stagnation phases the trader must be able to identify when either a short term uptrend or short term downtrend is prevalent. For this reason the trader will designate the stagnation phase as being part of the most immediate short term trend which can be defined using the parameters in Section 6.1.2.1.

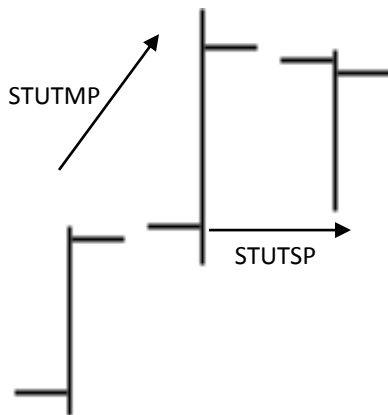


Figure 6.16: Short term uptrend stagnation phase

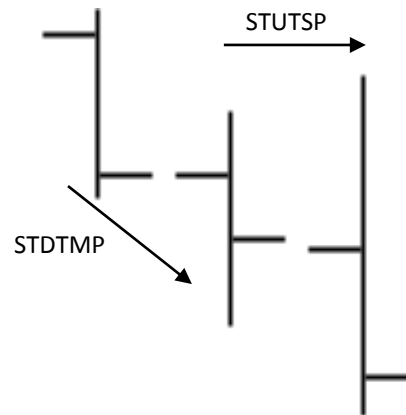


Figure 6.17: Short term downtrend stagnation phase

6.1.3 Points of Demand & Points of Supply

Short term trends will reverse when the prevailing supply-demand imbalance reaches equilibrium and subsequently returns to imbalance in the opposite direction. In the case of a short term uptrend changing into a short term downtrend, excess demand has transitioned into excess supply. The highest price point achieved in the transition between the short term uptrend the short term downtrend will be referred to as a *point of supply (POS)* or equally, a *medium term peak (MTP)*.

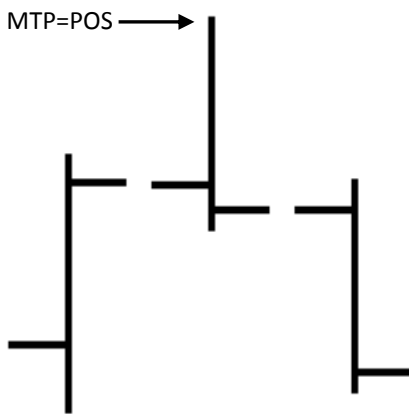


Figure 6.18: A medium term peak is a point of supply

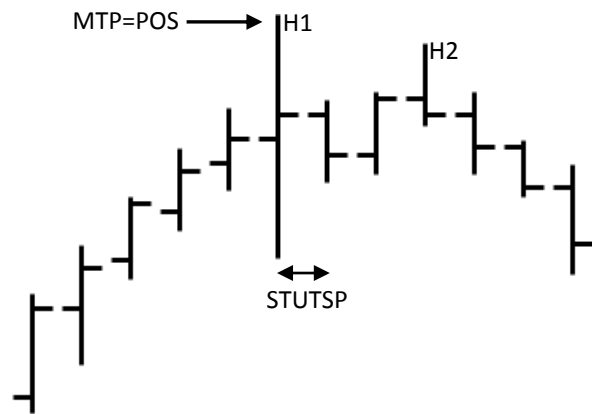


Figure 6.19: Identifying the MTP by deferral

In Figure 6.18 shows a relatively simple transition between the short term uptrend and short term downtrend. In Figure 6.19, H1 and H2 are both potential candidates to be designated a medium term peak. As a medium term trough does not exist between these two highs only one of them can be a medium term peak (it is impossible to have two peaks which are not separated by a trough). This causes deferral of the medium term peak to H1 over H2 as it is the higher of the two highs.

In the case of a short term downtrend changing into a short term uptrend, excess supply has transitioned into excess demand. The lowest price point achieved in the transition between the short term downtrend the short term uptrend will be referred to as a *point of demand (POD)* or equally, a *medium term trough (MTT)*.

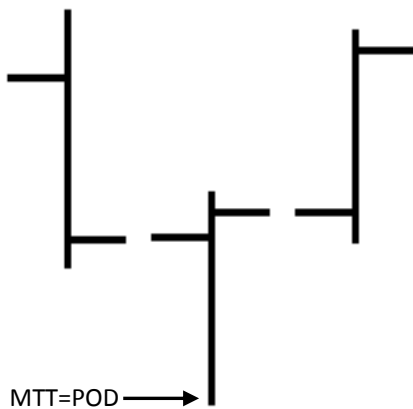


Figure 6.20: A medium term trough is a point of demand

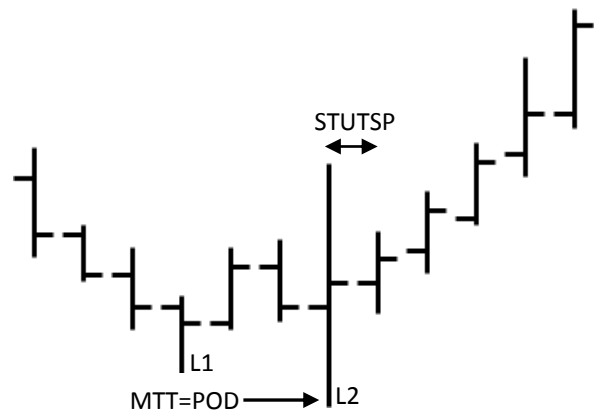


Figure 6.21: Identifying the MTT by deferral

Figure 6.20 shows a relatively simple transition between the short term downtrend and short term uptrend. In Figure 6.21, L1 and L2 are both potential candidates to be designated a medium term trough. As a medium term peak does not exist between these two lows only one of them can be a medium term trough (it is impossible to have two troughs which are not separated by a peak). Thus despite a short term uptrend immediately after L1, L2 is designated the medium term trough as it is the lower of the two lows.

6.1.3.1 Market memory

Market memory is the habit of investors to remember key price levels as turning points in the market and then to trade in similar fashion around these points in the future. Generally, investors will either want to emulate past successful trades, or expunge the feeling of regret arising from not previously acting in the market in a particular way. The latter could refer to trades which weren't entered and are now perceived to be successful, or to trades which were entered and are now trading at a loss. As a result of market memory the following scenarios commonly manifest themselves in the price action:

A past point of demand tends to act as a future point of demand until broken

A point of demand is where the price has risen from in the past. Many investors regret not entering longs or not exiting shorts at this point as it is now perceived to be an attractive point to do so. If the price should fall back towards the point of demand then some of these investors will look to enter the market on the demand side to take advantage of the perceived low prices.

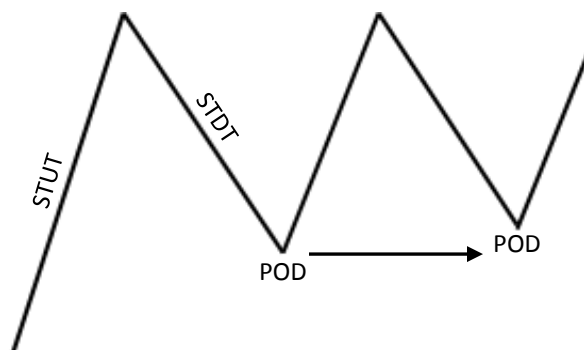


Figure 6.22: Points of demand act as future points of demand

Previous points of demand are therefore likely to act as future points of demand. However, once a point of demand is broken, it is no longer perceived to be an attractive entry point for longs or exit point for shorts thus decreasing the likelihood of it acting as a future point of demand.

After broken, a past point of demand tends to act as a future point of supply

When the price breaks below a previous point of demand investors who entered longs immediately prior to the break regret doing so as they are now in a losing position. Longer term investors also regret missing their opportunity to exit their longs at higher prices. Prices around the previous point of demand are now perceived to be a relatively attractive exit point for existing longs. Other investors may anticipate the excess supply likely to appear around the old point of demand and view it as an attractive point to enter new shorts. Each group contributes to supply around the old point of demand increasing the likelihood of it acting as a future point of supply.

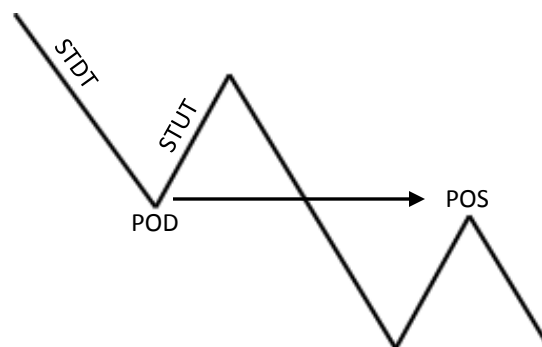


Figure 6.23: Points of demand when broken act as future points of supply

A past point of supply tends to act as a future point of supply until broken

A point of supply is where the price has fallen from in the past. Many investors regret not exiting longs or not entering shorts at this point as it is now perceived to be an attractive place to do so. If the price should rise back towards the point of supply, some of these investors will look to enter the market on the supply side to take advantage of the perceived high prices.

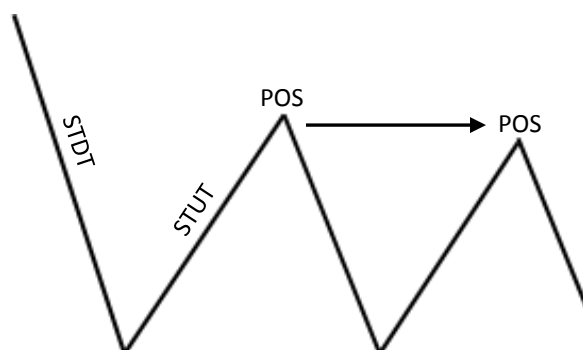


Figure 6.24: Points of supply act as future points of supply

Previous points of supply are therefore likely to act as future points of supply. However, once a point of supply is broken, it is no longer perceived to be an attractive exit point for longs or entry point for shorts thus decreasing the likelihood of it acting as a future point of supply.

After broken, a past point of supply tends to act as a future point of demand

When the price breaks above a previous point of supply investors who entered shorts immediately prior to the break regret doing so as they are now in a losing position. Prospective longer term investors also regret missing their opportunity to enter at lower prices. Prices around the previous point of supply are now perceived to be a relatively attractive exit point for existing shorts and a relatively attractive entry point for new longs. Other investors may anticipate the excess demand likely to appear at the old point of supply and view it as an attractive point to enter new longs. Each group contributes to demand around the old point of supply increasing the likelihood of it acting as a future point of demand.

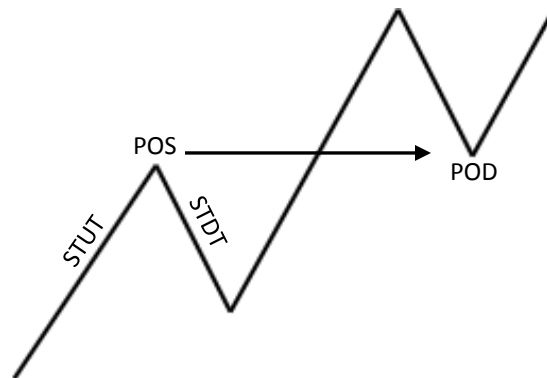


Figure 6.25: Points of supply when broken act as future points of demand

6.1.4 Medium Term Trends

When a point of demand forms at a higher price than the previous point of demand this is a confirmatory sign of building excess latent demand in the system. When in addition to this the price moves above the previous point of supply, it represents demand in excess of any latent supply at the previous point of supply. In combination, higher consecutive medium term peaks and higher consecutive medium term troughs is a sign of strong demand and diminished supply. This environment is favourable for long trades and will be defined as a *medium term uptrend motive phase (MTUTMP)*.

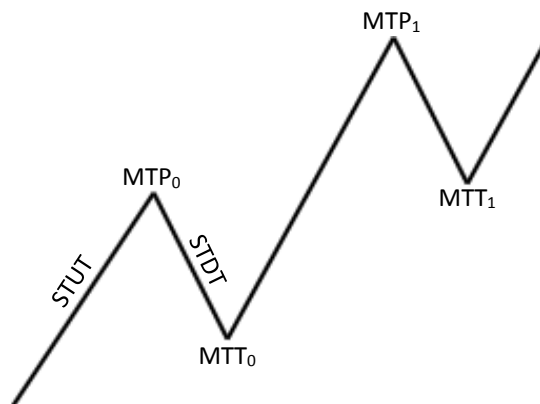


Figure 6.26: Medium term uptrend motive phase

When a point of supply forms at a lower price than the previous point of supply this is a confirmatory sign of building excess latent supply in the system. When in addition to this the price moves below the previous point of demand, it represents supply in excess of any latent demand at the previous point of demand. In combination, lower consecutive medium term peaks and lower consecutive medium term troughs is a sign of strong supply and diminished demand. This environment is favourable for short trades and will be defined as a *medium term downtrend motive phase (MTDTMP)*.

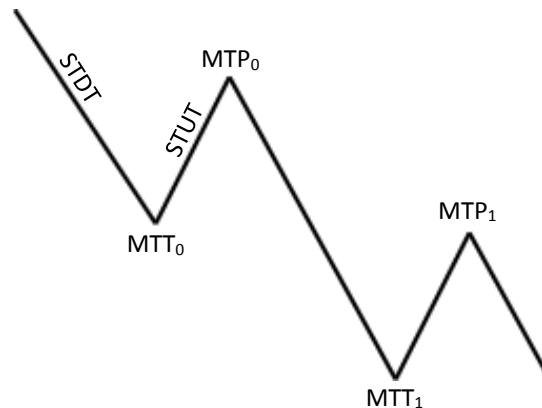


Figure 6.27: Medium term downtrend motive phase

6.1.5 Medium Term Trends – Stagnation Phases

Medium term uptrend and medium term downtrend motive phases demonstrate disequilibrium between supply and demand. Occasionally, supply and demand will reach equilibrium causing stagnation in the medium term trend. Here the prevailing medium term trend has not yet changed and prices will generally be moving in a more sideways direction.

A *medium term uptrend stagnation phase (MTUTSP)* occurs when a medium term uptrend motive phase is followed by a period where the price action observed meets neither of the criteria for a medium term uptrend motive phase (higher medium term peaks and higher medium term troughs), or a medium downtrend motive phase (lower medium term peaks and lower medium term troughs). A *medium term downtrend stagnation phase (MTDTSP)* occurs when a medium term downtrend motive phase is followed by a period where the price action observed meets neither of the criteria for a medium term uptrend motive phase or a medium downtrend motive phase.



Figure 6.28: MTUTSP with lower peaks, higher troughs



Figure 6.29: MTUTSP with higher peaks, lower troughs

The following stagnation phase combinations are possible for both uptrends and downtrends:

- Lower peaks and higher troughs;
- Higher peaks and lower troughs;
- Equal peaks and equal troughs;
- Equal peaks and higher troughs;
- Equal peaks and lower troughs;
- Higher peaks and equal troughs; and
- Lower peaks and equal troughs.

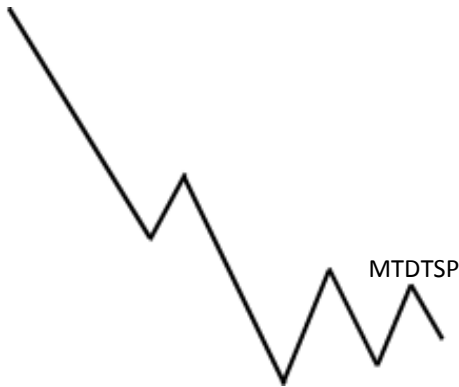


Figure 6.30: MTDTSP with lower peaks, higher troughs



Figure 6.31: MTDTSP with higher peaks, lower troughs

6.1.5.1 Extended Stagnation Phases (ESP)

Occasionally stagnation phases may extend for a substantial period of time and the price is observed rotating within a *dominant peak* or *dominant trough*. A dominant peak occurs just prior to the commencement of a medium term uptrend stagnation phase. The price does not breach this peak during the stagnation phase. If the medium term trend reverts to a medium term uptrend motive phase with higher peaks and higher troughs before the dominant peak has been breached, the medium term trend will not be designated a medium term uptrend motive phase but rather will continue to be designated a medium term uptrend stagnation phase, more specifically an *extended stagnation phase*. This will remain the case until the dominant peak is breached.

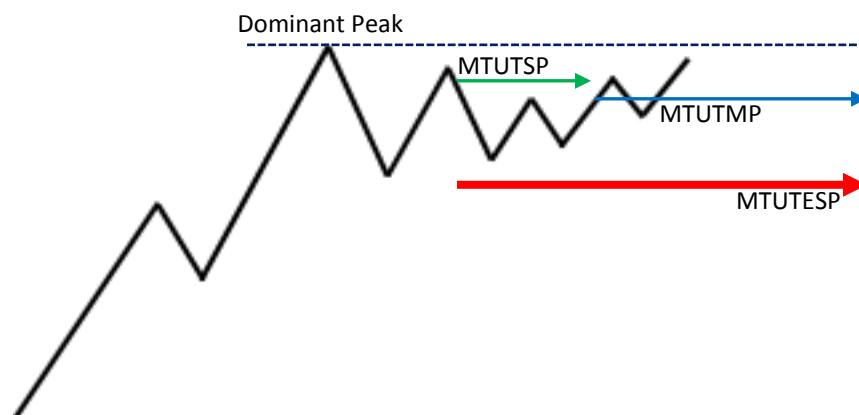


Figure 6.32: A MTUTMP within a dominant peak is designated an extended stagnation phase

A dominant trough occurs just prior to the commencement of a medium term downtrend stagnation phase. The price does not breach this trough during the stagnation phase. If the medium term trend reverts to a medium term downtrend motive phase with lower peaks and lower troughs before the dominant trough has been breached, the medium term trend will not be designated a medium term downtrend motive phase but rather will be designated a medium term downtrend extended stagnation phase. This will remain the case until the dominant trough is breached.

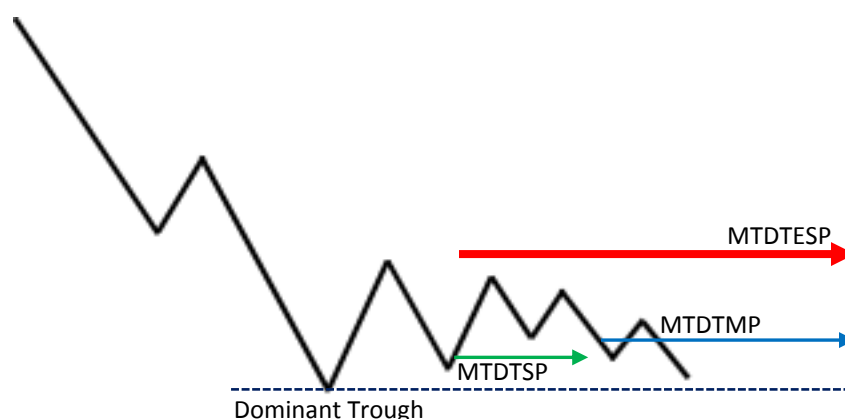


Figure 6.33: A MTDTMP within a dominant trough is designated an extended stagnation phase

6.1.5.2 Medium Term Stagnation Phase Strategies

Long trades may only be considered during a stagnation phase (standard or extended) which has rising troughs as this is symptomatic of increasing demand in the system. Short trades may only be considered during a stagnation phase (standard or extended) which has declining peaks as this is symptomatic of increasing supply.

Changes in demand and supply eventually reverts the system back to disequilibrium and the price will return to either a medium term uptrend motive phase or a medium term downtrend motive phase. Depending on the direction of the trend prior to the stagnation phase this could represent trend continuation or trend reversal.

When looking for new trade setups, the trader will be extra attentive during medium term stagnation phases for signs of medium term trend continuation as this would be an opportune scenario to enter a trade in the direction of the prevailing medium term trend. When in an existing trade the trader will be extra attentive during medium term stagnation phases for signs of medium term trend reversal as this will trigger a trade exit under the provisions in Section 7.3.4.

6.1.6 Trigger Points for Medium Term Trends

A medium term uptrend has been defined as a series of higher medium term peaks and higher medium term troughs. However, the exact point one can say with certainty that a medium term uptrend exists is when two higher troughs can be observed and the price subsequently moves above the last peak. Whilst the next peak may take some time to form, the fact that the price is trading above the last peak ensures that it will be a higher peak. This is sufficient to define the medium term trend as an uptrend.

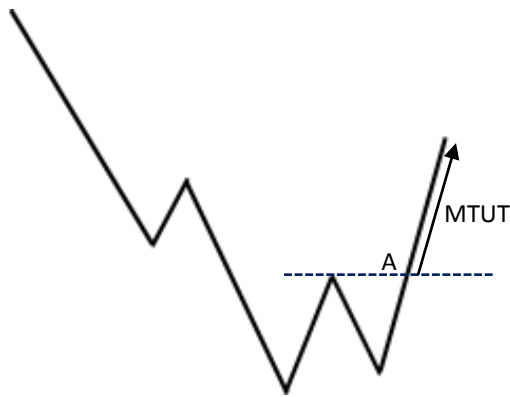


Figure 6.34: MTUT from higher troughs stagnation

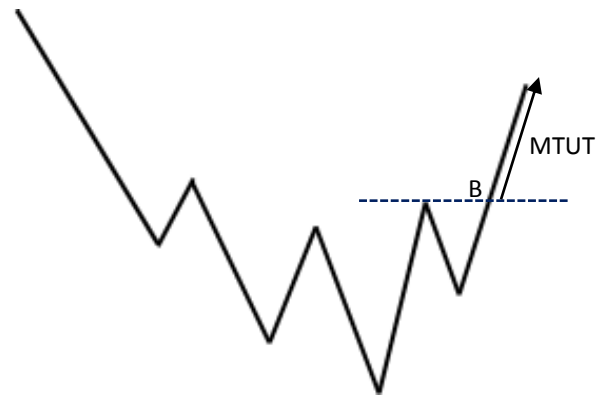


Figure 6.35: MTUT from higher peaks stagnation

When there is a medium term downtrend stagnation phase with higher troughs, all that is required to confirm a new medium term uptrend is the break above the last medium term peak price denoted by point A in Figure 6.34. When there is a medium term downtrend stagnation phase with lower troughs and higher peaks, a new medium term uptrend will only be considered in place when the price breaks above the price of the higher peak denoted by point B in Figure 6.35. Any point prior to this is therefore still part of the medium term downtrend and cannot be considered for a long trade entry.

A medium term downtrend has been defined as a series of lower medium term peaks and lower medium term troughs. However, the exact point one can say with certainty that a medium term downtrend exists is when two lower peaks can be observed and the price subsequently moves below the last trough. Whilst the next trough may take some time to form, the fact that the price is trading below the last trough ensures that it will be a lower trough. This is sufficient to define the medium term trend as a downtrend.

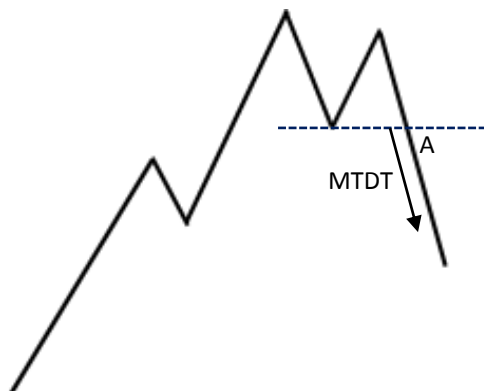


Figure 6.36: MTDT from lower peaks stagnation

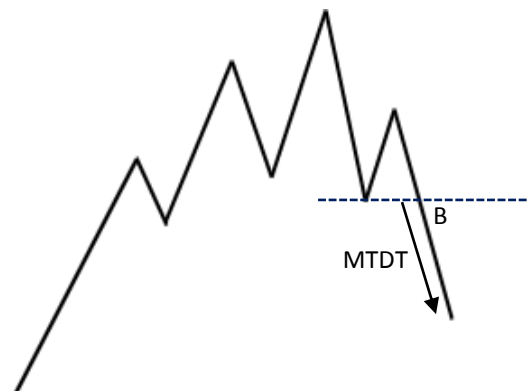


Figure 6.37: MTDT from lower troughs stagnation

When there is a medium term uptrend stagnation phase with lower peaks, all that is required to confirm a new medium term downtrend is the break below the last medium term trough price denoted by point A in Figure 6.36. When there is a medium term uptrend stagnation phase with higher peaks and lower troughs, a new medium term downtrend will only be considered in place when the price breaks below the price of the lower trough denoted by point B in Figure 6.37. Any point prior to this is therefore still part of the medium term uptrend and cannot be considered for a short trade entry.

6.1.7 Long Term Peaks and Troughs

A *long term peak* is the highest point between a medium term uptrend and a medium term downtrend. A *long term trough* is the lowest point between a medium term downtrend and a medium term uptrend. Previously we defined a medium term peak as a point where excess supply forced prices lower and therefore further defined it as a point of supply. However due to the fact that the formation of a long term peak requires the prior formation of no less than three medium peaks around an area of price, one can regard a long term peak as a *major point of supply*.

Previously we defined a medium term trough as a point where excess demand forced prices higher and therefore further defined it as a point of demand. However due to the fact that the formation of a long term trough requires the prior formation of no less than three medium term troughs around an area of price, one can regard a long term trough as a *major point of demand*. In turn, medium term peaks and troughs will now be referred to as *minor points of supply* and *minor points of demand*.

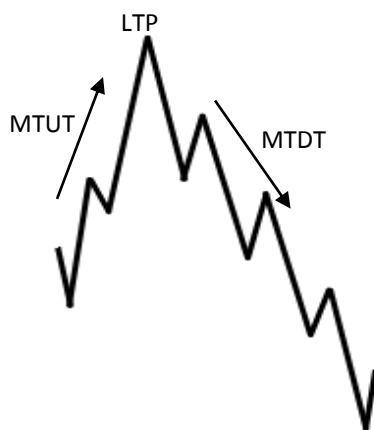


Figure 6.38: A long term peak is a major point of supply

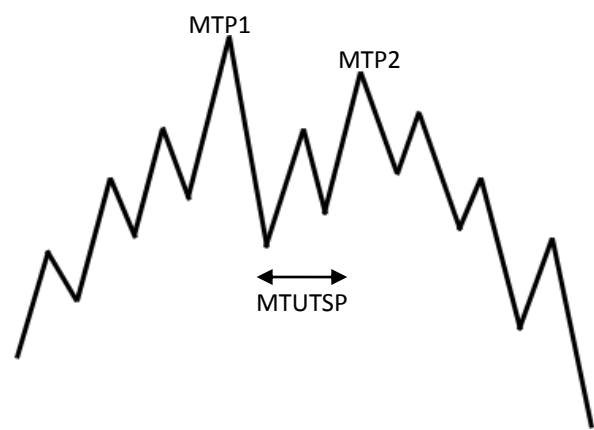


Figure 6.39: Identifying a LTP by deferral

In Figure 6.38 shows a relatively simple transition between the medium term uptrend and medium term downtrend. In Figure 6.39, MTP1 and MTP2 are both potential candidates to be designated a long term peak. As a long term trough does not exist between these two medium term peaks only one of them can be a long term peak (it is impossible to have two peaks not separated by a trough). This causes deferral of the long term peak to MTP1 over MTP2 as it is the higher of the two peaks.

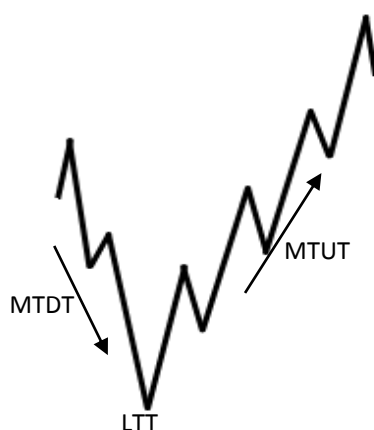


Figure 6.40: A long term trough is a major point of demand

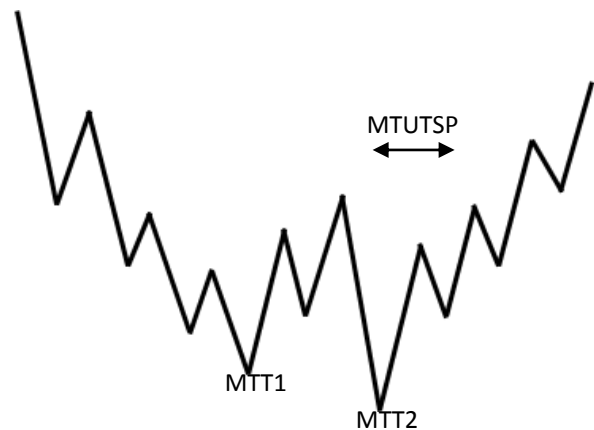


Figure 6.41: Identifying a LTT by deferral

Figure 6.40 shows a relatively simple transition between the medium term downtrend and medium term uptrend. In Figure 6.41, MTT1 and MTT2 are both potential candidates to be designated a long term trough. As a long term peak does not exist between these two medium term troughs only one of them can be a long term trough (it is impossible to have two troughs not separated by a peak). Thus despite a medium term uptrend immediately after MTT1, MTT2 is designated the long term trough as it is the lower of the two troughs.

6.1.8 Long Term Trends

Perceived strong fundamentals for a security will contribute to demand remaining consistently greater than supply over a sustained period of time. Frequent medium term uptrends will occur where price advances further and faster than it declines during the subsequent milder and shallower medium term downtrends. This causes long term peaks long term troughs to form at increasingly higher levels, i.e. a *long term uptrend*. A long trade entry may only be made in a long term uptrend.

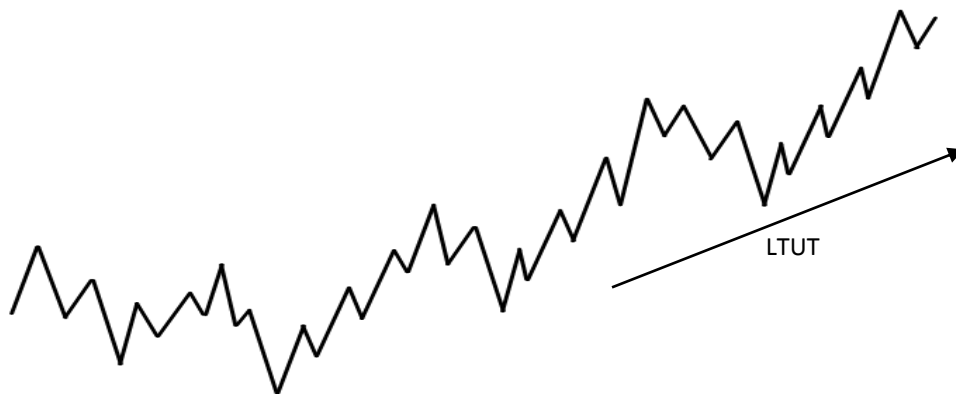


Figure 6.42: Long term uptrend

Perceived weak fundamentals for a security will contribute to supply remaining consistently greater than demand over a sustained period of time. Frequent medium term downtrends will occur where price declines further and faster than it advances during the subsequent milder and shallower medium term uptrends. This causes long term peaks long term troughs to form at increasingly lower levels, i.e. a *long term downtrend*. A short trade entry may only be made in a long term downtrend.

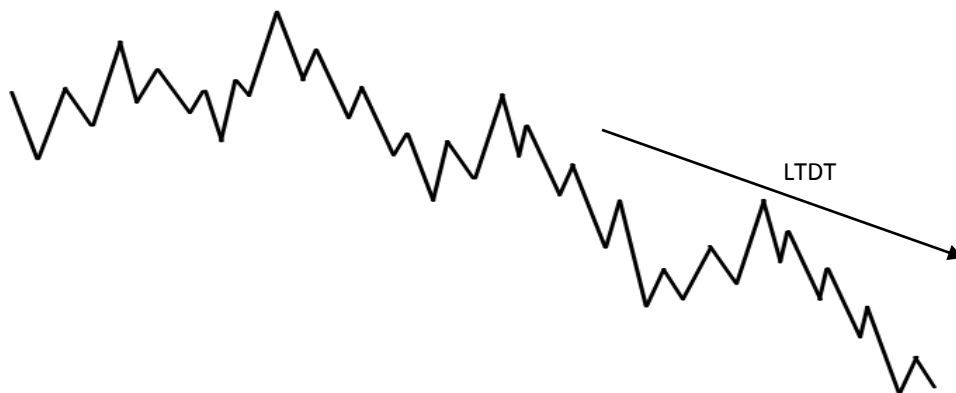


Figure 6.43: Long term downtrend

6.1.9 Trigger Points for Long Term Trends

A long term uptrend has been defined as a series of higher long term peaks and higher long term troughs. However, the exact point one can say with certainty that a long term uptrend exists is when two higher long term troughs can be observed and the price subsequently moves above the last long term peak. Whilst the next long term peak may take some time to form, the fact that the price is trading above the last long term peak ensures that it will be a higher long term peak. This is sufficient to define the long term trend as an uptrend.

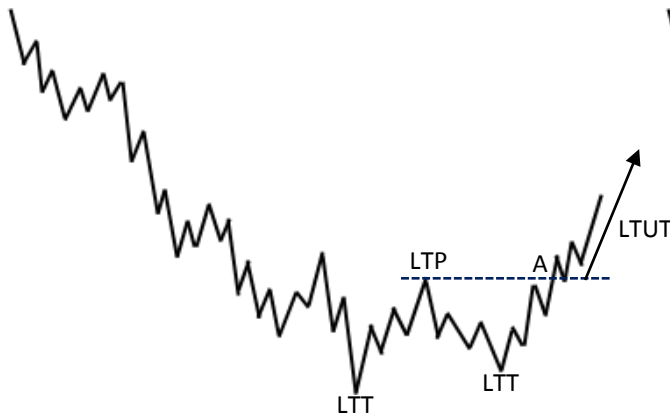


Figure 6.44: LTUT from higher LTTs stagnation

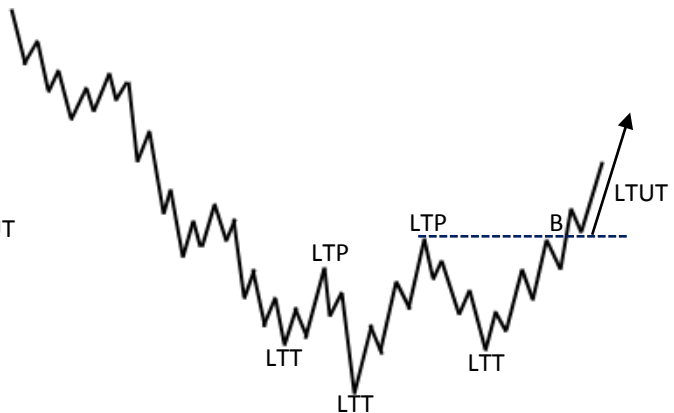


Figure 6.45: LTUT from higher LTPs stagnation

When there is a long term downtrend stagnation phase with higher long term troughs, all that is required to confirm a new long term uptrend is the break above the last long term peak denoted by point A in Figure 6.44. When there is a long term downtrend stagnation phase with lower long term troughs and higher long term peaks, a new long term uptrend will only be considered in place when the price breaks above the higher long term peak denoted by point B in Figure 6.45. Any point prior to this is therefore still part of the long term downtrend and cannot be considered for a long trade entry.

A long term downtrend has been defined as a series of lower long term peaks and lower long term troughs. However, the exact point one can say with certainty that a long term downtrend exists is when two lower long term peaks can be observed and the price subsequently moves below the last long term trough. Whilst the next long term trough may take some time to form, the fact that the price is trading below the last long term trough ensures that it will be a lower long term trough. This is sufficient to define the long term trend as a downtrend.

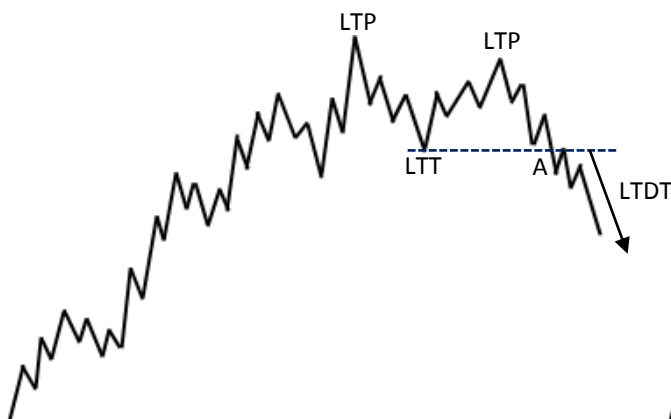


Figure 6.46: LTDT from lower LTPs stagnation

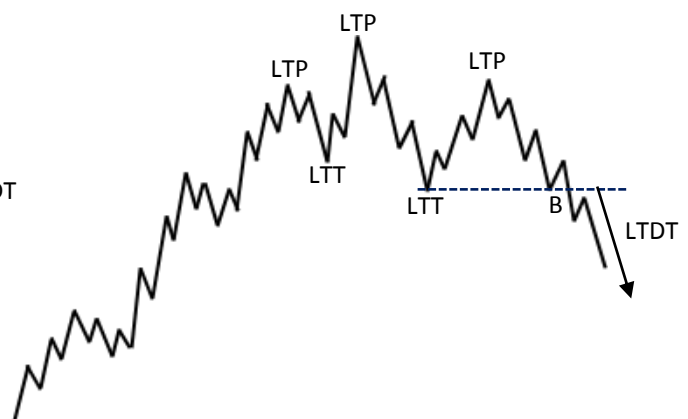


Figure 6.47: LTDT from lower LTTs stagnation

When there is a long term uptrend stagnation phase with lower long term peaks, all that is required to confirm a new long term downtrend is the break below the last long term trough denoted by point A in Figure 6.46. When there is a long term uptrend stagnation phase with higher long term peaks and lower long term troughs, a new long term downtrend will only be considered in place when the price breaks below the lower long term trough denoted by point B in Figure 6.47. Any point prior to this is therefore still part of the long term uptrend and cannot be considered for a short trade entry.

6.1.10 Price Action Filter – Motive Phase

It has been observed in very strong uptrends that after a point of supply has been breached it should then act as point of demand going forwards. If a subsequent trough forms at or above the old point of supply, this is confirmation the point has transitioned into a strong point of demand and is consistent with a strong uptrend. Alternatively, if a subsequent trough forms below the old point of supply, there is clearly insufficient demand in the system to signal it as a strong turning point. The lack of demand is enough to warrant discarding any potential long setup opportunity. The filter condition for a long setup is therefore: The last trough must be at or above the second from last peak. The filter condition for a long setup is therefore: The last trough must be at or above the second from last peak.

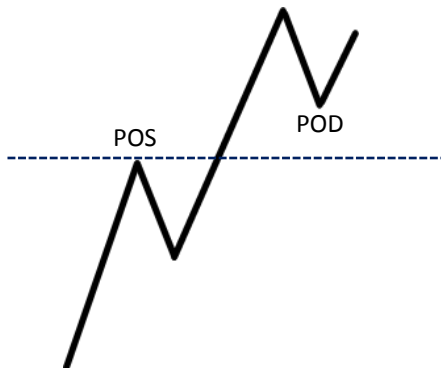


Figure 6.48: Strong price action uptrend

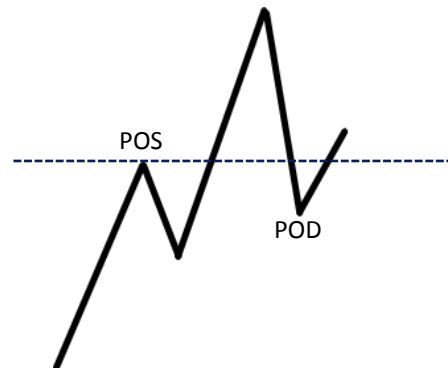


Figure 6.49: Weaker price action uptrend

A clarification of the definition of *at or above* for a long trade is further provided here: To confirm the price action filter, the candle which forms the last trough must close at or above the high price of the candle which formed the second from last peak. In the case of a blended candle forming the trough, the close of the second candle in the blended pattern will be used to assess the price action filter.

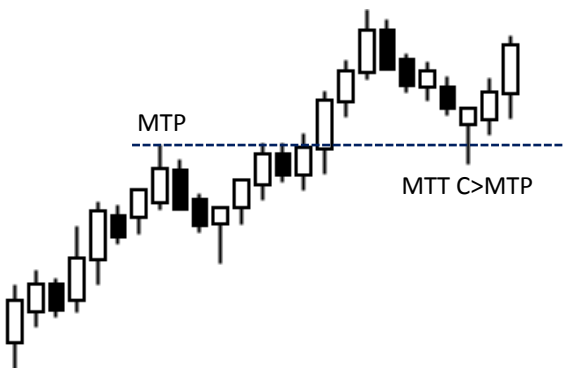


Figure 6.50: Acceptable 'at or above' price action

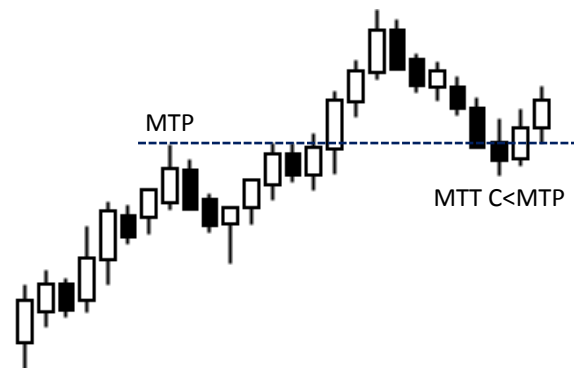


Figure 6.51: Unacceptable 'at or above' price action

It has been observed in very strong downtrends that after a point of demand has been breached it should then act as point of supply going forwards. If a subsequent peak forms at or below the old point of demand, this is confirmation the point has transitioned into a strong point of supply and is consistent with a strong downtrend. Alternatively, if a subsequent peak forms above the old point of demand, there is clearly insufficient supply in the system to signal it as a strong turning point. The lack of supply is enough to warrant discarding any potential short setup opportunity. The filter condition for a short setup is therefore: The last peak must be at or below the second from last trough.

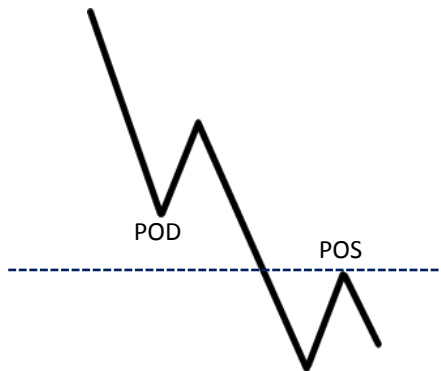


Figure 6.52: Strong price action downtrend

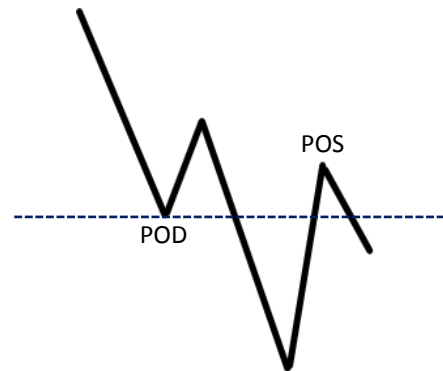


Figure 6.53: Weaker price action downtrend

A clarification of the definition of at or below for a short trade is further provided here: To confirm the price action filter, the candle which forms the last peak must close at or below the low price of the candle which formed the second from last trough. In the case of a blended candle forming the peak, the close of the second candle in the blended pattern will be used to assess the price action.

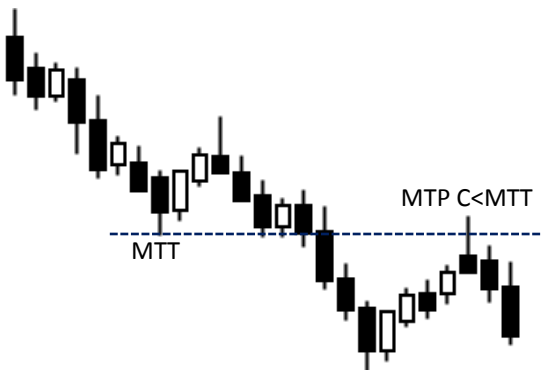


Figure 6.54: Acceptable 'at or below' price action

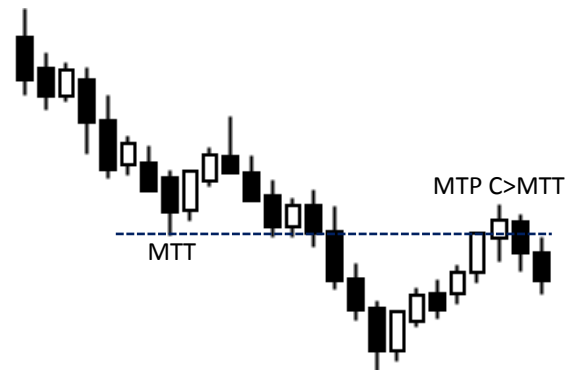


Figure 6.55: Unacceptable 'at or below' price action

6.1.11 Price Action Filter – Stagnation Phase

As described earlier, a stagnation phase is where price action is exhibiting neither of the attributes of a medium term uptrend motive phase (i.e. higher medium term peaks and higher medium term troughs), or a medium term downtrend motive phase (i.e. lower medium term peaks and lower medium term troughs). Supply and demand are in temporary equilibrium.

In a medium term uptrend stagnation phase, it is more likely that the system will move back to excess demand and the price will move higher. The probability of this will be even higher in stagnation phases which have rising medium term troughs as this is symptomatic of increasing demand in the system. For this reason a long trade entry may only be considered in a medium term uptrend stagnation phase which has rising medium term troughs.

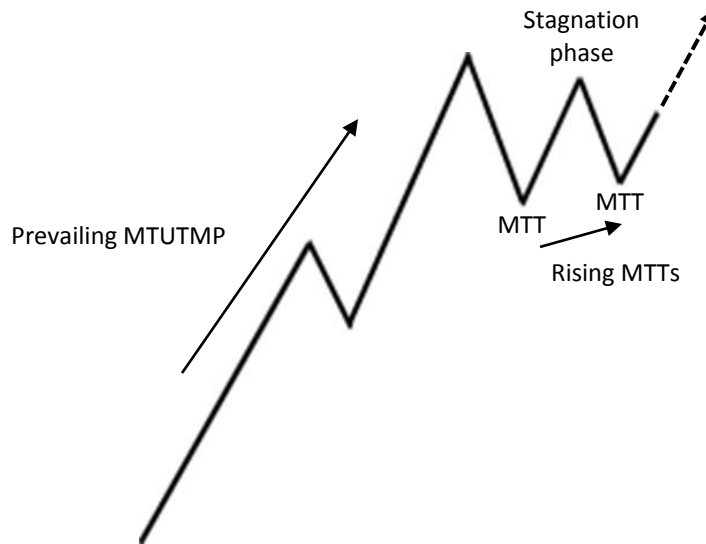


Figure 6.56: Acceptable bullish stagnation zone for prospective long trade entry

In a medium term downtrend stagnation phase, it is more likely that the system will move back to excess supply and the price will move lower. The probability of this will be even higher in stagnation phases which have declining medium term peaks as this is symptomatic of increasing supply in the system. For this reason a short trade entry may only be considered in a medium term downtrend stagnation phase which has declining medium term peaks.

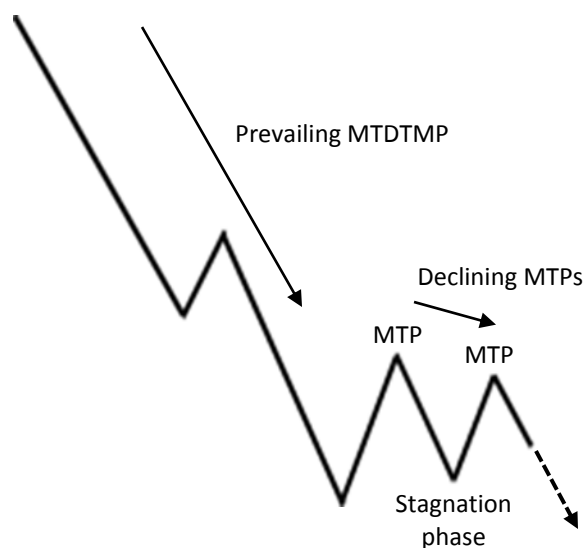


Figure 6.57: Acceptable bearish stagnation zone for prospective short trade entry

6.1.12 Price Action Filter – First Tests of Major PODs & Major POSs

Long term peaks have been defined as major points of supply. There is likely to be a significant amount of latent supply in the market around these levels. A first test of a major point of supply is defined as a medium term peak forming within one percent of the major point of supply price. By moving within such close proximity to the major point of supply, some holders of the security are stimulated to supply into the market as they can now sell at or close to their desired selling price. All things being equal, assuming that there is a finite amount of supply intended around the major point of supply, the next price move into this level will be impeded by less supply. This increases the probability of a subsequent breach of the point of supply. When considering long trades where a break above a major point of supply is being attempted, a first test of the point of supply must have been completed prior to a trade entry.

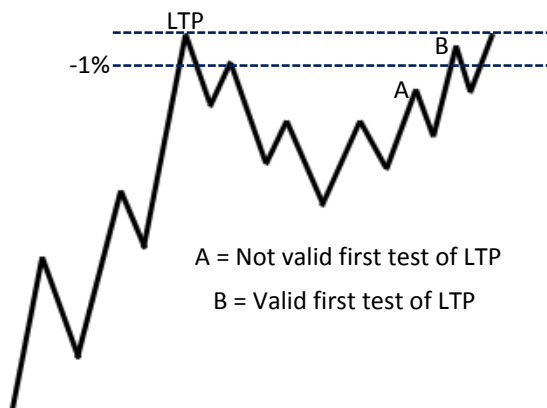


Figure 6.58: First test of a major point of supply

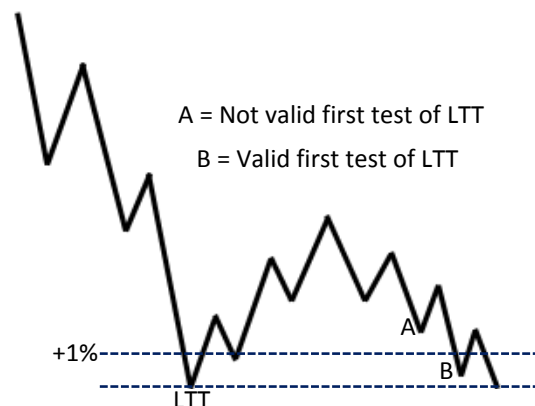


Figure 6.59: First test of a major point of demand

Long term troughs have been defined as major points of demand. There is likely to be a significant amount of latent demand in the market around these levels. A first test of a major point of demand is defined as a medium term trough forming within one percent of the major point of demand price. By moving within such close proximity to the major point of demand, some holders of the security are stimulated to enter the market on the demand side as they can now buy at or close to their desired buying price. All things being equal, assuming that there is a finite amount of demand intended around the major point of demand, the next price move into this level will be impeded by less demand. This increases the probability of a subsequent breach of the point of demand. When considering short trades where a break below a major point of demand is being attempted, a first test of the point of demand must have been completed prior to a trade entry.

6.2 Three Trends Model

The Three Trends Model is designed to measure the direction of the short term, medium term, and long term trends. It is an indicator-based model utilising exponential moving averages to define the trend of each of the three key trend durations. Due to the simplicity of the Three Trends Model it is quicker and easier to identify the three trends compared to the more complex Price Action Model. The Price Action Model however is more effective at pinpointing trade entries. For this reason, scanning will initially be conducted using the Three Trends Model to significantly reduce the universe to only the most prospective trade opportunities.

The results from the preliminary Three Trends Model scan will then be subjected to the conditions in the Long Trade Setup Conditions Checklist in Section 6.5.3 and the Short Trade Setup Conditions Checklist in Section 6.5.4 to confirm any new trade opportunities.

6.2.1 Three Trends Model Conditions

Trend Degree	EMA Duration	Uptrend Condition	Downtrend Condition
Short Term	21	Price above EMA, EMA rising	Price below EMA, EMA declining
Medium Term	63	Price above EMA, EMA rising	Price below EMA, EMA declining
Long Term	125	Price above EMA, EMA rising	Price below EMA, EMA declining
Correct order:	-	21EMA > 63 EMA > 125EMA	21EMA < 63EMA < 125EMA

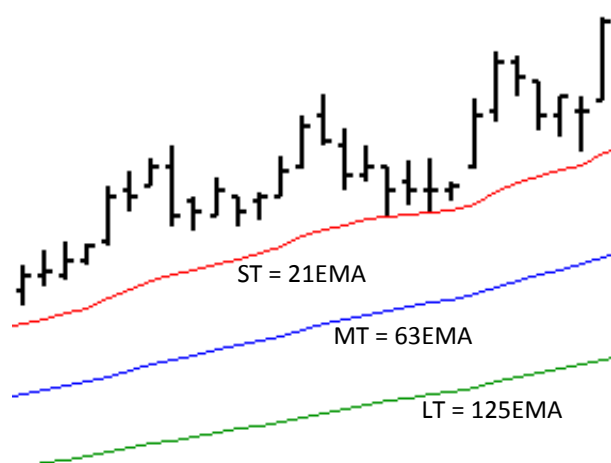


Figure 6.60: EMAs showing ST, MT and LT uptrends

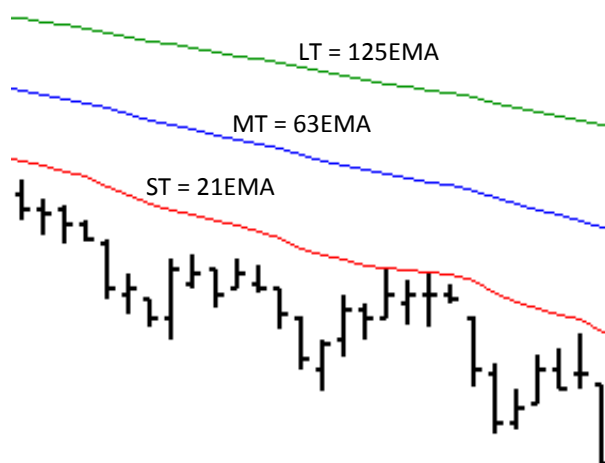


Figure 6.61: EMAs showing ST, MT and LT downtrends

6.3 Relative Strength Comparative

The universe to be considered is made up of many thousands of securities. Each of these securities will be competing for scarce capital from investors all over the world on the basis of their unique individual fundamental situations. As a result each will have its own unique supply and demand environment affecting its price action. Therefore each will be able to be scrutinised by the requirements set out in this trading plan and deemed to either receive some of the trader's own scarce trading capital or not.

Many securities within the universe are likely to meet these requirements at any one time. Within this subset of opportunity some will likely be exhibiting more favourable price action than others. It is impractical to compare each individual opportunity against another, but by comparing each to the benchmark index within which each trades, the trader may rank opportunities on the basis of their favourable performance against the benchmark.

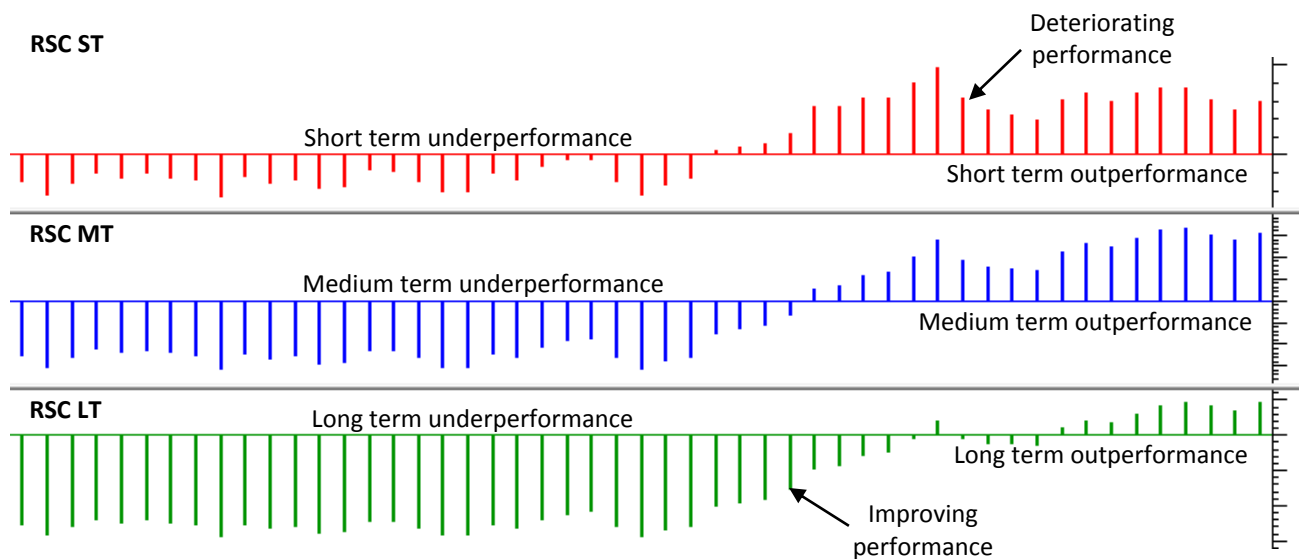


Figure 6.62: Relative Strength Comparative indicators

The relative strength comparative (RSC) indicator compares the short term, medium term and long term performance of a security being assessed for a potential trade entry to the corresponding performance of the benchmark index within which the security trades. When the RSC indicator is greater than zero, the security is outperforming the benchmark over the selected timeframe. When the RSC indicator is below zero the security is underperforming the benchmark indicator over the selected timeframe. When the RSC indicator is rising the security's performance is improving against the benchmark's performance. When the RSC indicator is declining the security's performance is deteriorating against the benchmark's performance.

For long trades, as a minimum, the security should be exhibiting superior performance to the benchmark over all three of the key timeframes. Therefore for long trades each of the RSC indicators should be greater than zero. For short trades, as a minimum, the security should be exhibiting inferior performance to the benchmark over all three of the key timeframes. Therefore for short trades each of the RSC indicators should be less than zero.

6.4 Reward to risk

A trade may only be entered if there is sufficient reward to risk on offer. This will assist the trader in achieving the stated performance objectives in Section 1, especially the long run reward to risk objective of 2:1 over a large sample of trade outcomes. The methodology for determining reward objective prices will be discussed here, with further discussion on this topic and risk objective prices in Section 7.5.

6.4.1 Definition of Initial Risk

When assessing a trade setup, initial risk is defined as the price difference between the intended trigger price and the intended initial stop loss price. The provisions for determining the trigger price will be discussed in Section 6.5.2 and the provisions for determining the initial stop loss price will be discussed in Section 7.2.

6.4.2 Definition of Initial Reward

When assessing a trade setup, initial reward is defined as the price difference between the intended trigger price and the intended profit objective price. In the case of $\frac{1}{2}R$ partial exits at two profit objective prices, the *average initial reward* is the price difference between the intended entry point and the average of the two profit objective prices. Profit objective prices may include:

Variable Reward to Risk Scale Out Price

The market risk rating defined in Section 8.2.1.1 will determine the profit objective price for $\frac{1}{2}R$ of any trade. This will be at 1:1, 2:1, or 3:1 reward to risk depending on the market risk rating and is therefore defined as a *variable scale out event price*.

Major Point of Demand or Major Point of Supply Price

A move into a major point of demand or major point of supply will trigger a *scale out event* (see Section 7.5). These levels are stagnant and therefore are defined as *fixed scale out event prices*. All trade opportunities must have at least 1:1 reward to risk on offer within the first observable fixed scale out price. The fixed scale out price for a long trade moving into a major point of supply is: point of supply price minus 1%, rounded down to nearest pip, minus 1 pip (E.g. if the major point of supply price was \$58.63, the fixed scale out price is \$58.03). The fixed scale out price for a short trade moving into a major point of demand is: point of demand price plus 1%, rounded up to nearest pip, plus 1 pip (E.g. if the major point of supply price was \$58.63, the fixed scale out price is \$59.23).

Major Round Number Price

A major round number is a price which is highly likely to have special significance with market participants. Major round numbers can stimulate demand and supply in similar ways to price action points of demand and points of supply. In uptrends, a move to very close to a major round number can stimulate supply from market participants. In a downtrend, a move to very close to a major round number can stimulate demand from market participants. Therefore profit objective prices are best placed inside major round numbers to lock in profits before other investors who are stimulated to act at the round number cause a trend reversal.

Australian Equities Round Number Schedule		USA Equities Round Number Schedule	
Price Range	Important Increments	Price Range	Important Increments
\$0.001 → \$0.40	\$0.10	\$0.01 → \$8	\$1
\$0.50 → \$4	\$0.50	\$10 → \$40	\$5
\$5 → \$8	\$1	\$50 → \$80	\$10
\$10 → \$14	\$2	\$100 → \$140	\$20
\$15 → \$40	\$5	\$150 → \$400	\$50
\$50 → \$80	\$10	\$500 → \$800	\$100
\$100 → \$140	\$20	\$1000 → \$1400	\$200
\$150+	\$50	\$1500+	\$500

The major round number scale out price for a long trade is: major round number price minus 1%, rounded down to the nearest pip, minus one pip. (E.g. for \$60, the scale out price is \$59.39). The major round number scale out price for a short trade is: major round number price plus 1%, rounded up to nearest pip, plus 1 pip (E.g. for \$60, the scale out price is \$60.61). Major round numbers are also classified as fixed scale out events and therefore all trade opportunities must have at least 1:1 reward to risk on offer within the first observable major round number scale out price.

6.5 Setups: Filters, Signals and Triggers

Filters are conditions which need to be met to qualify a trade opportunity. More specifically, filters are pre-conditions which require another discrete condition known as a signal to also be met to validate a trade opportunity. The combination of all requisite filters and a signal is defined as a setup. When a valid setup is to be acted upon, an appropriate *trigger price* will be calculated and any entry order will be placed at this point. The filter conditions have been covered in detail in various parts of this section up to this point. In this section the signal and trigger price conditions will be defined and then the final setup conditions compiled into concise checklists in Section 6.5.3 and Section 6.5.4.

6.5.1 Signal Conditions

A signal is a discrete, observable event. A signal will only be sought when all of the filter conditions are met. There are two types of signals, *breach signals* and *regressive signals*.

6.5.1.1 Breach Signals

Breach signals involve moving past a significant price point. These include a breakout above a previous medium term peak or long term peak, or a breakdown below a previous medium term trough or long term trough.

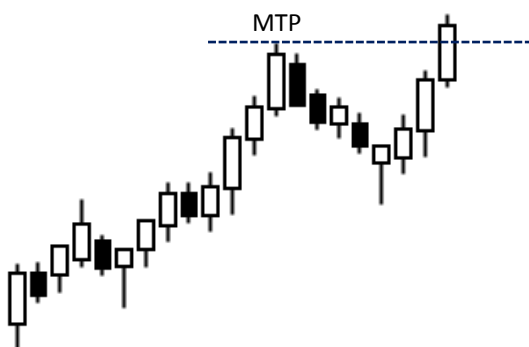


Figure 6.63: Breach/breakout of MTP signal

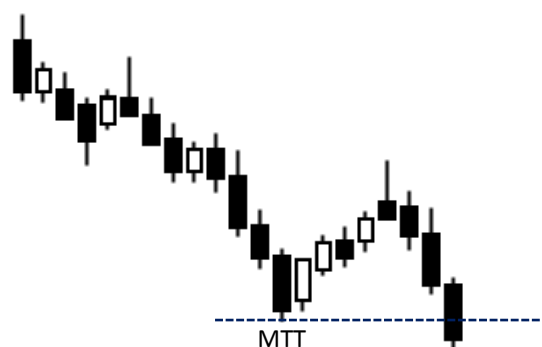


Figure 6.64: Breach/breakdown of MTT signal

6.5.1.2 Regressive Signals

Regressive signals occur after a short term move against the direction of the medium and long term trends. Entry is made on the basis of candle patterns which indicate a high probability of reversion back to the longer term trends. These include *aggressive* and *conservative* regressive signal options.

Aggressive Regressive Signals

Aggressive regressive signals are typically transition candles which indicate a high probability of the short term trend reverting to the medium term and long term trends. A long aggressive signal is any one of: Strong Demand Candle; Bullish Pinbar; Blended Strong Demand; Blended Bullish Pinbar. A short aggressive signal is any one of: Strong Supply Candle; Bearish Pinbar; Blended Strong Supply; Blended Bearish Pinbar.

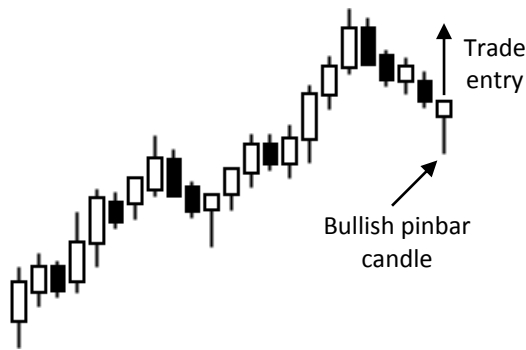


Figure 6.65: Regressive signal with bullish pinbar

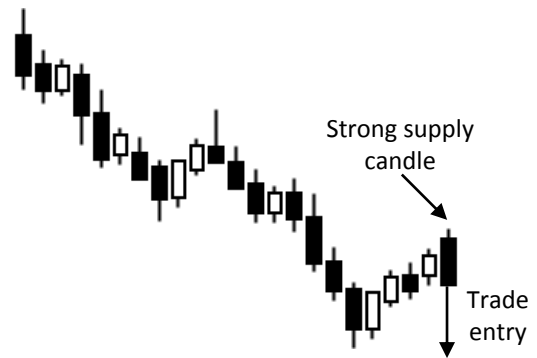


Figure 6.66: Regressive signal with strong supply candle

If an aggressive signal is not triggered on the next candle entry orders are to be cancelled, or if applicable, amended to a breach setup trigger. Note also that a Price, Volume & Volatility Exit signal on the last medium peak for long trades, or on the last medium term trough for short trades will nullify all subsequent aggressive signals until the point of supply or point of demand is breached.

Conservative Regressive Signals

A conservative regressive signal is an aggressive signal which has a subsequent *confirmation candle*. These signals will also be referred to as a *3 Bar Reversal*. The conditions for a 3 Bar Reversal are:

Candle 1: Any candle in the prevailing ST trend: Longs: STDT candle; Shorts: STUT candle;

Candle 2: An aggressive regressive signal;

Candle 3: A confirming candle: Longs: Close is greater than previous candle's high and close is greater than or equal to high minus 25% of range; Shorts: Close is less than previous candle's low and close is less than or equal to low plus 25% of range.

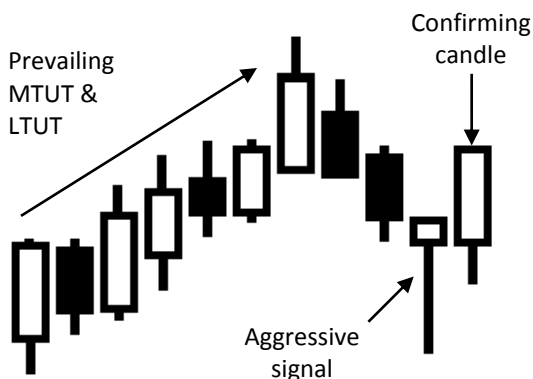


Figure 6.67: Bullish 3 Bar Reversal

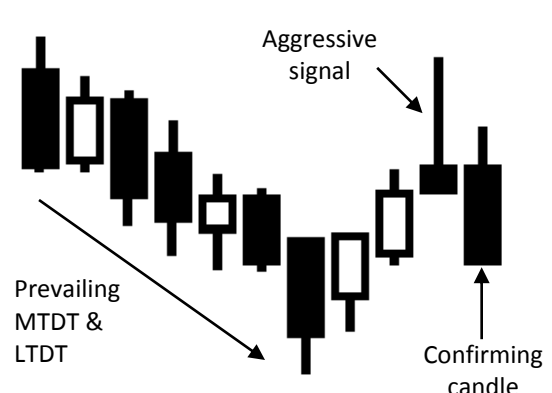


Figure 6.68: Bearish 3 Bar Reversal

6.5.2 Trigger Price Conditions

A trigger price is an activation price for a trade opportunity. A contingent order is placed on the trading platform using the trigger price which if touched during market hours will open a new trade.

6.5.2.1 Trigger Price for Long Trade Setups

Breach Setups

The trigger price is to be set 2 pips above the point of supply to be breached (Figure 6.69).

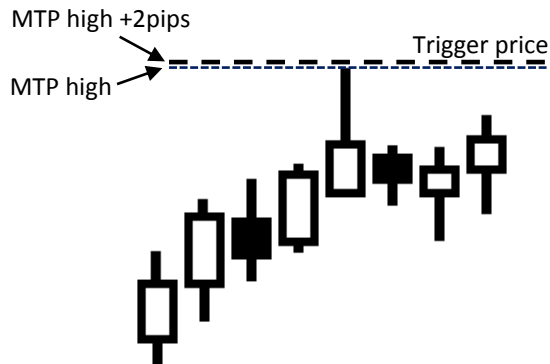


Figure 6.69: Trigger price for long breach setups

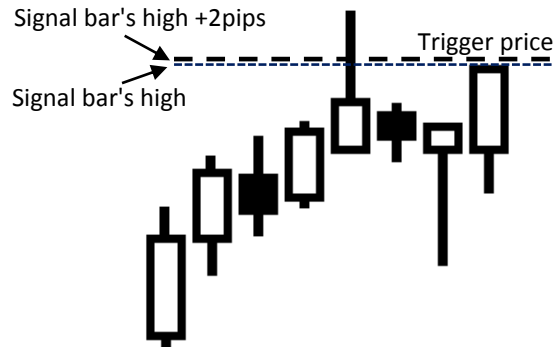


Figure 6.70: Trigger price for long regressive setups

Regressive Setups

The trigger price is to be set 2 pips above the signal bar's high (Figure 6.70). If the signal is a blended candle, the trigger price is to be set 2 pips above the highest high of the two candles being blended.

Deferring to a Round Number

A round number constitutes a scale out event. Therefore when a round number is between the trigger price calculated by either of the two methods above and a price which represents 1:1 reward to risk on the trade, the trigger price will defer to a minimum of round number plus 0.5% plus 1 pip and a maximum of round number plus 1% plus 1 pip. If setting the trigger price at this point causes the trade to have less than 1:1 reward to risk then the trade will be discarded.

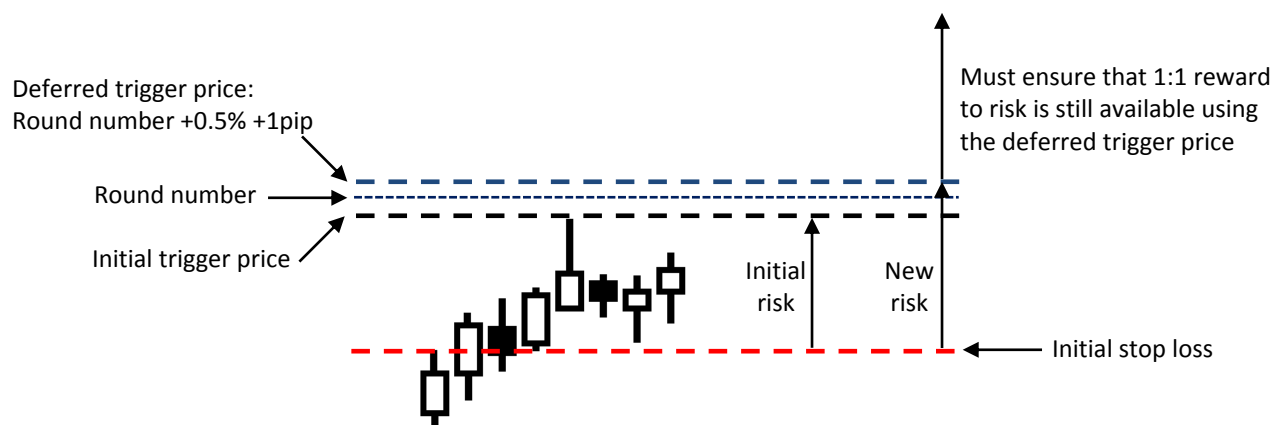


Figure 6.71: Trigger price when deferring to a round number for a long trade

6.5.2.2 Trigger Price for Short Trade Setups

Breach Setups

The trigger price is to be set 2 pips below the point of demand to be breached (Figure 6.72).

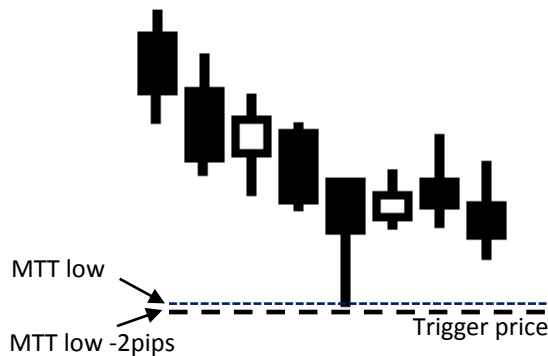


Figure 6.72: Trigger price for short breach setups

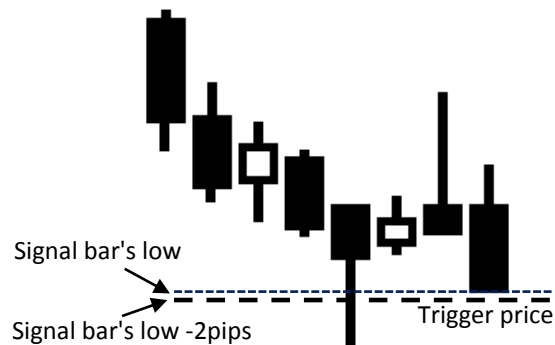


Figure 6.73: Trigger price for short regressive setups

Regressive Setups

The trigger price is to be set 2 pips below the signal bar's low (Figure 6.73). If the signal is a blended candle, the trigger price is to be set 2 pips below the lowest low of the two candles being blended.

Deferring to a Round Number

A round number constitutes a scale out event. Therefore when a round number is between the trigger price calculated by either of the two methods above and a price which represents 1:1 reward to risk on the trade, the trigger price will defer to a maximum of round number minus 0.5% minus 1 pip and a minimum of round number minus 1% minus 1 pip. If setting the trigger price at this point causes the trade to have less than 1:1 reward to risk then the trade will be discarded.

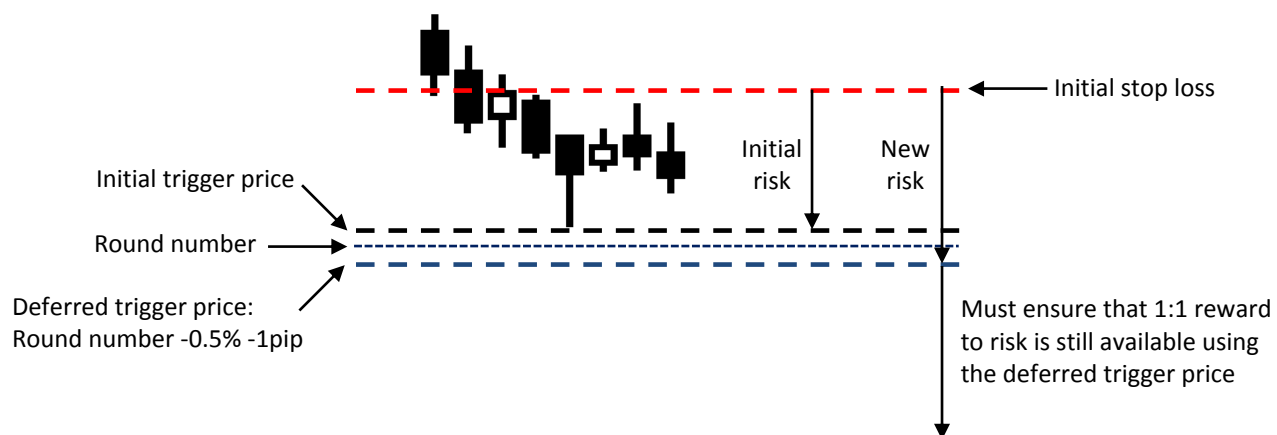


Figure 6.74: Trigger price when deferring to a round number for a short trade

6.5.3 Long Trade Setup Conditions Checklist

Filter Conditions

- ☐ Price > 21EMA and 21EMA > 63EMA and 63EMA > 125EMA
- ☐ 21EMA rising and 63EMA rising and 125EMA rising
- ☐ MTUT in place (must confirm either one of MTUTMP or MTUTSP conditions):
 - ☐ MTUTMP:
 - ☐ Breach Signal: Last MTT candle closed at or above second from last MTP; OR
 - ☐ Regressive Signal: Aggressive signal candle closed at or above second from last MTP, or second candle in Bullish 3 Bar Reversal closed at or above second from last MTP OR
 - ☐ MTUTSP: Rising MTTs
- ☐ Second test or later if LTP breach setup
- ☐ Price, Volume & Volatility Exit signal for longs not observed on last MTP for regressive signals
- ☐ 1:1 reward to risk or greater into next higher most recent LTP, or next higher most recent LTT, or next higher major round number

Signal Conditions

- ☐ Breach Signal: MTP has formed and price is below MTP; OR
- ☐ Regressive Signal:
 - ☐ Bullish Pinbar (Aggressive)
 - ☐ Strong Demand Candle (Aggressive)
 - ☐ Bullish Blended Pinbar or Blended Strong Demand Candle (Aggressive)
 - ☐ Bullish 3 Bar Reversal (Conservative)

Trigger Conditions

- ☐ Breach Signal: On stop order set 2 pips above point of supply
- ☐ Regressive Signal: On stop order set 2 pips above signal bar's high
- ☐ Round number deferral required (on stop order set minimum of 0.5% plus 1 pip above round number up to maximum of 1% plus 1 pip above round number) / ☐ Not required

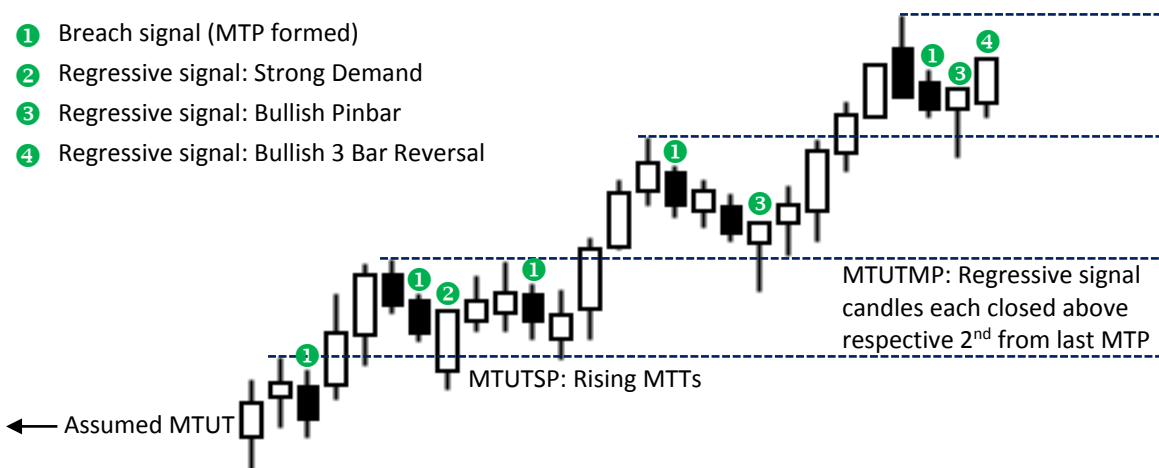


Figure 6.75: Examples of long setups

6.5.4 Short Trade Setup Conditions Checklist

Filter Conditions

- ☐ Price < 21EMA and 21EMA < 63EMA and 63EMA < 125EMA
- ☐ 21EMA declining and 63EMA declining and 125EMA declining
- ☐ MTDT in place (must confirm either one of MTDTMP or MTDTSP conditions):
 - ☐ MTDTMP:
 - ☐ Breach Signal: Last MTP candle closed at or below second from last MTT; OR
 - ☐ Regressive Signal: Aggressive signal candle closed at or below second from last MTT, or second candle in Bearish 3 Bar Reversal closed at or below second from last MTT OR
 - ☐ MTDTSP: Declining MTPs
- ☐ Second test or later if LTT breach setup
- ☐ Price, Volume & Volatility Exit signal for shorts not observed on last MTT for regressive signals
- ☐ 1:1 reward to risk or greater into next lower most recent LTT, or next lower most recent LTP, or next lower major round number

Signal Conditions

- ☐ Breach Signal: MTT has formed and price is above MTT; OR
- ☐ Regressive Signal: (any one of the next 4 conditions)
 - ☐ Bearish Pinbar (Aggressive)
 - ☐ Strong Supply Candle (Aggressive)
 - ☐ Bearish Blended Pinbar or Blended Strong Supply Candle (Aggressive)
 - ☐ Bearish 3 Bar Reversal (Conservative)

Trigger Conditions

- ☐ Breach Signal: On stop order set 2 pips below point of demand
- ☐ Regressive Signal: On stop order set 2 pips below signal bar's low
- ☐ Round number deferral required (on stop order set maximum of 0.5% minus 1 pip below round number down to minimum of 1% minus 1 pip below round number) / ☐ Not required

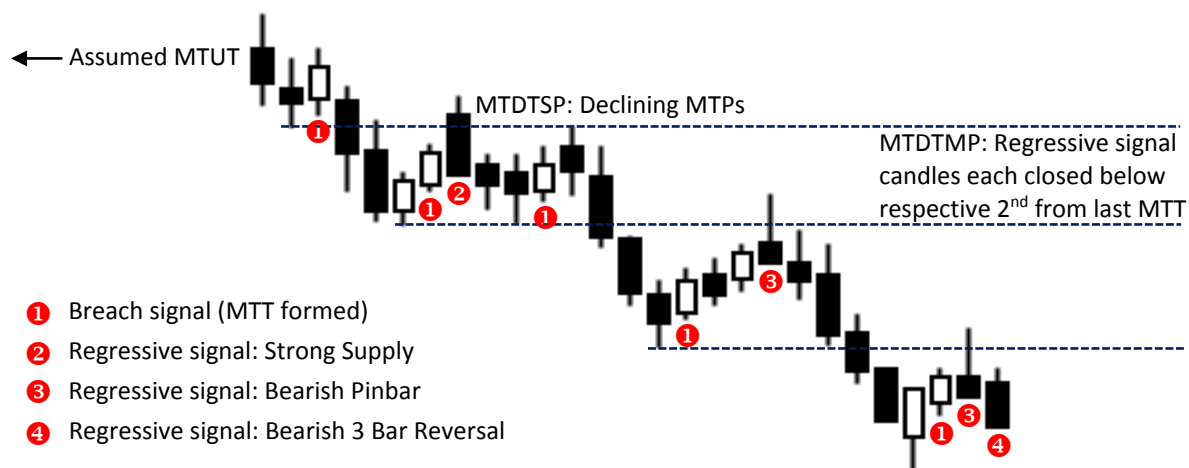


Figure 6.76: Examples of short setups

6.5.5 On-stop-with-limit Orders

An on-stop-with-limit order is the sole entry order to be utilised for trade entries. The trigger price for the on-stop component of the order will be determined using the parameters defined in Section 6.5.2. The limit price component will be determined using the following methodology.

Long Trade Limit Price Conditions

The *typical limit price* will be 1% greater than the trigger price rounded down to the nearest pip. If the distance between the typical limit price and the initial stop loss price is greater than the distance between the typical limit price and the closest fixed scale out price there will be less than 1:1 reward to risk on the trade opportunity. If this is the case the typical limit price will be adjusted lower to maintain at least a 1:1 reward to risk.

Long Trade Limit Price Example			
Trigger Price:	\$41.22	Typical Limit Price (+1%):	\$41.63
Stop Loss:	\$39.77	1 st Fixed Scale Out Price:	\$42.87
Risk at Typical Limit Price:	\$1.86	Reward at Typical Limit Price:	\$1.65
Adjusted Limit Price:	\$41.32		
Risk at Adjusted Limit Price:	\$1.55	Reward at Adjusted Limit Price:	\$1.55

Short Trade Limit Price Conditions

The typical limit price will be 1% less than the trigger price rounded up to the nearest pip. If the distance between the typical limit price and the initial stop loss price is greater than the distance between the typical limit price and the closest fixed scale out price there will be less than 1:1 reward to risk on the trade opportunity. If this is the case the typical limit price will be adjusted higher to maintain at least a 1:1 reward to risk.

Short Trade Limit Price Example			
Trigger Price:	\$24.74	Typical Limit Price (-1%):	\$24.50
Stop Loss:	\$26.53	1 st Fixed Scale Out Price:	\$22.60
Risk at Typical Limit Price:	\$2.03	Reward at Typical Limit Price:	\$1.90
Adjusted Limit Price:	\$24.57		
Risk at Adjusted Limit Price:	\$1.96	Reward at Adjusted Limit Price:	\$1.97

6.6 Scaling Into Trades

The process of *scaling in* sees the trader adding risk to an existing trade as subsequent setups are observed. Each scale in opportunity competes for trading capital on the same basis as other potential setups during an analysis session. Therefore each scale in opportunity must qualify as the best possible addition to the portfolio based upon the provisions in Section 8.2.



Strict risk limits are to be applied to scale in opportunities to prevent overloading risk on any single trade. *Value at risk (\$VaR)* is the amount of risk on a trade where the stop loss has not yet been trailed to breakeven or better. At the commencement of a trade, it has only *initial value at risk*. *Profit at risk (\$PaR)* is defined as the running gross profit. *Exposure at risk (\$EaR)* is defined as the value at risk for a trade plus the profit at risk for a trade.

$$\text{\$EaR} = \text{\$VaR} + \text{\$PaR}$$

6.6.1 Scaling in Conditions Checklist

- ☐ Initial trade entry (SIE₀) is 1R
- ☐ First scale in event (SIE₁) sees addition of 1R and
 - ☐ Initial trade entry must have positive \$PaR
- ☐ Second scale in event (SIE₂) sees addition of ½R
 - ☐ SIE₁ must have positive \$PaR
- ☐ Third scale in event (SIE₃) sees addition of ¼R
 - ☐ SIE₂ must have positive \$PaR
- ☐ Fourth and final scale in event (SIE₄) sees addition of ¼R
 - ☐ SIE₃ must have positive \$PaR
- ☐ Total trade \$VaR after addition of proposed new scale in trade's \$VaR not to exceed 2R
- ☐ Total trade \$EaR after addition of proposed new scale in trade's \$EaR not to exceed 3R



Case Study: SIE₃ ③

(Assume \$R = \$1,000)

\$VaR Analysis Prior to SIE₃

\$VaR SIE₀ = \$0

\$VaR SIE₁ = \$200

\$VaR SIE₂ = \$800

Total \$VaR = \$1,000

\$PaR Analysis Prior to SIE₃

\$PaR SIE₀ = \$1,000

\$PaR SIE₁ = \$700

\$PaR SIE₂ = \$300

Total \$PaR = \$2,000

\$EaR Analysis Prior to SIE₃

\$EaR SIE₀ = \$1,000

\$EaR SIE₁ = \$900

\$EaR SIE₂ = \$1,100

Total \$EaR = \$3,000

SIE₃ proposes to add \$250 risk to the scaled position. As this exceeds the \$VaR and \$EaR limits, it should not be added.

Figure 6.77: Scaling in case study

7 Trade Exits

The methodology for exiting trades is just as important in contributing to the profitability of the trading plan as the methodology for entering trades. Trade exits will be designed to maximise profit potential whilst minimising drawdown of the trading capital. This section will identify the specific circumstances under which exits will be executed.

7.1 Exit Events

Trades may be partially or wholly exited as a result of one of the following events:

1. Initial stop loss is triggered
2. Trailing stop loss is triggered
3. Scale out event is achieved

The specific trigger price for each of these scenarios will be defined in the following sections.

7.1.1 Hard Orders & Soft Orders

A *hard order* is set to transact at a predefined trigger price on the trading platform. If the market price touches the trigger price the order will be automatically executed in the market in real time. A *soft order* also has a predefined trigger price, but does not have a corresponding order to transact on the trading platform. A soft order merely represents intent to consider a course of action if the market price touches the trigger price. When a soft order is triggered it will be converted to a hard order.

7.2 Initial Stop Loss Conditions

A stop loss is a price at which the trader deems a trade to no longer be valid. If this price is breached the trader will immediately implement an appropriate exit strategy. A stop loss serves two purposes: firstly, defining the risk on an individual trade, and secondly, restoring the trader's remaining capital to be used on the next potentially profitable trade opportunity. Each is vital to the operation of this trading plan and therefore an initial stop loss will be implemented on each trade without exception. This section deals with the conditions for defining the initial stop loss price and the execution of stop loss orders.

7.2.1 Points of Demand & Points of Supply Conditions

When an initial stop loss is triggered valuable trading capital is lost. To protect the trading capital the initial stop loss should be set at a price which is unlikely to trade in the market unless the trend which validated the trade is reversing and threatening the trader with an even greater loss.

It has been noted that the price will tend to rise from a past point of demand, for example, in the case of a medium term trough. The initial stop loss price for a long trade will therefore be set below the last medium term trough. The latent demand around the medium term trough will likely prevent the price from moving low enough to trigger the stop loss and allow the trade to remain active. If the price breaches the last medium term trough and the stop loss, the probability that the demand-supply equilibrium has shifted against the trade is high, validating the trade exit and preventing greater loss.

It has been noted that the price will tend to decline from a past point of supply, for example, in the case of a medium term peak. The initial stop loss price for a short trade will therefore be set above the last medium term peak. The latent supply around the medium term peak will likely prevent the price from moving high enough to trigger the stop loss and allow the trade to remain active. If the price breaches the last medium term peak and the stop loss, the probability that the demand-supply equilibrium has shifted against the trade is high, validating the trade exit and preventing greater loss.

7.2.1.1 Identifying the Last MTT for Long Trades

The determination of the last trough price for the purpose of setting an initial stop loss on a long trade depends on the type of setup in consideration.

Breach Signal: MTP has formed and price is below MTP, MTT has formed between current candle and MTP to be breached (i.e. it is the last *formed* MTT);

- ☐ The initial stop loss should be set below the last formed MTT. The stop loss trigger price must be a minimum of 0.5% of the last formed MTT price below the last formed MTT price;

Breach Signal: MTP has formed and price is below MTP, MTT has not yet formed between current candle and MTP to be breached (i.e. current candle is part of a STDT)

- ☐ The initial stop loss should be set below the lowest low since the last MTP. The stop loss trigger price must be a minimum of 0.5% of this low below this low;

For the second setup scenario, the trader assumes that to trigger the trade it is almost certain that the current short term downtrend will change into uptrend, thus forming a medium term trough. Until this occurs the lowest low since the last medium term peak acts as *proxy for the last trough*.

7.2.1.2 Identifying the Last MTP for Short Trades

The determination of the last peak price for the purpose of setting an initial stop loss on a short trade depends on the type of setup in consideration.

Breach Signal: MTT has formed and price is above MTT, MTP has formed between current candle and MTT to be breached (i.e. it is the last *formed* MTP);

- ☐ The initial stop loss should be set above the last formed MTP. The stop loss trigger price must be a minimum of 0.5% of the last formed MTP price above the last formed MTP price;

Breach Signal: MTT has formed and price is above MTT, MTP has not yet formed between current candle and MTT to be breached (i.e. current candle is part of a STUT)

- ☐ The initial stop loss should be set above the highest high since the last MTT. The stop loss trigger price must be a minimum of 0.5% of this high above this high;

For the second setup scenario, the trader assumes that to trigger the trade it is almost certain that the current short term uptrend will change into downtrend, thus forming a medium term peak. Until this occurs the highest high since the last medium term trough acts as a *proxy for the last peak*.

7.2.2 Major Round Number Conditions

The demand-supply dynamics of a security can be greatly affected by the price interacting with a round number. Due to the strong psychological impact of round numbers investors tend to behave in consistent ways when trading around round number prices. As a result, these levels tend to also act as points of demand/supply. Certain round numbers elicit greater emotional responses from investors causing some round numbers to act as particularly strong points of demand or supply. Special care will be taken to set initial stop losses a safe distance beyond these levels.

Australian Equities Round Number Schedule		USA Equities Round Number Schedule	
Price Range	Important Increments	Price Range	Important Increments
\$0.001 → \$0.40	\$0.10	\$0.01 → \$8	\$1
\$0.50 → \$4	\$0.50	\$10 → \$40	\$5
\$5 → \$8	\$1	\$50 → \$80	\$10
\$10 → \$14	\$2	\$100 → \$140	\$20
\$15 → \$40	\$5	\$150 → \$400	\$50
\$50 → \$80	\$10	\$500 → \$800	\$100
\$100 → \$140	\$20	\$1000 → \$1400	\$200
\$150+	\$50	\$1500+	\$500

Longs: If the appropriate stop loss based upon the points of demand and points of supply provision is less than a value which is 1% above a round number, then the initial stop should be set a minimum of 0.5% of the round number price below the round number;

Shorts: If the appropriate stop loss based upon the points of demand and points of supply provision is above a value which is 1% below a round number, then the initial stop should be set a minimum of 0.5% of the round number price above the round number;

7.2.3 Minimum Volatility Conditions

Volatility is the degree of price movement a security experiences over a period of time. Certain securities will experience more volatility than others. The greater the volatility the greater is the potential for profit, but also for a disadvantageous stop loss exit. The minimum volatility condition seeks to minimise the risk of the stop loss being triggered by short term variations in price which are fairly characteristic to the security being assessed:

Long Trade: The initial stop should be set a minimum of 2 times ATR(21) below the trigger price and preferably no more than 4 times ATR(21) below the trigger price;

Short Trade: The initial stop should be set a minimum of 2 times ATR(21) above the trigger price and preferably no more than 4 times ATR(21) above the trigger price;

A maximum volatility distance is also suggested because the wider the stop loss distance chosen, the smaller the trade position, and the smaller the reward to risk for a fixed scale out price.

7.2.4 Long Trades Initial Stop Loss Conditions Checklist

- ☐ Initial stop loss price is set minimum of 0.5% of the last MTT price below the last MTT price
- ☐ Check Point 1 price is greater than 1% of round number price above round number
 - ☐ Otherwise defer initial stop loss price to minimum of 0.5% of the round number price below the round number price
- ☐ Initial stop loss price is set minimum of 2 times ATR(21) below trigger price and preferably no more than 4 times ATR(21) below trigger price

① This scenario has a formed MTT

② This scenario uses last candle low as MTT proxy

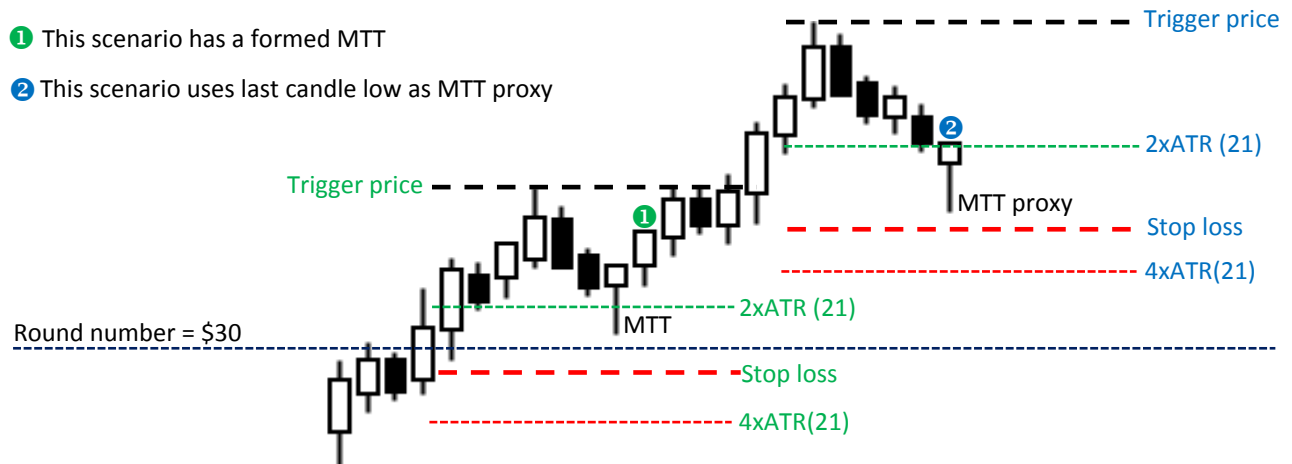
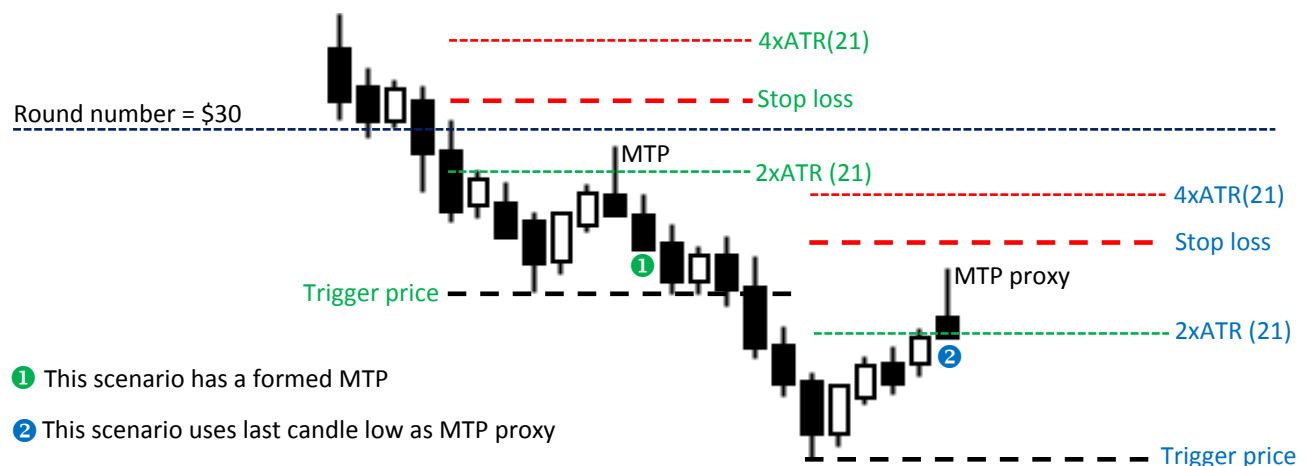


Figure 7.1: Initial stop loss price placement for a long trade

7.2.5 Short Trades Initial Stop Loss Conditions Checklist

- ☐ Initial stop loss price is set minimum of 0.5% of the last MTP price above the last MTP price
- ☐ Check Point 1 price is greater than 1% of round number price below round number
 - ☐ Otherwise defer initial stop loss to minimum of 0.5% of the round number price above the round number price
- ☐ Initial stop loss is set a minimum of 2 times ATR(21) above trigger price and preferably no more than 4 times ATR(21) above trigger price



① This scenario has a formed MTP

② This scenario uses last candle low as MTP proxy

Figure 7.2: Initial stop loss price placement for a short trade

7.3 Trailing Stop Loss Conditions

As a trade progresses towards a favourable outcome the stop loss will be moved or *trailed* in the direction of the trade. Initially the goal of trailing the stop loss is to reduce value at risk, however a stop may eventually be trailed to a price which eliminates value at risk and potentially even protects profit. It is important when trailing a stop loss that the new stop loss price is as robust as the initial stop loss price. As a result, each of the conditions used to determine the initial stop loss price will also be applied to determining the trailing stop price.

Points of Demand & Points of Supply Conditions

The trailing stop loss price will be placed behind relevant points of demand or points of supply. Points of demand/supply which have formed within 1% of each other will be considered the same point.

Major Round Number Conditions

The trailing stop loss price will be placed beyond relevant round numbers as per initial stop loss price.

Minimum Volatility Conditions

The trailing stop loss price will be set the minimum safe volatility distance from the last price.

7.3.1 Long Trade Trailing Stop Loss Conditions Checklist

- ☐ Trailing stop loss price may only move higher (unless security is going ex-dividend, then may adjust lower by dividend amount plus franking credits)
- ☐ Trailing stop loss price to be protected by at least two points of demand:
 - ☐ New point of demand trigger 1: Break and close above the last MTP
 - ☐ New point of demand trigger 2: Formation of a new MTT
- ☐ Check Point 2 price is greater than 1% of round number price above round number
 - ☐ Otherwise defer trailing stop loss price to a minimum of 0.5% of the round number price below the round number price
- ☐ Trailing stop loss price is a minimum of 2 times ATR(21) below last price and preferably no more than 4 times ATR(21) below the last price

- ① 1st POD for respective scenario
- ② 2nd POD for respective scenario

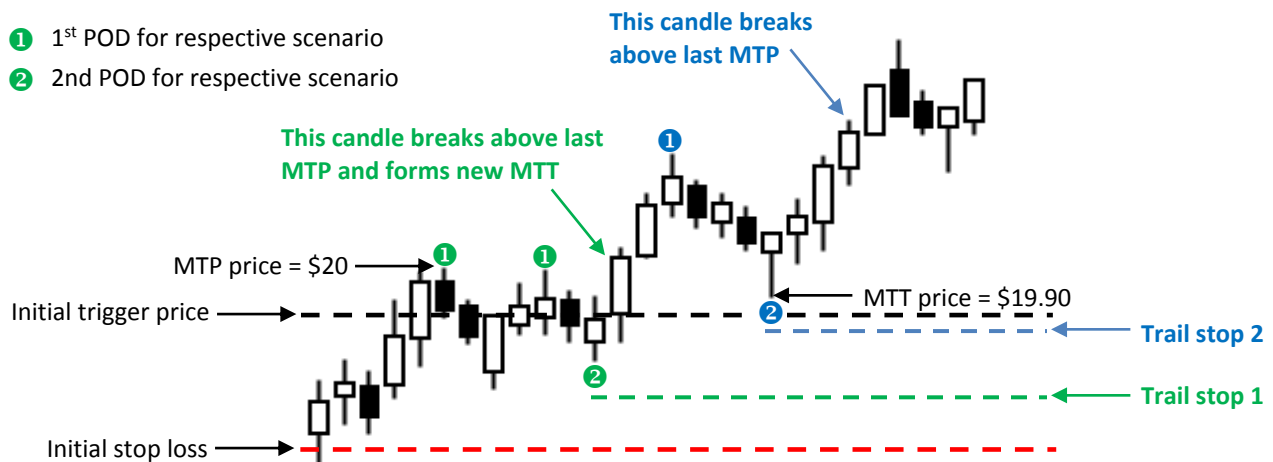


Figure 7.3: Trailing a stop loss for a long trade

7.3.2 Short Trade Trailing Stop Loss Conditions Checklist

- ☐ Trailing stop loss price may only move lower
- ☐ Trailing stop loss price to be protected by at least two points of supply:
 - ☐ New point of supply trigger 1: Break and close below the last MTT
 - ☐ New point of supply trigger 2: Formation of a new MTP
- ☐ Check Point 2 price is greater than 1% of round number price below round number
 - ☐ Otherwise defer trailing stop loss price to a minimum of 0.5% of the round number price above the round number price
- ☐ Trail stop price is a minimum of 2 times ATR(21) above last price and preferably no more than 4 times ATR(21) above the last price

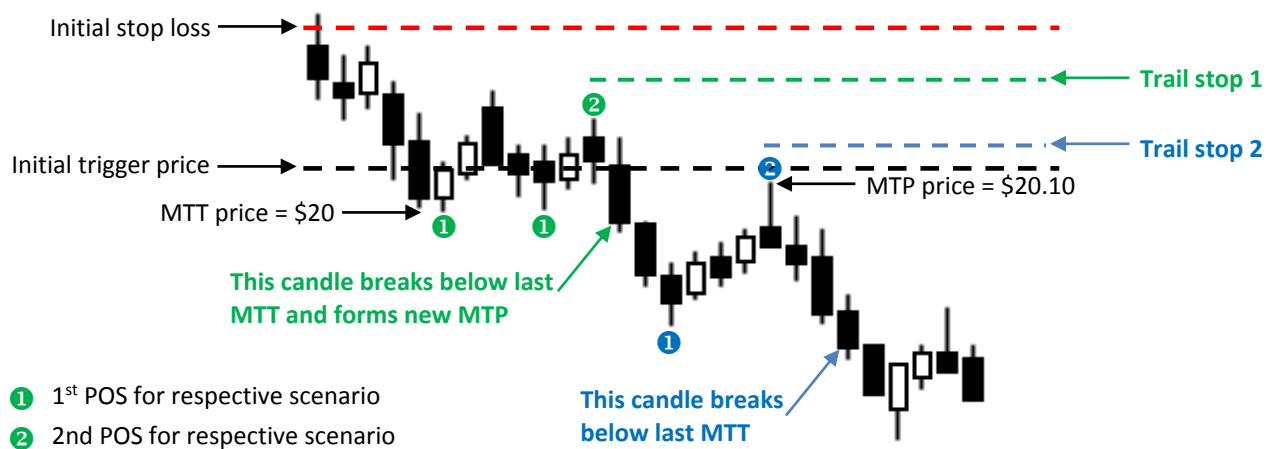


Figure 7.4: Trailing a stop loss for a short trade

7.3.3 Reward to Risk Trailing Stop

As a trade progresses towards a favourable outcome, given that the objectives generally consist of one or more fixed scale out events, it is likely that at some point the remaining reward available on the trade will be less than the risk at the prevailing stop loss price. If this occurs, the trader has two options to rebalance the reward to risk back to as close to 1:1 as possible:

Extend the Objective Prices

This may be possible if the current scale out price is inside a fixed scale out price. For example, consider where the trader has chosen to exit the full position at the variable reward to risk scale out price of 2:1 and this price is inside the next fixed scale out price. The trader could choose to move the objective order price to the fixed scale out price. The extra reward will move the reward to risk ratio on the trade closer to 1:1.

Reward to Risk Rebalance Trailing Stop Loss

If the objective price cannot be extended (for example, the scale out prices are both fixed), the trailing stop may be moved to a point as close to 1:1 reward to risk as possible based upon the following conditions (note X bar high refers to the highest high price of the last X bars, current bar included; whilst X bar low refers to the lowest low price of the last X bars, current bar included):

7.3.3.1 Long Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

- ☐ Move trailing stop loss price to 0.5% of nearest round number below nearest round number OR Move trailing stop loss price to 0.5% of the last point of demand below the last point of demand
- ☐ If Check Point 1 fails then move trailing stop loss price to 0.5% of the 5 bar low below 5 bar low
- ☐ If Check Point 2 fails then move trailing stop loss price to 0.5% of the 4 bar low below 4 bar low
- ☐ If Check Point 3 fails then move trailing stop loss price to 0.5% of the 3 bar low below 3 bar low
- ☐ If Check Point 4 fails then move trailing stop loss price to 0.5% of the 2 bar low below 2 bar low
- ☐ If Check Point 5 fails then move trailing stop loss price to 0.5% of the 1 bar low below 1 bar low

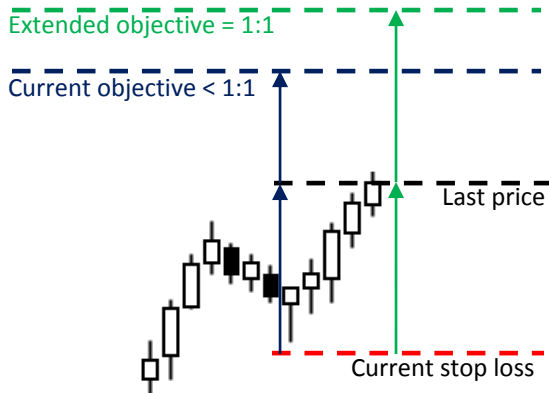


Figure 7.5: Objective price extension long trade

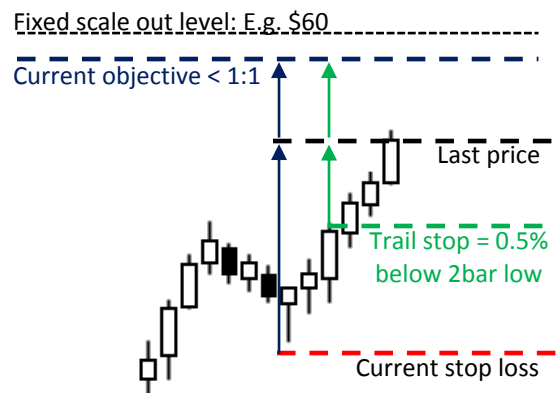


Figure 7.6: Rebalancing R:R trailing stop loss long trade

7.3.3.2 Short Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

- ☐ Move trailing stop loss price to 0.5% of nearest round number above nearest round number OR Move trailing stop loss price to 0.5% of the last point of supply above the last point of supply
- ☐ If Check Point 1 fails then move trailing stop loss price to 0.5% of the 5 bar high above 5 bar high
- ☐ If Check Point 2 fails then move trailing stop loss price to 0.5% of the 4 bar high above 4 bar high
- ☐ If Check Point 3 fails then move trailing stop loss price to 0.5% of the 3 bar high above 3 bar high
- ☐ If Check Point 4 fails then move trailing stop loss price to 0.5% of the 2 bar high above 2 bar high
- ☐ If Check Point 5 fails then move trailing stop loss price to 0.5% of the 1 bar high above 1 bar high

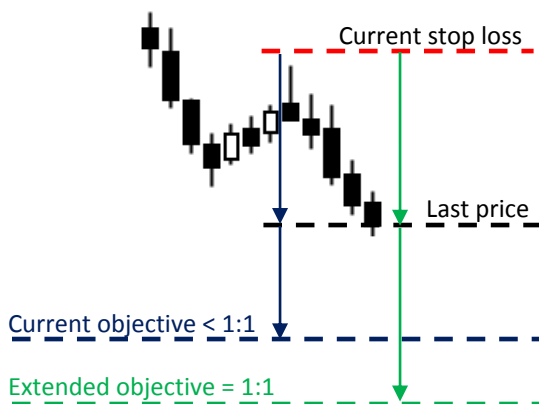


Figure 7.7: Objective price extension short trade

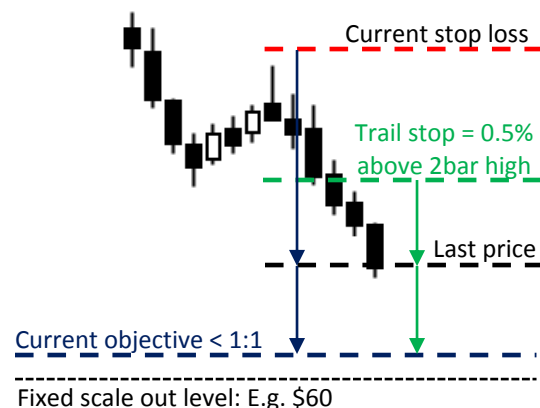


Figure 7.8: Rebalancing R:R trailing stop loss short trade

7.3.4 Ram, Cram & Jam Trailing Stop Loss Technique

A medium term trend change is deemed to negate an existing trade. The stop loss will be trailed to account for changes in the medium term trend which signal that a trend change is immanent. When trailing the stop in this scenario all of the standard trailing stop requirements remain except for the minimum volatility distance condition. The omission of this condition respects the fact that a medium term trend change could occur within the minimum volatility distance. *Ram, Cram & Jam (RCJ)* refers to the generally aggressive nature of this trailing stop technique.

For long trades in a prevailing medium term uptrend motive phase, the trigger to ram, cram and jam the stop loss is the formation of a lower medium term peak. With a lower medium term peak formed, all that is required to trigger a medium term downtrend motive phase is a breach of the last medium term trough. As a result, the stop loss will be trailed to 0.5% of the last trough price below the last trough price. If the candle which forms the last peak also breaches the last trough, then the stop loss will be trailed to 0.5% of the breach candle's low below the breach candle's low.

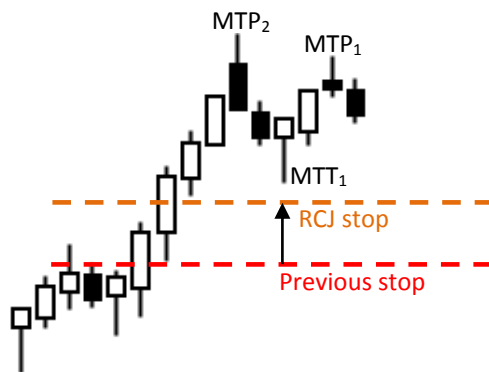


Figure 7.9: RCJ due to lower MTP

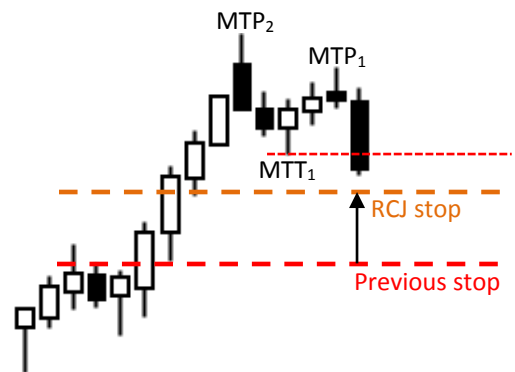


Figure 7.10: RCJ due to lower MTP & breach of last MTT

For short trades in a prevailing medium term downtrend motive phase, the trigger to ram, cram and jam the stop loss is the formation of a higher medium term trough. With a higher medium term trough formed, all that is required to trigger a medium term uptrend motive phase is a breach of the last medium term peak. As a result, the stop loss will be trailed to 0.5% of the last peak price above the last peak price. If the candle which forms the last trough also breaches the last peak, then the stop loss will be trailed to 0.5% of the breach candle's high above the breach candle's high.

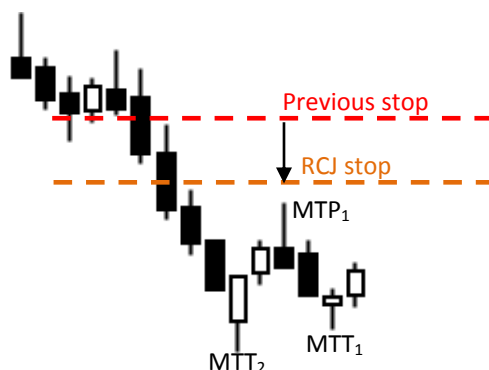


Figure 7.11: RCJ due to higher MTT

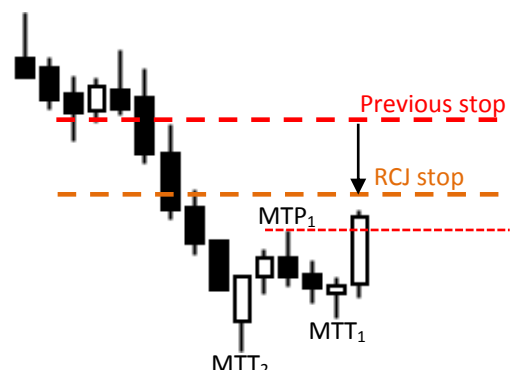


Figure 7.12: RCJ due to higher MTT & breach of last MTP

7.4 Stop Loss Execution Strategies

Hard stop loss orders will be used for ASX Equities. Hard stop loss orders will be used for USA Equities. If hard stop loss orders are to be used they will be placed on the trading platform for execution in real time. If soft stop loss orders are to be used they will adhere to all of the initial stop loss and trailing stop loss conditions, and the additional conditions in Section 7.4.1 and Section 7.4.2 below. The candle which triggers the soft stop loss will be referred to as the *signal bar*.

7.4.1 Long Trade Soft Stop Loss Execution Strategy

When a soft stop loss is triggered, it will be converted to a hard stop loss set 0.5% of the signal bar's low below the signal bar's low. The standard points of demand and points of supply and round number conditions apply. The minimum volatility condition does not apply. If the price moves back into a medium term uptrend motive phase, the hard stop loss will be converted back to a soft stop loss.

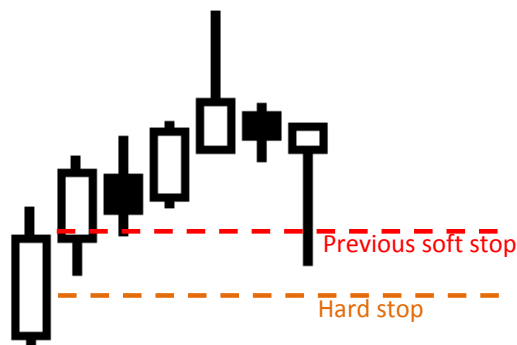


Figure 7.13: Setting a hard stop on trigger of a soft stop

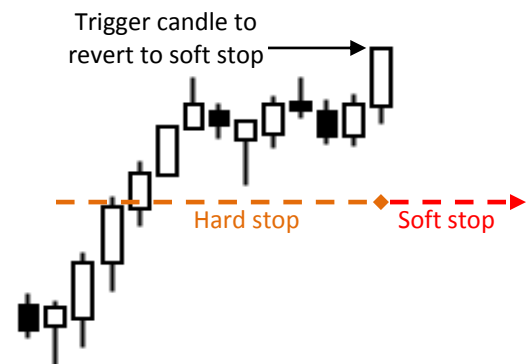


Figure 7.14: Reverting a hard stop back to a soft stop

7.4.2 Short Trade Soft Stop Loss Execution Strategy

When a soft stop loss is triggered, it will be converted to a hard stop loss set 0.5% of the signal bar's high above the signal bar's high. The standard points of demand and points of supply and round number conditions apply. The minimum volatility condition does not apply. If the price moves back into a medium term downtrend motive phase, the hard stop loss will be converted back to a soft stop loss.

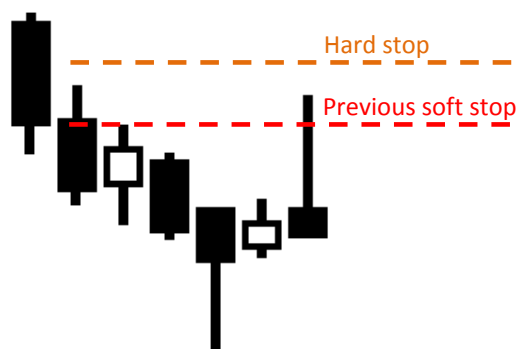


Figure 7.15: Setting a hard stop on trigger of a soft stop

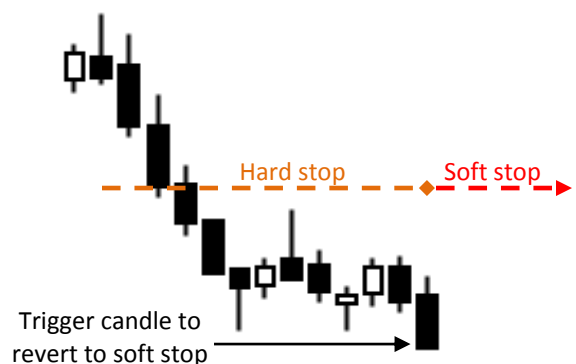


Figure 7.16: Reverting a hard stop back to a soft stop

7.5 Scaling Out of Trades

This section details the process for exiting a trade position in a series of stepped exits to be referred to as *scaling out*. When any one of the *scale out events* occurs, a minimum of $\frac{1}{2}R$ of the trade position will be exited. When multiple scale out events occur simultaneously, a minimum of $\frac{1}{2}R$ of the trade position per event must be exited. The following are valid scale out events:

1. Variable reward to risk scale out price is achieved
2. Major point of demand or major point of supply price is achieved
3. Major round number price is achieved
4. Price, Volume, & Volatility (PVV) Exit signal is observed

Scale out event 1 will be referred to as a *variable scale out event*. Scale out events 2 and 3 will be referred to as *fixed scale out events*. Scale out 4 will be referred to as a *contingent scale out event*. This section is to be read in conjunction with Section 6.4 which details the conditions relating to scale out events 1, 2, and 3.

7.5.1 Variable Scale Out Event Conditions

Possible outcomes: 1:1, 2:1, or 3:1 reward to risk

Order type: Hard objective order placed at the outset of the trade

Action price: Variable reward to risk scale out price determined by market risk rating (see Section 8.2)

7.5.2 Fixed Scale Out Event Conditions

Possible outcomes: Last major point of demand (long term trough) or last major point of supply (long term peak; major round numbers

Order type: Hard objective order placed at the outset of the trade

Action price longs: Fixed scale out price minus 1%, rounded down to nearest pip, minus 1 pip

Action price shorts: Fixed scale out price plus 1%, rounded up to nearest pip, plus 1 pip

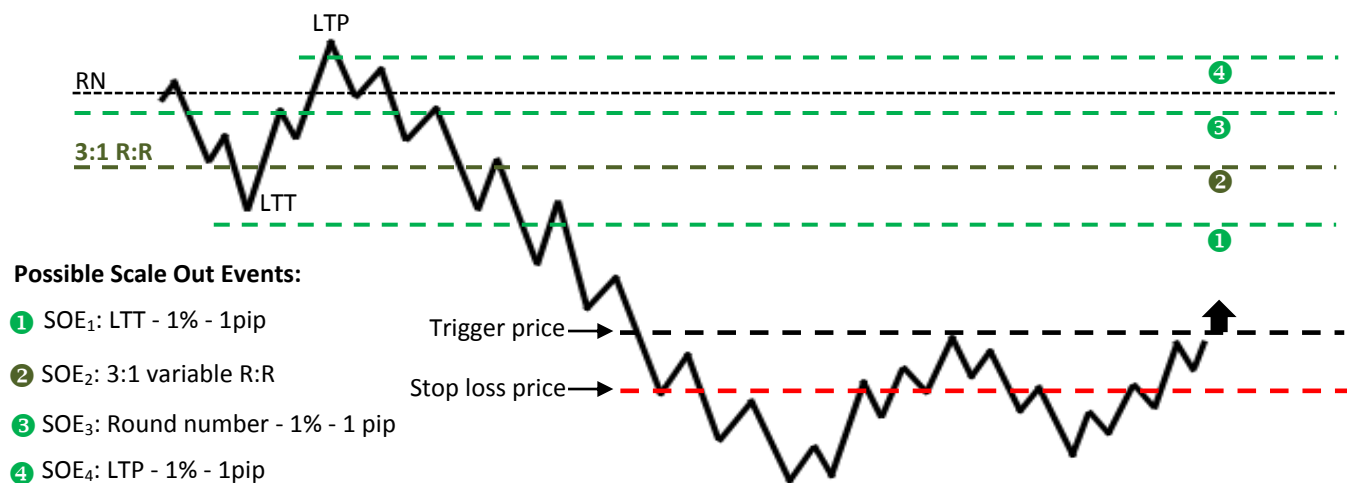


Figure 7.17: Scale out events for a long trade

Possible Scale Out Events:

- 1 SOE₁: LTP + 1% + 1pip
- 2 SOE₂: 3:1 variable R:R
- 3 SOE₃: Round number + 1% + 1 pip
- 4 SOE₄: LTT + 1% + 1pip

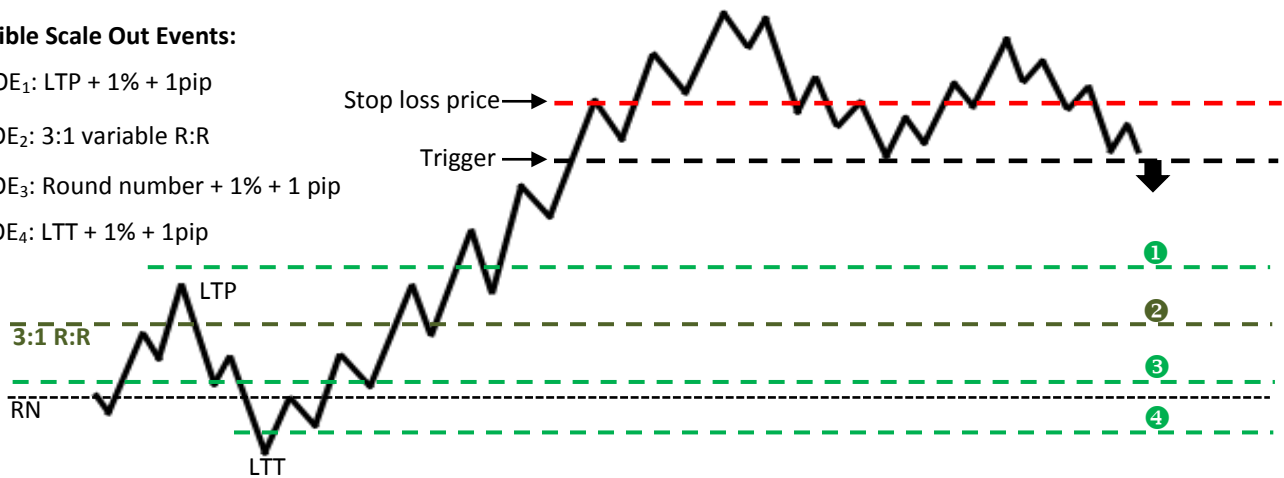


Figure 7.18: Scale out events for a short trade

7.5.3 Contingent Scale Out Event Conditions

Possible outcomes: Price, Volume & Volatility Exit for Longs; Price, Volume & Volatility Exit for Shorts

Order type: Hard stop loss order placed on observation of signal for $\frac{1}{2}R$ of the trade, stop loss for remaining $\frac{1}{2}R$ to be set as per usual stop loss conditions

Action price longs: Stop loss price to 0.5% of signal the bar's low below the signal bar's low, rounded down to nearest pip

Action price shorts: Stop loss price to 0.5% of signal the bar's high above signal the bar's high, rounded up to nearest pip

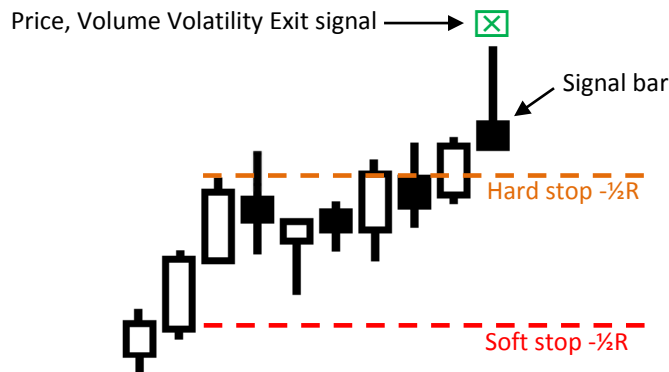


Figure 7.19: PVV exit for a long trade

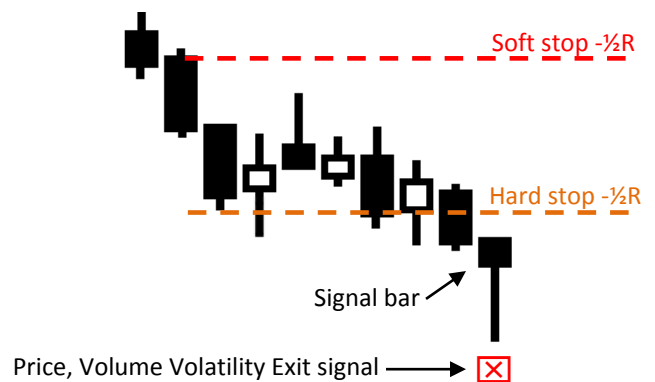


Figure 7.20: PVV exit for a short trade

7.5.4 Selecting Scale Out Event Prices

At the outset of the trade the two closest scale out event prices to the trigger price will be selected as points to set hard orders on the trading platform. If the two closest scale out event prices are within 1:1 reward to risk distance of each other, then then the full 1R will be scaled out at the closer of the two scale out event prices.

8 Capital Management

Capital Management is crucial to achieving the trader's goals: if the capital available for trading is eroded by bad trading practices this will jeopardise the ability of the trading plan to meet the stated objectives. This section details the trading plan's criteria to minimise the risk to the trader's capital. Capital management in this trading plan will be divided into three main areas: Individual Trade Risk Management, Portfolio Risk Management and Drawdown Management.

8.1 Individual Trade Risk Management

The key tools in the application of individual risk management are the use of stop loss orders and position sizing. Every trade opportunity at the outset will have an appropriate stop loss price determined by the provisions in Section 7.2. By defining the stop loss price at the outset of the trade, the trader can use the position sizing algorithms to determine the amount of capital to be risked on each individual trade.

8.1.1 Value at Risk (\$VaR)

Value at risk is the amount of trading capital at risk on a trade opportunity where the stop loss price has not yet been trailed to breakeven or better. Losses incurred on these trades will diminish the trading capital. Diminishment of the trading capital will be referred to as a *drawdown*. Trades which have a stop loss price which has been trailed to breakeven or better will be considered to have zero value at risk as they will generally not cause a drawdown.

8.1.2 Calculation of Value at Risk

All prospective trade opportunities will be apportioned a unitised amount of risk to be referred to as the *initial value at risk (\$R)*. Initial value at risk is calculated by multiplying the *notional trading capital* by the *initial value at risk percentage (%R)*. The concept of notional trading capital is explained further in Section 8.5. Therefore the maximum amount of capital at risk at the outset of any trade opportunity will be:

$$\text{\$R} = \text{Notional Trading Capital} \times \text{R\%}$$

%R for this trading plan is 0.50%.

8.1.3 Position Sizing

Each \$R value will translate into a number of securities to be transacted in for each trade opportunity. This amount will be referred to as the *position size*. The position size will account for any relevant transaction costs to ensure that \$R is kept to %R of the trading capital. (See Appendix 12.3.1 for examples of position sizing calculations).

8.1.3.1 Gross Position Size

The *gross position size* is the number of securities to be transacted before taking into account transaction and financing costs.

$$\text{Gross Position Size} = \$R \times ER \div \text{Stop Distance}$$

ER is the exchange rate the equity is denominated in with the AUD as the base currency (i.e. AUDXXX). Stop Distance is the distance from the trade entry price to the initial stop loss price dollars per share.

8.1.3.2 Transaction & Financing Costs

The *gross trade value* is the gross position size times the trigger price. This value is used as the basis to calculate the round trip commission for the trade. If applicable, the financing cost will be calculated using the gross trade value, the average trade hold time of 21 periods, and the applicable financing rate offered by the broker. Therefore the financing costs equation is:

$$\text{Financing costs} = \text{Gross Position Size} \times \text{Trigger Price} \times \text{Interest Rate} \times \text{Average Hold Time}/360$$

The typical transaction and financing costs for this trading plan are detailed in Appendix 12.1 and Appendix 12.2 respectively.

8.1.3.3 Net Position Size

All transaction and financing costs are subtracted from \$R to determine the *net initial value at risk* (\$R_N). \$R_N is used in the position sizing calculation to determine the *net position size*:

$$\text{Net Position Size} = \$R_N \times ER \div \text{Stop Distance}$$

All fractional results will be rounded down to the nearest whole share amount.

8.2 Portfolio Management

The *portfolio* is the collective term for all open trades currently held by the trader. Each trade will have its own individual risk management parameters as per the conditions in Section 8.1. Portfolio management compliments individual trade risk management by managing the combined risk across all open trades. Portfolio management has two main objectives each to be addressed in this section:

1. To determine the mix of trades contained within the portfolio;
2. To determine the maximum amount of value at risk across the entire portfolio at any one time.

8.2.1 The Benchmarking Portfolio Management Model

The Benchmarking Portfolio Management Model seeks to ensure that the bulk of the trader's capital is applied in the same direction as the price-trend of an appropriate benchmark index, but also that a portion of the capital is applied in the opposite direction to the price-trend of the benchmark index.

The benefits of this are:

1. The highest probability of achieving the trading plan's stated return objectives lies with following the price-trend of the benchmark;
2. By always having exposure to both long and short trades, a degree of hedging is achieved and this will assist in reducing the volatility of the portfolio's returns.

A benchmark index should be chosen on the basis of how well it represents the securities typically traded as a result of the application of this trading plan. The universe includes multiple markets and therefore each will utilise its own benchmark index. Capital will be allocated between markets in the universe based upon the relative frequency of trades derived from each market. The main benchmark indexes and the allocation of the trading capital for this trading plan are as follows:

Asset Class	Typical Capital Allocation	Benchmark Index
ASX Equities	25%	S&P ASX 200 (XJO)
USA Equities	75%	S&P1500

8.2.1.1 Market Risk Rating

The *portfolio management indicator* is a moving average convergence/divergence (MACD) indicator with the following parameters:

Periodicity	ST EMA	MT EMA	Signal Duration
Daily	21	42	14

The portfolio management indicator will assist in defining the direction, strength and sustainability of the benchmark index's price-trend. The nature of the benchmark index's price-trend will influence the various elements of the portfolio management indicator, namely the MACD Line, the MACD Signal Line and the MACD Histogram. The performance, position, and relative position of these sub-indicators contribute to a framework for defining the *portfolio bias* as long, short or neutral.

Portfolio Bias	MACD line	MACD Histogram
LONG	Positive	Positive
NEUTRAL	Positive	Negative
NEUTRAL	Negative	Positive
SHORT	Negative	Negative



In addition to the portfolio management indicator a 250EMA will be used as a *long term filter* to assist in determining the *market risk rating*. Lower market risk ratings result from a strong price-trend in the benchmark index which causes alignment between the portfolio management indicator and the long term filter. A weaker price-trend in the benchmark index will cause the portfolio management indicator and the long term filter to fall out of alignment and trigger a higher risk market rating.

	Portfolio Bias		
LT Filter	Long	Neutral	Short
Increasing	LOW RISK LONG	MODERATE RISK LONG	HIGH RISK LONG
Declining	HIGH RISK SHORT	MODERATE RISK SHORT	LOW RISK SHORT

Each market risk rating requires the trader to take specific action based upon the variable reward to risk scale out conditions, portfolio mix conditions, and portfolio value at risk conditions.

8.2.1.2 Price Action Override

All indicator-based trading models by their nature operate on a delay. Price action generally operates with much less of a delay, that is, it is more responsive to changes in demand and supply. In order to make the Benchmarking Portfolio Management Model more responsive, a *price action override* will be applied to the market risk rating determined by the portfolio management indicator and long term filter in Section 8.2.1.1.

The medium term trend of the benchmark index will be measured and compared to the portfolio bias indicated by the portfolio management indicators. If the medium term trend is contrary to the trend indicated by the portfolio management indicators, then the market risk rating will be downgraded one level. Low market risk ratings will be downgraded to moderate risk ratings; moderate market risk ratings will be downgraded to high risk ratings; and high market risk ratings will remain high risk.

Market Risk	MTUT	MTDT
Low Risk Long	No change	Moderate Risk Long
Moderate Risk Long	No change	High Risk Long
High Risk Long , High Risk Short	No change	No change
Moderate Risk Short	High Risk Short	No Change
Low Risk Short	Moderate Risk Short	No change

8.2.2 Portfolio Mix Conditions

Diversification assists in reducing the volatility of the portfolio's returns. To maintain a diversified portfolio an appropriate mix of long and short trades will be sought, and a limit will be placed on the amount of portfolio value at risk which can be applied to any single GICS Industry.

8.2.2.1 Long to Short Trades Ratio

The market risk rating will determine the allocation of value at risk across long and short trades within the portfolio. In long market risk ratings a greater proportion of the portfolio value at risk will be allocated to long trades. In short market risk ratings a greater proportion of the portfolio value at risk will be allocated to short trades. The ratios in the table below represent the percentage allocation of portfolio value at risk across long and short trades respectively.

LOW RISK LONG L-S Ratio: 90:10	MODERATE RISK LONG L-S Ratio: 75:25	HIGH RISK LONG L-S Ratio: 67:33
HIGH RISK SHORT L-S Ratio: 33:67	MODERATE RISK SHORT L-S Ratio: 25:75	LOW RISK SHORT L-S Ratio: 10:90

8.2.2.2 Portfolio Diversification

The setup conditions defined in Section 6 do not take into account any fundamental factors for the securities being traded. It has been observed that securities with similar fundamental characteristics in the same industries tend to offer setups at the same time. It is therefore possible that a large amount of portfolio value at risk could be concentrated in setups which are highly correlated, that is, likely to move in a very similar manner at the same time. This increases the possibility of a large drawdown if there is an adverse fundamental shock to the securities within the affected industry. To minimise volatility in the portfolio's returns an *industry exposure limit* of no more than 30% of the allowable portfolio value at risk may be applied to any single GICS Industry.

8.2.3 Portfolio Value at Risk (\$VaRP) Conditions

A method often used to reduce the severity of a potential drawdown is to limit *portfolio value at risk*. Note however that limiting risk also has the potential to limit reward, so the portfolio management system must be flexible enough to allow greater exposure during times of lower market risk.

8.2.3.1 Portfolio Value at Risk Calculation

The sum of all of the individual value at risk amounts within the portfolio provides a measure of *gross portfolio value at risk*. The portfolio mix provisions ensure that the portfolio will contain long and short trades at any one time. In low and moderate risk markets exposure within the portfolio is relatively one-sided in terms of market direction. Anti-correlation between the returns on long and short trades will likely provide some relief against a large directional move against the portfolio bias. Therefore a discount can be applied to value at risk within the portfolio which stands to benefit from a move against the portfolio bias. In high risk markets, the portfolio mix is likely to be more evenly divided between longs and shorts and therefore potential volatility could see losses on trades in both directions. As a result, the portfolio value at risk will not be discounted in high risk markets and will simply remain the gross portfolio value at risk. It follows that for a fixed portfolio value at risk amount (see Section 8.2.3.2) using the discounting method will allow greater risk during lower risk markets and lesser risk during higher risk markets.

Market Risk	Total Long \$VaR Multiplier	Total Short \$VaR Multiplier
Low – Long	100%	30%
Moderate – Long	100%	30%
High – Neutral	100%	100%
Moderate – Short	30%	100%
Low – Short	30%	100%

Scenario Example 1 – Low Risk Long or Moderate Risk Long Market Rating

When the benchmark risk rating is low risk long or moderate risk long, the portfolio will have a higher proportion of long trades. Therefore the greatest risk to the portfolio is a large systematic downturn in prices. This will however be mitigated to some degree by the requisite short exposure within the portfolio as there is likely to be a degree of anti-correlation between the returns of long and short trades. In this scenario, the long value at risk exposure will be carried at 100% weight and the short value at risk exposure will be carried at a discounted 30% weight.

Market Risk:	Low Risk Long		Moderate Risk Long	
Total Long \$VaR	\$14,563	Total Short \$VaR	\$3,451	
Long \$VaR Multiplier	100%	Short \$VaR Multiplier	30%	
Long \$VaR Adjust	\$14,563	Short \$VaR Adjust	\$1,035	
\$VaRP	\$15,598			

Scenario Example 2 – Low Risk Short or Moderate Risk Short Market Rating

When the benchmark risk rating is low risk short or moderate risk short, the portfolio will have a higher proportion of short trades. Therefore the greatest risk to the portfolio is a large systematic upturn in prices. This will however be mitigated to some degree by the requisite long exposure within the portfolio as there is likely to be a degree of anti-correlation between the returns of long and short trades. In this scenario, the short value at risk exposure will be carried at 100% weight and the long value at risk exposure will be carried at a discounted 30% weight.

Market Risk:	Low Risk Short		Moderate Risk Short	
Total Long \$VaR	\$3,451	Total Short \$VaR	\$14,563	
Long \$VaR Multiplier	30%	Short \$VaR Multiplier	100%	
Long \$VaR Adjust	\$1,035	Short \$VaR Adjust	\$14,563	
\$VaRP	\$15,598			



Scenario Example 3 – High Risk Long or High Risk Short Market Rating

In a high risk market, large systematic upturns and downturns are equally likely and may follow each other in quick succession. Long exposure value at risk and short exposure value at risk are equally likely to deliver drawdowns. In this scenario, all value at risk exposure will be carried at 100% weight.

Market Risk:	High Risk Long		High Risk Short	
Total Long \$VaR	\$14,563	Total Short \$VaR	\$3,451	
Long \$VaR Multiplier	100%	Short \$VaR Multiplier	100%	
Long \$VaR Adjust	\$14,563	Short \$VaR Adjust	\$3,451	
\$VaRP	\$18,014			

8.2.3.2 Portfolio Value at Risk Limits

A *portfolio value at risk limit* will be implemented to help prevent drawdowns in excess of the risk objectives defined in Section 1.1.2. Low risk markets will be apportioned the greatest portfolio value at risk limit while high risk markets will be apportioned the least portfolio value at risk limit. The key benchmark in determining the portfolio value at risk limit is the maximum drawdown objective from Section 1.1.2 of 15.0%.

Market Risk Rating	Market Risk Multiplier	Max DD%	\$VaRP Limit
LOW RISK LONG	100%	15.00%	15.00%
MODERATE RISK LONG	60%	15.00%	9.00%
HIGH RISK LONG	30%	15.00%	4.50%
HIGH RISK SHORT	30%	15.00%	4.50%
MODERATE RISK SHORT	60%	15.00%	9.00%
LOW RISK SHORT	100%	15.00%	15.00%

A *market risk multiplier* will be applied to the maximum drawdown objective to calculate the portfolio value at risk limit. The multiplier for low risk markets is 100% implying that the full maximum drawdown objective amount can be utilised for trading. In moderate risk markets the market risk multiplier declines to 60% and in high risk markets it declines to 30%. This model ensures that the trader has incrementally smaller portfolio value at risk exposure as the volatility of the benchmark index's price-trend increases.

8.2.3.3 Treatment of Non-directional Trades

Non-directional trades include any trade which stands to benefit from little-to-no directional movement in the underlying security. The risk in such trades is therefore directional movement – either up or down. For this reason all directional trades will use a market risk multiplier of 100%.

8.2.3.4 Treatment of Pending Trades

Pending trades represent contingent value at risk. To account for the potential contribution of pending trades to portfolio value at risk, 25% of all pending trades' value at risk will be included in the portfolio value at risk calculation. The prevailing market risk multipliers also apply to pending trades.

Scenario Example 1 – Low Risk Long or Moderate Risk Long Market Rating

Market Risk:	Low Risk Long			or:	Moderate Risk Long		
Long Trades	Sub	Sub	Total	Short Trades	Sub	Sub	Total
Open Trades \$VaR		\$14,653		Open Trades \$VaR		\$3,451	
Pending Trades \$VaR	\$3,250			Pending Trades \$VaR	\$688		
Pending \$VaR Adjust	x 25%	\$813		Pending \$VaR Adjust	x 25%	\$172	
Total Long \$VaR \$		\$15,466		Total Short \$VaR \$		\$3,623	
Long \$VaR Adjust		x 100%	\$15,466	Short \$VaR Adjust		x 30%	\$1,087
Directional Portfolio \$VaR			\$16,553				
Non-directional Portfolio \$VaR			\$4,210				
Total Portfolio Value at Risk (\$VaRP)			\$20,763				

Scenario Example 2 – High Risk Long or High Risk Short Market Rating

Market Risk:	High Risk Long			or:	High Risk Short		
Long Trades	Sub	Sub	Total	Short Trades	Sub	Sub	Total
Open Trades \$VaR		\$8,741		Open Trades \$VaR		\$4,021	
Pending Trades \$VaR	\$1,782			Pending Trades \$VaR	\$819		
Pending \$VaR Adjust	x 25%	\$446		Pending \$VaR Adjust	x 25%	\$205	
Total Long \$VaR \$		\$9,187		Total Short \$VaR \$		\$4,226	
Long \$VaR Adjust		x 100%	\$9,187	Short \$VaR Adjust		x 100%	\$4,226
Directional Portfolio \$VaR			\$13,413				
Non-directional Portfolio \$VaR			\$4,210				
Total Portfolio Value at Risk (\$VaRP)			\$17,623				

8.2.3.5 Breach of \$VaRP Limit

The trader must not exceed the portfolio value at risk limit at any time. If the portfolio value at risk limit is breached, no further pending trades may be placed on the trading platform and existing pending trade orders should be cancelled. The placing of pending trades may resume when the portfolio value at risk returns to below the specified limit amount.



8.3 Variable Reward to Risk Scale Out Conditions

In lower risk markets where the benchmark index has a strong price-trend, trades in the direction of this trend tend to experience greater positive price movement with lesser volatility. Trades taken in the opposite direction however, tend to experience lesser positive price movement with greater volatility. In high risk markets where the benchmark index lacks a clearly defined price-trend, trades in either direction tend to experience lesser positive price movement with greater volatility.

LOW RISK LONG Longs R:R: 3:1 Shorts R:R: 1:1	MODERATE RISK LONG Longs R:R: 2:1 Shorts R:R: 1:1	HIGH RISK LONG Longs R:R: 1:1 Shorts R:R: 1:1
HIGH RISK SHORT Longs R:R: 1:1 Shorts R:R: 1:1	MODERATE RISK SHORT Longs R:R: 1:1 Shorts R:R: 2:1	LOW RISK SHORT Longs R:R: 1:1 Shorts R:R: 3:1

To address the above observations, in lower risk markets trade opportunities in the same direction as the benchmark index's price-trend will have wider profit objectives, whilst trades in the opposite direction to the benchmark index's price-trend will have narrower profit objectives. In high risk markets all trades will have narrower profit objectives. As the market risk rating changes, profit objective prices on pending and open trades must be amended to match the designated long trade and short trade reward to risk scale out ratios. Hard orders for $\frac{1}{2}R$ of the respective trade opportunity will be placed on the trading platform at the appropriate variable reward to risk scale out price.

8.4 Practical Aspects of Market Risk Rating Change

When there is a change to the market risk rating a number of systems within this plan will be affected. It is impractical to implement all of the requirements under the new market risk rating immediately, for example, achieving the new long value at risk to short value at risk ratio. Rather, a number of measured steps need to be taken to ensure the portfolio continues to be optimised towards achieving the return and risk objectives. When the bias changes, the following systems will be affected and may require may require amendments:

- ☐ Long value at risk to short value at risk ratio:
 - ☐ Check pending orders, possible removal of orders which if triggered will move the portfolio further away from the desired long value at risk to short value at risk ratio
- ☐ Recalculation of portfolio value at risk:
 - ☐ Long \$VaR Multiplier and Short \$VaR Multiplier may have changed (i.e. when moving from low or moderate market risk rating to high market risk rating). Recalculate \$VaRP taking into account new multipliers and any cancelled pending orders from Check Point 1
- ☐ Recalculation of portfolio value at risk limit:
 - ☐ Apply new Market Risk Multiplier to determine the new \$VaRP limit
 - ☐ If over limit, adjust potential exposure to pending orders accordingly
 - ☐ If under limit, focus on new trade opportunities which meet the new market risk, and be more stringent in applying entry criteria for new trade opportunities which don't

- ☐ Amend variable reward to risk scale out objective prices
 - ☐ For a trade which has as last price greater than new variable reward to risk objective price:
 - ☐ For low market risk rating changing to moderate market risk rating: No change
 - ☐ For low market risk or moderate market risk rating changing to high market risk rating:
 - ☐ Long trades: Set hard order for $-\frac{1}{2}R$ at 0.5% of last candle low below last candle low
 - ☐ Short trades: Set hard order for $-\frac{1}{2}R$ at 0.5% of last candle high above last candle high

Required changes should be fully implemented within 5 trading periods. High volatility in the benchmark index could cause the market risk rating to change on a number of consecutive periods. If this occurs implementation of the new bias will be stalled until 3 trading periods elapse without a market risk rating change.

8.5 Notional Trading Capital

The *trading capital* is the current balance in the trading account plus the capital outlaid on all outstanding open trades (i.e. not including any unrealised profits or losses). For example:

Trading Account Balance	\$65,000
Capital Outlaid on Open Trades	\$35,000
Trading Capital	\$100,000

Section 8.1.2 stated the trader's intent to risk no more than the initial value at risk percentage on any new trade opportunity. If the trading capital amount is used to determine \$R, and all prior positions result in a drawdown, the new trade opportunity will have risked a greater amount than prescribed.

Using original trading capital for \$R:	\$100,000	%R: 0.50%	\$R: \$500
Assume Loss on all Open Trades:	\$90,000	%R: 0.50%	Appropriate \$R: \$450

To avoid a situation where a new trading opportunity results in a drawdown of greater than the initial value at risk percentage, the trading capital will be reduced by the portfolio value at risk before it is used in the calculation of \$R. The trading capital minus the current portfolio value at risk will be referred to as the *notional trading capital*.

$$\text{Notional Trading Capital} = \text{Trading Capital} - \$VaR_P$$

Therefore in the example, notional trading capital will be:

Trading Capital		\$VaR _P		Notional Trading Capital
\$100,000	-	\$10,000	=	\$90,000



8.6 Drawdown Management

A drawdown is defined as a sustained diminishment of the trading capital. From Section 1.1.2 the following drawdown limits were established:

Maximum starting drawdown limit (Start DD%): 7.5%

Maximum drawdown limit (Max DD%): 15.0%

Strict adherence to the trading plan's broader capital management provisions should prevent drawdowns in excess of these limits. Despite this, it is expected that the systems employed will find themselves out of synch with the markets from time to time. Therefore it is inevitable the trader will eventually experience a drawdown. This section will define the conditions under which a drawdown will be managed.

8.6.1 Equity Curve Management Conditions

The *equity curve* is a schedule representing the sum of all realised profits and losses on trades taken since the commencement of trading activity. A drawdown therefore appears as a sustained decline in the equity curve. The *equity high* is the highest equity curve point on record. In order to conserve the trading capital, any decline from the equity high must not exceed the maximum drawdown limit. Two methodologies will be applied to prevent a breach of the maximum drawdown limit: Reduced Risk Trading and Virtual Trading.

8.6.2 Reduced Risk Trading

Reduced risk trading is triggered by a drawdown event and therefore occurs only when there is some evidence of dislocation between the trading strategies and market conditions. Under reduced risk trading new trade opportunities are allocated less than 1R initial value at risk. Trade opportunities which subsequently incur losses do so at a diminished rate therefore having a smaller detrimental impact on the equity curve. The disadvantage of this methodology is that new trade opportunities which subsequently incur profits also do so at a diminished rate. This risk will be discounted because the overriding objective of this trading plan is capital preservation. When the trading systems have realigned with market conditions, reduced risk trading will cease and regular risk trading will recommence.

8.6.2.1 Equity Curve Indicator

The trader requires an objective measure to differentiate between a characteristic drawdown (i.e. one that is typical of past drawdowns which did not trigger the drawdown limit) and an uncharacteristic drawdown, which if left unchecked is likely to trigger the drawdown limit. The *equity curve indicator* is a 30 period simple moving average of the equity curve. The equity curve indicator trails behind the equity curve providing a dynamic drawdown limit which is more sensitive to changes in systematic risk than the comparatively fixed maximum drawdown limit. When the equity curve falls below the equity curve indicator, reduced risk trading will commence at $\frac{1}{2}$ R initial value at risk to prevent a more severe drawdown in the trading capital. Reduced risk trading will continue until the equity curve recrosses back above the equity curve indicator (Figure 8.1).

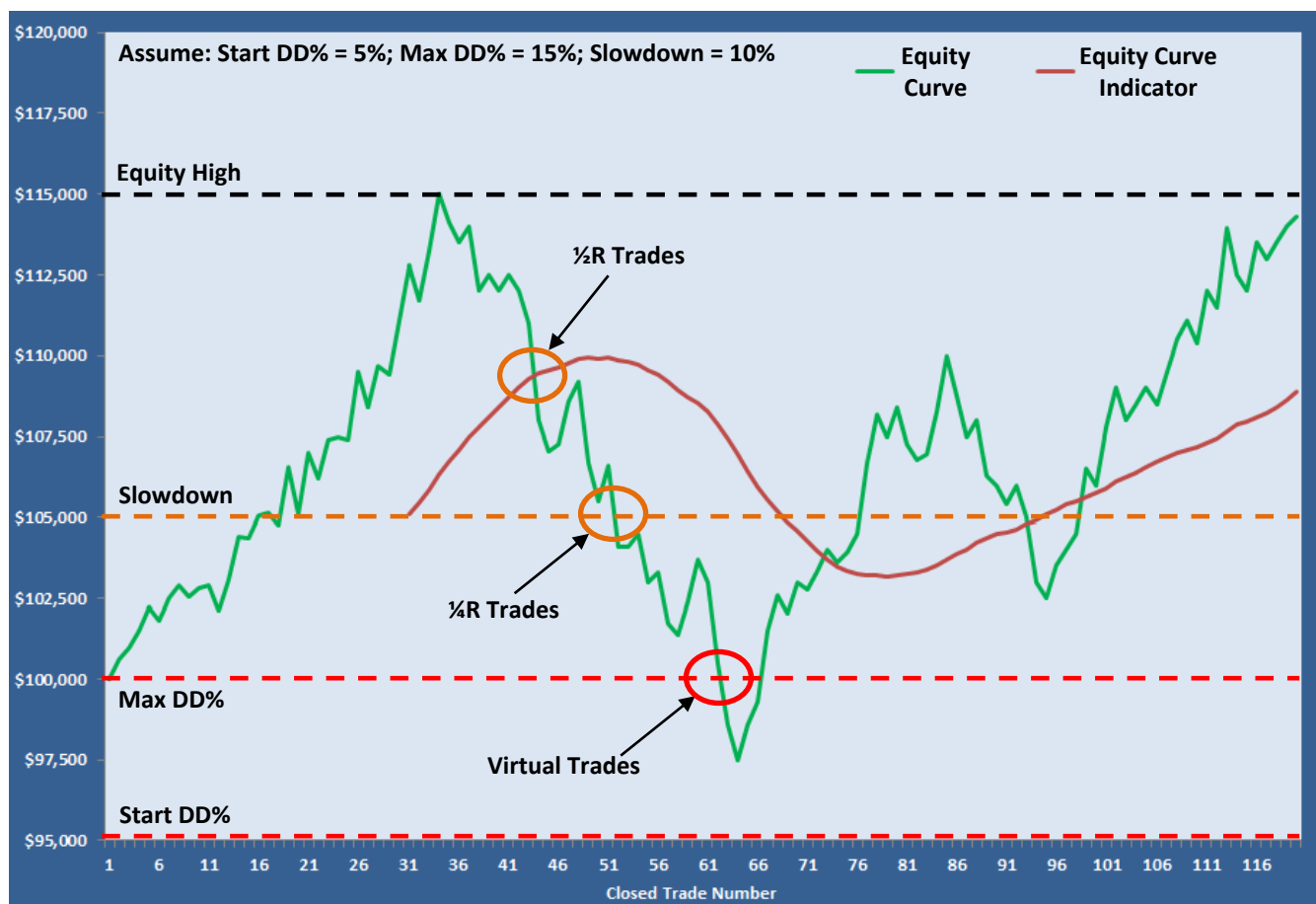


Figure 8.1: Equity curve, equity curve indicator, reduced risk trading and virtual trading events

As it takes 31 closed trades to plot the equity curve indicator, the maximum starting drawdown limit has been defined to address any starting drawdown until the more practical equity curve indicator method can be applied.

8.6.2.2 Slowdown Point

The goal of equity curve management is to prevent a drawdown in excess of the maximum drawdown limit. Reduced risk trading will slow the rate of drawdown but provides no guarantee that the maximum drawdown limit won't be breached. For this reason a further *slowdown point* will be implemented to reduce the impact of continued underperformance. If a drawdown from the equity high exceeds two-thirds of the maximum drawdown limit, the initial value at risk will be reduced by half of the prevailing \$R amount. The slowdown point for this trading plan is therefore a drawdown of 10.0% from the equity high.

If the slowdown point is breached it follows that:

- ☐ If the prevailing \$R amount is 1R because the equity curve indicator has not yet been breached, this condition acts to reduce \$R to 1/2R.
- ☐ If the equity curve indicator has been breached, and 1/2R reduced risk trading is already in place, this condition acts to reduce \$R to 1/4R.

- If the slowdown point is breached before the equity curve indicator and then a subsequent breach of the equity curve indicator occurs, this condition acts to reduce \$R to $\frac{1}{4}R$.

In the recovery phase the conditions work in reverse:

- If the prevailing initial value at risk is $\frac{1}{4}R$ and the equity curve subsequently recrosses back above either the slowdown point or the equity curve indicator, then \$R increases to $\frac{1}{2}R$.
- If the prevailing initial value at risk is $\frac{1}{2}R$ and the equity curve subsequently recrosses back above both the slowdown point and the equity curve indicator then reduced risk trading will cease and \$R increases to $1R$.

8.6.3 Virtual Trading

If the equity curve falls below the maximum starting drawdown limit (7.5%) or the maximum drawdown limit (15.0%) access to the trading capital for new trading opportunities will be temporarily suspended. During the temporary suspension analysis sessions proceed as usual and existing trades are allowed to run their course. Potential trading opportunities continue to be identified through the trade selection and portfolio management processes but are not allocated any of the trading capital.

The term *virtual trade* refers to a trade which otherwise would have been placed into the market but has been held back due to the trading suspension. If a virtual trade triggers, its progress is tracked as a standard trade with regards to all other aspects of the trading plan. Trading outcomes will be recorded in the trading journal and profits and losses from virtual trades will contribute to a new *virtual equity curve*. As market conditions realign with the trading systems, both virtual trades and remaining live trades are likely to deliver profits. Continued realignment of market conditions with the trading systems will cause the virtual equity curve to recross back above the relevant maximum drawdown limits. It is now likely that the risk of further drawdown is diminished and live trading may recommence.

8.6.3.1 Recommencing Live Trading

Immediately prior to the recommencement of live trading, all virtual trades are to be removed from the trading journal and the equity curve is recalculated. The trader will assess where the equity curve is in relation to the equity curve indicator, the slowdown point, and the maximum drawdown limits. If the equity curve is below any of these levels, live trading must initially begin in reduced risk mode (Figure 8.2).

- If the equity curve is below the maximum drawdown limit then live trading is to recommence with an initial value at risk of $\frac{1}{4}R$.
- If the equity curve is above the maximum drawdown limit but is below both the slowdown point and the equity curve indicator, then the initial value at risk is $\frac{1}{4}R$.
- If the equity curve is above the maximum drawdown limit but is below just one of the slowdown point or the equity curve indicator, then the initial value at risk is $\frac{1}{2}R$.
- When the equity curve has recrossed maximum drawdown limit, the slowdown point and the equity curve indicator, $1R$ trading can recommence.
- The same recommencement conditions apply to a breach of the maximum starting drawdown limit.

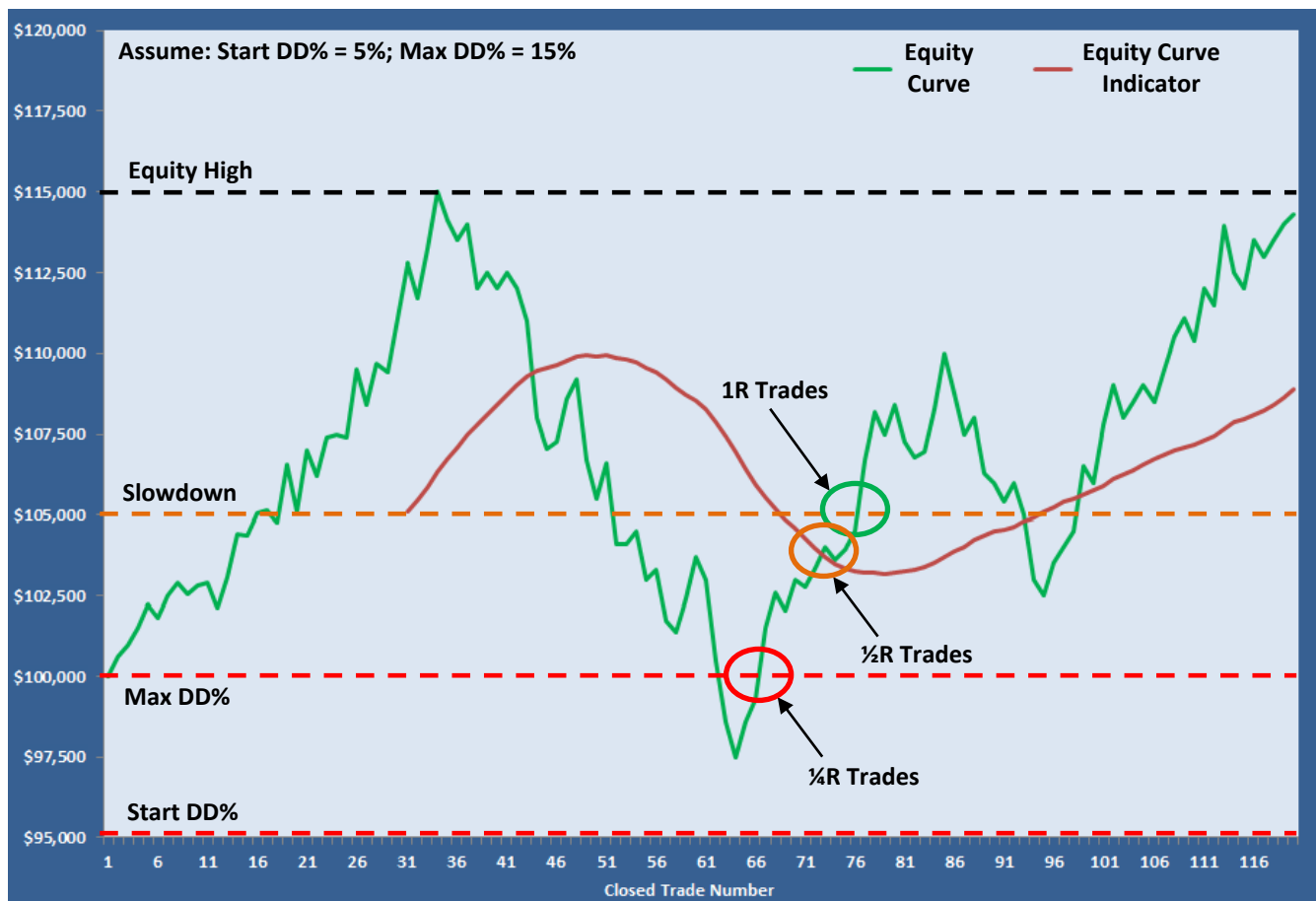


Figure 8.2: Events required after virtual and reduced risk trading for 1R trading to recommence

9 The Trading Process

The trading process is designed to save time, improve efficiency, and ensure that each aspect of the trading plan is being executed correctly. It is important the trading process is completed in its entirety and the various components undertaken in the defined order at each analysis session.

This section details the 12-step process to be followed in line with the periodicity stated in Section 3. The 12 steps are:

1. **Allocate appropriate time and resources;**
2. **Check current market risk rating;**
3. **Review existing trades;**
4. **Scan the trading universe;**
5. **Shortlist possible trades;**
6. **Work the numbers;**
7. **Check for fundamental developments;**
8. **Review portfolio management conditions;**
9. **Select the trades;**
10. **Position sizing;**
11. **Place trades onto platform;**
12. **Journal all activity.**

9.1 Allocate Appropriate Time & Resources

To ensure that the trading plan is faithfully followed it is necessary to allocate the appropriate amount of time and resources to the activities required. *Remember this is a business, not a hobby.* Analysis sessions must be conducted in line with the periodicity specified in Section 3 to ensure that all possible trading opportunities within the universe are seen by the system, and all requirements specified in this trading plan for exiting trades and capital management are adhered to.

9.1.1 Time Reserved for Trading Analysis

The following times have been set aside for analysis sessions to be undertaken:

Time of Analysis	Action
Monday	
7.00am-8.00am	Attend Weekly Analysis Session (for broader macroeconomic picture)
Monday – Friday	
1.00pm-5.30pm	Analysis All Markets
5.30pm-6.30pm	Attend Daily Analysis Sessions
Saturday	
8.00am-12.00pm	Analysis All Markets

Note: All live webinar sessions will occur one hour earlier during Australian Eastern Daylight Time



9.1.2 Resources

The trader has set up a desk in the study with all of the necessary tools required including a PC, printer, and communications. The trader has printed copies of each of the checklists in Section 11 of this trading plan and they are easily accessible during analysis sessions. The trader has acquired an appropriate technical analysis package (Beyond Charts Plus) with a quality data feed for each of the markets within the universe to be analysed. Adequate study of this software has been undertaken to ensure its most efficient use and to minimise strategy execution errors. The requisite trading accounts with the required functionality have been opened with reputable brokers for each of the asset classes to be traded. Adequate study of these trading platforms has been undertaken to ensure their most efficient use and to minimise transaction execution errors.

9.2 Check Current Market Risk Rating

The current market risk rating affects a number of portfolio management provisions including the ratio of long value at risk to short value at risk within the portfolio, the portfolio value at risk limit, and variable reward to risk scale out prices. If there is a market risk rating change, carry out the steps set out in the Market Risk Rating Change Checklist in Section 11.12.

9.3 Review Existing Trades

9.3.1 Review Pending Positions

All existing pending positions are to be reviewed to determine if they have triggered since the last analysis session. Newly opened trades are to be journalised. Trades still showing as pending should be scrutinised to confirm that each setup is still valid, and to determine if each trade remains suitable from a portfolio management perspective. Any trades which do not meet the relevant criteria should be immediately cancelled from the trading platform and the cancellation journalised.

9.3.2 Review Open Positions

Check for Closed Trades

Check to see if any stop loss orders or scale out objective orders have triggered since the last analysis session. If so, all closed trades are to be journalised. Review the equity curve and current drawdown amounts. Determine if the reduced risk or virtual trading conditions have been breached or whether trading can continue as normal.

Check Portfolio Value at Risk and Buffer

Once newly opened trades and closed trades have been accounted for, what is the current portfolio value at risk amount? Compare this to the portfolio value at risk limit to determine the value at risk buffer available for new trade opportunities. If the portfolio is over the limit, pending orders will need to be cancelled, and no new pending orders can be placed. If this is the case, Step 4 to Step 11 may be redundant. If just under the limit, care will need to be taken in how many new pending orders are added as pending trades contribute to portfolio value at risk.

Fundamental Developments

Fundamental developments include ex-dividend dates or the scheduled reporting of company financial results (quarterly or half-yearly). Check to see if there are any fundamental developments affecting each of the open trades. If the company is to go ex-dividend in the next period, the stop loss may need to be adjusted down by the dividend amount (plus franking credits for ASX listed equities). If the company is to report results in the next period, a partial exit may be enacted, a full exit may be enacted, or the trader can choose to proceed with the trade unchanged. Whichever of these three alternatives is decided as the appropriate method for dealing with the reporting of company results, the trader must then be totally consistent with its application going forward.

Trailing Stop Triggers

Check to see if any of the trailing stop loss trigger conditions have been met on each trade. If there is a trigger to trail a stop, journal the new trailing stop loss price and mark the item for implementation on the trading platform. Check to see if a price, volume & volatility exit signal is apparent on each trade. If a signal is apparent, journal the new trailing stop loss price for $\frac{1}{2}R$ of the trade and mark the item for implementation on the trading platform.

9.4 Scan the Trading Universe

The trading universe is defined in Section 4 as the group of securities which will be scanned each analysis session in order to identify potential trading opportunities. Scanning will involve viewing the chart of every security in the universe and assessing for the prevalence of a valid setup under the criteria set out in Section 6. At this stage trades are simply vetted as a potential long or short setup. As each security which meets the setup criteria is identified it is noted on a list, the *shortlist*, and the scan continues. It is essential that this process is done very quickly as the goal is simply to reduce the pool of potential trading opportunities to only those where a valid setup is evident. *It is vitally important* that more detailed and time consuming tasks are withheld until the trading universe has been reduced to just a few high quality potential setups.

9.5 Shortlist Possible Trades

Using the list of setups identified in Step 4, a more detailed analysis is undertaken of each remaining opportunity. The goal of this exercise is to confirm a valid setup exists and to conduct a first-pass assessment of the strength of the setup. Stronger setups are retained and weaker setups are discarded.

The trader should zoom out the chart of each of the remaining opportunities to check for major points of demand or a major points of supply outside of the default zoom as these may impact on the reward to risk potential of the setup. Any major point of demand or point of supply prior to 1 Jan 2007 can be ignored as being insignificant.

For each opportunity remaining on the shortlist an even more rigorous analysis is undertaken to cull those setups which are weaker than others. This is continued until no more than 5 of the absolute best possible trade setups remain.

9.6 Work the Numbers

For each of the remaining opportunities, the following information is identified and recorded:

- Trigger price
- ATR(21), 2 x ATR(21) and 4 x ATR(21)
- Stop loss price
- Variable reward to risk scale out price, and the next two fixed scale out prices
- Limit price for on-stop order

9.7 Check for Fundamental Developments

Identify the GICS Industry of each of remaining opportunities. This may have ramifications due to the application of the provisions in Section 8.2.2.2.

An imminent ex-dividend date could invalidate a potential trigger price for a long trade opportunity, or inadvertently trigger a trade for a short trade opportunity. Each potential trade opportunity will be assessed for ex-dividend dates and the amount of dividends payable. Appropriate adjustments are to be made to the trigger price.

Securities often experience uncharacteristic volatility around financial results reporting dates. If results are to be released within the next 5 trading periods the trader may choose to discard the affected trade setup, or the trader can choose to proceed with the trade setup. Whichever of these two alternatives is selected as the appropriate method for dealing with the reporting of company results, the trader must then be totally consistent with its application going forward.

9.8 Review Portfolio Management Considerations

Consider how any closed positions and newly opened positions have affected the required ratio of long value at risk to short value at risk from the portfolio management provisions in Section 8.2.2.1. Consider whether the adherence to the required ratio requires a greater focus on identifying new long trades or short trades. Consider how newly opened positions have impacted on the GICS Industry exposure limits. This may require the trader view new setups from certain GICS Industries more favourably in subsequent process steps. Consider again the current portfolio value at risk amount and the buffer available to new trades.

9.9 Select the Trades

In this step the trader selects the trade setups which will be allocated some of the trading capital. The strength of the trading setup is the first and foremost consideration. However, special care should also be taken in selecting opportunities which provide the optimal diversification benefit, and optimal reward to risk potential. Proceed from this step only on the basis that a sufficient buffer exists.

1. Setup

The strongest setup should be considered first for implementation, then each setup sequentially down to the weakest setup.



2. Portfolio Management

The current portfolio mix must be considered to determine if the planned trade would adversely impact the diversification of the overall portfolio. It is possible that of two potential trades being considered, one has a higher correlation of returns with the portfolio and therefore increases the potential portfolio's volatility of returns, and one has a lower correlation of returns with the portfolio and therefore decreases the potential portfolio's volatility of returns. The security which provides the greatest diversification benefit should be selected.

3. Reward to Risk Ratio

Only those trades which offer the strongest setup *and* the best reward to risk ratio will be selected. A minimum reward to risk ratio of 1:1 is required for each trading opportunity otherwise it cannot be considered for addition to the portfolio.

9.10 Position Sizing

The position size for each trade selected is determined by the methodologies detailed in Section 8.1.3. The Elite Traders Club Trading Journal contains a Position Sizing Calculator which will assist in calculation of the appropriate position sizes for each new trade opportunity. Alternatively, see Appendix 12.3.1 for a number of position sizing examples.

9.11 Place Trades onto Platform

Any updates to pending and open positions marked for implementation in earlier steps are to now be actioned on the trading platform. New trade setups are to be actioned on the trading platform with special care taken in entering the quantity to be traded, the trigger price, and any requisite the stop loss price or scale out objective prices. It is important to double and triple check order tickets for accuracy and reasonableness of margin requirements.

9.12 Journal All Activity

A journal of all trades is to be maintained (see Section 10 for more details). All relevant details for the analysis session must be recorded in the journal.

9.13 Turn off the Computer

And go and do something more productive! Always remember:

NOTHING GOOD WILL COME OF
WATCHING YOUR TRADES LIVE!

10 Documentation & Analysis of Results

Thorough documentation of the actions carried out by the trading plan will assist the trader in its efficient implementation, minimise oversights and errors, and provide detail on its robustness and performance. This section describes the documents which must be maintained to keep track of the trading plan's activities.

10.1 Trading Journal Spreadsheet

The primary document which will be used is the Trading Journal Spreadsheet. All of the relevant details for each trade as outlined below are required to be recorded for each trade. In addition to a trading journal, the spreadsheet should also track the equity curve and equity curve indicator and assist in risk management and position sizing calculations. The Trading Journal Spreadsheet is to be updated each analysis session.

10.1.1 Record Keeping for Individual Trades

Details of each trade will include:

- Trade Status (Pending / Open / Closed)
- Security Code / Name
- Trade Direction (Long or Short)
- Setup Description
- Trade Opening Date
- Scale In Date
- Quantity (units of securities)
- Tick Size
- Initial \$VaR
- Trade Open Price
- Initial Stop Loss Price
- Initial Target Price
- Initial Reward to Risk Ratio
- Trade Close Date
- Trade Exit Price
- Commission Charged on Entry
- Commission Charged on Exit
- Finance Costs
- Exchange Rate
- Actual Profit / Loss
- Actual Reward to Risk Ratio
- Trailing Stop Prices
- \$VaR at Each Trailing Stop Price
- Amended Target Prices
- Dividends Received (Long Trades) or Paid (Short Trades)
- Exit Reason (Stop Loss / Trail Stop / Exit Trigger / Hit Target / Trail Target)
- Comments (Key take-away points from the trade to note for future trades)

10.1.2 Record Keeping for Trading Plan Performance

A Summary Worksheet will be created. It will include the following fields:

- Gross Profit/Loss
- All Transaction Costs
- Net Profit/Loss
- Closed Trades
- Cumulative Number of Wins
- Cumulative Number of Losses
- Maximum Consecutive Wins
- Maximum Consecutive Losses
- Cumulative Loss of all Losses
- Cumulative Profit of all Wins
- Largest Winning Trade
- Largest Losing Trade
- Win Rate
- Loss Rate
- Average Win
- Average Loss
- Average Win to Loss Ratio
- Expectancy of Trading System
- Maximum Drawdown Value and %
- Current Drawdown Value and %
- \$VaR Directional and \$VaR Non-Directional
- Portfolio Value at Risk
- \$VaR Limit Amount
- \$VaR Buffer
- Equity Curve Status
- Net Equity
- Notional Equity
- Next Trade \$R

10.2 Trading Plan Review

The trading plan will be reviewed in six monthly instalments from implementation to determine whether the return and risk objectives set out in Section 1.1 are being achieved. It will also be assessed for relevancy and robustness under the prevailing market conditions.

11 Checklists

The following checklists are provided to assist the trader in following each step of the daily trading process meticulously and in the correct order.

11.1 Daily Process Checklist

See pages 76-77.

11.2 Long Trade Setup Conditions Checklist

See pages 78.

11.3 Short Trade Setup Conditions Checklist

See pages 79.

11.4 Scaling In Conditions Checklist

See page 80.

11.5 Long Trades Initial Stop Loss Conditions Checklists

See page 81.

11.6 Short Trades Initial Stop Loss Conditions Checklists

See page 82.

11.7 Long Trade Trailing Stop Loss Conditions Checklists

See pages 83.

11.8 Short Trade Trailing Stop Loss Conditions Checklists

See pages 84.

11.9 Long Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

See page 85.

11.10 Short Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

See page 86.

11.11 Portfolio Management Checklist

See page 87.

11.12 Market Risk Rating Change Checklist

See page 88.

11.1 Daily Process Checklist

Step	Description	Check
1. Allocate Appropriate Time & Resources	Ensure you have adequate time to conduct your analysis and are in the correct frame of mind to be completely objective with your analysis.	
2. Check the Current Market Risk Rating	Has the market risk rating changed? This may have ramifications for required ratio of long value at risk to short value at risk, portfolio value at risk and variable reward to risk objective prices	
3. Review Existing Trades	Check pending trades: Journal open trades, confirm the validity of still-pending trades, and consider continued suitability under portfolio mix considerations	
	Check for closed trades: Have any stop loss orders or scale out objective orders been triggered?	
	Check current portfolio value at risk. Compare to current limit and determine the available buffer for new trade opportunities. It is possible that new trades may not be allowed, or only limited exposure is allowed.	
	Check fundamental developments:	
	Are any securities going ex-dividend in the next period?	Y / N
	If so, have I adjusted any affected trigger prices for pending trades, or stop loss prices for open trades?	Y / N
	Are any securities reporting financial results in the next period?	Y / N
	If so, do I need to enact a partial exit or full exit?	Y / N
	Trailing stop triggers: Have any open trades triggered the conditions to trail a stop loss price?	
4. Scan the Universe	Rapid scan over each of the securities in the universe to determine if a setup exists. If so add to shortlist. Crucial this is done quickly! Long, Short, Pass!!!	
5. Shortlist	Scrutinise the shortlist and discard any weaker setups. Cull the list until the 5 very best setups remain.	
6. Work the Numbers	Determine the trigger price, stop loss price, and scale out objective prices for each of the remaining setups. This will infer the reward to risk potential of each trade.	
7. Check Fundamental Developments	Identify the GICS Industry of each security being considered (this will assist in managing portfolio mix)	
	Check for immanent ex-dividend dates: Do any of the trigger prices for the potential setups need to be amended?	
	Check for immanent financial results reporting dates: Do any of the potential setups need to be discarded?	



Daily Trading Process Checklist (Part 2)		
Step	Description	Check
8. Portfolio Management Considerations	Given closed trades and new trades, consider the characteristics of any new securities required to maintain appropriate portfolio mix including requirements for long-short value at risk ratio and GICS Industry exposure limits.	
	Consider the portfolio value at risk buffer and how much exposure can be added by way of new pending orders.	
	Check current drawdown levels to determine whether reduced risk trading or a trading suspension may be required.	
9. Select Trades	Select the trades which have:	
	1. The strongest setup	
	2. Best help achieve the current portfolio management requirements	
	3. Have the best reward to risk potential	
10. Position Sizing	Calculate the position sizes for each of the trades to be placed.	
11. Place Trades on the Platform	Place the trades onto the relevant trading platforms and check-and-double-check the validity of trade quantity, trigger, stop loss, and objective prices and reasonableness of margin requirements.	
12. Journal All Activity	Ensure that the Journal is up to date with all closed trade and open trade amendments, pending trade amendments and cancellations, and new trade entries.	
13. Turn off the Computer	And go do something more productive!	
NOTHING GOOD WILL COME FROM WATCHING YOUR TRADES LIVE!		



11.2 Long Trade Setup Conditions Checklist

Filter Conditions	Check
Price > 21EMA and 21EMA > 63EMA and 63EMA > 125EMA	
21EMA rising and 63EMA rising and 125EMA rising	
MTUT in place (must confirm either one of MTUTMP or MTUTSP conditions):	
‣ MTUTMP:	
‣ Breach Signal: Last MTT candle closed at or above second from last MTP; OR	
‣ Regressive Signal: Aggressive signal candle closed at or above second from last MTP, or second candle in Bullish 3 Bar Reversal closed at or above second from last MTP	
‣ MTUTSP: Rising MTTs	
Second test or later if LTP breach setup	
Price, Volume & Volatility Exit signal for longs not observed on last MTP for regressive signals	
1:1 reward to risk or greater into next higher most recent LTP, or next higher most recent LTT, or next higher major round number	
Signal Conditions	Check
Breach Signal: MTP has formed and price is below MTP; OR	
Regressive Signal:	
‣ Bullish Pinbar (Aggressive)	
‣ Strong Demand Candle (Aggressive)	
‣ Bullish Blended Pinbar or Blended Strong Demand Candle (Aggressive)	
‣ Bullish 3 Bar Reversal (Conservative)	
Trigger Conditions	Check
Breach Signal: On stop order set 2 pips above point of supply	
Regressive Signal: On stop order set 2 pips above signal bar's high	
Round number deferral required (on stop order set minimum of 0.5% plus 1 pip above round number up to maximum of 1% plus 1 pip above round number)	Y / N

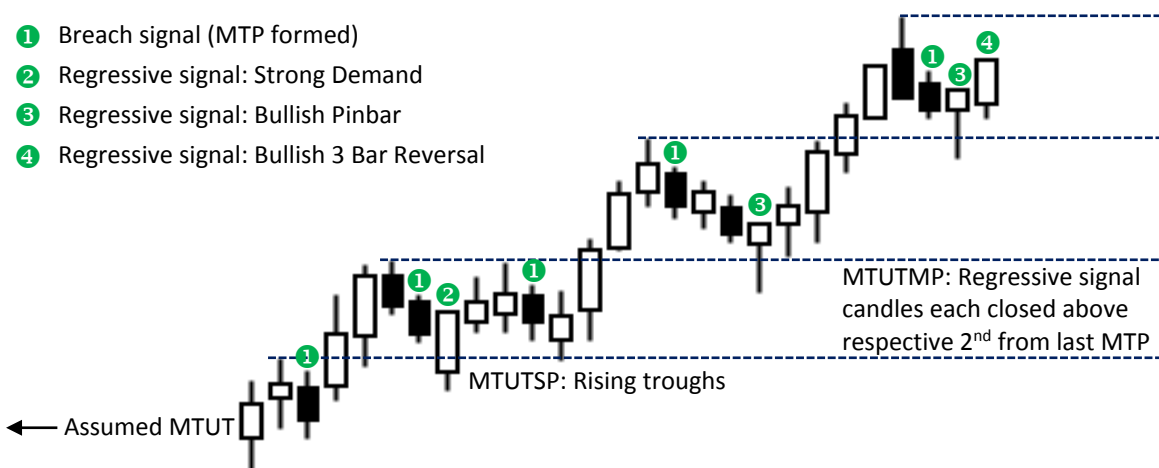


Figure 11.1: Examples of long setups

11.3 Short Trade Setup Conditions Checklist

Filter Conditions	Check
Price < 21EMA and 21EMA < 63EMA and 63EMA < 125EMA	
21EMA declining and 63EMA declining and 125EMA declining	
MTDT in place (must confirm either one of MTDTMP or MTDTSP conditions):	
‣ MTDTMP:	
‣ Breach Signal: Last MTP candle closed at or below second from last MTT; OR	
‣ Regressive Signal: Aggressive signal candle closed at or below second from last MTT, or second candle in Bearish 3 Bar Reversal closed at or below second from last MTT	
‣ MTDTSP: Declining MTPs	
Second test or later if LTT breach setup	
Price, Volume & Volatility Exit signal for shorts not observed on last MTT for regressive signals	
1:1 reward to risk or greater into next lower most recent LTT, or next lower most recent LTP, or next lower major round number	
Signal Conditions	Check
Breach Signal: MTT has formed and price is above MTT; OR	
Regressive Signal:	
‣ Bearish Pinbar (Aggressive)	
‣ Strong Supply Candle (Aggressive)	
‣ Bearish Blended Pinbar or Blended Strong Supply Candle (Aggressive)	
‣ Bearish 3 Bar Reversal (Conservative)	
Trigger Conditions	Check
Breach Signal: On stop order set 2 pips below point of demand	
Regressive Signal: On stop order set 2 pips below signal bar's low	
Round number deferral required (on stop order set maximum of 0.5% minus 1 pip below round number down to minimum of 1% minus 1 pip below round number)	Y / N

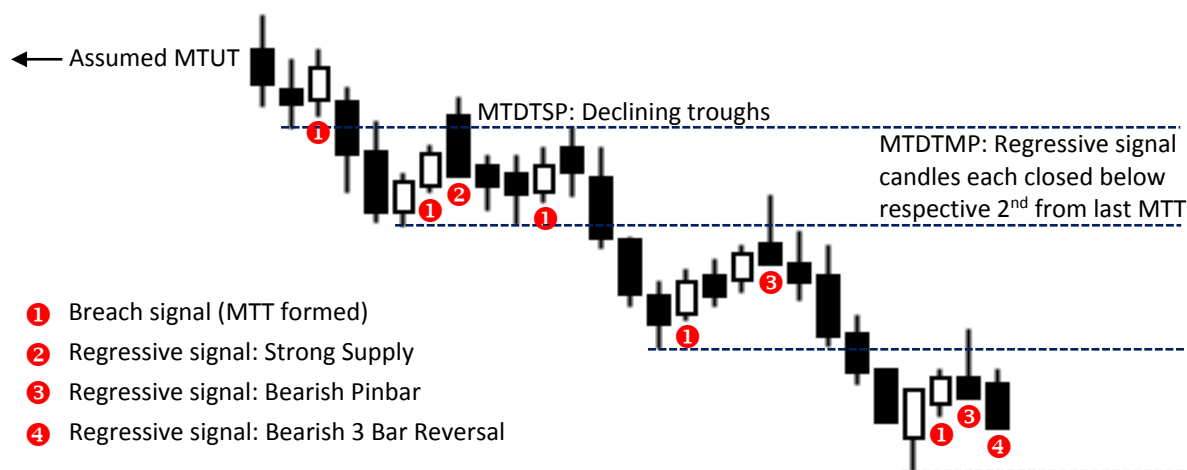


Figure 11.2: Examples of short setups

11.4 Scaling in Conditions Checklist

Conditions	Check
Initial trade entry (SIE0) is 1R	
First scale in event (SIE1) sees addition of 1R and	
‣ Initial trade entry must have positive \$PaR	
Second scale in event (SIE2) sees addition of ½R	
‣ SIE1 must have positive \$PaR	
Third scale in event (SIE3) sees addition of ¼R	
‣ SIE2 must have positive \$PaR	
Fourth and final scale in event (SIE4) sees addition of ¼R	
‣ SIE3 must have positive \$PaR	
Total trade \$VaR after addition of proposed new scale in trade's \$VaR not to exceed 2R	
Total trade \$EaR after addition of proposed new scale in trade's \$PaR not to exceed 3R	



Case Study: SIE₃ ③

(Assume \$R = \$1,000)

\$VaR Analysis Prior to SIE₃

\$VaR SIE₀ = \$0

\$VaR SIE₁ = \$200

\$VaR SIE₂ = \$800

Sum \$VaR = \$1,000

\$PaR Analysis Prior to SIE₃

\$PaR SIE₀ = \$1,000

\$PaR SIE₁ = \$700

\$PaR SIE₂ = \$300

Sum \$PaR = \$2,000

\$EaR Analysis Prior to SIE₃

\$EaR SIE₀ = \$1,000

\$EaR SIE₁ = \$900

\$EaR SIE₂ = \$1,100

Sum \$EaR = \$3,000

SIE₃ proposes to add \$250 risk to the scaled position. As this exceeds the \$VaR and \$EaR limits, it should not be added.

Figure 11.3: Scaling into trades case study

Conditions	Check
Initial stop loss price is set a minimum of 0.5% of the last MTT price below the last MTT price	
Check Point 1 price is greater than 1% of round number price above round number	
<ul style="list-style-type: none"> Otherwise defer initial stop loss price to a minimum of 0.5% of the round number price below the round number price 	
Initial stop loss price is set a minimum of 2 times ATR(21) below the trigger price and preferably no more than 4 times ATR(21) below the trigger price	

- 1 This scenario has a formed MTT
- 2 This scenario uses last candle low as MTT proxy

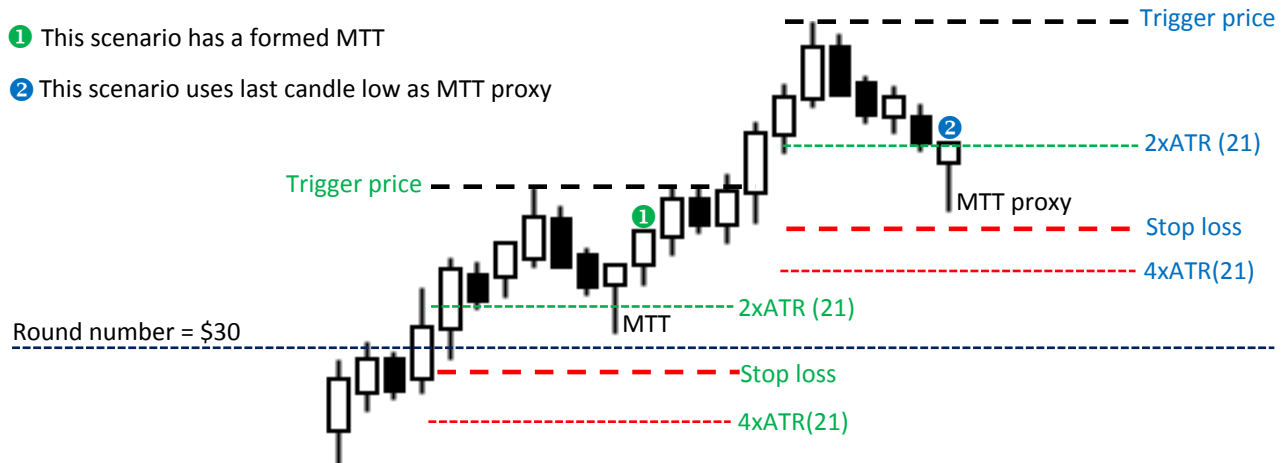


Figure 11.4: Initial stop loss price placement for a long trade

11.6 Short Trades Initial Stop Loss Conditions Checklist

Conditions	Check
Initial stop loss price is set a minimum of 0.5% of the last MTP price above the last MTP price	
Check Point 1 price is greater than 1% of round number price below round number	
‣ Otherwise defer initial stop loss price to a minimum of 0.5% of the round number price above the round number price	
Initial stop loss price is set a minimum of 2 times ATR(21) above the trigger price and preferably no more than 4 times ATR(21) above the trigger price	

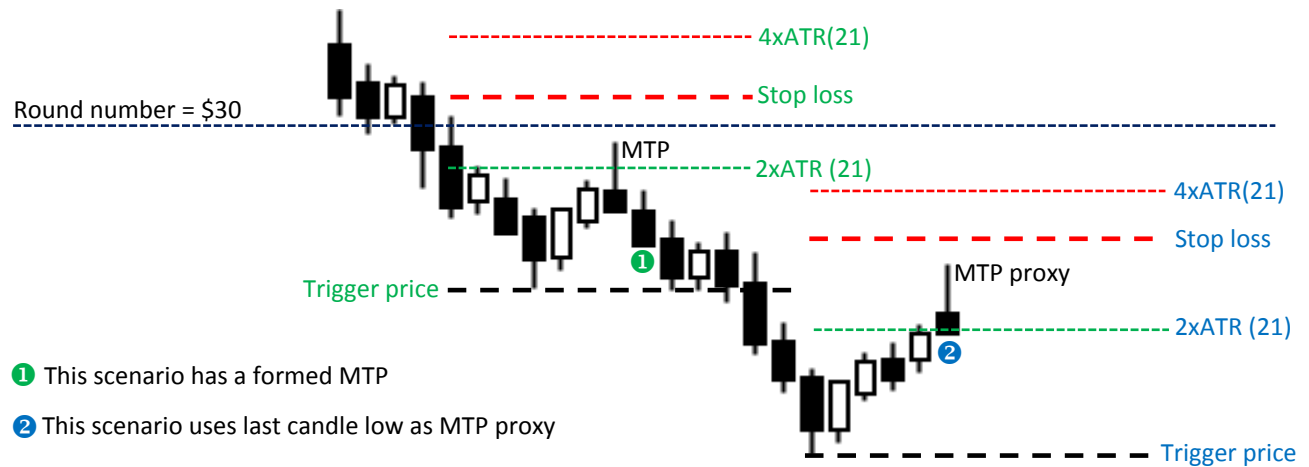


Figure 11.5: Initial stop loss price placement for a short trade

11.7 Long Trade Trailing Stop Loss Conditions Checklist

Conditions	Check
Trailing stop loss price may only move higher (unless security is going ex-dividend, then may adjust lower by dividend amount plus franking credits)	
Trailing stop loss price to be protected by at least two points of demand:	
‣ New point of demand trigger 1: Break and close above the last MTP	
‣ New point of demand trigger 2: Formation of a new MTT	
Check Point 2 price is greater than 1% of round number price above round number	
‣ Otherwise defer trail stop price to a minimum of 0.5% of the round number price below the round number price	
Trailing stop loss price is a minimum of 2 times ATR(21) below last price and preferably no more than 4 times ATR(21) below the last price	

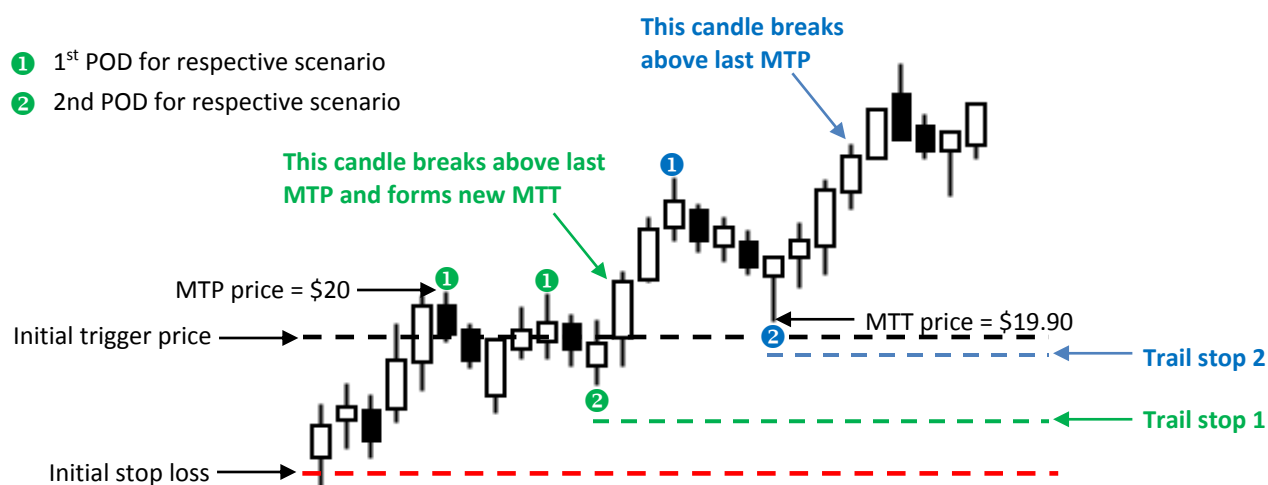


Figure 11.6: Trailing a stop loss for a long trade

11.8 Short Trade Trailing Stop Loss Conditions Checklist

Conditions	Check
Trailing stop loss price may only move lower	
Trailing stop loss price to be protected by at least two points of supply:	
‣ New point of supply trigger 1: Break and close below the last MTT	
‣ New point of supply trigger 2: Formation of a new medium term MTP	
Check Point 2 price is greater than 1% of round number price below round number	
‣ Otherwise defer trail stop price to a minimum of 0.5% of the round number price above the round number price	
Trail stop price is a minimum of 2 times ATR(21) above last price and preferably no more than 4 times ATR(21) above the last price	

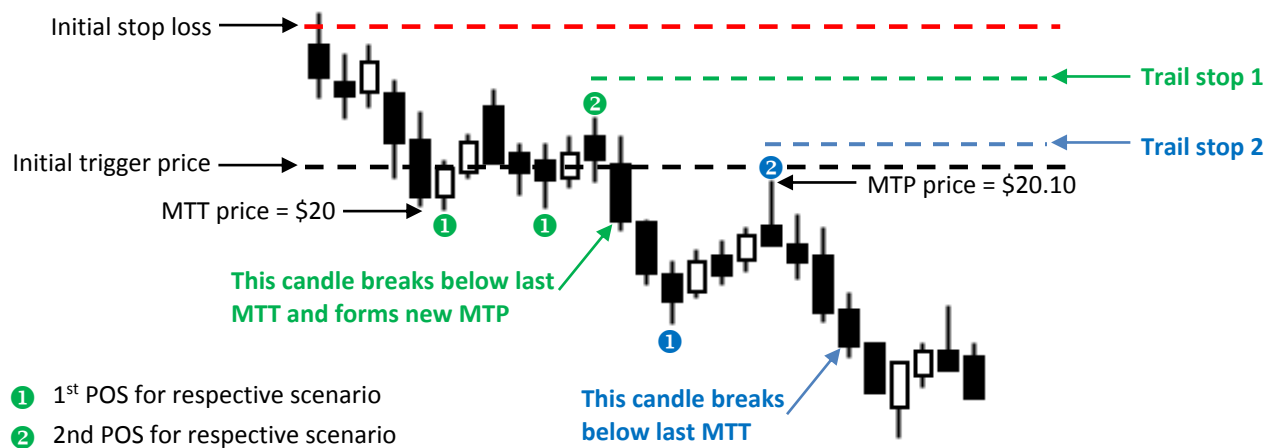


Figure 11.7: Trailing a stop loss for a short trade

11.9 Long Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

Conditions	Check
Move trailing stop loss price to 0.5% of nearest round number below nearest round number OR	
Move trailing stop loss price to 0.5% of the last point of demand below the last point of demand	
If Check Point 1 fails then move trailing stop loss price to 0.5% of the 5 bar low below the 5 bar low	
If Check Point 2 fails then move trailing stop loss price to 0.5% of the 4 bar low below the 4 bar low	
If Check Point 3 fails then move trailing stop loss price to 0.5% of the 3 bar low below the 3 bar low	
If Check Point 4 fails then move trailing stop loss price to 0.5% of the 2 bar low below the 2 bar low	
If Check Point 5 fails then move trailing stop loss price to 0.5% of the 1 bar low below the 1 bar low	

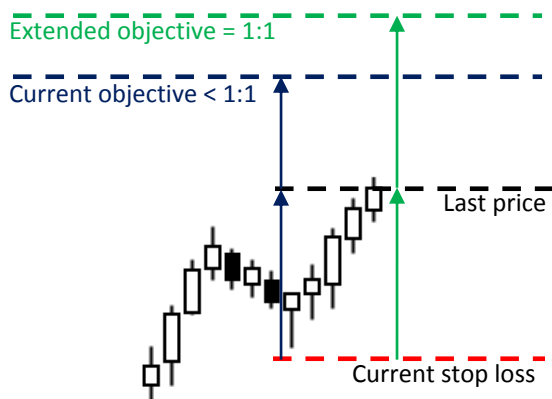


Figure 11.8: Objective price extension long trade

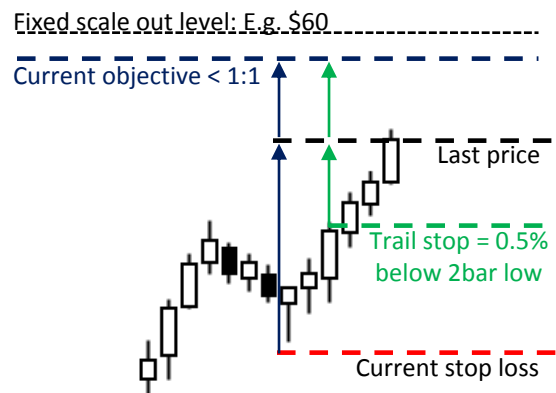


Figure 11.9: Rebalancing R:R trailing stop loss long trade

11.10 Short Trades Reward to Risk Rebalance Trailing Stop Loss Conditions Checklist

Conditions	Check
Move trailing stop loss price to 0.5% of nearest round number above nearest round number OR	
Move trailing stop loss price to 0.5% of the last point of supply above the last point of supply	
If Check Point 1 fails then move trailing stop loss price to 0.5% of the 5 bar high above the 5 bar high	
If Check Point 2 fails then move trailing stop loss price to 0.5% of the 4 bar high above the 4 bar high	
If Check Point 3 fails then move trailing stop loss price to 0.5% of the 3 bar high above the 3 bar high	
If Check Point 4 fails then move trailing stop loss price to 0.5% of the 2 bar high above the 2 bar high	
If Check Point 5 fails then move trailing stop loss price to 0.5% of the 1 bar high above the 1 bar high	

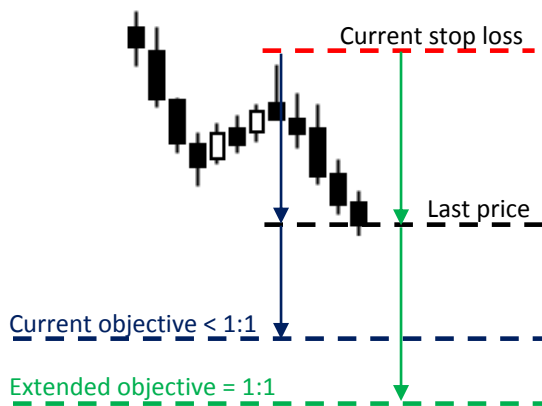


Figure 11.10: Objective price extension short trade

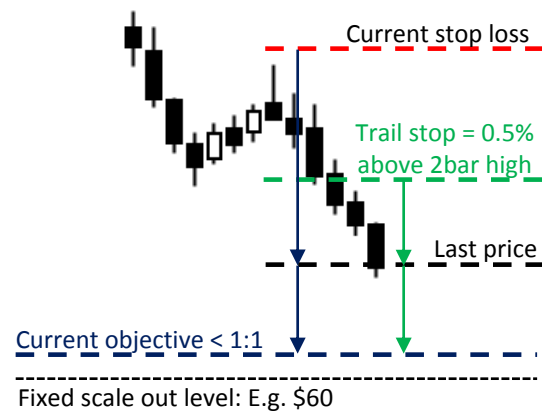


Figure 11.11: Rebalancing R:R trailing stop loss short trade

11.11 Portfolio Management Checklist

Market Risk Level	LOW RISK LONG	MODERATE RISK LONG	HIGH RISK LONG	
	Long Variable R:R SOE: 3:1 Short Variable R:R SOE: 1:1	Long Variable R:R SOE: 2:1 Short Variable R:R SOE: 1:1	Long Variable R:R SOE: 1:1 Short Variable R:R SOE: 1:1	
	L:S Ratio: 90:10	L:S Ratio: 75:25	L:S Ratio: 67:33	
	MaxDD% Multiplier: x100%	MaxDD% Multiplier: x60%	MaxDD% Multiplier: x30%	
	Long \$VaRP Multiplier: x100% Short \$VaRP Multiplier: x30%	Long \$VaRP Multiplier: x100% Short \$VaRP Multiplier: x30%	Long \$VaRP Multiplier: x100% Short \$VaRP Multiplier: x100%	
	HIGH RISK SHORT	MODERATE RISK SHORT	LOW RISK SHORT	
	Long Variable R:R SOE: 1:1 Short Variable R:R SOE: 1:1	Long Variable R:R SOE: 2:1 Short Variable R:R SOE: 1:1	Long Variable R:R SOE: 1:1 Short Variable R:R SOE: 3:1	
	L:S Ratio: 33:67	L:S Ratio: 25:75	L:S Ratio: 10:90	
MaxDD% Multiplier: x30%	MaxDD% Multiplier: x60%	MaxDD% Multiplier: x100%		
Long \$VaRP Multiplier: x100% Short \$VaRP Multiplier: x100%	Long \$VaRP Multiplier: x30% Short \$VaRP Multiplier: x100%	Long \$VaRP Multiplier: x30% Short \$VaRP Multiplier: x100%		
GICS Industries (Top 3 by exposure)	Industry: _____ \$VaRP Exposure: _____%	Industry: _____ \$VaRP Exposure: _____%	Industry: _____ \$VaRP Exposure: _____%	
\$VaRP Calcs	Open Longs \$VaR \$_____	Pending Longs \$VaR x 25% \$_____	Total Longs \$VaR \$_____	Adjusted Longs \$VaR \$_____
	Open Shorts \$VaR \$_____	Pending Shorts \$VaR x 25% \$_____	Total Shorts \$VaR \$_____	Adjusted Shorts \$VaR \$_____
	Non-Directional \$VaR \$_____			
	\$VaRP: \$_____		\$VaRP Limit: \$_____	\$VaRP Buffer: \$_____
Drawdown Limit (____%)	Current Drawdown: _____%			
	Pending Trade Suspension? Y / N	½R Trading? Y / N ¼R Trading Y / N	Virtual Trading? Y / N	



11.12 Market Risk Rating Change Checklist

Conditions	Check
Long value at risk to short value at risk ratio:	
<ul style="list-style-type: none"> Check pending orders, possible removal of orders which if triggered will move the portfolio further away from the desired long value at risk to short value at risk ratio 	
Recalculation of portfolio value at risk:	
<ul style="list-style-type: none"> Long \$VaR Multiplier and Short \$VaR Multiplier may have changed (i.e. when moving from low or moderate market risk rating to high market risk rating). Recalculate \$VaRP taking into account new multipliers and any cancelled pending orders from Check Point 1 	
Recalculation of portfolio value at risk limit:	
<ul style="list-style-type: none"> Apply new Market Risk Multiplier to determine the new \$VaRP limit 	
<ul style="list-style-type: none"> If over limit, adjust potential exposure to pending orders accordingly 	
<ul style="list-style-type: none"> If under limit, focus on new trade opportunities which meet the new market risk, and be more stringent in applying entry criteria for new trade opportunities which don't 	
Amend variable reward to risk scale out objective prices	
<ul style="list-style-type: none"> For a trade which has as last price greater than new variable reward to risk objective price: 	
<ul style="list-style-type: none"> For low market risk rating changing to moderate market risk rating: No change 	
<ul style="list-style-type: none"> For low market risk or moderate market risk rating changing to high market risk rating: 	
<ul style="list-style-type: none"> Long trades: Set hard order for $-\frac{1}{2}R$ at 0.5% of last candle low below last candle low 	
<ul style="list-style-type: none"> Short trades: Set hard order for $-\frac{1}{2}R$ at 0.5% of last candle high above last candle high 	
<p>Required changes should be fully implemented within 5 trading periods. High volatility in the benchmark index could cause the market risk rating to change on a number of consecutive periods. If this occurs implementation of the new bias will be stalled until 3 trading periods elapse without a market risk rating change.</p>	

12 Appendices

12.1 Transaction Costs

The transaction costs for the brokers to be used in the implementation of this trading plan are:

Broker	Type	Commission	Exchange Fees	GST
Saxo	Equity CFDs	ASX: Min \$8, 0.10% USA: Min \$15, 2cps	Nil	Nil
Saxo	Direct Equities	Min \$15, 0.10% USA: Min \$15, 2cps	Nil Nil	10% Nil
Saxo	Options	ASX: Min \$5 con USA: Min \$3 con	13c per contract	ASX: 10% USA: Nil
Saxo	Futures, Spot	Spread based, varies	Nil	Nil

12.2 Financing Costs

The financing costs for the brokers to be used in the implementation of this trading plan are:

Broker	Type	Financing Charges	
		Longs	Shorts
	CFD \$A Equities, Indices	5.50%	0%
	CFD \$US Equities, O/S Indices	2.65%	2.35%
Saxo	CFD Futures/Forwards	0%	0%
	CFD \$A Cash/Spot Commodities	4.30%	(2.70%)
	CFD Non \$A Cash/Spot Commodities	0.45%	0.15%

12.3 Position Sizing

For the following position sizing examples it will be assumed:

Trading Capital = \$100,000

%R = 2%

12.3.1 Position Sizing for ASX Equities

Security: BHP Billiton (BHP) - LONG

Commissions: \$19 min or 0.1%, ± 2.5% financing

Entry Price: \$37.67

GST: 10%

Stop Loss Price: \$36.44

Financing Days: 21

Stop Loss Distance: \$1.23

Cash Rate: 4.25% (i.e. financing rate = 6.75%)

Exchange Rate (AUDAUD): 1.0000

$$\begin{aligned}\$R &= \text{Trading Capital} \times \%R \\ &= \$100,000 \times 0.02 \\ &= \$2,000\end{aligned}$$

$$\begin{aligned}\text{Gross Position Size} &= \$R \times ER \div \text{Stop Loss Distance} \\ &= \$2,000 \times 1.0000 \div \$1.23 \\ &= 1,626 \text{ shares}\end{aligned}$$

$$\begin{aligned}\text{Gross Position Value} &= \text{Gross Position Size} \times \text{Entry Price} \\ &= 1,626 \times \$37.67 \\ &= \$61,251\end{aligned}$$

$$\begin{aligned}\text{Total Dealing Costs} &= \text{Commissions Round Trip} + \text{Financing Costs} \\ &= (\$61,251 \times 0.0011 \times 2) + (\$61,251 \times 0.0675 \times 21/360) \\ &= \$134.75 + \$241.17 \\ &= \$375.92\end{aligned}$$

$$\begin{aligned}\$R_N &= \$R - \text{Total Dealing Costs} \\ &= \$2,000 - \$375.92 \\ &= \$1,624.08\end{aligned}$$

$$\begin{aligned}\text{Net Position Size} &= \$R_N \times ER \div \text{Stop Loss Distance} \\ &= \$1,624.08 \times 1.000 \div \$1.23 \\ &= 1,320 \text{ shares}\end{aligned}$$

12.3.2 Position Sizing for USA Equities

Security: Apple Inc (AAPL) USA - LONG

Commissions: \$15min or 2 cps, \pm 2.5% financing

Entry Price: \$378.10

GST: Nil

Stop Loss Price: \$344.40

Financing Days: 21

Stop Loss Distance: \$33.70

USA LIBOR: 0.15% (i.e. financing rate = 2.65%)

Exchange Rate (AUDUSD): 0.9850

$$\text{\$R} = \text{Capital at Bank} \times \%R$$

$$= \$100,000 \times 0.02$$

$$= \$2,000$$

$$\text{Gross Position Size} = \text{\$R} \times \text{ER} \div \text{Stop Loss Distance}$$

$$= \$2,000 \times 0.9850 \div \$33.70$$

$$= 58 \text{ shares}$$

$$\text{Gross Position Value} = \text{Gross Position Size} \times \text{Entry Price}$$

$$= 58 \times \$378.10$$

$$= \$21,929.80$$

$$\text{Total Dealing Costs} = (\text{Round Trip Commissions} + \text{Financing Costs}) \div \text{ER}$$

$$= (\$15 \times 2 + \$21,929.80 \times 0.0265 \times 21/360) \div 0.9850$$

$$= (\$30 + \$33.90) \div 0.9850$$

$$= \$64.87$$

$$\text{\$R}_N = \text{\$R} - \text{Total Dealing Costs}$$

$$= \$2,000 - \$64.87$$

$$= \$1,935.12$$

$$\text{Net Position Size} = \text{\$R}_N \times \text{ER} \div \text{Stop Loss Distance}$$

$$= \$1,935.12 \times 0.9850 \div \$33.70$$

$$= 56 \text{ shares}$$

12.4 Portfolio Management Calculations

For the following portfolio management examples it will be assumed:

Trading Capital = \$100,000

Max DD% = 15%

%R = 0.5%

12.4.1 Benchmarking Portfolio Management Model Calculations

Example 1 – Low Risk Long Market Risk Rating

Market Risk Rating: **Low Risk Long**

Max DD% Multiplier: 100%

Long vs. Short Ratio: 90:10

Sum \$VaR Long Trades: \$12,000

Sum \$VaR Short Trades: \$2,000

Long \$VaRP Multiplier: 100%

Long \$VaRP Multiplier: 30%

$$\begin{aligned}\$VaRP &= \text{Sum \$VaR Long Trades} \times \text{Long \$VaRP Multiplier} + \\ &\quad \text{Sum \$VaR Short Trades} \times \text{Long \$VaRP Multiplier}\end{aligned}$$

$$\begin{aligned}\$VaRP &= \$12,000 \times 100\% + \$2,000 \times 30\% \\ &= \$12,600\end{aligned}$$

$$\begin{aligned}\$VaRP \text{ Limit} &= \text{Trading Capital} \times \text{MaxDD\%} \times \text{Max DD\% Multiplier} \\ &= \$100,000 \times 15\% \times 100\% \\ &= \$15,000\end{aligned}$$

$$\begin{aligned}\$VaRP \text{ Buffer} &= \$VaRP \text{ Limit} - \$VaRP \\ &= \$15,000 - \$12,600 \\ &= \$2,400\end{aligned}$$

$$\begin{aligned}\text{Notional Trading Capital} &= \text{Trading Capital} - \$VaRP \\ &= \$100,000 - \$12,600 \\ &= \$87,400\end{aligned}$$

$$\$R = \text{Notional Trading Capital} \times \%R$$

$$\begin{aligned}\$R &= \$87,400 \times 0.005\% \\ &= \$437\end{aligned}$$

Example 2 – Moderate Risk Long Market Risk Rating

Market Risk Rating: **Moderate Risk Long**

Max DD% Multiplier: 60%

Long vs. Short Ratio: 75:25

Sum \$VaR Long Trades: \$12,000

Sum \$VaR Short Trades: \$2,000

Long \$VaRP Multiplier: 100%

Long \$VaRP Multiplier: 30%

$$\begin{aligned} \$VaRP &= \text{Sum \$VaR Long Trades} \times \text{Long \$VaRP Multiplier} + \\ &\quad \text{Sum \$VaR Long Trades} \times \text{Long \$VaRP Multiplier} \end{aligned}$$

$$\begin{aligned} \$VaRP &= \$12,000 \times 100\% + \$2,000 \times 30\% \\ &= \$12,600 \end{aligned}$$

$$\begin{aligned} \$VaRP \text{ Limit} &= \text{Trading Capital} \times \text{MaxDD\%} \times \text{Max DD\% Multiplier} \\ &= \$100,000 \times 15\% \times 60\% \\ &= \$9,000 \end{aligned}$$

$$\begin{aligned} \$VaRP \text{ Buffer} &= \$VaRP \text{ Limit} - \$VaRP \\ &= \$9,000 - \$12,600 \\ &= -\$3,600 \text{ (i.e. the trader breached portfolio value at risk limit)} \end{aligned}$$

13 Disclaimer

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