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Understanding Classic Chart Patterns

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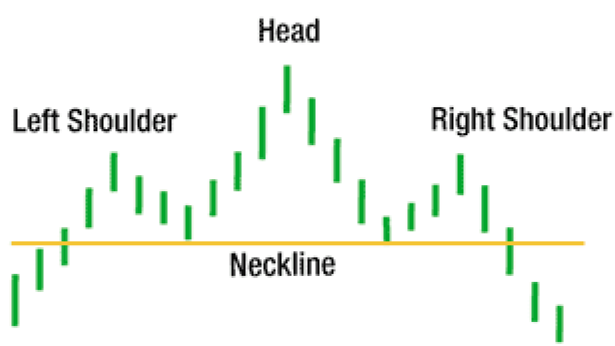

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Introduction

Why are charts important?

By charting the price movements of a stock over a period of time, you will get a convenient and easy-to-read source of information, and you can see the complete record of a stock's trading history at a glance.

Technical analysis is based on the idea that to know where stock prices are going, you must know where they have been. Therefore, charts are a fundamental element of technical analysis. Technical market analysis is based on the technical action of the market itself. According to technical analysis, the market is - at its most basic - groups of buyers pitted against groups of sellers.

Put buyers and sellers together and the law of supply and demand is not far behind. According to that law, when demand exceeds supply, prices rise. When supply outruns demand, prices fall.

Knowing if there are more sellers than buyers in a market, for example, will mean knowing that supply exceeds demand and, as a result, prices are declining.

Price charts - by detailing the history of price movements of a stock - are the key tools of a technical analyst. Charts tell the story of whether the market is moving up or down, helping investors to find the stocks they wish to buy and determine which stocks they want to sell.

Experts will tell you that charts do not predict.2 According to technical analysts, charts are valuable in determining the probabilities of success for the decision to buy, sell or hold. The key to successful technical analysis is figuring out how to analyze the information the charts provide and, in turn, forecast future price movements.

The "trend" is what technical analysts are looking for in their charts. Chart analysis is based on the theory that prices tend to move in trends, and that past price behaviour can give clues to the future direction of the trend. 3

The purpose of chart analysis is to identify and evaluate price trends, with the objective of profiting from the future movement of prices. "A chartist's asset lies not so much in his being able to forecast how high or how low a market will go, or when it will get there, as in being able to identify the direction of a trend and to call the turn of a trend when it comes." 4

While technical analysis focuses on the action of the market itself, the other major form of market analysis - fundamental analysis - concentrates on studying the potential of a stock by focusing on the fundamentals of the company and the economic environment in which it is operating. A fundamental analyst will look at the business of the company, its earnings and dividends - all the relevant factors that determine the success or failure of the business. Like technical analysis, the goal of fundamental analysis is the determination of where stock prices are headed. According to Murphy, "the fundamentalist studies the cause of market movement, while the technician studies the effect." 5

2 Kahn, p. 21, 3 Sklarew, p. 10, 4 Sklarew, p. 1

Although there are commonly held "high-level" definitions for the key chart patterns, many experts have different opinions on their significance, importance, subtleties and trading implications. Recognia provides you with a balanced perspective from a number of published experts in the field of technical analysis, including Edwards and Magee, Bulkowski, Murphy and Schabacker.

If you have any questions regarding regarding the material in this document please send them to sales@recognia.com

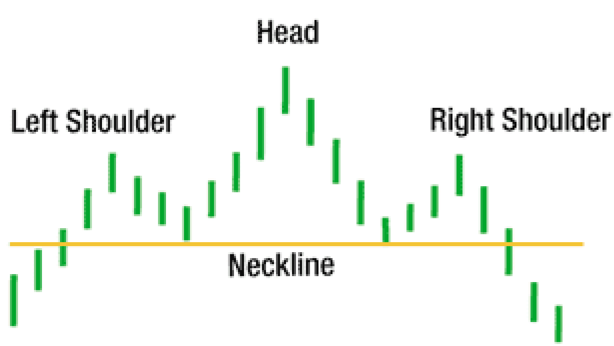
Head and Shoulders Top

The head and shoulders top is an extremely popular pattern among investors because it's one of the most reliable of all formations. It also appears to be an easy one to spot. Novice investors often make the mistake of seeing Head and Shoulders everywhere. Seasoned technical analysts will tell you that it is tough to spot the real occurrences.

The head and shoulders top is a "reversal" pattern. The formation marks a reversal in an upward trend of the stock's price - an uptrend is in the process of becoming a downtrend.

What does a classic head and shoulders top look like?

As depicted below, the classic head and shoulders top looks like a human head with shoulders on either side of the head. A perfect example of the pattern has three sharp high points, created by three successive rallies in the price of the stock.



The first point - the left shoulder - occurs as the price of the stock in a rising market hits a high and then falls back. The second point - the head - happens when prices rise to an even higher high and then fall back again. The third point - the right shoulder - occurs when prices rise again but don't hit the high of the head. Prices then fall back again once they have hit the high of the right shoulder. The shoulders are definitely lower than the head and, in a classic formation, are often roughly equal to one another.

A key element of the pattern is the neckline. The neckline is formed by drawing a line connecting two low price points of the formation. The first low point occurs at the end of the left shoulder and the beginning of the uptrend to the head. The second marks the end of the head and the beginning of the upturn to the right shoulder. The neckline can be horizontal or it can slope up or down. However, as

Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors points out, a Head and Shoulders Top neckline that is sloping downwards is highly unusual and demonstrates extreme weakness.

The pattern is complete when the support provided by the neckline is "broken." This occurs when the price of the stock, falling from the high point of the right shoulder, moves below the neckline. Technical analysts will often say that the pattern is not confirmed until the price closes below the neckline - it is not enough for it to trade below the neckline.

A classic head and shoulders top has been described above. There are many variations, some of which are described here and can be just as valid as the classic formation. Other factors - including volume and the quality of the breakout - should be considered in conjunction with the pattern itself.

Is volume important in a head and shoulders top?

Volume is extremely important for this pattern. For a head and shoulders top the volume pattern is as follows:

- Volume is highest when the left shoulder is forming. In fact, volume is often expanding as the uptrend continues and more and more buyers want to get in.
- Volume is lowest on the right shoulder as investors see a reversal happening. Experts say low volume levels on the right shoulder are a strong sign of a reversal.
- In the head portion of the price pattern, volume falls somewhere between the strength of the left shoulder and weakness of the right shoulder. Volume often increases when the neckline is broken as the reversal is now complete and downside pressure begins in earnest. In fact, Yager notes that one of the key characteristics she looks for in a Head and Shoulders Top is very high volume on the breakout.

Although volume is important, experts warn us not to get caught up in the precise number of shares being traded.[1] What we're looking for are changes in the rate of trading.

What are the details that I should pay attention to in the head and shoulders top?

There are certain characteristics that experts like to see in the pattern:

1. Symmetry - The right and left shoulders should peak at approximately the same price level. In addition, the shoulders are often about the same distance from the head. In other words, there should be about the same amount of time between the development of the top of the left shoulder and the head as between the head and the top of the right shoulder. In the real world, the formation will seldom be perfectly symmetrical. Sometimes one shoulder will be higher than the other or take more time to develop. Experts warn, however, that if a shoulder reaches the level of the head, you're no longer looking at a head and shoulders top. 2
2. Volume - The importance of volume has already been discussed. In summary, volume should be highest on the left shoulder, lowest on the right shoulder and somewhere in between on the head. The real tip-off in this formation occurs when activity fails to rally on the right shoulder.
3. Duration of the Pattern - Some experts say that an average pattern takes at least three months from start to the breakout point when the neckline is broken. It is not uncommon, however, for a pattern to last up to six months. The duration of the pattern is sometimes called the "width" of the pattern.
4. Need for an Uptrend - This is a reversal pattern which marks the transition from an uptrend in prices to a downtrend. This means that the formation always begins during an uptrend of stock prices. Yaer goes further to say that she only considers a Head and Shoulders Top pattern significant if the trend has been in existence for more than a year.
5. Slope of the Neckline - The neckline can slope up or down. The direction of the slope tends to predict the severity of the price decline.3 An upward sloping neckline is considered to be more bullish than a downward sloping one, which indicates a weaker situation with more drastic price declines. However, as noted above it is rather rare to have a downward sloping neckline for this pattern.
6. Decisive Neckline Break - To be complete, the neckline must be decisively broken. If the support at the neckline holds - if price bounces around the neckline or fails to move below the neckline - this is a sign that the reversal pattern has failed. If the pattern fails to decisively break through the neckline, prices will often move higher as the rally continues. Experts advise "beware a complicated right shoulder," where prices bounce around without decisively breaking through the neckline.

How can I trade this pattern?

Begin by computing the target price. The measuring technique is as follows. Begin by computing the height of the pattern. To do this, measure the number of points vertically down from the top of the head to the neckline. Subtract this number from the point where the price finally breaks the neckline, marking the end of the right shoulder. The difference is the minimum target price.

For example, assume the top of the head is 140 and the neckline vertically under it is 110. The height of the pattern is 30 (140 - 110 = 30). Assume the neckline was broken at 80. That means the downside objective is projected at 50 (80 - 30 = 50). This target price of 50 is only a guide, affected by a variety of the other factors already mentioned. Experts remind us that this target is a minimum target.[4] Prices will often move beyond that objective.

The way you trade this pattern will depend on how aggressive you are. No matter what your personality type, however, your trading focus will be on "breaking the neck." The pattern is not complete until the neckline is conclusively broken by the right shoulder.

On the aggressive end, Bulkowski suggests that, if you are confident that a head and shoulders formation is shaping up validly, that you should sell your stock or sell short once the right shoulder forms. He believes that because his statistics show that the pattern has a 93% success rate, there's no need to wait for a confirmed breakout before entering the trading arena.[5]

Others are less aggressive. Murphy, for example, places strong emphasis on ensuring that the pattern is complete. This can be seen by a significant breaking of the neckline, which he refers to as a "decisive closing violation" of the neckline.[6] He argues that until that violation takes place, it's always possible that the pattern is not a head and shoulders top and that the downtrend may never take place.

Murphy advises keeping a close eye on the "return move." Sometimes, after the neckline is broken on the right shoulder, the pattern bounces back up to the neckline. This is called a return move. The return move, if it occurs at all, is often only a minor and short-lived bounce. If the neckline is broken on heavy volume, this diminishes the possibility that there will even by a return move. However, don't discount the bounce. If the price keeps hovering around the neckline without a decisive break, it may not be a head and shoulders reversal and the uptrend may resume.

Edwards and Magee call a close below the neckline break of approximately 3% of the price of the stock the "breakout" or "confirmation" of the head and shoulders top.[7] The authors warn that up to 20% of head and shoulders tops are "saved," where prices keep bouncing around the low point of the right shoulder, before they eventually head back up.

According to Murphy, there are two tests that can be applied to determine whether the pattern is complete. He applies the 1 to 3% penetration criterion (see Edwards and Magee above) and confirms the neckline break with the "two-day rule," the requirement of the two successive closes below the neckline.[8]

Are there variations in the pattern that I should know about?

There are a few notable variations:

Watch for the Drooping Shoulder

According to Schabacker, the drooping shoulder - where neckline has a downward slope - can often indicate a rapidly developing technical weakness.[9] The droop happens because the stock price at the end of the head and the beginning of the right shoulder have dropped even lower than the previous low at the end of the left shoulder and the beginning of the head. Most experts agree that a downward slope has bearish implications for market weakness. Typically when the right shoulder is drooping, the trader will have to wait longer than usual for a decisive neck break. Murphy points out that when that decisive break does occur much of the move will have already occurred.[10]

Varying Width of Shoulders

The classic head and shoulders top is symmetrical. However, if the shoulders don't match in width, don't discount the pattern. According to Schabacker, it's common for one shoulder to take longer to form than the other.[11] If the pattern decisively breaks the neckline, it's still a valid head and shoulders top.

Flat Shoulders

While the classic head and shoulders top is made up of three sharp upward points, these need not be present for the pattern to be valid. Sometimes, shoulders can be rounded.

Multiple Head and Shoulders Patterns

Many valid head and shoulders patterns are not as well defined as the classical head with a shoulder on either side. "Complex" formations can have more variations than the classical formation. It is not uncommon to see more than two shoulders and more than one head. Edwards and Magee advise that any combination is possible, but a multiple head and shoulders is seen more often in a head and shoulders bottom rather than a top.[12]

A common version of a multiple head and shoulders pattern includes two left shoulders of more or less equal size, one head, and then two right shoulders that mimic the size and shape of the left shoulders.

(1Edwards and Magee, p. 66, 2Edwards and Magee, p. 75, 3Bulkowski, p. 292, 4Murphy, p. 109, Bulkowski, p. 301, 6Murphy, p. 106, 7Edwards and Magee, p. 64, 8Murphy, p. 107, 9Schabacker, p.50, 10Murphy, p. 112, 11Schabacker, p. 47, 12Edwards and Magee, p. 85)

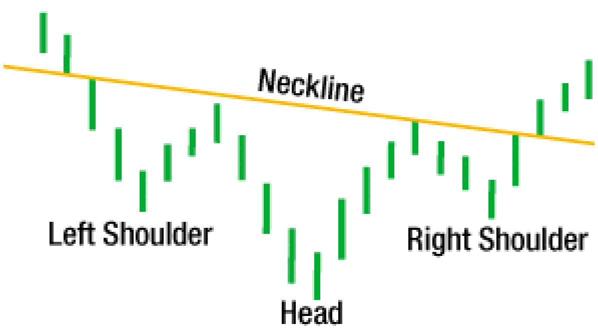
Head and Shoulders Bottom

Like the head and shoulders top, the head and shoulders bottom is a popular pattern with investors. The reverse of the head and shoulders top, the bottom marks a reversal in a downward trend in a stock's price -... In fact, Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, holds that this pattern most commonly occurs during the reversal of a major trend, a trend that has been in existence for a year or more.

While volume is important to a head and shoulders top, it is absolutely crucial to a head and shoulders bottom. An investor will be looking for increasing volumes at the point of breakout. This increased volume definitively marks the end of the pattern and the reversal of a downward trend in the price of a stock.

What does a classic head and shoulders bottom look like?

As shown below, the head and shoulders bottom, also referred to as an inverse head and shoulders, looks like a top, except reversed. A perfect example of the head and shoulders bottom has three sharp low points created by three successive reactions in the price of the stock. It is essential that this pattern form following a prior major downtrend in a stock's price.



The first point,- the left shoulder, -occurs as the price of the stock in a falling market hits a new low and then rises in a minor recovery. The second point, -the head, happens when prices fall from the high of the left shoulder to an even lower level and then rise again. The third point, -the right shoulder, -occurs when prices fall again but don't hit the low of the head. Prices then rise again once they have hit the low of the right shoulder. The lows of the shoulders are definitely higher than that of the head and, in a classic formation, are often roughly equal to one another.

The neckline is a key element of this pattern. The neckline is formed by drawing a line connecting two high price points of the formation. The first high point occurs at the end of the left shoulder and beginning of the downtrend to the head. The second marks the end of the head and the beginning of the downturn to the right shoulder. The neckline usually points down in a head and shoulders bottom, but on rare occasions can slope up.

The pattern is complete when the resistance marked by the neckline is "broken." This occurs when the price of the stock, rising from the low point of the right shoulder moves up through the neckline. Many technical analysts only consider the neckline "broken" if the stock closes above the neckline.

Is volume important in a head and shoulders bottom?

It is crucial for an investor to monitor the volume pattern to determine if what looks like a forming head and shoulders bottom will prove dependable.

The volume sequence should progress in a fairly predictable way, beginning with relatively heavy volume as prices descend to form the low point of the left shoulder. Once again, volume spikes as the stock hits a new low to form the point of the head. It is possible that volume at the head may be slightly lower than at the left shoulder. When the right shoulder is forming, however, volume should be markedly lighter as the price of the stock once again moves lower.

It is most important to watch volume at the point where the neckline is broken. For a true reversal, experts agree that heavy volume is essential. Murphy advises looking for a "sharp burst" of trading volume[1]. This increase in volume marks an increase in demand at higher prices. Buyers have entered the market in greater numbers.

What are the details that I should pay attention to in the head and shoulders bottom?

There are certain characteristics that experts like to see in the pattern as follows;

- Symmetry - In a classic head and shoulders bottom, the left and right shoulders hit their relative low points at approximately the same price and level. In addition, the shoulders are usually about the same distance from the head. Experts like to see symmetry but variations are not lethal to the validity of the pattern. Bulkowski comments that wide variations between the shoulders (they can vary in height or width) are common in the pattern. The head, however, is noticeably symmetrical.2 If a shoulder hits the low point marked by the top of the head, the pattern is not a head and shoulders bottom.
- Volume - As mentioned earlier, it is critical to watch the volume sequence as this pattern develops.

- Volume will usually be highest on the left shoulder and lowest on the right.
- Investors, looking to ensure that volume increases in the direction of the trend, should ensure that a "burst" in volume occurs at the time the neckline is broken.
- Experts, including Murphy, maintain that the volume pick-up at the end of the pattern is essential. "If the volume pattern does not show a significant increase during the upside price breakout, the entire pattern should be questioned."3 Other experts, including Bulkowski, are not so convinced: "a low volume breakout is not an indicator of an impending failure."4
- Duration of Pattern - A bottoming pattern is usually longer in duration and less volatile than a top. In addition, price swings are more marked in tops than in bottoms. According to Edwards and Magee, bottoms tend to be longer and flatter than tops.5 It is not unusual for a head and shoulders bottom to take several months to develop. Schabacker explains that volume activity in stocks is characteristically less after a period of declining prices than after a bull market. Because of this lower volume, patterns take longer to form and tend to be smaller than tops.6
- Need for a Downtrend - This is a reversal pattern which marks the transition from a downtrend to an uptrend. According to Yager, the formation always begins during a major downtrend in the stock's price.
- Slope of the Neckline - In a well-formed pattern, the slope will not be too steep, but don't automatically discount a formation with a steep neckline.7 Some experts believe an upward sloping neckline is more bullish than a downward sloping one. Others say slope has little to do with the stock's degree of bullishness.8 The slope of a neckline can be too steep however. Bulkowski recommends that if a neckline is too steep, an investor should consider the highest rise between the shoulders as the breakout level, rather than the piercing of the neckline.9
- Decisive Neckline Break - As mentioned earlier, the pattern is not complete until the neckline is broken and the breakout or confirmation must occur with a convincing burst of trading activity.

How can I trade this pattern?

Begin by computing the target price. Compute the height of the pattern by measuring the number of points vertically up from the bottom of the head to the neckline. Add this number to the point where prices finally break the neckline, marking the end of the right shoulder. The sum is the minimum price target.

For example, assume the bottom of the head is 110 and the neckline vertically above it is 140. The height of the pattern is 30 (140 - 110 = 30). Assume the neckline was broken at 130. That means the upside objective is projected at 160 (130 + 30 = 160). This target price of 160 is only a guide and can be affected by a variety of other factors already mentioned. Because this projected price is a minimum target, prices will often move beyond that objective.

Yager uses two measurements, one to confirm the formation of the pattern and one to compute a target price. As in the calculation above, compute the height of the pattern by measuring the number of points vertically up from the bottom of the head to the neckline. Take the height and add it to the price which marks the bottom of the right shoulder. This calculation should be done only when the price has penetrated the neckline. The pattern is confirmed when this price target is reached.

Then take the height and add it to the neckline marking the end of the right shoulder. This second measurement is the price objective.

For example, assume the bottom of the head is 110 and the neckline vertically above it is 140. The height of the pattern is 30 (140 - 110 = 30). Assume the bottom of the right shoulder is 120 and the neckline was broken at 130. The confirmation point is therefore 150 (120 + 30 = 150) and the upside objective is projected at 160 (130 + 30 = 160). Bulkowski suggests modifying this calculation method in situations where the neckline is particularly steep and up-sloping. "Substitute the rise between the head and right shoulder (that is the highest price in the rise) for the neckline breakout price."[10] Bulkowski's advice is in keeping with his aggressive approach to trading a head and shoulders bottom.

According to Bulkowski, "if you can determine that a head and shoulders formation is completing, consider buying the stock. The formation rarely disappoints and the rise is worth betting on."[11] He does continue, however, to caution potential investors to first be sure that what they are looking at is a true head and shoulders bottom. If you're unsure, he advises, wait for the breakout at the neckline.

Schabacker advises patience when monitoring the development of this pattern. He bases this on the fact that a head and shoulders bottom tends to take longer to form and is smaller in size to a head and shoulders top. Don't expect the time frames for pattern development to mimic that of the head and shoulders top.[12] Murphy suggests the investor use this difference to his or her advantage. Because of the smaller price ranges and slower development time, "it is usually easier and less costly to identify and trade bottoms than to catch market tops."[13] Although, he concludes, because prices tend to decline faster than they go up, an investor can reap greater rewards trading a head and shoulders top. This greater reward is accompanied by greater risk.

Murphy is adamant that increasing volume is a critical confirming pattern in the completion of a head and shoulders bottom. "If the volume pattern does not show a significant increase during the upside price breakout, the entire pattern should be questioned." [14]

Bulkowski advises investors that if they miss the upside breakout, they should wait and watch. They may not have lost a trading opportunity. "Half the time, the stock will throw back to the neckline. Once it does, buy the stock or add to your position." [15]

Edwards and Magee call a close above the neckline break of approximately 3% of the stock's market price the "breakout" or "confirmation" of the head and shoulders bottom.[16]

Are there variations in the pattern I should know about?

There are a few notable variations:

Multiple Head and Shoulders Patterns

Many valid head and shoulders patterns are not as well defined as the classical head with a shoulder on either side. "Complex" formations can have more variations than the classical formation. It is not uncommon to see more than two shoulders and more than one head. Edwards and Magee advise that any combination is possible, but it's more common to see multiple head and shoulders with a bottom rather than a top.[17]

A common version of a multiple head and shoulders pattern includes two left shoulders of more or less equal size, one head, and then two right shoulders that mimic the size and shape of the left shoulders.

Flat Shoulders

The classic head and shoulders pattern is made up of three sharply pointed components - the head and two shoulders. This is not always the case. Sometimes, the shoulders can lack sharp low points and instead be quite rounded. This does not affect the validity of the pattern. "The point to note," explains Schabacker, "is simply that the stock is trying to continue its previous main movement but is restrained from doing so on successive occasions by the development of technical power or pressure in the opposite direction."[18]

1Murphy, p. 112, 2Bulkowski, p. 265, 2Murphy, p. 103, 4Bulkowski, p. 265, 5Edwards and Magee, p. 81, 6Schabacker, p. 53, 7Bulkowski, p. 267, 8Bulkowski, p. 271, 9Bulkowski, p. 265, 10Bulkowski, p. 273, 11Bulkowski, p. 273, 12Schabacker, p. 53, 13Murphy, p. 103, 14Murphy, p. 103, 15Bulkowski, p. 273, 16Edwards and Magee, p. 81, 17Edwards and Magee, p. 85, 18Schabacker, p. 57)

Symmetrical Triangle

The triangle pattern, also called the "coil," appears in three varieties:

- symmetrical,
- ascending and,
- descending.

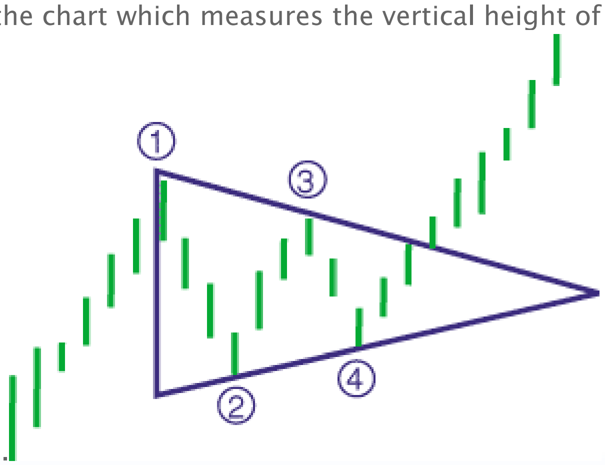
Generally, a triangle pattern is considered to be a continuation or consolidation pattern. Sometimes, however, the formation marks a reversal of a trend.

Symmetrical triangles are generally considered neutral, ascending triangles are bullish, and descending triangles are bearish. From a time perspective, triangles are usually considered to be intermediate patterns. Usually, it takes longer than a month to form a triangle. Seldom will a triangle last longer than three months. If a triangle pattern does take longer than three months to complete, Murphy advises that the formation will take on major trend significance.[1]

What does a symmetrical triangle look like?

Converging trendlines of support and resistance gives the triangle pattern its distinctive shape. This occurs, Kahn explains, because "the trading action gets tighter and tighter until the market breaks out with great force."[2] Buyers and sellers find themselves in a period where they are not sure where the market is headed. Their uncertainty is marked by their actions of buying and selling sooner, making the pattern look like an increasingly tight coil moving across the chart.

As the range between the peaks and troughs marking the progression of price narrows, the trendlines meet at the "apex," located at the right of the chart. The "base" of the triangle is the vertical line at the left of the chart which measures the vertical height of the pattern.



A symmetrical triangle shows two converging trendlines, one is ascending, the other is descending - creating a sideways symmetrical triangle. The formation occurs because prices are making both lower highs and higher lows. Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, notes that the pattern should display two highs and two lows, all touching the trendline as - a minimum of four reversal points is necessary to draw the two converging trendlines. The diagram has these points noted.

Bulkowski divides symmetrical triangles into two groups:

1. symmetrical bottoms - prices trend down then form lower highs and higher lows. Breakout can be either downward or upward.
2. symmetrical tops - prices trend up then form lower highs and higher lows. Breakout can be either downward or upward.

Why is the symmetrical triangle pattern important?

A symmetrical triangle pattern is relatively easy to identify. In addition, triangle patterns can be quite reliable to trade with very low failure rates. There is a caution concerning trading these patterns, however. As mentioned previously, a triangle pattern can be either continuation or reversal patterns. Typically, they are continuation patterns. To achieve the reliability for which the triangle is well known, technical analysts advise waiting for a clear breakout of one of the trendlines defining the triangle.

Triangle patterns are usually susceptible to definite and dependable analysis, with the proviso that the investor must wait for a reliable, as opposed to a premature, breakout. Bulkowski advises that, in general, the failure rate for triangles drops significantly if the investor waits for a valid breakout and, once that breakout occurs, the pattern proves strongly reliable. [3]

Murphy advises that a minimum penetration criterion would be a closing price outside the trendline and not just an intraday penetration.[4] Similarly, Schabacker warns of the "false moves" and "shake-outs" which most commonly attend the triangle. [5]

Is volume important in a symmetrical triangle pattern?

Volume is an important factor to consider when determining whether a formation is a true triangle. Typically, volume follows a reliable pattern: volume should diminish as the price swings back and forth between an increasingly narrow range of highs and lows. However, when breakout occurs, there should be a noticeable increase in volume. If this volume picture is not clear, investors should be cautious about whether the pattern is a true triangle.

This traditional volume pattern develops because of investor sentiment during the creation of a triangle.

Investors are uncertain. This uncertainty means that they are buying and selling sooner, which translates into a narrowing of the highs and lows, creating the "coil" shape, indicative of the triangle . Because investors are uncertain, many are holding on to their stocks, awaiting the market's next move. When breakout finally does occur, there's a surge in market activity because investors are finally certain enough about the direction of the market to release their pent-up supply or demand.

What are the details that I should pay attention to in a symmetrical triangle pattern?

1. Occurrence of a Breakout - Technical analysts pay close attention to how long the triangle takes to develop to its apex. The general rule, as explained by Murphy, is that prices should break out - clearly penetrate one of the trendlines - somewhere between three-quarters and two-thirds of the horizontal width of the formation.[6] The break out, in other words, should occur well before the pattern reaches the apex of the triangle. . Adherence to this rule is strongly advised by Yager, She adds that the closer the breakout occurs to the apex the higher the risk of a false breakout.

To take the measurement, begin by drawing the two converging trendlines. Measure the length of the triangle from its base to the apex. Next, plot the distance along the horizontal width of the pattern where the breakout should take place. If prices remain within the trendlines beyond the three-quarters point of the triangle, technical analysts will approach the triangle with caution. In much the same manner as Yager, Murphy warns that if prices don't breakout of the trendlines before that point, the triangle "begins to lose its potency"[7] and prices will simply drift out beyond the apex with no surge in either direction.

2. Price Action - Unlike ascending and descending triangles which give advance notice of their intentions, the symmetrical triangle tends to be a neutral pattern. Murphy advises that the symmetrical triangle is generally a consolidation pattern. This means an investor can look to see the direction of the previous trend and make the basic assumption that the trend will continue.[8] However, many experts advise investors that because the breakout direction could go either way that they wait until the breakout occurs before investing in or selling the stock. Schabacker refers to a symmetrical triangle as a "picture of hesitation."[9]

3. Measuring the Triangle - To project the minimum short-term price objective of a triangle, an investor must wait until the price has broken through the trendline. When the price breaks through the trendline, the investor then knows whether the pattern is a consolidation or a reversal formation.

To calculate the minimum price objective, calculate the "height" of the formation at its widest part - the "base" of the triangle. The height is equal determined by projecting a vertical line from the first point of contact with the trendline on the left of the chart to the next point of contact with the opposite trendline. In other words, measure from the highest high point on one trendline to the lowest low point on the opposite trendline. Both these points will be located on the far left of the formation. Next, locate the "apex" of the triangle (the point where the trendlines converge). Take the result of the measurement of the height of the triangle and add it to the price marked by the apex of the triangle if an upside breakout occurs and subtract it from the apex price if the triangle experiences a downside breakout.

For example, working with a symmetrical triangle, assume the highest high of the pattern occurs at 100 and the lowest low at 80. The height of the pattern is 20 (100 - 80 = 20). The apex of the triangle occurs at 90. The pattern has an upside breakout. Using the measuring rule, the target price is 110 (90 + 20 = 110).

4. Duration of the Triangle - As mentioned before, the triangle is a relatively short-term pattern. It may take up to one month to form and it usually forms in less than three months.

5. Forecasting Implications - Once breakout occurs, the symmetrical triangle tends to be a reliable pattern. Bulkowski calculates failure rates ranging between 2% and 6% for symmetrical triangles after a valid breakout.

6. Shape of Symmetrical Triangle - The pattern should display two highs and two lows, all touching the trendline - a minimum of four reversal points is necessary to draw the two converging trendlines.

7. Volume - Investors should see volume decreasing as the pattern progresses toward the apex of the triangle. At breakout, however, there should be a noticeable increase in volume. Like reversal patterns, volume is more important on the upside than the downside. Therefore, an investor will be particularly interested in seeing an increase in volume on breakout if the pattern is moving upwards. Similarly, if prices are experiencing an uptrend, investors should be looking for volume to increase as prices move up and fall as prices fall back.

8. Premature or False Breakouts - Bulkowski calls them "premature" false breakouts[10] and Schabacker refers to them as "false moves" or "shake-outs."[11] Both agree that triangles are among the patterns most susceptible to this phenomenon. Because the pattern can be either a reversal or continuation pattern, investors are particularly susceptible to false moves or, at the very least, confused by them. In addition, because volume becomes so thin as the triangle formation progresses to the apex, it takes very little activity to bring about an erratic and false movement in price, taking the price outside of the trendlines.

To avoid taking an inadvisable position in a stock, some investors advise waiting a few days to determine whether the breakout is a valid one. Typically, a false move corrects itself within a week or so.[12] A key sign of a possible false move is low volume. If there's no pick up in volume around the breakout, investors should be wary. Typically, a good breakout from a triangle formation will be accompanied by a definite surge in volume.

There are situations, however, where a false move will occur with high volume. According to Schabacker, these are the most dangerous variety of false moves.[13] The only advice experts can give to investors who fall prey to one of these false moves is to reverse their positions as soon as they become aware of the true movement of the stock.

It is also advisable to be increasingly suspicious of triangle patterns where the breakout occurs very close to the apex. Because trading is so thin at this point, there is an increased likelihood that a false move could occur. Also, false moves are more likely with symmetrical triangles, maintains Schabacker.[14] With the right-angle triangles, the trend is suggested by the pattern itself. Therefore, a deviation from that trend is more likely to raise the suspicion that it may be a "false move."

How can I trade this pattern?

Edwards and Magee offer different trading strategies depending on whether you already have a position in the stock or whether you do not have a position in a stock experiencing a triangle formation. If an investor already has a position in a stock, he or she may be "locked" into that position as the formation takes shape because it is not possible to definitively predict which way the breakout will take the price of the stock. [15] The key is waiting and watching for a valid breakout before making an investment decision.

If an investor does not have a position in a stock, Edwards and Magee advise staying away from the stock when it's in the process of forming the triangle pattern. Consider a position when a dependable breakout has occurred. "After such a breakout, if on the upside, buy on the next reaction if the Major Trend is up, or if on the downside, sell short on the next rally if the Major Trend is down." [16]

Given contradictory nature of the direction of breakouts from triangles, all experts advise caution with triangles while they're in the process of forming. (". . . it might be better policy to note such formations in the making, and wait until the decisive breakout before making the new commitment." [17]) Once a valid breakout has been detected, however, the same experts agree that triangles are a reliable pattern to trade.

As mentioned, this pattern has a tendency to premature breakouts and false moves. To avoid mistaking a false move for a valid breakout, experts advise waiting a few days to see if the breakout is dependable. According to Murphy, a minimum penetration criteria would be a closing price outside the trendline and not just an intraday penetration. Investors do have time once a breakout has occurred.[18] According to Bulkowski, when considering symmetrical triangles, an investor will have over five months to reach the ultimate high after an upside breakout and less than half that time after a downside breakout. [19]

Because premature breakouts (where prices close outside of the trendline) are so common, don't dismiss the pattern if it has experienced such a breakout. According to Bulkowski, however, "premature breakouts do not predict the final breakout direction or success or failure of the formation." [20]

Be wary of breakouts from triangles where the breakout does not occur until the apex of the triangle. Experts, including Edwards and Magee, maintain that the most reliable breakouts occur about two-thirds of the way along the triangle. [21]

The triangle pattern should not show too much "white space," states Bulkowski.[22] If there's too much white space in the middle portion of the triangles created as price moves from lows to highs, then the pattern may not be a triangle. In a valid triangle, price should bounce back and forth in a fairly regular pattern, as price moves toward the apex.

Bulkowski advises that it is very common for a triangle formation to experience a throwback (where prices break upward and then fall back to the formation) or a pullback (where prices break downward and then rise up again to meet the formation). Throwbacks and pullbacks tend to complete within a couple of weeks and the breakout continues as before. [23]

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Ascending Triangle

The triangle pattern, also called the "coil," appears in three varieties:

1. ascending,
2. descending, and
3. symmetrical,

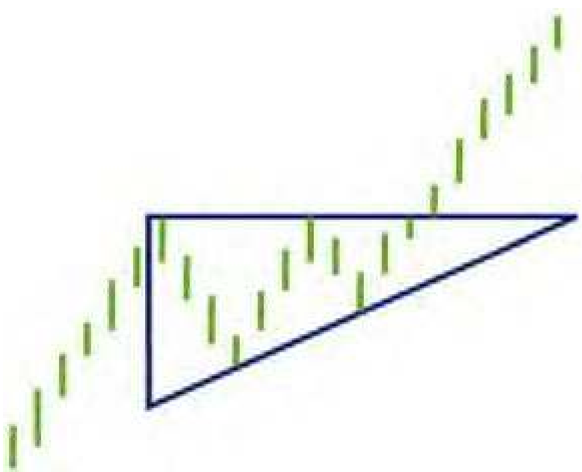
Ascending and descending triangles are also referred to as "right-angle" triangles.

Generally, a triangle pattern is considered to be a continuation or consolidation pattern. Sometimes, however, the formation marks a reversal of a trend.

Symmetrical triangles are generally considered neutral, ascending triangles are bullish, and descending triangles are bearish. From a time perspective, triangles are usually considered to be intermediate patterns. Usually, it takes longer than a month to form a triangle. Seldom will a triangle last longer than three months. If a triangle pattern does take longer than three months to complete, Murphy advises that the formation will take on major trend significance. [1]

What does an ascending triangle look like?

Converging trendlines of support and resistance give all three patterns their distinctive shape. This occurs, Kahn explains, because "the trading action gets tighter and tighter until the market breaks out with great force."[2] Buyers and sellers find themselves in a period where they are not sure where the market is headed. Their uncertainty is marked by their actions of buying and selling sooner, making the pattern look like an increasingly tight coil moving across the chart.



As the range between the peaks and troughs marking the progression of price narrows, the trendlines meet at the "apex," located at the right of the chart. The "base" of the triangle is the vertical line at the left of the chart which measures the vertical height of the pattern.

An ascending triangle - the "flat-top" triangle - also shows two converging trendlines. In this case, however, the lower trendline is rising and the upper trendline is horizontal. This pattern occurs because the lows are moving increasingly higher but the highs are maintaining a constant price level.

Why is the ascending triangle pattern important?

An ascending triangle is relatively easy to identify. In addition, triangle patterns can be quite reliable to trade with very low failure rates. There is a proviso concerning trading these patterns, however. As mentioned previously, a triangle pattern can be either a continuation or reversal pattern. Typically, they are continuation patterns. To achieve the reliability for which the triangle is well known, technical analysts advise waiting for a clear breakout of one of the trendlines defining the triangle.

Triangle patterns are usually susceptible to definite and dependable analysis, with the proviso that the investor must wait for a reliable, as opposed to a premature, breakout. Bulkowski advises that, in general, the failure rate for triangles drops significantly if the investor waits for a valid breakout and, once that breakout occurs, the pattern proves strongly reliable. [3]

Murphy advises that a minimum penetration criterion would be a closing price outside the trendline and not just an intraday penetration.[4] Similarly, Schabacker warns of the "false moves" and "shake-outs" which most commonly attend the triangle.[5]

Is volume important in an ascending triangle pattern?

Volume is an important factor to consider when determining whether a formation is a true triangle. Typically, volume follows a reliable pattern: volume should diminish as the price swings back and forth between an increasingly narrow range of highs and lows. However, when breakout occurs, there should be a noticeable increase in volume. Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, strongly advises that volume is a prerequisite for a valid breakout. If the volume picture is not clear, investors should be cautious about whether the pattern is a true triangle.

This traditional volume pattern develops because of investor sentiment during the creation of a triangle. Investors are uncertain. This uncertainty means that they are buying and selling sooner, which translates into a narrowing of the highs and lows, creating the "coil" shape, indicative of the triangle. Because investors are uncertain, many are holding on to their stocks, awaiting the market's next move. When breakout finally does occur, there's a surge in market activity because investors are finally certain enough about the direction of the market to release their pent-up supply or demand.

What are the details that I should pay attention to in an ascending triangle pattern?

1. Occurrence of a Breakout - Technical analysts pay close attention to how long the triangle takes to develop to its apex. The general rule, as explained by Murphy, is that price breakout clearly penetrate one of the trendlines - somewhere between three-quarters and two-thirds of the horizontal width of the formation.[6] The break out, in other words, should occur well before the pattern reaches the apex of the triangle. To take the measurement, begin by drawing the two converging trendlines. Measure the length of the triangle from its base to the apex. Next, plot the distance along the horizontal width of the pattern where the breakout should take place. If prices remain within the trendlines beyond the three-quarters point of the triangle, technical analysts will approach the triangle with caution. Typically, warns Murphy, if prices don't break out of the trendlines before that point, the triangle "begins to lose its potency"[7] and prices will simply drift out beyond the apex with no surge in either direction.

2. Price Action - With its "flat-topped" shape, the ascending triangle indicates that buyers are more aggressive than sellers. Bulkowski states that the ascending triangle forms because of a supply of shares available at a fixed price. When the supply depletes, the shares quickly breakout from the flat-topped trendline and move higher.[8] How high the share prices rise is dependent on the strength of demand for the stock.

3. Measuring the Triangle - To project the minimum short-term price objective of a triangle, an investor must wait until the price has broken through the trendline. When the price breaks through the trendline, the investor then knows whether the pattern is a consolidation or a reversal formation.

To calculate the minimum price objective, calculate the "height" of the formation at its widest part - the "base" of the triangle. The height is determined by projecting a vertical line from the first point of contact with the trendline on the left of the chart to the next point of contact with the opposite trendline. In other words, measure from the highest high point on one trendline to the lowest low point on the opposite trendline. Both these points will be located on the far left of the formation. Next, locate the "apex" of the triangle (the point where the trendlines converge). Take the result of the measurement of the height of the triangle and add it to the price marked by the apex of the triangle if an upside breakout occurs, or subtract it from the apex price if the triangle experiences a downside breakout.

For example, working with an ascending triangle, assume the highest high is 170 and the lowest low occurs at 140. The height of the pattern is (170 -140 = 30). The apex of the ascending triangle also occurs at 170. The pattern experiences an upside breakout. This means the pattern has a target price of 200 (170 + 30 = 200). If the pattern had experienced a downside breakout, the target price would have been 140 (170 - 30 = 140).

4. Duration of the Triangle - As mentioned before, the triangle is a relatively short-term pattern. It may take up to one month to form and it usually forms in less than three months.

5. Forecasting Implications - The ascending triangle is considered to be bullish. Bulkowski confirms this: his statistics show that two out of three ascending triangles have a "meaningful rise" after an upside breakout.[9] However, this statistic is premised on the existence of a valid upside breakout. Typically, that breakout should be accompanied by a noticeable surge in volume.

6. Shape of Ascending Triangle - Prices should rise to hit the upper trendline at least twice (two highs), then fall away. Prices should fall to the lower trendline at least twice (two lows), then rise. The horizontal top trendline need not be completely horizontal but it often is and, in any event, it should be close to horizontal.

7. Volume - Murphy advises that in the ascending triangle, volume tends to be slightly higher on bounces and lighter on dips.[10]

8. Premature or False Breakouts - Bulkowski calls them "premature" false breakouts[11] and Schabacker refers to them as "false moves" or "shakeouts"[12] Both agree that triangles are among the patterns most susceptible to this phenomenon. Because the pattern can be either a reversal or continuation pattern, investors are particularly susceptible to false moves or, at the very least, confused by them. In addition, because volume becomes so thin as the triangle formation progresses to the apex, it takes very little activity to bring about an erratic and false movement in price, taking the price outside of the trendlines.

To avoid taking an inadvisable position in a stock, some investors advise waiting a few days to determine whether the breakout is a valid one. Typically, a false move corrects itself within a week or so.[13] Yager cautions that the pattern immediately will be suspicious without an accompanying high volume breakout. If there's no pick up in volume around the breakout, investors should be wary. Typically, a good breakout from a triangle formation will be accompanied by a definite surge in volume. There are situations, however, where a false move will occur with high volume. According to Schabacker, these are the most dangerous variety of false moves.[14] The only advice experts can give to investors who fall prey to one of these false moves is to reverse their positions as soon as they become aware of the true movement of the stock.

According to Yager, it is also advisable to be increasingly suspicious of triangle patterns where the breakout occurs very close to the apex.

Also, because trading is so thin at this point, there is an increased likelihood that a false move could occur.

How can I trade this pattern?

Edwards and Magee offer different trading strategies depending on whether you already have a position in the stock or whether you do not have a position in a stock experiencing a triangle formation. If an investor already has a position in a stock, he or she may be "locked" into that position as the formation takes shape because it is not possible to definitively predict which way the breakout will take the price of the stock.[15] The key is waiting and watching for a valid breakout before making an investment decision.

If an investor does not have a position in a stock, Edwards and Magee advise staying away from the stock when it's in the process of forming the triangle pattern. Consider a position when a dependable breakout has occurred. "After such a breakout, if on the upside, buy on the next reaction if the Major Trend is up, or if on the downside, sell short on the next rally if the Major Trend is down." [16]

Given contradictory nature of the direction of breakouts from triangles, all experts advise caution with triangles while they're in the process of forming. (". . . it might be better policy to note such formations in the making, and wait until the decisive breakout before making the new commitment." [17]) However, once a valid breakout has been detected , the same experts agree that triangles are a reliable pattern to trade.

As mentioned, this pattern has a tendency to premature breakouts and false moves. To avoid mistaking a false move for a valid breakout, experts advise waiting a few days to see if the breakout is dependable. According to Murphy, a minimum penetration criterion would be a closing price outside the trendline and not just an intraday penetration.[18] Investors do have time once a breakout has occurred.

Because premature breakouts (where prices close outside of the trendline) are so common, don't dismiss the pattern if it has experienced such a breakout. According to Bulkowski, however, "premature breakouts do not predict the final breakout direction or success or failure of the formation." [19]

Be wary of breakouts from triangles where the breakout does not occur until the apex of the triangle. Experts, including Edwards and Magee, maintain that the most reliable breakouts occur about two-thirds of the way along the triangle. [20]

The triangle pattern should not show too much "white space," states Bulkowski.[21] If there's too much white space in the middle portion of the triangles created as price moves from lows to highs, then the pattern may not be a triangle. In a valid triangle, price should bounce back and forth in a fairly regular pattern, as price moves toward the apex.

Bulkowski advises that it is very common for a triangle formation to experience a throwback (where prices break upward and then fall back to the formation) or a pullback (where prices break downward and then rise up again to meet the formation). Throwbacks and pullbacks tend to complete within a couple of weeks and the breakout continues as before. [22]

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Descending Triangle

Introduction

The triangle pattern, also called the "coil," appears in three varieties:

1. descending,
2. ascending, and
3. symmetrical.

Ascending and descending triangles are also referred to as "right-angle" triangles.

Generally, a triangle pattern is considered to be a continuation or consolidation pattern. Sometimes, however, the formation marks a reversal of a trend.

Descending triangles are generally considered bearish, ascending triangles are bullish and symmetrical triangles are neutral. From a time perspective, triangles are usually considered to be intermediate patterns. Usually, it takes longer than a month to form a triangle. Seldom will a triangle last longer than three months. If a triangle pattern does take longer than three months to complete, Murphy advises that the formation will take on major trend significance. [1]

What does a descending triangle look like?

Converging trendlines of support and resistance gives this pattern its distinctive shape. This occurs, Kahn explains, because "the trading action gets tighter and tighter until the market breaks out with great force."[2] Buyers and sellers find themselves in a period where they are not sure where the market is headed. Their uncertainty is marked by their actions of buying and selling sooner, making the pattern look like an increasingly tight coil moving across the chart.

As the range between the peaks and troughs marking the progression of price narrows, the trendlines meet at the "apex," located at the right of the chart. The "base" of the triangle is the vertical line at the left of the chart which measures the vertical height of the pattern.

A descending triangle, like the other two triangles, features two converging trendlines. In this "flat-bottom" triangle, the bottom trendline is horizontal and the top trendline slopes downward. The pattern illustrates lows occurring at a constant price level, with highs moving constantly lower.

Why is the descending triangle pattern important?

A descending triangle pattern is relatively easy to identify. In addition, triangle patterns can be quite reliable to trade with very low failure rates. There is a proviso concerning trading these patterns, however. As mentioned previously, a triangle pattern can be either continuation or reversal patterns. Typically, they are continuation patterns. To achieve the reliability for which the triangle is well known, technical analysts advise waiting for a clear breakout of one of the trendlines defining the triangle.

Triangle patterns are usually susceptible to definite and dependable analysis, with the proviso that the investor must wait for a reliable, as opposed to a premature, breakout. Bulkowski advises that, in general, the failure rate for triangles drops significantly if the investor waits for a valid breakout and, once that breakout occurs, the pattern proves strongly reliable. [3]

Murphy advises that a minimum penetration[4] criterion would be a closing price outside the trendline and not just an intraday penetration. Similarly, Schabacker warns of the "false moves" and "shake-outs" which most commonly attend the triangle.[5]

Is volume important in a descending triangle pattern?

Volume is an important factor to consider when determining whether a formation is a true triangle. Typically, volume follows a reliable pattern: volume should diminish as the price swings back and forth between an increasingly narrow range of highs and lows. However, when breakout occurs, there should be a noticeable increase in volume. If this volume picture is not clear, investors should be cautious about whether the pattern is a true triangle.

This traditional volume pattern develops because of investor sentiment during the creation of a triangle. Investors are uncertain. This uncertainty means that they are buying and selling sooner, which translates into a narrowing of the highs and lows, creating the "coil" shape, indicative of the triangle. Because investors are uncertain, many are holding on to their stocks, awaiting the market's next move. When breakout finally does occur, there's a surge in market activity because investors are finally certain enough about the direction of the market to release their pent-up supply or demand.

What are the details that I should pay attention to in a descending triangle pattern?

1. Occurrence of a Breakout - Technical analysts pay close attention to how long the triangle takes to develop to its apex. The general rule, as explained by Murphy, is that prices should break out -and clearly penetrate one of the trendlines - somewhere between three-quarters and two-thirds of the horizontal width of the formation.[6] The break out, in other words, should occur well before the pattern reaches the apex of the triangle. Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, strongly agrees that a breakout well before the apex and with significant volume is essential. To take the measurement, begin by drawing the two converging trendlines. Measure the length of the triangle from its base to the apex. Next, plot the distance along the horizontal width of the pattern where the breakout should take place. If prices remain within the trendlines beyond the three-quarters point of the triangle, technical analysts will approach the triangle with caution. Typically, warns Murphy, if prices don't breakout of the trendlines before that point, the triangle "begins to lose its potency"[7] and prices will simply drift out beyond the apex with no surge in either direction.

2. Price Action - With its "flat-bottomed" shape, the descending triangle indicates that sellers are more aggressive than buyers. The pattern typically emerges when buyers feel that the stock is overvalued and decide that the fair value is at a specific lower level. These buyers are prepared to purchase the stock if it hits that specific price level. The floor does not hold because demand wanes - possibly buyers have run out of money or interest in the stock. Once the downside breakout occurs, the stock price continues to fall.

3. Measuring the Triangle - To project the minimum short-term price objective of a triangle, an investor must wait until the price has broken through the trendline. When the price breaks through the trendline, the investor then knows whether the pattern is a consolidation or a reversal formation.

To calculate the minimum price objective, calculate the "height" of the formation at its widest part - the "base" of the triangle. The height is equally determined by projecting a vertical line from the first point of contact with the trendline on the left of the chart to the next point of contact with the opposite trendline. In other words, measure from the highest high point on one trendline to the lowest low point on the opposite trendline. Both these points will be located on the far left of the formation. Next, locate the "apex" of the triangle (the point where the trendlines converge). Take the result of the measurement of the height of the triangle and add it to the price marked by the apex of the triangle if an upside breakout occurs and subtract it from the apex price if the triangle experiences a downside breakout.

For example, working with a descending triangle, assume the highest high is 180 and the lowest low occurs at 150. The height of the pattern is (180 -150 = 30). The apex of the descending triangle also occurs at 150. The pattern experiences a downside breakout. This means the pattern has a target price of 120 (150 - 30 = 120). If the pattern had experienced an upside breakout, the target price would have been 180 (150 + 30 = 180).

4. Duration of the Triangle - As mentioned before, the triangle is a relatively short-term pattern. It may take up to one month to form and it usually forms in less than three months.

5. Forecasting Implications - The descending triangle is considered to be bearish. Bulkowski, however, warns that only 55% of developing descending triangles actually prove to be bearish.[8] However, if investors wait for a valid breakout, then the success rate increases to 96%. Statistics compiled by Bulkowski show that descending triangles are less likely to hit their target prices than ascending ones.[9] According to Edwards and Magee, volume confirmation is more important for ascending triangles than descending ones.[10]

6. Shape of Descending Triangle - Prices should rise to hit the upper trendline at least twice (two highs), then fall away. Prices should fall to the lower trendline at least twice (two lows), then rise. The horizontal bottom trendline need not be completely horizontal but it often is and, in any event, it should be close to horizontal.

7. Volume - Murphy advises that in the descending triangle, volume tends to be slightly higher on dips and lighter on bounces.[11]

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To avoid taking an inadvisable position in a stock, some investors advise waiting a few days to determine whether the breakout is a valid one.) Typically, a false move corrects itself within a week or so.[14] A key sign of a possible false move is low volume. Yager cautions that the pattern immediately will be suspicious without an accompanying high volume breakout. If there's no pick-up in volume around the breakout, investors should be wary. Typically, a good breakout from a triangle formation will be accompanied by a definite surge in volume.

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Be wary of breakouts from triangles where the breakout does not occur until the apex of the triangle. Experts, including Edwards and Magee, maintain that the most reliable breakouts occur about two-thirds of the way along the triangle. [21]

The triangle pattern should not show too much "white space," states Bulkowski.[22] If there's too much white space in the middle portion of the triangles created as price moves from lows to highs, then the pattern may not be a triangle. In a valid triangle, price should bounce back and forth in a fairly regular pattern, as price moves toward the apex.

Bulkowski advises that it is very common for a triangle formation to experience a throwback (where prices break upward and then fall back to the formation) or a pullback (where prices break downward and then rise up again to meet the formation). Throwbacks and pullbacks tend to complete within a couple of weeks and the breakout continues as before. [23]

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19Murphy, p. 133, 20Bulkowski, p. 523, 21Edwards and Magee, p. 484, 22Bulkowski, p. 517, 23Bulkowski, p. 523

Double Tops

A double top occurs when prices form two distinct peaks on a chart. A double top is only complete, however, when prices decline below the lowest low - the "valley floor" - of the pattern.

The double top is a reversal pattern of an upward trend in a stock's price. The double top marks an uptrend in the process of becoming a downtrend.

Sometimes called an "M" formation because of the pattern it creates on the chart, the double top is one of the most frequently seen and common of the patterns. Because they seem to be so easy to identify, the double top should be approached with caution by the investor.

According to Schabacker, the double top is a "much misunderstood formation."[1] Many investors assume that, because the double top is such a common pattern, it is consistently reliable. This is not the case. Schabacker estimates that probably not more than a third of them signal reversal and that most patterns which an investor might call a double top are not in fact that formation.[2] Bulkowski estimates the double top has a failure rate of 65%.[3] If an investor waits for the breakout, however, the failure rate declines to 17%.

The double top is a pattern, therefore, that requires close study for correct identification.

What does a double top look like?

As illustrated below, a double top consists of two well-defined, sharp peaks at approximately the same price level. A double top occurs when prices are in an uptrend. Prices rise to a resistance level, retreat, return to the resistance level again before declining.

The two tops should be distinct and sharp. The pattern is complete when prices decline below the lowest low in the formation. The lowest low is called the confirmation point.

Analysts vary in their specific definitions of a double top. According to some, after the first top is formed, a reaction of at least 10% should follow. That decline is measured from high to low. According to Edwards and Magee, there should be at least a 15% decline between the two tops, on diminishing activity. The second rally back to the previous high (plus or minus 3%) should be on lower volume than the first.[4] Other analysts maintain that the decline registered between the two tops should be at least 20% and the peaks should be spaced at least a month apart.[5]

There are a few points of agreement, however. Investors should ensure that the pattern is in fact comprised of two distinct tops and that they should appear near the same price level. Tops should have a significant amount of time between them -ranging from a few weeks to a year. Investors should not confuse a consolidation pattern with a double top. Finally, it is crucial to the completion of the reversal pattern that prices close below the confirmation point.

Why is this pattern important?

According to Murphy, the double top is one of the most frequently seen and most easily recognized.[6] However, analysts agree that this can be a difficult pattern to correctly identify. Investors must pay close attention to the volume during the formation of the pattern, the amount of decline between the two peaks, and the time the pattern takes to develop on the chart.

A double top often forms in active markets, experiencing heavy trading. A stock's price heads up rapidly on high volume. Demand falls off and price falls, often remaining in a trough for weeks or months. A second run-up in the price occurs taking the price back up to the level achieved by the first top. This time volume is heavy but not as heavy as during the first run-up. Stock prices fall back a second time, unable to pierce the resistance level. These two sharp advances with relatively heavy volume have exhausted the buying power in the stock. Without that power behind it, the stock reverses its upward movement and falls into a downward trend.

Is volume important in a double top?

Investors should pay close attention to volume when analyzing a double top.

Generally, volume in a double top is usually higher on the left top than the right. Volume tends to be downward as the pattern forms. Volume does, however, pick up as the pattern hits its peaks. Volume increases again when the pattern completes, breaking through the confirmation point. .

Monitoring volume is a key aspect of determining whether or not a double top is valid. Schabacker insists that the volume rule must be applied quite strictly in the case of a double top.[7] The first top must be made with noticeably high volume. The second top must also experience high volume but it need not achieve the level of the first top. In fact, Schabacker points out that the second top is often made on only a slight increase over the average volume during the interval between the tops.[8]

Bulkowski explains that volume does not need to be high on the breakout. When a breakout occurs with high volume, however, prices tend to decline further.[9]

Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, notes that the right-hand side of the pattern is the area to watch most closely. She watches for diminishing volume until the confirmation point at which point the volume should increase. However, Yager notes that this pattern is often traded with or without the volume increase on the right hand peak.

What are the details that I should pay attention to in the double top?

1. Uptrend Preceding Double Top

As mentioned previously, the double top is a reversal formation. It begins with prices in an uptrend. Analysts focus on specific characteristics of that uptrend when searching for a valid double top. The trend upwards should be fairly long and healthy. Bulkowski maintains that an investor will want to see prices trending up over the short to intermediate term - approximately 3 to 6 months. Further, he states that "the price trend should not be a retrace in an extended decline but generally has a stair-step appearance."[10] Schabacker confirms this approach, explaining that if the stock has been in a long, healthy uptrend, the double top is more likely to develop into a reversal. If the uptrend is short, the double top may not hold and the uptrend will continue.[11]

2. Time between Tops

Analysts pay close attention to the "size" of the pattern - the duration of the interval between the two tops. Generally, the longer the time between the two tops, the more important the pattern as a good reversal. Schabacker warns investors off of a pattern where only a few days intervene between the two peaks.[12] Analysts suggest that investors should look for patterns where at least one month elapses between the peaks. It is not unusual for a few months to pass between the dates of the two tops. Murphy mentions that these patterns can span several years.[13]

On the other hand, Yager notes that patterns that are too long may be unmanageable, and she looks for tighter, shorter patterns. Yager believes that shorter patterns are viable as long as you can see the volume in the right top forming.

3. Decline from First Top

According to Schabacker, this element is even more significant to the validity of a double top than volume. He argues the decline in price that occurs between the two peaks should be consequential, amounting to approximately 20% of the price. In fact, he states that it could even be more than that but should not be much less.[14] Other analysts are not so definite or demanding concerning the price decline. For some, including Yager, a decline of at least 10% is adequate. All agree, however, that the deeper the trough between the two tops, the better the performance of the pattern.

4. Volume

As mentioned previously, volume tends to be heaviest during the first peak, lighter on the second. It is common to see volume pick up again at the time of breakout.

5. Decisive Breakout

According to Murphy, the technical odds usually favor the continuation of the present trend.[15] This means that it is perfectly normal market action for prices on an uptrend to peak at a resistance level a couple of times, retreat, and then resume that uptrend. It is a challenge for the analyst to determine whether the decline from a peak is the indication of the development of a valid double top or simply a temporary setback in the progression of a continuing uptrend.[16] Analysts, therefore, advise cautious investors to wait for the price to fall back and break through the confirmation point before relying on the validity of the pattern.

Many experts maintain that an investor should wait for a decisive breakout, confirmed by high volume. Others, like Bulkowski, are not so reliant on high volume at the time of breakout but do agree that the higher the volume at the time of breakout, the further the decline in prices that the pattern will register.[17]

6. Pullback after Breakout

A pullback after the breakout is usual for a double top. Bulkowski argues that the higher the volume on the breakout, the higher the likelihood of a pullback. "When everyone sells their shares soon after a breakout, what is left is an unbalance of buying demand (since the sellers have all sold), so the price rises and pulls back to the confirmation point."[18]

How can I trade this pattern?

Begin by calculating the target price -- the minimum expected price move. The double top is measured in a way similar to that for the head and shoulders top.

Calculate the height of the pattern by subtracting the lowest low from the highest high in the formation. Then, subtract the height of the pattern from the lowest low. In other words, an investor can expect the price to move downwards at least the distance from the breakout point less the height of the pattern.

For example, assume the lowest low of the double top is 230 and the highest high is 260. The height of the pattern equals 30 (260 - 230 = 30). The minimum target price is 200 (230 - 30 = 200).

Given the sometimes weak performance of the double top, Bulkowski suggests dividing the height in half before subtracting from the breakout point. In the above example, this would mean a target price of 215 (230 - 15 = 215).[19]

Murphy cautions the term "double top" is greatly overused in the markets. Most of the patterns referred to as double tops are, in fact, something else. Because of this, Murphy advises investors to make their investment decisions only after prices have broken through the confirmation point, completing the reversal pattern.[20] Watching the volume throughout the development of the pattern can help determine whether the pattern is a valid double top.

Edwards and Magee explain that patterns where the tops are close together in time are likely not valid double tops but are, in fact, a consolidation area. [21]

Generally, analysts like to see deep troughs between the two peaks. Bulkowski advocates a valley that is at least 15% lower than the peaks.[22]

Because so many double tops pullback after breaking through the confirmation point, it is often possible to wait for the pullback to place a trade and then watch prices decline for a second time.[23]

Are there variations in the pattern that I should know about?

1. Two Peaks at Different Levels

Sometimes the two peaks comprising a double top are not at exactly the same price level. This does not necessarily render the pattern invalid. Murphy points out that investors should be less concerned if the second peak does not hit the high of the first peak. If the second peak is higher than the first, however, investors should show caution because the pattern may be in the process of resuming its uptrend. Analysts advise that if the second peak exceeds the first by more than 3%, the pattern may not be a double top. Similarly, if the second peak stays higher than the first peak by more than a couple of days, then the pattern may not be a true double top.

1Schabacker, p.107, 2Schabacker, p. 107, 3Bulkowski, p. 197, 4Edwards and Magee, p. 676, 5Bulkowski, p. 199, 6Murphy, p. 117, 7Schabacker, p. 109, 8Schabacker, p. 109, 9Bulkowski, p. 199, 10Bulkowski, , . 199, 11Schabacker, p. 108, 12Schabacker, p. 109, 13Murphy, p. 125, 14Schabacker, p. 109, 15Murphy, p. 124, 16Murphy, p. 124, 17Bulkowski, p. 199, 18Bulkowski, p. 209, 19Bulkowski, p. 210, 20Murphy, p. 122, 21Edwards and Magee, p. 158, 22Bulkowski, p. 210, 23Bulkowski, p. 210

Double Bottoms

A double bottom occurs when prices form two distinct lows on a chart. A double bottom is only complete, however, when prices rise above the high end of the point that formed the second low.

The double bottom is a reversal pattern of a downward trend in a stock's price. The double bottom marks a downtrend in the process of becoming an uptrend.

Double bottoms are often seen and are considered to be among the most common of the patterns. Because they seem to be so easy to identify, the double bottom should be approached with caution by the investor.

According to Schabacker, the double bottom is a "much misunderstood formation."[1] Many investors assume that, because the double bottom is such a common pattern, it is consistently reliable. This is not the case. Bulkowski estimates the double bottom has a failure rate of 64%, which he terms surprisingly high.[2] If an investor waits for a valid breakout, however, the failure rate declines to 3%.

The double bottom is a pattern; therefore, that requires close study for correct identification.

What does a double bottom look like?

As seen below, a double bottom consists of two well-defined lows at approximately the same price level. Prices fall to a support level, rally and pull back up, then fall to the support level again before increasing.

The two lows should be distinct. According to Edwards and Magee, the second bottom can be rounded while the first should be distinct and sharp.[3] The pattern is complete when prices rise above the highest high in the formation. The highest high is called the confirmation point.

Analysts vary in their specific definitions of a double bottom. According to some, after the first bottom is formed, a rally of at least 10% should follow. That increase is measured from high to low. According to Edwards and Magee, there should be at least a 15% rally following the first bottom. This should be followed by a second bottom. The second bottom returning back to the previous low (plus or minus 3%) should be on lower volume than the first.[4] Other analysts maintain that the rise registered between the two bottoms should be at least 20% and the lows should be spaced at least a month apart.[5]

There are a few points of agreement, however. Investors should ensure that the pattern is in fact comprised of two distinct bottoms and that they should appear at or near the same price level. Bottoms should have a significant amount of time between them - ranging from a few weeks to a year depending on whether an investor is viewing a weekly chart or a daily chart. Investors should not confuse a consolidation pattern with a double bottom. Finally, it is crucial to the completion of the reversal pattern that prices close above the confirmation point.

Why is this pattern important?

According to Murphy, the double bottom is one of the most frequently seen and most easily recognized.[6] However, analysts agree that this can be a difficult pattern to correctly identify. Investors must pay close attention to the volume during the formation of the pattern, the amount of increase between the two lows, and the time the pattern takes to develop on the chart.

Murphy explains that bottoming patterns may have smaller price ranges than topping patterns and often take longer to build. "For this reason, it is usually easier and less costly to identify and trade bottoms than to catch market tops." [7]

It is quite common after prices reach a new low for a rebound in prices to occur. A retest of the low then usually follows. According to Bulkowski, a retest occurs when prices return to the low and test to see if the stock can support itself at that price level. "If it cannot, prices continue moving downward. Otherwise, the low usually becomes the end of the decline and rising prices result." [8]

Is volume important in a double bottom?

Investors should pay close attention to volume when analyzing a double bottom.

Generally, volume in a double bottom is usually higher on the left bottom than the right. Volume tends to be downward as the pattern forms. Volume does, however, pick up as the pattern hits its lows. Volume increases again when the pattern completes, breaking through the confirmation point.

Monitoring volume is a key aspect of determining whether or not a double bottom is valid. Schabacker insists that the volume rule must be applied quite strictly in the case of a double bottom.[9] Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors, strongly agrees with this point. The first low must be made with noticeably high volume. The second low must also experience high volume but it need not achieve the level of the first low.

Bulkowski explains that volume tends to rise substantially at the time of breakout.[10]

What are the details that I should pay attention to in the double bottom?

1. Downtrend Preceding Double Bottom

As mentioned previously, the double bottom is a reversal formation. It begins with prices in a downtrend. Bulkowski cautions that on their way down, prices should not drift below the left low of the pattern.[11]

2. Time between Bottoms

Analysts pay close attention to the "size" of the pattern - the duration of the interval between the two lows. Generally, the longer the time between the two lows, the more important the pattern as a good reversal. Schabacker warns investors off of a pattern where only a few days intervene between the two lows.[12] Analysts suggest that investors should look for patterns where at least one month elapses between the bottoms. It is not unusual for a few months to pass between the dates of the two bottoms. Murphy mentions that these patterns can span several years.[13] Yager notes, however, that tracking of bottoms that run for several years can become cumbersome and difficult. Bulkowski suggests that best gains come from formations where bottoms are approximately 3 months apart.[14]

3. Increase from First Low

Some analysts argue the increase in price that occurs between the two bottoms should be consequential, amounting to approximately 20% of the price. Other analysts are not so definite or demanding concerning the price increase. For some, an increase of at least 10% is adequate. Yager strongly agrees with this point. The rise between the lows tends to look rounded but it can also be irregular in shape.

4. Volume

As mentioned previously, volume tends to be heaviest during the first low, lighter on the second. It is common to see volume pick up again at the time of breakout.

5. Decisive Breakout

According to Murphy, the technical odds usually favor the continuation of the present trend.[15] This means that it is perfectly normal market action for prices on a downtrend to fall to a support level a couple of times, rise back up, and then resume that downtrend. It is a challenge for the analyst to determine whether the rise from the bottom is the indication of the development of a valid double bottom or simply a temporary setback in the progression of a continuing downtrend.[16] Analysts, therefore, advise cautious investors to wait for the price to rise back up and break through the confirmation point before relying on the validity of the pattern. Many experts will maintain that an investor should wait for a decisive breakout, confirmed by high volume.

6. Pullback after Breakout

A pullback after the breakout is usual for a double bottom. Bulkowski estimates that in 68% of double bottom patterns, price will throwback to the breakout price. [17]

How can I trade this pattern?

Begin by calculating the target price -of the minimum expected price move. The double bottom is measured in a way similar to that for the head and shoulders bottom.

Calculate the height of the pattern by subtracting the lowest low from the highest high in the formation. Then, add the height of the pattern to the highest high. In other words, an investor can expect the price to move upwards at least the distance from the breakout point plus the height of the pattern.

For example, assume the lowest low of the double bottom is 220 and the highest high is 290. The height of the pattern equals 70 (290 - 220 = 70). The minimum target price is 360 (290 + 70 = 360).

Murphy cautions the terms "double tops and bottoms" are greatly overused in the markets. Most of the patterns referred to as double bottoms are, in fact, something else. Because of this, Murphy advises investors to make their investment decisions only after prices have broken through the confirmation point, completing the reversal pattern.[18] Watching the volume throughout the development of the pattern can help determine whether the pattern is a valid double bottom.

Yager notes that the key for this pattern is for the investor to have patience and wait for confirmation. Too often investors see double bottoms everywhere.

Edwards and Magee explain that patterns where the bottoms are close together in time are likely not valid double bottoms but are, in fact, a consolidation area.[19]

Because so many double bottoms pullback after breaking through the confirmation point, it is often possible to wait for the pullback to place a trade and then watch prices decline for a second time.[20]

Bulkowski estimates that the average time for prices to return to the breakout price is 11 days. Throwbacks that occur 30 days after the breakout are not throwbacks at all, but simply normal price fluctuations.[21]

Bulkowski offers advice for both short-term and long-term investors. Because only approximately 68% of double bottoms meet their price targets, he advises short-term investors to be ready to take profits as price nears the target. In other words, sell as prices get close to the target.[22] Long-term investors, he suggests, can hold onto the stock for an extended upward move but should keep watch on the fundamentals to determine whether they are justified in continuing to hold the stock. [23]

Are there variations in the pattern that I should know about?

1. Two Lows at Different Levels

Sometimes the two lows comprising a double bottom are not at exactly the same price level. This does not necessarily render the pattern invalid. Analysts advise that if the second low varies in price from the first low by more than 3% or 4%, the pattern may not be a double bottom.

1Schabacker, p.107, 2Bulkowski, p. 182, 3Edwards and Magee, p. 676, 4Edwards and Magee, p. 676, 5Bulkowski, p. 199, 6Murphy, p. 117, 7Murphy, p. 103, 8Bulkowski, p. 186, 9Schabacker, p. 109, 10Bulkowski, p. 184, 11Bulkowski, p. 184, 12Schabacker, p. 109, 13Murphy, p. 125, 14Bulkowski, p. 184, 15Murphy, p. 124, 16Murphy, p. 124, 17Bulkowski, p. 191, 18Murphy, p. 122, 19Edwards and Magee, p. 158, 20Bulkowski, p. 192, 21Bulkowski, p. 192, 22Bulkowski, p. 195, 23Bulkowski, p. 195

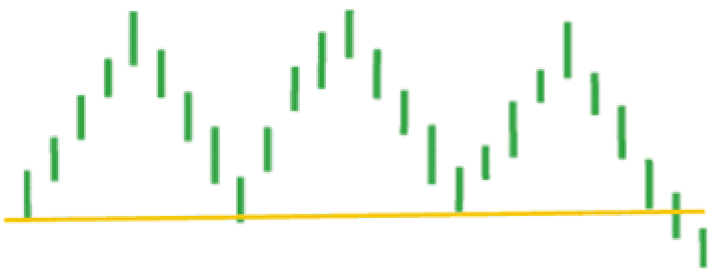
Triple Top

A triple top is considered to be a variation of the head and shoulders top. Often the only thing that differentiates a triple top from a head and shoulders top is the fact that the three peaks that make up the triple top are more or less at the same level. The head and shoulders top displays a higher peak - the "head" - between the two shoulders.

According to experts including Murphy, making a distinction between these two patterns is largely academic because they both imply the same thing.[1] They are both "reversal" patterns of an upward trend in a stock. The triple top marks an uptrend in the process of becoming a downtrend.

What does a triple top look like?

As shown below, the triple top pattern is comprised of three sharp peaks, all at the same level. A triple top occurs when prices are in an uptrend. Prices rise to a resistance level, retreat, return to the resistance level again, retreat, and finally, return to that resistance level for a third time before declining. In a classic triple top, the decline following the third peak marks the beginning of a downtrend.



While the three peaks should be sharp and distinct, the lows of the pattern can appear as rounded valleys. The pattern is complete when prices decline below the lowest low in the formation. The lowest low is also called the "confirmation point."

Bulkowski advises that this pattern can have many variations. He continues, however, to advise that an investor should ensure that the three peaks are well separated and not part of a congestion pattern. "Each top should be part of its own minor high, a distinct peak that towers about the surrounding price landscape." [2]

Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors suggests they should be noticeably distinct peaks and they do not have to be precisely at the same level.

Why is this pattern important?

Like the head and shoulders top which it resembles so closely, the triple top is considered by experts to be a reliable pattern. According to Schabacker, there is a good explanation for placing reliance on this pattern. The pattern illustrates three successive attempts to break through a resistance level. Price cannot move above a certain point, despite three tries. "Each failure adds weight to the indications of reversal," explains Schabacker. [3]

Is volume important in a triple top?

Generally, volume in a triple top tends to be downward as the pattern forms. Murphy advises that volume should be lighter on each rally peak.[4] Volume then picks up as prices fall under the confirmation point and break into the new downward trend.

Both Bulkowski and Schabacker place less significance on the downward progression of volume. While both agree that investors should see relatively high volume on the first peak, they also agree that volume on the other peaks can be confused and irregular.[5]

Volume should be higher on the peaks than at the lows. Bulkowski's statistics suggest that an investor should see a volume burst at the time of breakout and during the few days following the decline in price below the confirmation point. [6]

What are the details that I should pay attention to in the triple top?

1. Duration of the Pattern

This pattern can take upwards of several months to form. According to Bulkowski, average formation time is approximately four months. In addition, experts, including Schabacker and Murphy, agree that the longer the pattern takes to form, the greater the significance of the price move once breakout occurs. The three highs do not need to be equally spaced from one another.

2. Need for an Uptrend

The triple top is a reversal pattern marking the transition period between an uptrend and a downtrend in prices. It is crucial to the existence of this pattern that it begin with an uptrend of stock prices.

3. Decisive Breakout

Investors are advised to wait for prices to make a definitive break below the confirmation point of a triple top pattern. If prices do not fall below the confirmation point after the third peak is reached, the pattern is not a triple top. In a bull market, for example, it is common to see three highs which look like the beginning of a well-formed triple top. If prices, however, do not fall below the confirmation point, they can just as easily pull away from the highs established by the three peaks and then continue on in the upward trend.

4. Volume

As discussed, it is typical to see volume diminish as the pattern progresses. This should change, however, when breakout occurs. A valid breakout should be accompanied by a burst in volume. Certain experts are less concerned by seeing a steadily diminishing trend in volume as the pattern progresses through its three highs. Schabacker comments that the volume picture can often be confused and irregular.[7] All agree, however, that an investor will want to see a definite increase in volume at the time of the break through the confirmation point.

5. Rally after Breakout

Yager notes that a high percentage of triple tops have rallies back to the point of the breakdown more often than not.

How can I trade this pattern?

Begin by calculating the target price - the minimum expected price move. The triple top is measured in a way similar to that for the head and shoulders top.

Calculate the height of the pattern by subtracting the lowest low from the highest high in the formation. Then, subtract the height from the lowest low. In other words, an investor can expect the price to move downwards at least the distance from the breakout point less the height of the pattern.

For example, assume the lowest low of the triple top is 170 and the highest high is 220. The height of the pattern equals 50 (220 - 170 = 50). The minimum target price is 120 (170 - 50 = 120).

Bulkowski calculates that the measure rule is not completely reliable for the triple top, estimating that nearly 50% of all triple tops will fall short of their minimum target price.[9]

Edwards and Magee warn that true triple tops are few and far between. So, it makes sense to be cautious when assessing what might initially look like a developing triple top. [10]

According to Edwards and Magee, an investor should never "jump the gun" with a triple top.[11] If the triple top is not completed by breaking through the confirmation point, experts advise caution. The pattern can fail to complete and just as easily recommence an upwards trend. However, Edwards and Magee also explain that if the pattern has been confirmed by a valid breakout, then the pattern seldom fails. "Stick to the breakout rule," they advise, "and you will be safe."[12]

Rallies are common with triple tops. An investor can trade that return move to his or her advantage. According to Bulkowski, if an investor misses the breakout, there's still time to place or add to a short position when prices resume their rally towards the former breakdown level. In this case it would have been 170. [13]

Are there variations in the pattern that I should know about?

1. Hybrid Variation

There is a hybrid variation that appears to be a cross between a double and triple top. The middle peak is slightly lower than the left and right peaks. This is still a valid reversal pattern.

2. Fourth Peak

It is possible for the pattern to display a fourth peak before reversal occurs.

1Murphy, p. 115, 2Bulkowski, p. 593, 3Schabacker, p. 117, 4Murphy, p. 116, 5Schabacker, p. 117, 6Bulkowski, p. 598, 7Schabacker, p. 117, 8Bulkowski, p. 599, 9Bulkowski, p. 599, 10Edwards and Magee, p.163, 11Edwards and Magee, p. 165, 12Edwards and Magee, p. 165, 13Bulkowski, p. 599)

Triple Bottom

A triple bottom pattern displays three distinct minor lows at approximately the same price level. The triple bottom is considered to be a variation of the head and shoulders bottom. Like that pattern, the triple bottom is a reversal pattern.

The only thing which differentiates a triple bottom from a head and shoulders bottom is the lack of a "head" between the two shoulders. The triple bottom illustrates a downtrend in the process of becoming an uptrend. It is, therefore, vital to the validity of the pattern that it commence with prices moving in a downtrend.

Elaine Yager, Director of Technical Analysis at Investec Ernst and Company in New York and a member of Recognia's Board of Advisors goes further to say that this pattern must commence with prices moving in a major downtrend - one that has lasted for one year or more.

What does a triple bottom look like?

As illustrated below, the triple bottom pattern is composed of three sharp lows, all at about the same price level. Prices fall to a support level, rise, fall to that support level again, rise, and finally fall, returning to the support level for a third time before beginning an upward climb. In the classic triple bottom, the upward movement in the price marks the beginning of an uptrend.

Investors should note that the three lows tend to be sharp. When prices hit the first low, sellers become scarce, believing prices have fallen too low. If a seller does agree to sell, buyers are quick to buy at a good price. Prices then bounce back up. The support level is established and the next two lows also are sharp and quick. Bulkowski points out that the sharp lows are often only one-day spikes.[1]

While the three lows should be sharp and distinct, the highs of the pattern can appear to be rounded. The pattern is complete when prices rise about the highest high in the formation. The highest high is called the "confirmation point."

This pattern, the experts warn, can be easily confused with other similar patterns. For example, if the center low is lower than the other two, the pattern may be a head and shoulders bottom. Also, if the three bottoms are successively higher or lower than one another, the pattern may be a triangle formation.

Because the pattern is easy to confuse, an investor should look for three sharp lows which are well separated and not part of a larger congestion pattern. In addition, between the lows, the highs should be fairly rounded in shape, although it is not absolutely necessary to the validity of the pattern. If the pattern fails to move up and break through the confirmation point after reaching the third low, the pattern is not a valid triple bottom.

Why is this pattern important?

Like the head and shoulders bottom which it so closely resembles, the triple bottom is considered to be a reliable pattern. Bulkowski estimates the failure rate to be a low 4%, assuming that an investor waits for the upside breakout through the confirmation point. [2]

Is volume important in a triple bottom?

Generally, volume in a triple bottom tends to trend downward as the pattern forms. Volume tends to be lighter on each successive low. Volume then picks up as prices rise above the confirmation point and break into the new upward trend.

An investor should not dismiss a triple bottom if volume does not display this pattern. The pattern can take several months to form and, during that time, volume can be irregular and unpredictable. Volume should be higher at the lows than on the days leading to the lows.

What are the details that I should pay attention to in the triple bottom?

1. Duration of the Pattern

The average formation takes approximately four months to develop. The triple bottom is one of the longer patterns to develop. Schabacker and Murphy agree, however, that the longer the pattern takes to form, the greater the significance of the price move once breakout occurs.

2. Need for a Downtrend

The triple bottom is a reversal pattern. This means it is essential to the validity of the pattern that it begin with a downward trend in a stock's price. As Yager noted above, some experts believe the downtrend must be a major one.

3. Decisive Breakout

Because a triple bottom can be confused with many other patterns as it is developing, experts advise that investors wait for a valid breakout through the confirmation point before deciding whether the pattern is a true triple bottom. Bulkowski reinforces this message, stating that true triple bottoms are quite rare and waiting for a valid breakout is essential before determining whether the pattern is a triple bottom. [3]

4. Volume

As discussed, it is typical to see volume diminish as the pattern progresses. This should change, however, when breakout occurs. A valid breakout should be accompanied by a burst in volume. Certain experts are less concerned by seeing a steadily diminishing trend in volume as the pattern progresses through its three lows.

5. Pullback after Breakout

It is very common in the triple bottom to see a pullback after the breakout. Bulkowski estimates that 70% of triple bottoms will throw back to the breakout price. [4]

How can I trade this pattern?

Begin by calculating the target price - the minimum expected price move. The triple bottom is measure in a way similar to that for the head and shoulders bottom.

Calculate the height of the pattern by subtracting the lowest low from the highest high in the formation. Then, add the height to the highest high. In other words, an investor can expect the price to move upwards at least the distance from the breakout point plus the height of the pattern.

For example, assume the lowest low of the triple bottom is 200 and the highest high is 240. The height of the pattern is 40 (240 - 200 = 40). The minimum target price is 280 (240 + 40 = 280).

Experts agree that triple bottoms are not that common. Edwards and Magee, for example, stress the necessity for waiting for a valid breakout through the confirmation point.[5] However, this is a reliable pattern if the pattern has been confirmed by a valid breakout.

Pullbacks are common with triple bottoms. Investors can use this to their favor advises Bulkowski. If prices return to the confirmation point quickly after the breakout (within two weeks but no more than a month), Bulkowski suggests that the time to jump in is once the prices have turned around again and headed back up. [6]

Investors looking for a valid triple bottom should be wary of a pattern that shows a lot of white space as it is developing. The pattern should display a fairly regular progression among the three, well-separated lows. Yager suggests that the symmetry of this pattern is something that should catch your eye.

(1Bulkowski, p. 578, 2Bulkowski, p. 576, 3Bulkowski, p. 585, 4Bulkowski, p. 586, 5Edwards and Magee, p. 165, 6Bulkowski, p. 588)