

TREND DEVELOPMENT

WEEK 2: TREND DEVELOPMENT AND TIME
DEVELOPMENT

Learn more about Trend Development with this
supplemental section from my book “The 5 Technical
Signals You Should Not Trade Without”

**[TONI HANSEN’S MARKET
TIMING BOOTCAMP]**

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Part 5: Trend Development

User Tip: Since there is a great deal of reference in this segment of the course to the charts displayed, please be sure to just sit back and not rush. Use the CD to help you follow the material more easily to begin with, supplemented by the text afterwards.

Throughout this entire course I have made reference to price moves in securities. These price moves are called "trends". It is the nature of these price moves themselves that I will now address in this chapter of the 5th and final of the five technical tools or categories that I use when assessing the market for a new position or even when exiting a position. Trend development, or trend placement, will often be the deciding factor on the success or failure of a trade or position.

In this segment I will be referencing the other four technical tools, incorporating them into trend development. Pace, in particular, will be discussed at length. Pace and trend development are perhaps the two most important factors in the market that will indicate an upcoming price move in a security.

To understand how trend development or trend placement can affect price action, it's first imperative to understand what exactly a trend is. I've hinted at it a few times throughout this course. A trend is simply the primary direction that the prices in a security are moving at any given time, whether it's in a stock, index, commodity, etc.

Many times when I am trading, I will come across a pattern on a particular time frame that looks exactly like one traded in the past on the same time frame. When I attempt to secure the same level of success as on the previous trade, however, I found that I was unable to do so. In time, I learned that this was a result of the larger trend development and the placement of the setup within that larger trend.

A trend is the primary direction that the prices in a security are moving at any given time.

For instance, something that looks the same on a five minute chart on two different days, might look completely different on a 30 minute chart or a daily chart. If there is a five minute buy pattern forming on one day and it's near the beginning of a new uptrend on a larger time frame, then it's going to have a higher probability for success than one which is forming on a very advanced uptrend or forming into a strong resistance level on a larger time frame. This locale in the larger trend is crucial to determining the degree of success or failure of the setup and what would be the best means to manage the position.

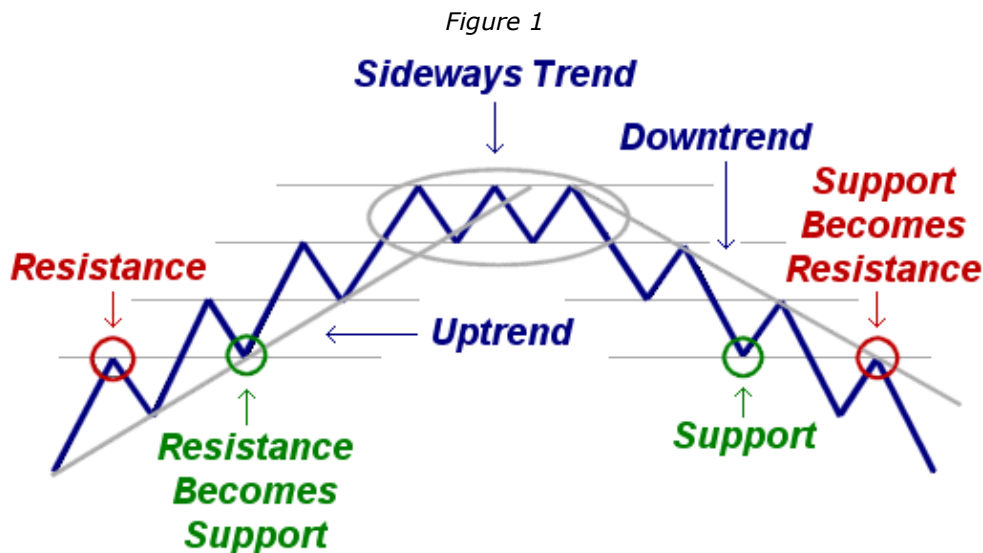
Something which has larger resistance due to a more extended trend can still offer opportunities for shorter term traders, such as a swingtrade coming out of an

extended monthly trend, or a scalp coming out of an extended 60 minute trend. It is simply necessary to realize that the larger moves, such as a prior rally in the trend on the larger time frame, are not likely to hit targets such as those set with an equal move on the higher time frame. They may hit smaller equal moves based upon the prior move on the smaller time frame though.

Trend Types

This first segment may be a bit of a review for many readers, since I will be discussing the basic types of trends which exist in the market. For those newer to trading, however, it is very important to understand the difference. The market is comprised of three types of trends: the uptrend, the downtrend, and the sideways trend. An uptrend is a series of higher highs and higher lows. A downtrend is a series of lower highs and lower lows. A sideways trend, often called a trading range or base, will have comparable highs, comparable lows, or both.

The sideways trend may have more comparable highs than it does lows, or vice versa. If \$50 were resistance, for example, it may trade at highs of \$50.04, \$50.00, \$49.97. It may then have lows within the range of \$49.45, \$49.67, \$49.50 and \$49.82. As long as the downside momentum on that last drop into \$49.83 was slower in pace than the last rally into \$49.97, then the bias will favor an upside break from that sideways trend, no matter if the range is forming at the highs or the lows of the previous price move.



A template for the types of trends is shown in **Figure 1**. The uptrend on the right illustrates how previous highs, once broken, will often become support on the next pullback to a higher low within the trend. This is not always going to hold true, but it is an additional support level to watch for when trading or investing to help time continuation patterns in the direction of the larger trend. As a directional trend such as this begins to correct, it is fairly common to see it fall into a sideways trading range.

This can then form a continuation pattern to the upside, or reverse and lead to a downtrend, where each support level, once broken, then becomes resistance.

Uptrends

Figure 2, which displays the Mini-Sized Dow Jones Industrial Average futures contract (YM) is a solid example of an uptrend in play. Pay attention to how many of the pivot highs and lows within the trend channel occur at correction periods. The initial high on this chart occurs at about 14:00 ET on first day of trading. A low, which is comparable to the initial low on the chart, forms at around 15:00 on the first day. The YM breaks out of this back and forth action, beginning a new uptrend, when it pushes through the 14:00 ET highs heading into the second day of trading. It establishes those highs into the 10:15 ET correction period and pulls back, creating a higher low into 11:00 ET, which is another correction period. With a higher high and a higher low now in place, an uptrend has begun. Notice that the low around 11:00 ET is also the same price level as on the first day, with an excellent example of how prior highs in an uptrend will often serve as support when that trend corrects. This uptrend continues into the end of the day on the second day of trading and holds correction periods with each test of highs and lows within that trend channel.

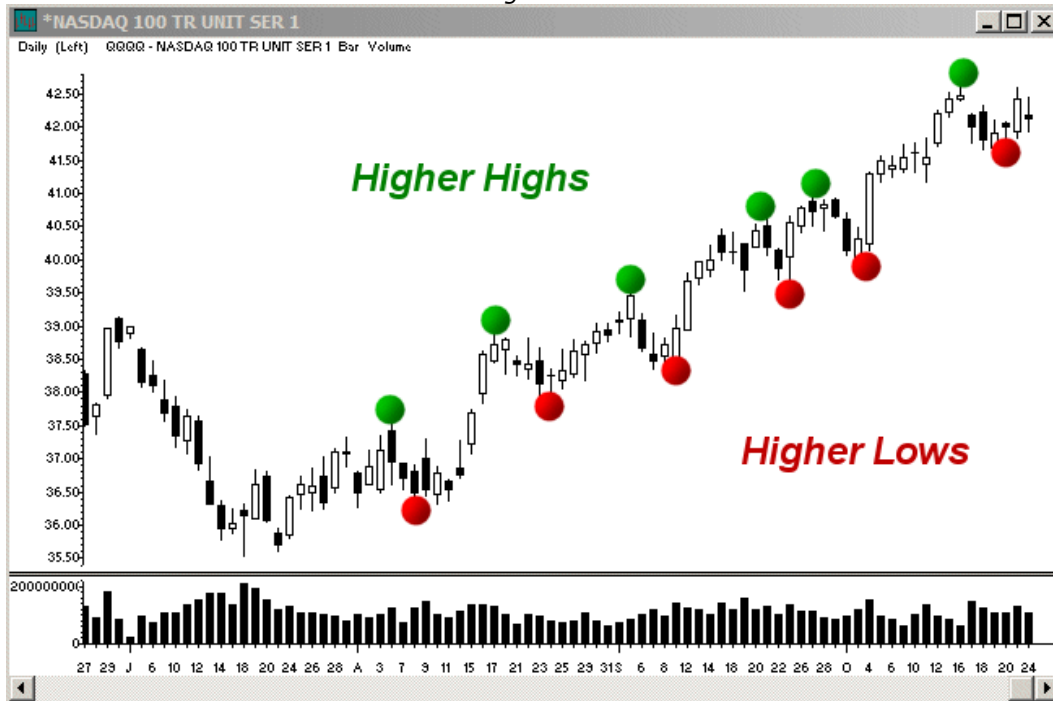
Figure 2



Another nice example of an uptrend is the one in **Figure 3** of the QQQQ. After selling off at the beginning of the time frame displayed here, the QQQQ establishes a higher low into the second week of August. A higher high soon follows, running smack into price resistance from the late June pivot in the \$39.00 whole number resistance level. The series of higher highs and higher lows continues, forming a solid trend heading

into October. Throughout the trend, the QQQQ reacts to price support and resistance in the form of half and whole numbers, such as the initial July lows in the \$35.50 zone, the second lows around \$36 and so on, and highs into \$39, \$40, \$41, etc. This creates a consistent trend with multiple support and resistance levels hitting at the same time since these price levels also correspond to the trend channels.

Figure 3



Downtrends

On the opposite side of the spectrum is the downtrend, which contains lower highs and lower lows. **Figure 4** consists of a great example of such a trend. After reversing from highs with the 9:45 ET correction period, the YM broke through morning lows and then forms a lower high into 10:15 ET. The lighter volume on this small correction assists it in resuming its downside bias, breaking into new intraday lows and the last pivot highs from around 15:30 ET on the previous afternoon. A second correction off lows, again on lighter volume, hits the upper channel resistance at about the same price as the first lows off the high (around 10:00 ET), and a third wave of downside follows.

TRADE TIP:

A correction within a trend move which takes place on declining volume is more likely to break in the direction of the previous trend, leading to a continuation of the trend.

Both support and the correction periods again come into play. The 10:45 ET correction period takes place right as the YM is closing its morning gap and this combination,

along with the level of development of the trend which I'll cover here in the next half hour, lead to a longer correction into lunch. Since pace of the downside move was stronger than average, this longer correction takes place more through time than price as it pulls off the lows.

Figure 4

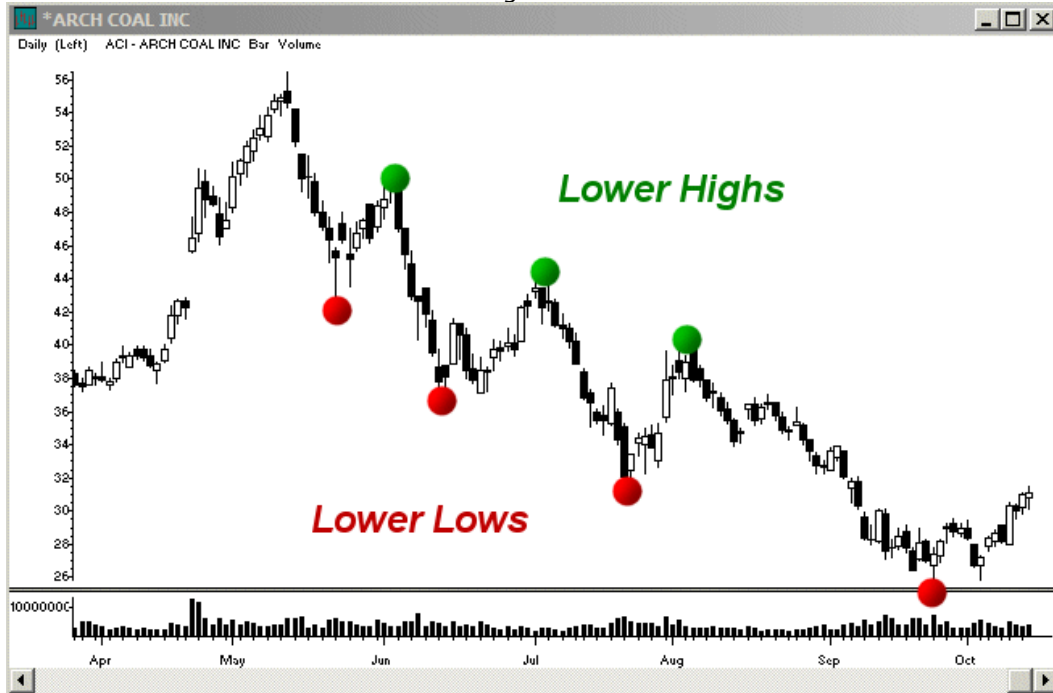


Arch Coal, Inc. (ACI), shown in **Figure 5**, also has a strong downtrend example. In this case it took place on the daily time frame. It shared a lot of the same traits on the YM, beginning after a strong upside move that contained a gap. This is, of course, not how all downtrends begin, but it is always interesting to notice how sets of patterns will repeat time after time on multiple time frames.

After the momentum slowed on the upside into early May, ACI sold off very sharply throughout the middle of the month. This descent closed the gap from mid-April, where it found its first support level on the daily time frame in what would become the new downtrend. The first lower high took place heading into June when the stock pulled gradually higher on declining volume, coming into price resistance from the highs made in late April. A second strong decline followed, confirming the formation of a downtrend. This time support in the \$38 congestion zone from March and into April curbed the sellers. This was also equal move support as compared to the initial decline off May's highs.

Even though the momentum increased slightly coming off the second low in the new downtrend as the stock move higher into the end of July, it did so with declining volume, indicating a lack of motivated buyers. The result was a hold on the upper trend channel with another lower high and then a third lower low. The downtrend held until winter.

Figure 5



Sideways Trends

The third type of trading range is the sideways trading range. Northeast Utilities (NU), shown in **Figure 6**, is a textbook example of a sideways trading range. After moving higher off lows in November, 2005, the stock ran into prior highs in December on the daily time frame. That price resistance stalled the buying and NU fell into a sideways trend channel, also known as a congestion zone, in the area of \$20. Although a bit more erratic to begin with, the range began to fall into a series of comparable highs and comparable lows. These were not exactly the same prices though, and it would be unusual if they were. Remember, support and resistance levels are “zones” and should not be thought of in terms of an exact price level.

NU attempted to make a break for highs in early May, however, the stock had to move all the way from the lows of the range before it hit the prior highs on the daily charts and this left the stock a bit winded. It was unable to sustain the momentum long enough to hold it up over the highs and it fell back again into the end of May before making a second attempt to break out in June. This time the move was a bit stronger. The pace increased as compared to the previous rally, and the stock made it into the \$21 price resistance zone. It still had the same type of action to deal with, however, as a result of the larger move that had been in play heading into that breakout. The stock fell back into the prior highs at the end of June as a result, returning quickly to the upper channel resistance, which became support after establishing the June highs.

Figure 6



A breakout such as this is higher risk, since it is very easy for the security to form a false breakout, such as in May, and then reverse. In this case it at least held the previous lows and returned for another breakout attempt, but it could have just as easily fallen back sharply off the highs and then had a more gradual move off the lows of the range. This would have then been more prone to a break lower. The momentum of the decline in June, which was stronger than earlier selling within the range, would have helped out.

A more ideal setup for a breakout as a continuation would have been if the stock bounced into the upper end of the sideways trend, based or pulled back more gradually from that resistance, preferably holding the upper end of the range, and then triggered a breakout.

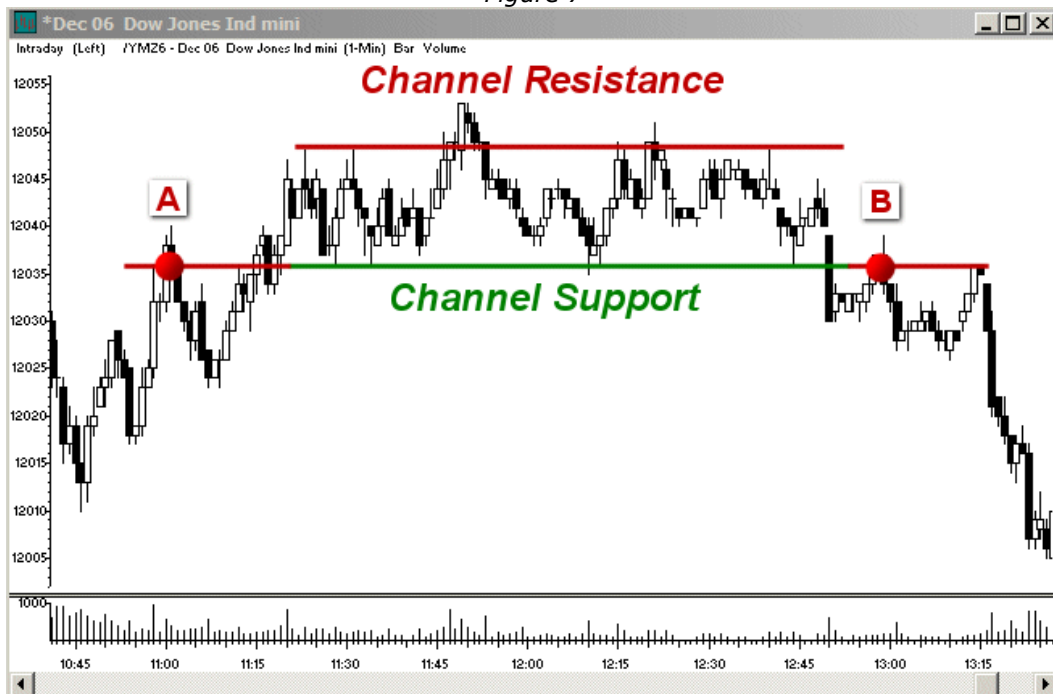
As I've hinted at earlier, not all sideways trading ranges will form continuation patterns. It is just as easy for them to lead to a reversal of the prior trend move, such as took place in the template of the trend moves in **Figure 1**. A change in pace within the range can be used successfully in making this distinction. This one minute chart of the YM (**Figure 7**) had a typical type of sideways trend in play along highs. The index had rallied higher throughout much of the morning and after breaking the pivot high marked "A", it fell into a channel whereby the price resistance from "A" became support within the sideways trend.

Throughout much of the sideways range the buying was fairly strong, particularly into 12:15 ET when it popped back into the higher end of the range. It lacked any volume confirmation on the buying, however, and the pace began to turn over into the first

hour of the afternoon. At about 12:30 ET a more gradual move to the upside within the range was accompanied by a decrease in volume and the lower end of the range was soon giving way. The support which had held the lows of the range became price resistance when it corrected higher around 12:45 ET. The YM did have quite a move to make before breaking the lows of the range, so it was easier for it to repeat the type of action we saw along highs on NU. It broke the support and then congested along the former support and new resistance level before continuing in the direction of the breakdown. Increased volume confirmed the breakdown.

One trait of the sideways range which increased the risk of a reversal pattern right away was when it put in that slightly higher high just prior to noon. This creates a bit of a trap for late-arriving bulls and it can create additional panic when support levels give way. It can also assist in the formation of a rounded high, where successive attempts at highs barely break before the security pulls back and they do so by lesser degrees each time. Each new high lures in more bulls, but the frustration mounts as each high fails to result in substantial gains, so when selling hits then it can do so very quickly, creating a lot of panic to fuel sellers

Figure 7



Another sideways trading range which broke with a reversal took place in Sears Holdings Corp. (SHLD) (**Figure 8**) in early 2006. I had been following the range for quite some time. It had pulled lower into its 20 month simple moving average and had been hugging it for several months. I caught it as a short with about half a lot (meaning half my normal risk) when it was moving off the upper end of the range, but before it had really based long enough to confirm that the pace and development within the range was going to break lower. While it looked good to start with since I was able to catch a move lower within the channel itself, it ended up being a rather costly mistake.

The volume within the range did decline, which is typical of a continuation pattern forming, but this is also just normal volume activity for any range, even a reversal one. It would have been better had the selling within the range actually picked up a bit into February and March, but it did not. The momentum slowed on the downside with choppy selling than buying and in March the stock gapped higher on news, clearing the trading range completely. There were some nice intraday buy setups on the day of the gap, making it easy to catch that new breakout direction, but it was a little rough since I got caught on the short side and had to reverse my position quickly in order to not take a substantial hit.

Figure 8



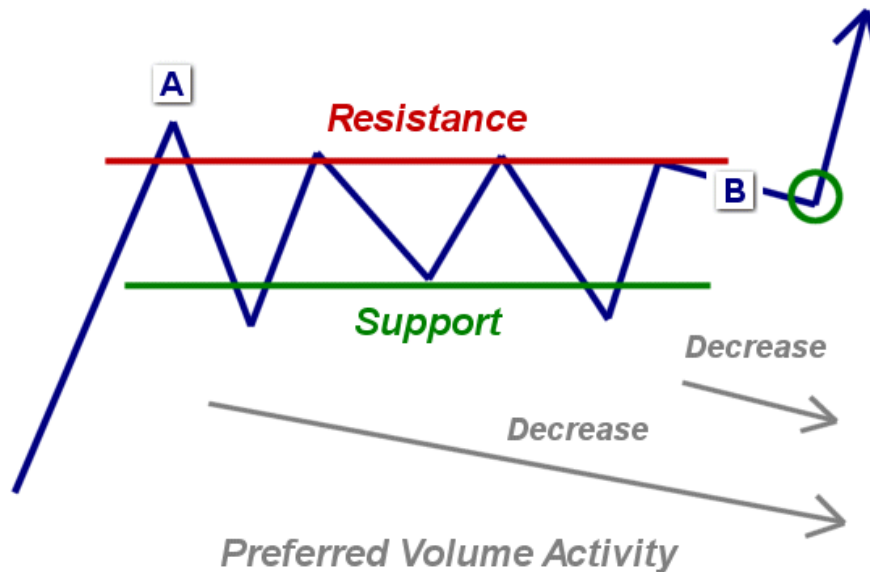
Figure 9 contains a template of a typical continuation breakout from a sideways trading range. In most ranges, it is common for the initial move into resistance to display more “give” at the resistance than on subsequent tests. If the resistance level here were \$50 for instance, then “A” might be as much as \$50.23, whereas the next high to follow could be \$50.03 and the one to kick off “B” could be \$50.00 exact.

The pace within the move off “A” is similar to the rally into those highs. Sometimes it might be somewhat faster as well, but as long as the initial rally was stronger than average, if the correction is also stronger than average, then it indicates that a trading range, or sideways trend, is going to stand a good chance of developing.

The security in the template attempted to break lower towards the end of the range, just above where it says “Activity” in “Preferred Volume Activity”, but since it had to drop all the way from the highs of the range and into the lows of the range, it was exhausted by the time those prior lows hit. Such a breakout like this will always be higher risk for failure simply because it can trap traders who use a trend channel break from the larger range as their entry trigger instead of using a smaller trend

channel within the range itself. True, it may have then based under that range, like it did in the examples of the sideways ranges which served as reversals, but it can also easily whip back to the upper end of the range like it did here.

Figure 9



It was the slower pullback off the highs, marked "B", that really provided a boost to the pattern as a continuation pattern as opposed to a reversal pattern. This does NOT mean that a security won't move from the lows of a sideways range and through the highs and just keep going! If a range is very narrow compared to prior price activity, then this is still ok. If the range is wide, however, then the amount of room needed for a stop, and the extension of the move at the time of the breakout, WILL cut the potential and also increase the chances of failure.

In addition to favoring sideways ranges with a more gradual move within the range to assist in decreasing risk and for

Preferred Traits for a Continued Uptrend:

- ✚ More gradual downside pace as compared to upside pace within the corrections inside the trend just prior to it breaking out.
- ✚ Declining volume throughout the correction, particularly within the last pullback off the upper end of the range.
- ✚ When the last pullback within the correction itself holds within the upper 50% of the larger correction move.
- ✚ When the correction pulls into a moving average support level before breaking higher again.
- ✚ When the larger uptrend resumes by coming out of a correction period and confirms with an increase in volume.

timing an entry, monitoring volume is also highly beneficial. A volume decline throughout an entire sideways range and particularly during that last more gradual move within the range itself is ideal. When the volume is the lightest and the pullback marked "B" only corrects about 50% off the highs of the range, then I know I have a highly successful pattern developing.

My entry is as the channel from the pullback marked "B" breaks higher, with a stop placed under the low of pullback "B". If the resistance was \$50 and the lows of the larger range were \$49.50, then this could mean an entry of about \$49.90 with a stop under \$49.75. It's a big difference from an entry over \$50 and a stop under \$49.50, but amazingly it doesn't really hold any higher of a chance of the stop hitting on the closer support within the range than when it's under the lows of the range. It only increases the reward versus risk potential.

Figure 10

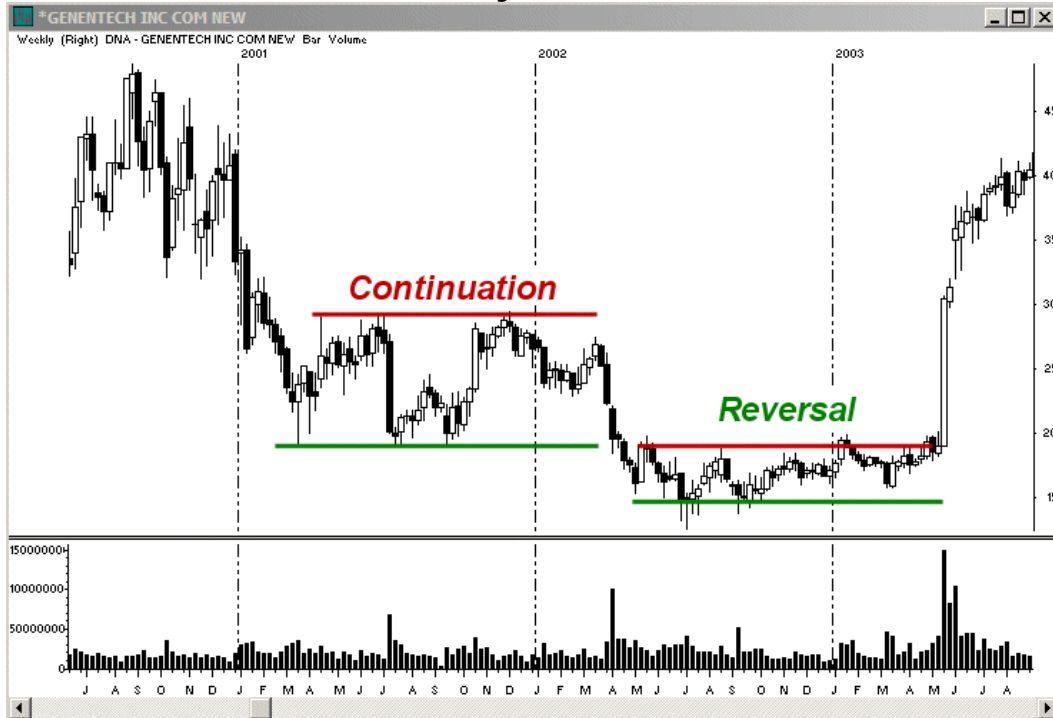


Polycom Inc. (PLCM) in **Figure 10** has a nice illustration of this type of continuation pattern on a sideways trend breakout, where the pace and volume are both favoring a return of the bulls. PLCM moves higher out of December, stalling at \$20 price resistance. After breaking through that level, \$20 became support with the \$23 area as resistance. Throughout most of the congestion the action was very choppy without a strong momentum bias to favor a break in either direction.

It wasn't until the end of July and heading into August that the pace within the sideways range slowed in one direction. In fact, the drop in July was even on stronger volume, although it had to move all the way off the highs to make it back into the lows. As a result, the break of the prior lows was exactly like in the template labelled **Figure 9** and it merely served as a trap for those that jumped the gun a bit. The pace finally slowed on the next pullback off highs going into August. At that point the

volume declined and the pullback only came into the middle of the range, which is much better than had it pulled back into the lows, even if it had done so on declining momentum. The reason is that the prior highs will not serve as much, if any, resistance that way, whereas they would have if it had to make a larger move to return to them. I'll be examining this setup in greater detail in the last segment of this course.

Figure 11



This next chart of Genentech Inc. (DNA), in **Figure 11**, has two sideways trends. The first led to a continuation of the previous selling, while the second broke with a reversal of the prior trend. The continuation move again shows how a range may not provide a strong directional bias for a breakout when there are stronger than average moves at play. The stock fell sharply in July of 2001 to retest the initial lows of the range, but then managed to round off at the support and rushed back into the prior highs, creating a stronger than average upside move. The pullback into the New Year coming off the highs of the range was more gradual than the fall rally, but the attempt to return to those highs in March failed miserably and a mid-range congestion broke lower.

The decline in the spring of 2002 was followed by another sideways trend. This time it would lead into a reversal of the previous selling. One of the first indications of added risk for those hopeful for a continuation was the slightly lower low into the start of July as compared to the lows made heading into May of 2002. This initial rounding off is common of sideways moves that turn over, just like the ones shown earlier in **Figures 7 and 8**. The pace then began to change as the range progressed. Volume was lighter for the most part on each of the declines within the range once that pace began to turn over. It attempted an initial setup into January 2003, but since the sideways

range had not taken as long to form as the previous one, it indicated that it might be a little premature. Once it had corrected for that long it managed a more solid breakout from the range, this time following through sharply to the upside. On weekly time frames such as this, it is common for breakouts to correspond to news events such as on SHLD. This will often lead to very rapid breakouts. The same idea applies on all time frames and securities though.

Trend Development

At the beginning of this segment I posted a template of the three types of trend moves. It began with an uptrend, followed by a sideways trend, and then a downtrend. Another configuration of these trends unfolded in International Business Machines Corp. (IBM) on the daily chart this past year (**Figure 12**). It began with a choppy sideways range throughout the first part of the year, eventually breaking lower when the pace within the range slowed on the upside and the support gave way in May. This kicked off a downtrend that lasted until July. Volume spiked as the stock reversed, pulling quickly back up into the price resistance from June and early July. Volume spiked as the stock reversed, pulling quickly back up into the price resistance from June and early July.

Figure 12



The pattern of this reversal off lows in IBM is usually called a "Reverse Head and Shoulders". The left shoulder was that range in June and early July, the head was the pivot low in July, and the right shoulder formed in late July and throughout the first half of August. This right shoulder formed on declining volume and confirmed the beginning of a new trend when it broke through the late July highs and returned to the late May price zone. Although not displayed here, the trend continued on the weekly time frame until February of 2007 when the 10 period simple moving average on the

weekly charts that held as support finally gave way and a lower low was made on February 27th after it fell into a sideways range along the highs made back at the beginning of 2005.

Trends and Moving Averages

Although a trend can be quickly identified by simply looking at the directional move, one technical tool that I often fall back on to help display support within the trend are the moving averages. Often an uptrend or a downtrend will hold one moving average or another throughout its development and as long as the pace of the trend is fairly consistent, then the moving average will be very reliable. I mentioned this briefly regarding the trend development on IBM in **Figure 12**. It held the 10 period simple moving average on the weekly time frame. The chart of the QQQQ in **Figure 13** shows what such support will look like.

Figure 13



Initially the 20 period simple moving average served as resistance as the QQQQ was turning over in July, 2006. After hugging the moving average into August, it broke rapidly higher, creating the beginning of an uptrend with a higher high and higher low now in place. Each time the QQQQ corrected it pulled back into the 20 period simple moving average and then bounced back. I have found that most trends will hold a 20 period sma on one of the time frames it is trending on. Stronger than average momentum moves, however, can hold a shorter period moving average such as the 10 sma, whereas more gradual trends, or ones that are also forming on a larger time frame, can hold a slower moving average as the trend progresses, such as a 50 week sma or even a 100 day sma.

The Fractal Nature of Trends

Trends are fractal in nature, meaning that multiple trends will be taking place at one time, but just on different time periods. As a result, a faster moving average that is serving as support on a larger time frame might be a slower moving average on a smaller time frame. The 10 period sma on the weekly chart of IBM for instance, was close to the 40 day sma, albeit not exact.

Figure 14 displays how such activity develops. The three darker black moves are part of a larger uptrend. Within this uptrend, however, are several smaller trends in play. After the initial buying, for example, the security fell into a sideways trend. A smaller uptrend within the larger one followed and then led into a smaller downtrend. Within each of these smaller trends were even ones. The sideways trend was comprised of up and downtrends within the range, while the upside coming out of that sideways trend had two smaller downtrends and three smaller uptrends within the larger uptrend.

Figure 14

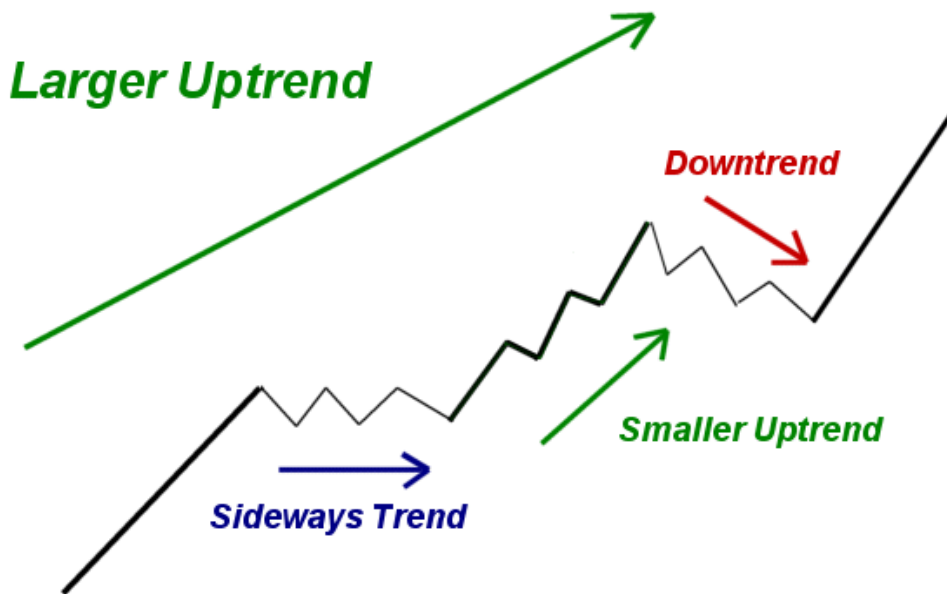


Figure 15

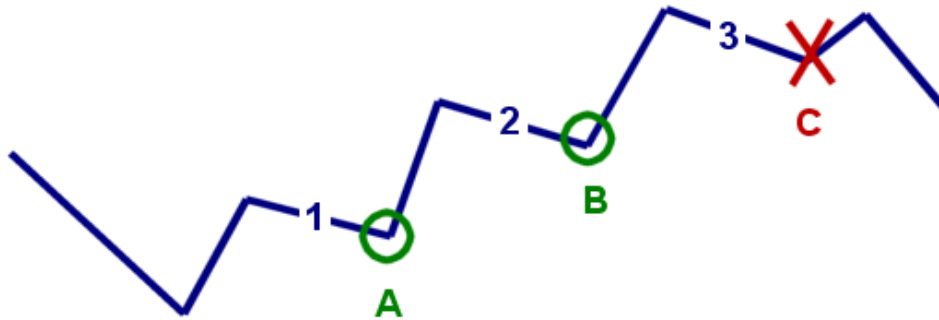


The YM in **Figure 15** is very similar to the template. It is also in a larger uptrend, with a series of higher highs and higher lows intraday on the two minute chart. It has two smaller trends that break up the larger uptrend. These are sideways ranges, which also have a number of trends that developed on the more diminutive time frames. Sideways trend #1 began with a small downtrend, followed by a small uptrend into noon. That mid-day correction period hit as the initial highs of the range hit and led to a second downtrend with the range. This continued until breaking higher out of the 13:00 ET correction period when the YM bounced off the prior lows within the congestion. The smaller trends in #2 were not as clear-cut and were choppy, but they existed within that sideways move as well.

Trend Development – Three Waves

There are a couple of ways that a trend can be monitored to help indicate an upcoming price move. In addition to the pace within the range itself, the development of the trend will often fall into certain “rules of conduct” that repeat time and time again. Trends often develop in the same manner over and over again, leading to two and three waves (or smaller trends) within a larger one before that trend corrects on a larger time frame.

Figure 16



In three wave trend development (**Figure 16**), a trend (whether it's a sideways trend, an uptrend or a downtrend), will have either three waves of buying or three waves of selling before the trend channel breaks. Thus, when I am looking at a pattern as a continuation or reversal pattern, I find that it's very important to pay attention to where that pattern is forming in the larger trend. If I am following a base along highs for a continuation breakout to the upside for instance, then it is typically best if there has only been one or two waves of buying within the trend. After a third wave of buying then targets based upon equal moves and larger time frames will have greater difficulty hitting and it's more common to see continuation patterns fail.

It is imperative here to examine the corrections between each of the waves of buying or selling within the trend to determine if this type of trend development will be an effective aid in reading market activity. In order for the above assumption to hold true, then the corrective moves must be comparable in terms of time development. In other words, #2 must take approximately as long as #1 in order to assume that any breakouts after the move into #3 will be less than ideal. If #3 is similar to #1 and #2, then it can still attempt a continuation, but targets must be tightened since they typically will not get as far as the moves out of "A" and "B" were able to. Even if it makes a new high in the trend, it will more often do so by only a hair before turning over, creating a type of double top. The trend may not necessarily break on the larger time frame, though. It might simply fall into a longer correction and then resume later on.

Figure 17



Figure 17 of the NQ displays a very typical three wave trend development. Although I generally do not place a 40 period sma on my intraday charts, I have added here to illustrate how many trend moves will gravitate towards one of these simple moving averages. In a new trend for instance, if the security has fallen off highs and then hugs a moving average, such as took place from about 11:35 to 12:15 or so in the NQ, then that moving average will often be the resistance when it corrects a second time. This is particularly true if the second move is not significantly greater than the first. In other words, as long as move #2 does not drop more than twice what it did in #1.

Since each of these corrections was also similar in terms of time development, meaning they each took around 45 minutes to form, after correcting for the same amount of time coming out of the low just before 14:00 ET, the NQ did not resume the downtrend. Instead, it busted through the 40 period sma following the third wave of selling. Knowing that a longer correction would likely follow that third wave of selling, I watched that drop closely and took it as a pivot trade coming off the lows when the momentum on the one minute time frame began to turn over and after that tail formed into the lows on the two minute chart.

Figure 18



The same thing happened in 2006 in Maxim Integrated Products Inc. (MXIM) (**Figure 18**). It fell off highs near the beginning of the year, dropping into its 50 day sma where it formed a small base before continuing lower. When it corrected, however, it dropped more rapidly than it did initially off the highs and hence took nearly twice as long to move off the March lows than it did at the 50 day sma to begin with. The moving average still held as resistance in April, however, and the stock broke lower. The pace of this second selloff into May was similar as the initial move off highs and it was able to achieve an equal move on the decline whereby #2 fell by approximately the same amount as #1. This meant that if it attempted a third wave of selling on that time frame, then the 50 day sma would again serve as resistance, which it did heading into July.

The third wave of downside was a bit choppier overall than the prior two after the first couple of days. It even moved back into the 50 day sma in August without hitting an equal move again. Although it made a slightly lower low, that overall move in wave #3 was unable to obtain that equal move since the smaller correction off lows into August meant that the overall pace of wave #3 was now more gradual than the prior two.

Volume spiked on this third wave of selling as lows were established in August. The momentum increased on the upside and the stock was quickly back at that 50 day sma again. This time it began to hug the resistance, much as it had earlier in the year when it was support. It did so on lighter volume, indicating that the selling within the correction off the resistance was not very significant and it did not take too long before that moving average resistance and the downtrend itself were broken.

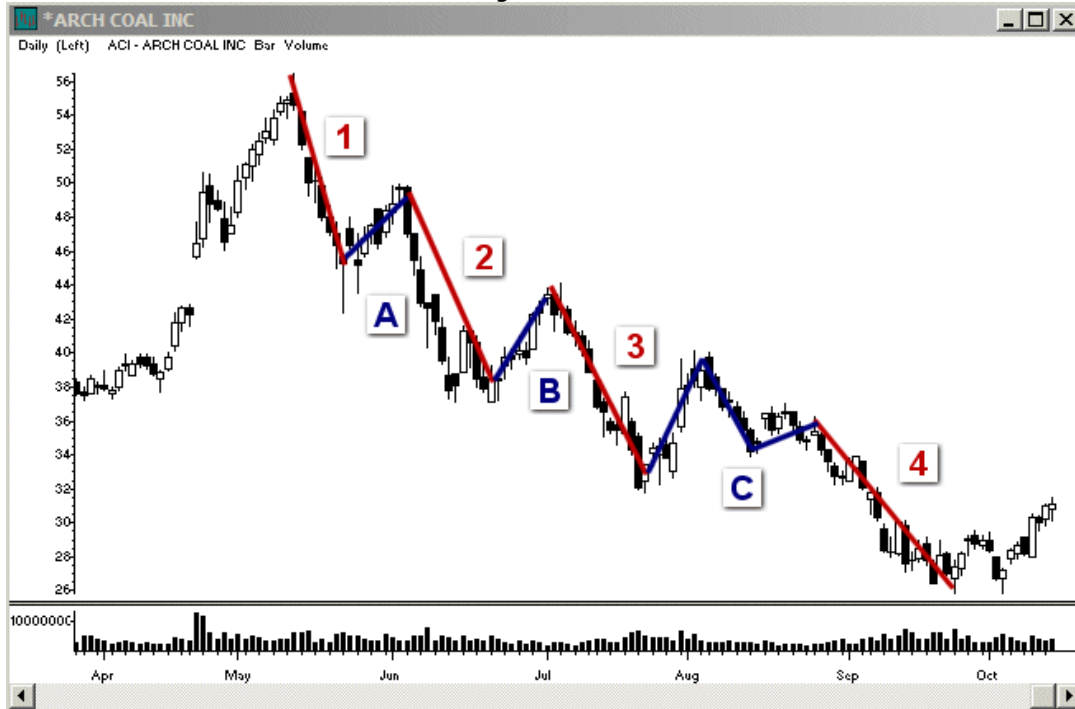
Figure 19



Within the larger downtrend in MXIM was a smaller downtrend as well. This was marked in the gray square in **Figure 18** and is expanded here in **Figure 19**. This smaller trend is the second wave of selling on the larger trend. When that first correction into April hit the 50 day sma, it kicked off a new lower low into the end of April. It was followed by a correction into May and a second wave of selling mid-May. Since the pace was similar to the first drop, the moves were nearly equal. A second correction, labelled "B", formed. This correction took 6 days, just as it had between the previous two waves of selling. It then broke lower in late May for a third wave of selling. As on the larger trend, the third wave of selling began quickly, but it was unable to sustain that momentum and was soon falling into another sideways trend.

Although three wave trend moves will nearly always correct longer afterwards when each of the waves of correction with the trend are similar, it does not mean that the trend itself is over. When the corrective period following wave #3 is only 1 ½ to 2 times the previous two, then it can lead to a fourth wave of selling (**Figure 20**). So, if the correction is two weeks long between waves #1 and #2 and again from #2 to #3, then a correction lasting 4 weeks can again break lower. After that fourth decline, however, the trend will nearly always break by either falling into a longer sideways trend or by reversing completely. In either case, it's highly probable that the trend line and moving average resistance from the trend move will end up breaking, even if the trend resumes on a larger scale later on.

Figure 20



The YM in **Figure 21** displays two types of three wave trend development. In red is the type in which there are three waves of selling, with similar corrections between each. This is followed by a third correction, but one which takes about twice as long as the prior two. It allows the YM to put in a fourth wave of downside before turning over around 11:30 ET and starting a new uptrend.

Notice that on the upside move, each time it stalled and fell into a pullback, it did so at price resistance from each of the prior downside moves. When it completed the third wave of buying, it returned to the price zone of the beginning of the downtrend and stalled at that resistance. Unlike the pivot at lows around 10:00 ET that led to a slower upside move and then a fourth decline, the reversal off highs came in the form of a pattern I call a 2T. It's a type of double top, but the second high is slightly greater than the first. This took place into the 14:00 ET correction period on the YM. The 2T trap pattern led to a more rounded high and the result was a sharper reversal and no fourth wave of buying before breaking the trend with a slightly lower low into 15:00 and lower high into 15:30 ET.

Figure 21



One of my favorite methods for utilizing three wave trend development is as a means of entering trend reversals (**Figure 22**). In doing so, it is to again pay close attention to the pace of the waves of selling. If a decline begins sharply and each of the two waves of selling which follow are more and more gradual than the first, then a security can turn around very quickly off the lows and lead to a strong momentum reversal. This can be a more difficult pattern to trade, however, because it is fairly common that the security will attempt one last flush on wave 3 before turning over and the return of the bulls can begin gradually before that pace really accelerates.

One way to try to avoid these risks is to drop down to a smaller time frame and look for buy setups there as well, or to wait until after a flush does take place and then take the trade. Of course, a flush is not guaranteed, so this strategy can end up meaning that the trader misses the position altogether. The same thing applies to trying to wait and time it on a smaller time frame. Such a setup may never form. It might just take off on the larger time frame without any other ideal entry zone. Usually I will draw a trend line connecting highs in the last segment of the third wave of selling and when that breaks higher, I wait for the prior bar's highs to break as well and then take the position. If there is a sharp volume increase on the first wave of selling, but a slow down in volume on the third wave, then this will boost the odds for more immediate success.

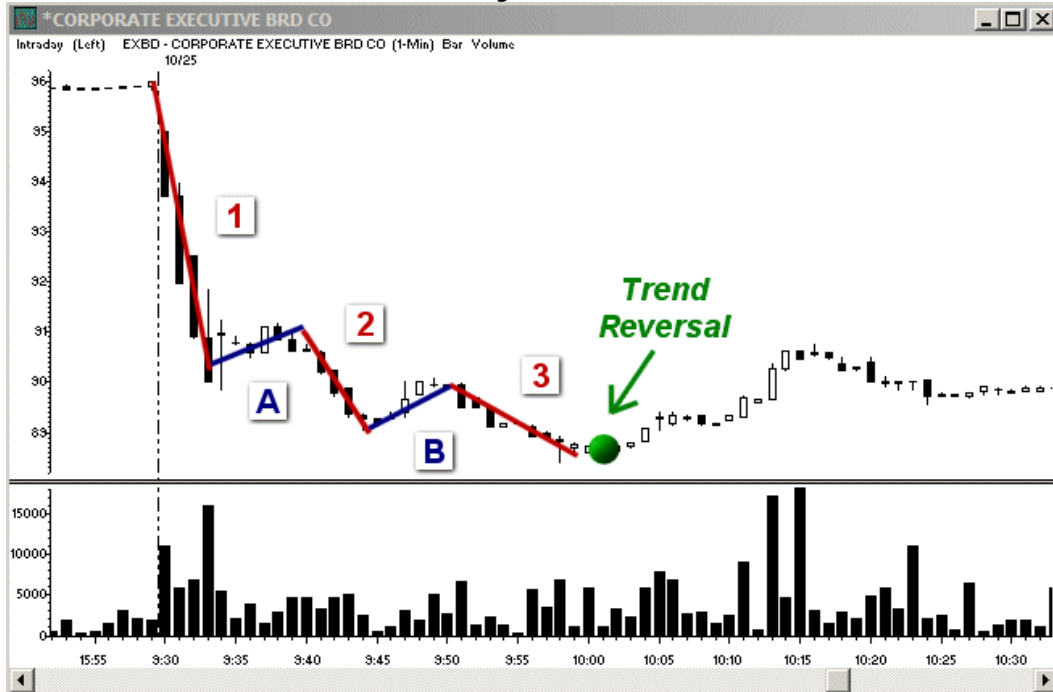
Figure 22



I will re-examine this type of three-wave reversal pattern in the final segment of this course, but one example of such a move took place intraday in Corporate Executive Board Co. (EXBD) (**Figure 23**). Wave #1 was very extreme, but after a brief correction (A) it continued with a more gradual move lower. A stronger upside move in "B" followed, leading into a third decline into 10:00 ET. Within about 15 minutes EXBD was back at the \$91.00 zone from the "A" correction.

Where this pattern takes place in the larger time frames will determine how successful it is as either a quick setup or something that will reverse and break the highs from the first decline. A newer downtrend on the next couple of time frames higher would be more prone to correct like the move in EXBD and can resume selling later on, whereas if there had been three waves of selling on a 5 or 15 minute chart already and these three waves shown here made up a third downside wave on the larger time frame, then a much sharper correction off the lows is more likely.

Figure 23



Trend Development – Two Waves

Trend moves can also develop with just two waves of buying or selling within the trend. These are most common as counter-trend moves within a larger trend, such as a two wave pullback within a larger uptrend. They can also serve as continuation patterns though. In the case of Akamai Technologies (AKAM) in **Figure 24**, the stock had fallen into a trading range out of the open. Within that range itself it had two waves of pullback off the highs around 10:00 ET. It then fell into a longer base along lows heading into 11:00 ET as volume declined, creating a continuation breakdown. It had an initial wave of selling, marked #3, and then a second continuation, marked #4, into 11:15 ET.

When there are two waves of selling and then a longer base, each of those initial two waves of selling can be used to determine the target on the continuation. The second segment of the decline (#2) can be compared to the initial breakdown (#3) to identify the first support and target. The move on #3 can then be measured for an equal move level for #4 as long as the pace remains the same as in the previous drop. Additionally, the overall move from #1 and #2 combined can be compared to #3 and #4 combined to create a larger target, as long as the pace again remains comparable. In this case the pace increased somewhat on the continuation, and this allowed for a slightly larger move than an equal move.

Figure 24



Figure 25



A similar two wave continuation pattern, this time on the upside, took place intraday in the ES in **Figure 25**. This time the action was a bit choppier, but after hugging the upper end of the trend channel on the correction marked "B", the range broke higher for another two waves of buying. This time around the pace was more gradual than the combined two waves going into the range and the volume didn't confirm the breakout from the 12:00 ET correction period. The two wave pattern still held faithfully, but it did not quite hit an equal move target.

Although in the previous two examples, each of the correction periods between the two waves of the moves into the congestion and out of the congestion were similar in terms of how long they took to develop, this is not always the case. Sometimes the continuation out of "B" will have a larger or smaller time development at "C" than at "A", so that even when the pace of the continuation begins with similar action as the last wave heading into "B", it will not always be able to sustain it if the small continuation at "C" lasts longer than at "A" since the overall pace of the larger continuation becomes stunted. The continuation can have a larger than equal move even if the pace is the same on the initial breakout as compared to the last bit of buying or selling into "B" if the action between waves three and four takes less time to develop than between the first and second ones.

Figure 26

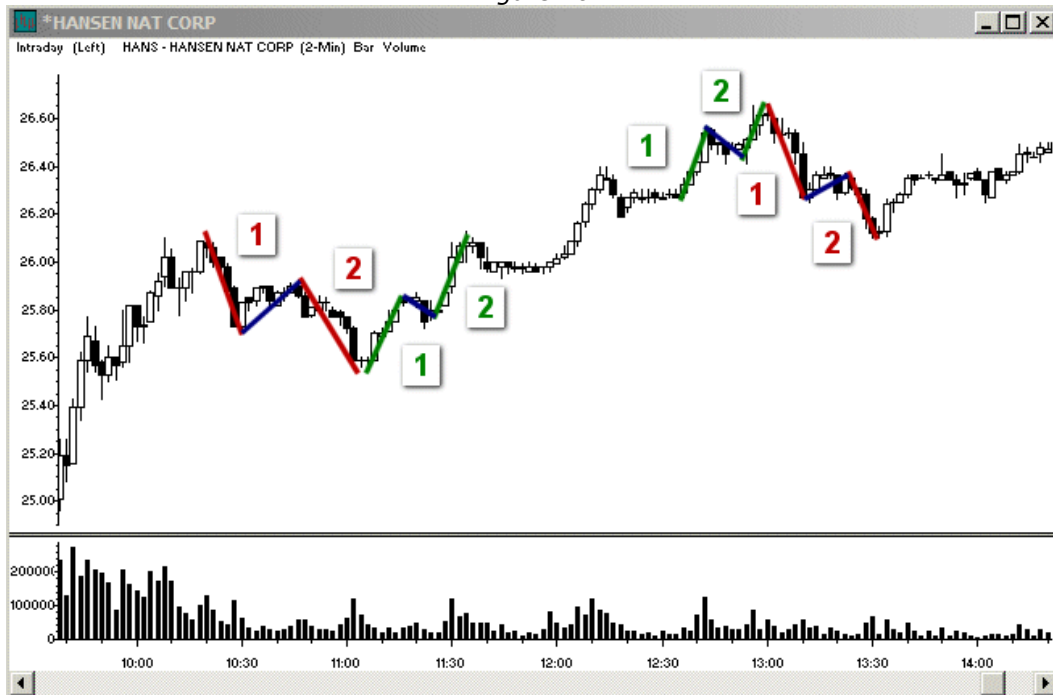
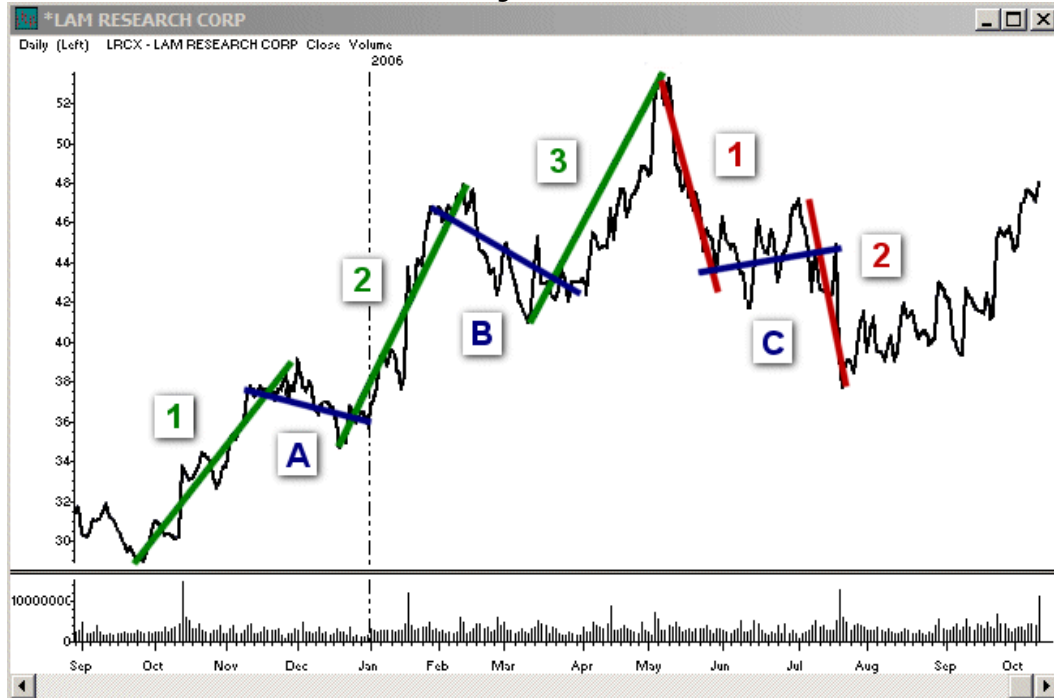


Figure 26 of Hansen Nat. Corp. (HANS) has a plethora of two wave trend moves. The first two are just a correction within a larger uptrend, forming a more gradual overall pullback into 11:00 ET, at which point the pace changes and two waves of buying follow. These end up as part of another upside move before correcting again off highs with the 13:00 ET correction period, leading to another two wave correction within the larger uptrend.

Figure 27



Both the three wave, as well as the two wave trend development can be found on Lam Research Corp. (LRCX). It consists of three strong upside moves into the summer of 2006, following by a sharp pullback into the range from "B". At that point the stock bases along the price support before forming a second pullback.

In order to continue with a third wave of downside, LRCX would have needed to have broken lower again in September when that base along support had mimicked the move marked "C". It tried to break the lower trend channel, but because it dropped off the highs of the range without basing at the lower end of the range before attempting to break the lower trend channel line, the risk was a lot higher that it would either be too early, or failure completely... which it did. Instead of continuing lower, it popped back up, based on a smaller time frame into the end of September, and then resumed the uptrend until late November.

Conclusion

As with each of the previous four technical tools that I've covered in this course, trend development is one that is best when used in combination with the others. I showed a lot of examples of what to look for in this section, but the key one to focus on will be pace. When using the trend development as an entry tool, take care to make sure the trend has not already had an extreme run. If this is the case, then drop down to the smaller time frames for placing targets. The closer a trader can enter a position within a new trend, the better. In the final part of this course we will look at more examples of how to use this tool while actually placing and timing a trade.

Worksheets

Answer the following questions to the best of your abilities. Once you have completed this section, turn to the answer guide to double check your work.

1) How can "trend placement" lead to the success of one pattern on a daily time frame which appears at first glance to be identical to the daily pattern in another security also forming on the same time frame?

2) Define the terms "uptrend", "downtrend", and "sideways trend".

3) What is the best time in a trend to enter a new position?

4) What does a common trend move look like in a security and what are some of the possible indications in a trend move that the trend is coming to an end?

5) When looking at trend reversals, what do the terms "rounded highs" and "rounded lows" refer to?

6) When examining a sideways trend for a breakout, what are some of the things to watch for that will indicate the most likely direction of that breakout?

7) Which trend should be given the greatest consideration: an uptrend on a daily chart or a downtrend on a 5 minute chart?

Worksheet Answers

1) How can "trend placement" lead to the success of one pattern on a daily time frame which appears at first glance to be identical to the daily pattern in another security also forming on the same time frame?

Even though the patterns may look the same at first glance, where the patterns are forming on the larger time frames may be completely different. A bull flag that is forming after three waves of upside already, for instance, will have a more difficult time following through strongly than if that same flag formed after only one or two upside moves in the trend. The latter typically has a lot more room to move before stronger resistance levels hit, whereas the former can still work out as a trade, but only as a faster position than in the previous moves within the trend. Even if they make higher highs, it can more easily serve as a trap, followed by a stronger reversal.

2) Define the terms "uptrend", "downtrend", and "sideways trend".

An uptrend is a price move consisting of higher highs and higher lows. A downside price move has lower highs and lower lows. A sideways trend is more of a congestion move, with a lot of back and forth action in a sideways trading range. It often has comparable highs, comparable lows, or both.

3) What is the best time in a trend to enter a new position?

An uptrend is a price move consisting of higher highs and higher lows. A downside price move has lower highs and lower lows. A sideways trend is more of a congestion move, with a lot of back and forth action in a sideways trading range. It often has comparable highs, comparable lows, or both.

4) What does a common trend move look like in a security and what are some of the possible indications in a trend move that the trend is coming to an end?

Many trends will develop in waves of two or three. A typical uptrend for instance, will have three waves of buying, with comparable correction periods within the uptrend, and then will be followed by a larger correction afterwards. Many times the counter-moves within a larger trend will form with two waves of reaction, such as a two wave downside correction within a larger three wave upside move. If a trend already has three waves of buying, then it becomes easier for that larger correction to begin. Before a trend reverses, the pace will often start to reverse, forming a slower move higher in an uptrend before turning over with a more rapid downside move that pushes the security into either a sideways trend or downtrend.

5) When looking at trend reversals, what do the terms "rounded highs" and "rounded lows" refer to?

When a trend is slowing, many times it will make higher highs or lower lows to a lesser degree than before. For instance, the difference between highs may be 6 points at first, and then 3 points, and then 1 point. This would be an example of rounding highs. The momentum or pace with each attempt at highs or lows is often slower than before as well. This allows for a more rapid reversal in the trend than if the highs or lows were not "rounded".

6) When examining a sideways trend for a breakout, what are some of the things to watch for that will indicate the most likely direction of that breakout?

- *More gradual downside pace as compared to upside pace within the corrections inside the trend just prior to it breaking out.*
- *Declining volume throughout the correction, particularly within the last pullback off the upper end of the range.*
- *When the last pullback within the correction itself holds within the upper 50% of the larger correction move.*
- *When the correction pulls into a moving average support level before breaking higher again.*
- *When the larger uptrend resumes by coming out of a correction period and confirms with an increase in volume.*

7) Which trend should be given the greatest consideration: an uptrend on a daily chart or a downtrend on a 5 minute chart?

An uptrend on a daily chart will carry more weight than a downtrend on a 5 minute chart

