#### Friends

For me TA is a passion. I have been experimenting a lot on various aspects of TA. It has been a good learning experience. Sharing my experiments was a bigger learning experience. Truly, unlike sharing money sharing knowledge only leads to further expansion of knowledge.

A few months ago I came across a thread on "Volume spread Analysis" in the Traders laboratory forum. Tough I did not understand much the seeds of interest were sown. Thus began a new chapter in my TA journey.

I had posted some charts based on my work on this. A few had shown interest on this especially our esteemed Asish. So we will begin a discussion on the "Volume Spread Analysis". I request other knowledgeable members to add their bit to this discussion so that we have fruitful learning experience.

Calling VSA as advanced strategy may be controversial. But the concept is rather new and is gaining wide popularity. Hence we will consider it as advanced strategy.

# Regards

# karthik

Note: As we know this will be a restricted thread. Those who cannot post their doubts can still posts queries in my other threads and genuine queries would be answered there. Good post even will be copied on the main thread. Now that the awareness on the reputation points has grown, we hope more members will be able to post in this thread.

# Some background notes......

Once the seed of interest were sown hours were spent searching the net and watching clips on Youtube. The journey was full of obstacles. There was hardly any clear cut information available. Most were sales talks with sketchy information. Then hours were spent studying the charts and formulating rules. The rules were coded to check the validity of these rules. Some Traderji friend stepped in and there were some real time checks for these rules. Thus we came up with our own interpretation of the "Volume spread analysis".

Please do not start comparing my description with the ones that may be available from the net. I have used some basic stuff from Tom Williams's book and have built on it. Here we are not trying to clone the Trader Guider system.

The foundations for volume spread analysis were laid by R.Wyckoff way back in the early 1930s. Wyckoff was supposed to have made fortunes with his principles. Wyckoff stared with a premise that price / volume / Time could provide a picture of the demand and supply from smart money (he called the smart money 'composite man'). We will come back Wyckoff later in the thread. It would be nice to look at Wyckoff methods time to time as his work is the basic one and others have built on it.

Wyckoff had three basic principles or..say.. laws

# Price and volume Cause and Effect Effort and Result

The current day VSA available in the market still relate to these tenets.

Much later in the 70s Tom Williams who worked with a syndicate (read... Smart money) for 15 years, developed on the Wyckoff's work and came up with Volume Spread Analysis and later commercialized it. (The critic would say ..why commercialize it, he could have made money himself.. ②). Now many more companies offer their own concoction of VSA, hawkeye traders and genie software to name a few.

Tom William's VSA basically ignores the open of a bar and uses high, Low and Close. This is where it basically differs from classical candlestick analysis. Most commercial vendors claim to use more than 300 indicators to analyze each bar. I have seen that some of the VSA vendors use other indicators though not explicitly.

One thing is certain that the availability of basic information on VSA is scarce. I have come across much discussion on other forums on VSA. However most revolve around commercially available packages. Our intention in this thread will be to explore the basics so that each one of us can arrive at our own convenient VSA analysis.

Now it is time to move on ....

I know most of you are eager to get straight into the core of VSA. But let us lay some foundations before building the blocks of VSA. First thing is of course to understand a little more about working of Smart Money (hereafter we will just use the term SM to indicate Smart money).

The SM basically moves the market in four phases as follows

- 1. Accumulation
- 2. Markup
- 3. Distribution
- 4. Mark Down

Most of you may be fully aware of these. Still we will look at these phases more in details as this would help us to understand the SM operation better which in turn would give a better perspective to VSA.

There will not be any demand for something when there is plenty of it available and nobody wants it. As the availability decreases and more people want it then the demand increases. So the first thing the SM does is find something that is available a plenty and cheap. The next step is to create a scarcity of the same and get people interested in it which in turn generates the demand. This is first phase which is Accumulation.

# Accumulation

Accumulation is a process through which the SM acquires a large quantity of the stock at the lowest possible price. Accumulation is a subtle, sophisticated and sly process of cornering a huge quantity of the stock that makes the following phases possible and worthwhile. Once a large quantity has been absorbed the number of floating stock reduces and the demand increases. This makes possible the next phase Markup.

Accumulation normally takes place in congestion areas. Congestion area are mostly sideways range bound movements where the stock appears to have no interest to either move up or move down. The SM ensures that the stock is contained below a certain upper level which is the supply area. At the same time the SM also supports the prices above a certain lower line which is the support area. The stock moves within an upper resistance or supply area and a lower support area.

The congestion areas are characterized by Indecision. One of the most important characters of congestion areas is the Low Volume. When most traders are bullish or bearish the volume is high. Low volumes indicate indecision among the traders on bullishness and bearishness.

Ah.. Sounds easy....... Well the problem is that congestion areas are seen in both accumulation areas as well as Distribution areas ....... oh, Well that is not the only problem....... There will be periods where no one seems to be interested in the stock... the pattern of price movement most of time very similar to the congestion pattern.....

So the naturally the question is how one would ascertain if the pattern is really accumulation in progress...... A little later on this and other congestion patterns.....

So the question was ...How one checks if the congestion area is really an accumulation area.

There are a few things to lookout for...

- First, the indecision should be quite visible. In other words the volume should be low and quite. No huge volume upsurges. Even if the volume is relatively higher the range between up day volumes and down day volume should be narrow.
- Second, the spread of the bars (High Low) should be narrow.
- Third, the volume should shrink near the support line and expand near the resistance line.
- Fourth, the stock should be trading in a range for some weeks if not months.

Also you may see some shakeouts in the trading range. The SM would temporarily drive down the prices below the support line in order to takeout the stop losses and panic the weak hands into selling. You will see the stock bounces back above the support line immediately. By this process the SM is shaking out the weak money from the stock. For most of us it is just a failed breakout. Sometime the stock instead of bouncing back would continue to drop if there was too much supply. So trading these breakouts could be tricky.

Also it would a good sign if the stocks trading range is much above the support line.

Normally we would see some of the above signs if not all in the accumulation area.

There are many other patterns which signify accumulation. Some of them are rounding bottoms, reverse head and shoulder and double bottoms (or "W") patterns. Each could be explained in terms of SM activity. However we would go into the details now. One thing to keep in mind when evaluating patterns is that it is very important to check the volume pattern as well.

For an example we will look at the chart of HCC where a clear accumulation indication was seen June 2007



A few points about the congestion zone we are looking at for signs of accumulation. It is important to look at the history of the stock prior to the congestion area.

A few things to look out for....

Has the stock gone through a cycle of accumulation, markup, distribution and arkdown previously? Were there signs of a selling climax just prior to the congestion? If so, the SM are really looking out for making another round.

Or the stock has been languishing aimlessly prior to the congestion zone you are looking at. If so, this area you are looking at is not accumulation at all.

Was the stock enjoying an uptrend prior to the congestion? If so, this could be a reaccumulation going on here.

Was the stock undergoing a minor down trend (after an up move) prior to the congestion? Was there a downtrend without selling climax? Then this could mean there is re-distribution in progress and it may be advisable to look out for sign of

distribution.

(If you are wondering what is selling climax.. don't worry.. we will take it up in detail later.)

Now we come to the next phase in the game plan of SM, namely "Mark Up".

Once the smart money has a cornered a huge chunk of the stocks they are ready for the next move. The idea is to jack up the prices so the SM can fill their pockets. Typically you will see the low are getting higher. The closes are slowly getting nearer to the high. The prices are getting higher on lower volumes as there is very less supply. The reactions happen much higher than the support line.

Then ..the stock shoots through the resistance or supply line with higher volume. For that matter the stock need not exhibit the characteristics mentioned above. Suddenly it can just pop out of the congestion zone.

It is better to take note on the volume at this juncture. The volume need not be very high at all. Since there is no supply (SM have the majority of the floating stock). If the volume is moderate we should see it coming in strongly soon. Otherwise the move will collapse and stock would return to the base. We should see a large swift increase in the volume in case of a genuine breakout. The stock should be closing near the top. Also too much volume is not good. It would mean too much supply is coming in. Heavy volume with the stock closing in lower half would definitely mean supply coming in. Typically an 150% increase in volume with the close near the top would indicate a successful breakout.

The breakout is just the beginning. Then the stock moves up in stages. Each stage would be an advance at higher volumes and a retracement at lower volumes. The retracement is mainly due to short term traders booking their profits. The SM also starts the distribution during the retracement. The point at which the retracement stops become important. These should be above the previous retracement stops. In simple terms as Saint would put it the stock is making higher high pivots and higher low points.

We will also see sideways movement during the up move which would be congestion areas. We need to pay lot of attention to these congestion areas for this could be final distribution areas before the mark down begins. Also it pays to give attention to volume during retracement and congestion areas. Increasing volumes near support line and low pivots indicate problem. If the increase is dramatic then it is time to re-evaluate your position.

Finally the stock could make a climax run where the price and volume explode. The shorts run for cover and the green horns rush in not to be left out... like cattle rushing into a abattoir. Soon rapid markdown starts leaving the weak money holding the bag and he SM their cash.

Please do note that here we are talking about more of an idealistic picture. In reality it could be more complex and many a time difficult to decipher. But then practice man one

perfect.

Just enclosing a chart with similar conditions mentioned above.



Now let us come to the third phase in the SM game plan which is "Distribution". Distribution is the process where the SM is offloading their accumulated stock at a much higher price.

It is not very easy to spot distribution. Many a times you will not see any congestion areas. The UP move may slowly deteriorate and start rapidly deciding after a furl of heightened activity. The Wyckoff puritans may disagree here.

In mark up phase after the stock has run up for some time you will the volume diminishing and the spreads narrowing. The angle of ascent becomes lesser and lesser. The stock trend may even flatten. This would mean that the demand is drying up. The buyers are not willing to pay a higher price for the stock. Also sellers are reluctant to offload their positions hoping and waiting for a better price. It is here the SM slowly start offloading their stock. Much care is taken not to make it visible. Volume is never too high. Prices are support at certain levels so that there is no panic. Here it is important to

take note of the volume price pattern and angle of ascent. Too steep an ascent is also a problem. Suddenly you will see the stock dropping down like stone from its high perch.

It is at the top you will see patterns like H&S and double Tops which are distribution patterns.

Many times it is hard to maintain any semblance of the uptrend continuing and so a sideways congestion move ensues. The congestion zone will be quite similar to the zone we discussed earlier for accumulation. You will see the price being supported at some support level and being contained within a resistance level. The points to take note are the same ones we talked about in the accumulation zone. Just like in the shake outs in the accumulation zone you will see a shakeout in terms of up thrust bars. One has to be very careful trading the breakout from the distribution zone. If it turns out to be the final climax move you will be left holding the bag. But then the stock may goes for another up move. Here looking for uptrusts and other weak indication becomes necessary. We will be talking about these indications later.

In the final climax run the stock explodes in terms of volume and price. Like I said before the breakout traders, greenhorns rush in and the shorts will run for cover. Then you will see many Uptrust Bars where distribution takes place with maximum prices. There could be a series of Uptrusts and then......BANG..... the stock drops down like a stone.

We now come to final step in the SM game plan, the "Mark Down". When the SM has disposed off most of the accumulated stock they start the most dramatic move of crashing down the prices. Suddenly supply comes in plenty overwhelming the demand. The price starts tumbling. The spreads dramatically widen. There is panic selling from investors. But the prices drop so rapidly and most of the investors and green horns that entered late never get a chance to off load there holdings.

Like the markup phase we will see some rallies in the downtrend. These are more off reactions. Either the SM themselves try to shore up the price for their last bit of holding. Day traders, "Value Investors" trying to bottom pick and the green horns trying to "Average" contribute to these rallies. Our friend Saints calls averaging "Catching a dropping knife". I cannot find a better description for "Averaging". It is better to note the volume during the rallies. You will find the volume is more on down days and less on up days. When the rally fails the average investor panic and start selling and that accelerates the fall.

It may take weeks for the down trend to reach the bottom. The end is generally indicated by a stopping volume or an absorption volume. The SM may be absorbing the stocks to start the game again. You would find a High volume bar with long spread and closing near the top.

It is during the mark down phase you will see rallies like the "Dead Cat Bounce". Pay attention to the volume pattern during these rallies.

The mark down phase is the most depressing and cruel part of the SM game plan. By the end of it the SM would be taking delivery of his brand new E class Benz while the average investor is scouting for a buyer for his run down maruti.

Of course the Markdown phase does offer good opportunities to smart investors who are adept in short side trades.

But the mark down phase has a silver lining... towards the end it offers the smart investors many opportunity to enter into some really profitable trades. We will discuss all these later.

Now that we have a general idea about the SM operation we can step into the world of VSA.

VSA involves analyzing each bar with respect volume, spread and close. We will ignore the open. Also while analyzing the bar action we will also keep in mind the general background of the market.

As a first step let us make some definitions. These are elementary and most of you understand this. But for the sake of synchronizing our thought I will repeat these here.

Some Basic Bar definitions.

Upbar - A bar would be called a up bar if the close of the bar is above the close of the previous bar.

Downbar – A bar would be called a Downbar if the close of the bar is below the close of previous bar.

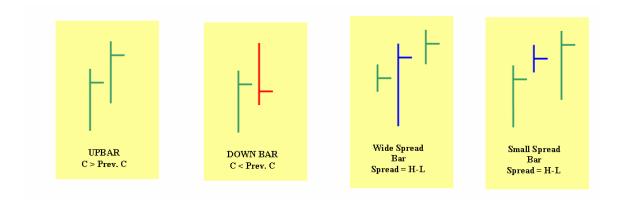
Spread – Spread is the difference between High and Low.

A wide spread Bar – If the spread of the bar is above 1.8 times the average spread then we will term it as a wide spread bar. The factor of 1.8 is a tentative one.

A narrow spread bar – if the spread of the bar is 0.8 times the average spread then we will term in a narrow bar. The factor 0.8 is again tentative.

# Note:

The problem of calculating the average spread is that during volatile period the average spread is high and in non volatile period the average spread is lower. So a bar which could be termed as a wide spread bar (WRB) in non volatile times could become a average or even a Narrow spread bar (NRB) in volatile times. For simplicity sake and to take the discussion forward we will keep the above factors common. At a later stage we can discuss about methods to arrive at better methods of defining the average which works at all times



Now let us define some Close positions.

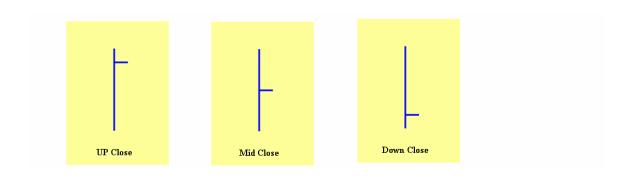
Up close: A close near the High would be termed as a Up close. (Upper 30% of the Bar)

Down close: A close near the Low would be termed as Down close (Lower 30% of the Bar )

Middle close: A close in the middle would be termed Mid close (between 30% to 70%)

Please note that the values mentioned above could controversial. But for this discussion we will take these values and move forward.

Now we have some basic tools to analyze the bars. Next we will look at volume.



Finally... we will step in the actual VSA. VSA measures the weakness and strength of individual bars. In addition it looks at the background strength/Weakness. So we have to always look out for Weakness in a uptrend and for strength in a down Trend.

Each bar could be characterized to indicate Strength or Weakness based on the Spread and volume.

We will start with looking out for weakness. First we will look into one of the most easily identifiable and strong indication of weakness which is commonly called the UPTHRUST Bar. And what a day to talk about Upthrust... The charts are full of them today...Even the nifty is showing a Upthrust...of course not a one of the ideal one. But distinct weakness shown on the nifty.

# What is an UPTHRUST BAR?

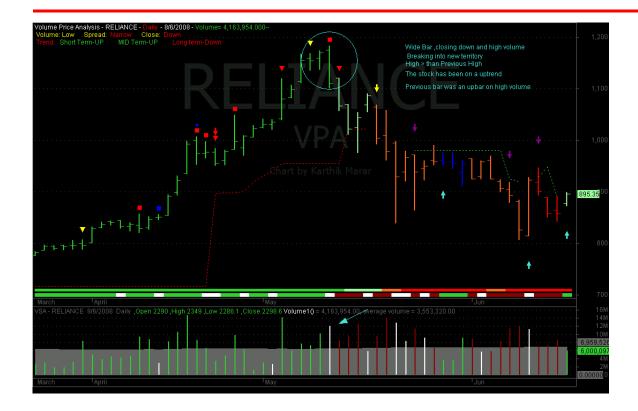
An Upthrust Bar is a wide range bar, with a high volume and closing down. It indicates that the prices were marked up during the day (for simplicity we use day, it is equally applicable on all time frames), the Trading activity was High as indicated by the High volume and the prices dropped to near the low (or to the low) towards the closing hours.

Looking the SM perspective what happened was that the SM marked up the prices in early trading hours indicating strong bullishness. Enticed by this bullish move the weak money also rushed to acquire the stock. Shorts if any would also have rushed for cover. Meanwhile the SM is quietly distributing their holding to the weak money. In the later part of the day the SM drastically marks the price down trapping the weak money holding stocks at much higher prices.

In order to make this ideal, the Upthrust normally appears after a wide range upbar with high volume. This makes it easy for the SM to markup the price and entice the weak money. Most of the time the Upthrust will be moving into new higher territory. The High of this bar will be much higher than the previous high.. High volume should be an important consideration.

What are the Things to Looks for in a Uptrust?

- 1. High Volume and How high?
- 2. Wide Spread?
- 3. Close, near or on the Low?
- 4. What was the previous bar action?
- 5. Did the bar into new territory?
- 6. Is the stock in an up trend?



The Answers for the above would decide how potent the Upthrust is.

High volume Upthrust are a sure indication of weakness, higher the Volume the stronger the indication. It may be even wise to get out of the stock if the Upthrust has ultra high volume

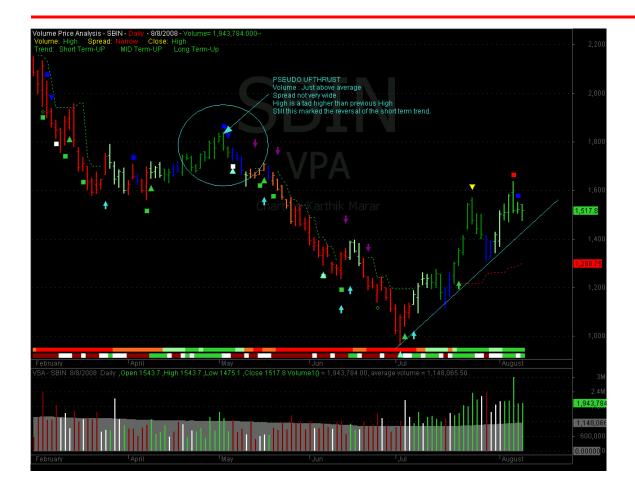
Wider the spread more potent the Upthrust

Lower the closer the stronger the indication of weakness. Ideally it should close should be the Low. If the close is towards the middle it would mean than the SM was not successful in marking the price down. There was too much demand.

An ideal Upthrust will move into new territory. The High will be very much higher than the high of the previous bar. This means the SM was really successful in marking the price up and many traders get trapped into bad positions in the end of the day.

Upthrusts are effective when the trend has been in force for some time. Sometime you would find weak up thrusts in early trends.

Many times you will Upthrusts with low volume. I call them Pseudo Upthrusts. These are not effective as the Upthrust. But are still signs of weakness..



#### Mike adds....

Pseudo upthrusts will generally occur when price is treading the fringes of a previous known area of supply (resistance) from below. This can be confirmed from the price action and pivots on the left. If price has reached the fringes of a known resistance area on the previous day, you would do well to look out for the open the next day and WAIT!. The SM has two choices,

- (a) To gap up the open above the old reistance. This indicates the SM's commitment to bullishness. This is to discourage selling by traders who are holding stock at previous resistance price range in the hope for more gains! But herein lies the delicate balance, You have to wait to see if the market makers are selling into the gap or not and if the SM is prepared to absorb the selling.
- (b) To open near previous close and to mark up the price rapidly. This indicates that the SM is not very bullish and is probing upwards in the resistance zone to see the market reaction. Depending on the reaction, the SM will decide upon further course of action. If the volumes are medium to medium-high and the price is not moving up (ie high equal to or not too much greater than previous high) then it's time to jump ship as the aim of SM this time is not to gun shorts stops (if they manage it then it's a bonus) but to distribute as much stock as possible before the intermediate down trend sets in (as it invariably will).

In both the cases it is better to wait & watch till almost the final outcome, as no amount of tape reading (in the absence of level 2 trading screen) or volume analysis will give a very clear picture in the intraday timeframe.

Pseudo upthrusts will rarely occur in areas of new price territory. That is not to say that Pseudo upthrusts are not potent.

We looked at the Upthrust and Pseudo Upthrsts.. We also looked at what to look for in an Upthrust Bar.

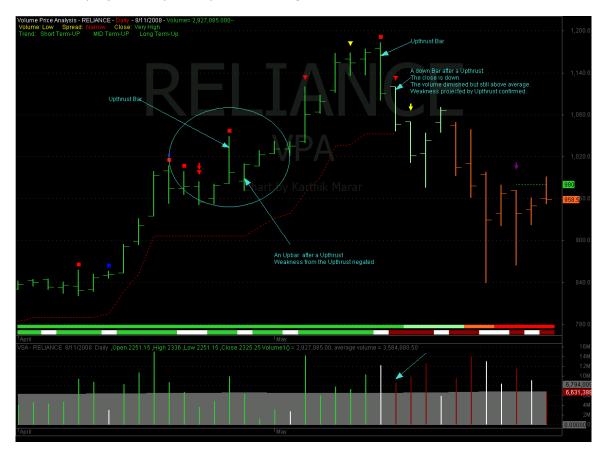
The obvious next question would be "What to do when we see an Upthrust".

The next bar after the UPthrust is very important. That helps us decide our action.

If the next bar is a Downbar closing down it is clear that the weakness and set in and the immediate trend is reversing. Here again the volume is an important indication. If the volume is high then it time to get out and wait to short. If the volume is low the weakness is not so pronounce and it may be worthwhile to wait and watch next bar movement. Here the spread and the position of Bar also give clues. If the Bar is wide closing down the weakness is more pronounced. Also if the high of the bar is towards the low of the Upthrust bar the weakness is enhanced.

If the down bar is with low volume and closing Up then the weakness of the upthrust bar is still in question. We have to wait for the enxt bar for confirmation.

If the Bar after the Upthrust bar is an Upbar closing up then it would mean that the weakness projected by the upthrust is negated.



Let us look at another indication of weakness. If the stock has been moving up on a high volume and then we encounter a down bar closing down towards low on high

volume is a sign of weakness. Volume need not be very high. Ideally the volume should be higher than the previous two bars.

If you look at the enclosed chart the stock was moving up on higher volume. Then we have the down bar closing down near the low. The volume is higher than the previous two bars. Looks like the SM have been distributing. The next bar looks more like a test for supply. The volume is low and the stock closing up. The low volume indicates supply is lower. Then again a downbar on higher volume. The weakness is more pronounced now. What followed is obvious...



### **NO DEMAND BAR**

Next we will look at another indication of weakness, the "No Demand Bar".

According to trade Guider/ tom Williams an Ideal No demand bar is a Upbar bar with narrow spread closing in the middle or lower and the volume is less than the volume of the previous bars. Though this is their basic definition I have seen subtle difference in the No Demand bar throwing up different commentaries.

But in general any narrow spread low volume Upbar closing in the lower half of the bar indicated No demand.

# What does this no Demand Bar indicate?

A no Demand bar indicates that there is no support from the SM. The SM is not interested in higher prices and they are supporting the stock. Whatever buying or selling is from the stray weak money entering and exiting.

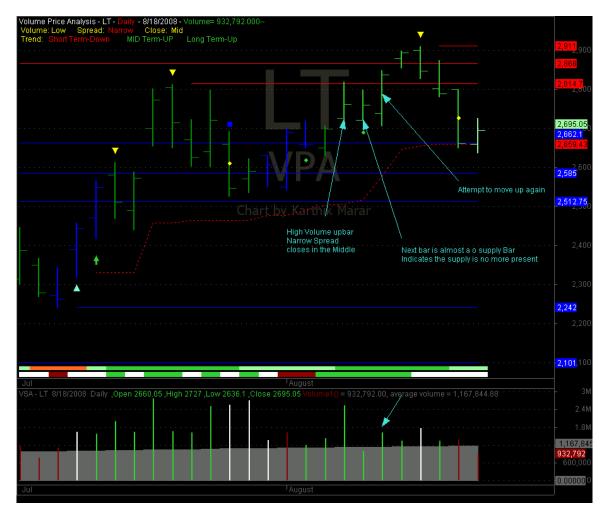
Consequently this indicates weakness. The No Demand bar does not indicate any immediate reversal. While analyzing a No demand bar we have to look at the prevailing background.

Does the background reflect weakness in terms of Upthrust or Pseudo upthrust? If the background is weakness the No Demand bar indicates enhanced weakness.



If the background does not show weakness the No demand bar does show weakness and does not necessarily indicate reversal. It only shows lack of participation from SM. We may soon see the SM moving in to take the stock up further. So it would be wait and watch time.

We will explore a little more on weakness indications. Upbars with high volume with narrow spread and closing in the middle or low indicates that supply is swamping the demand. This kind of bars would normally be seen near resistance lines. This by itself does not portend great weakness. But the following bars would indicate whether the supply is persisting or not. Persisting supply would definitely reinforce weakness. Enclosing the chart of L&T for the recent times when supply came in at the resistance line. The next bar shows that supply has decreased which encouraged the SM to push further. But the move faltered at the next level.



Let us move on....

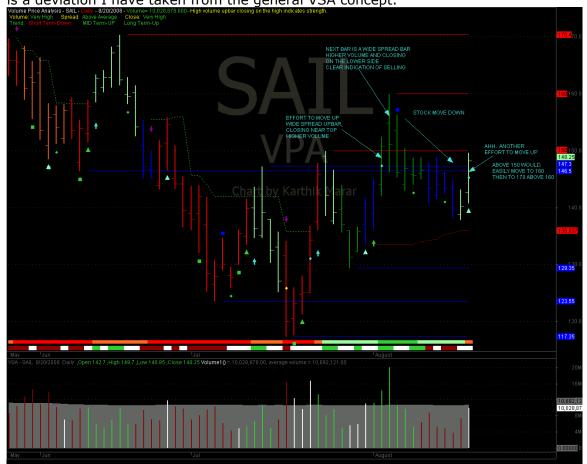
Currently we are discussing weakness. One last indication before we take up strengths is called "Effort without Result"

After accumulation phase is over the SM gets ready for the Mark Up Phase. In order to move the stock up the SM has to put in some effort. The effort to move the market up can be seen as wide spread upbars closing near the top with increased volume. The volume would never be excessive. It is easy to identify these bars.

If the "effort to move up" results in the stock moving up, the effort has yield the desired result. Many times you will find an effort to move up bar and the next bar would be high volume bar closing near the low indicating large supply coming in swamping the demand. So the effort to move up has not yielded the desired result. Frequently you would find such a situations at high resistance / high supply areas.

These Efforts without result are good indications of weakness. Most of the times you will find the stock moving down or side ways after this failure. This is because the SM would rather wait for the supply to vanish before repeating the effort. The SM will then test the market for supply before trying to move up further. The repeat move could be good entry points.

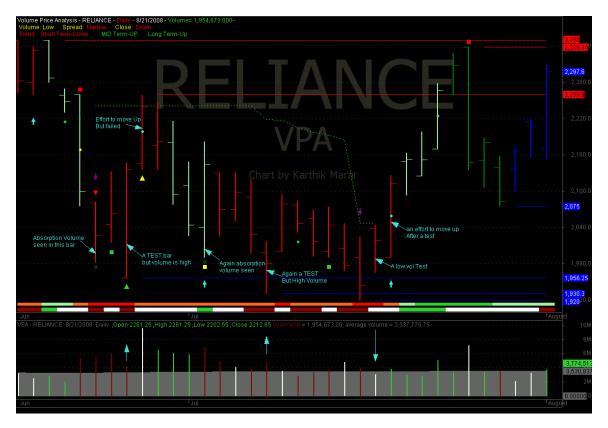
Actually though the VSA does not take into account the OPEN, I have noticed that an ideal "Effort to Move up" bar would open near the low and close up near to high. This is a deviation I have taken from the general VSA concept.



Now let us move on to the indication of strength. One of the most powerful indication of strength is the "Testing for Supply".

After down trend when the SM has accumulated enough and is ready to move the stock up again they test if there is still supply present. Also in an uptrend if the SM encounters large supply they would pause till the supply disappears. Then they would check again to see supply is present.

The Testing for supply is done by rapidly marking down the price. If the



stock recovers towards the high and the volume is low it would mean that there was no supply. If the volume is high and if the stock fails to recover it would mean that there still supply present. Low volume or less trading activity indicates a successful test.

A TEST bar typically dips into a previous high volume area and recovers to close near the high on low volume.

A test bar viewed in isolation does not signify anything. It necessary to look at the background to ascertain the strength of the Test bar. If there has been absorption volumes just before the Teat bar the strength of the test bar becomes more significant.

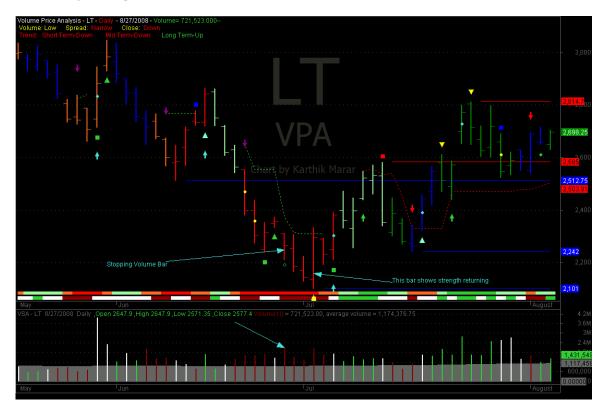
### **STOPPING Volume**

Now we will move further. The next VSA indication we will discuss is called the Stopping volume, also called absorption volume.

Normally in a down trend you will see a down bar with high volume bar closing on the upper side. This is called a Stopping volume. This indicates that the SM is absorbing all the stocks. The SM has decided to start the game all over again and have decided to stop the down tide and start accumulating. As a result the stock will soon see side ways movement or go into a long accumulation phase. In effect the stopping volume or absorption volume indicates that the long bearish move is likely to end soon.

An Ideal Stopping Volume bar will be down bar with high volume and closing near the top. However most of times you would see the close on the upper half of the bar.

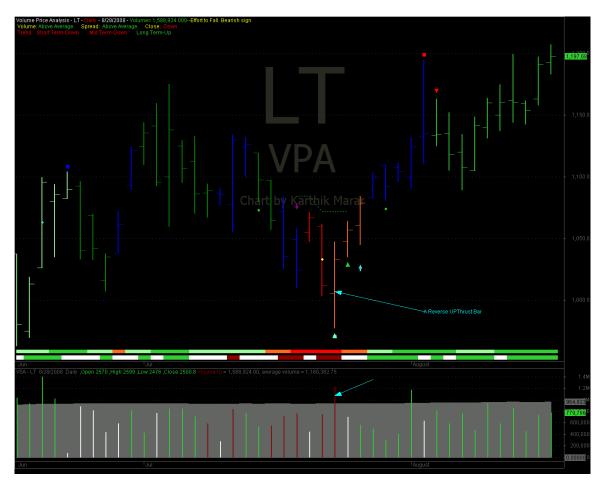
Stopping volume occurs after long down trend. Stopping volumes are basically alert to the impending reversal.



Next we will look another indication of strength called a Reverse Upthrust. Users of TG will not find this in their software. However I do find it a useful indication.

Just like the Upthrust bar we will find in a bearish move a High volume wide range up bar with the low chartering into new lows and the closing will be near the high. This is a good sign of strength returning and you find the trend reversing almost immediately.

The reverse Upthrust is rare and is found rarely at bottoms. Finding the bottom is more difficult than finding the Tops. Most of the time the bottoms will see stopping volumes, some sideways moves and multiple tests before we see a reversal of the trend. It is also common to see consolidation bases at the bottoms.



Any high volume wide range upbar in a down trend would indicate strength. However these kinds of bar can be seen any where in a down trend. It could appear before the temporary bounces / retracements during the downtrend. The difficult lies in the recognizing the strength returning after the bottoms.



Next Indication we are going to look at is called "No Supply". As the name signifies this bar indicates absence of supply and indicates strength.

The No Supply bar is a narrow range low volume down bar closing in the lower half. The No Supply bars are found in the early Bottom reversals and indicate strength. It is also common to find these bars in an up trend which are indications of continuation of the trend. They would also be found on consolidation bases.

A No Supply indication has to be read in context with background. At bottom reversal areas they indicate there is no supply available. Then the SM gets ready for mark up. Hence they indicate strength especially if they appear before/after test bars.

During up moves a No supply could indicate non participation from SM. IMHO this is one of the difficult indication to interpret.



#### **SUPPORT & RESISTANCE**

It is widely believed that SM respects the support and resistance areas.

Before we proceed with Support and Resistances with regards to VSA let us look at some basics about support and resistances.

The general practice followed by most of us is to draw lines from previous swing Highs and Lows (or high and low pivots). Once these lines are they are taken as Support and Resistance lines .. I repeat....LINES... IMHO this is one of the basic folly we make... The question we ask here is "How can a single price act as a Support or Resistance Line?" It is like assuming that in case of resistances there are a huge numbers of people holding the stocks at this particular price and early waiting sell.

A more reasonable assumption would be that there are many holding the price at and around last swing high. So there would be a area or a zone of supply/Demand rather than a single price. In case if the last swing high was an Upthrust bar the whole range off the bar could become a supply rich area.

The point here is that not all swing Highs and Swing Lows offer Resistance / Support. A swing high can be considered as a resistance only if the price reacts at that level. Till then a swing high remains a swing high. Same is the case for the Supports. Swing lows become swing lows only if the price reacts at these levels

Enclosed is charts explaining this concept..

Please feel free to express contrary views if any... More on Support and Resistance Later



An important thing to note here is that the Resistance areas do not represent large supply waiting to be dumped. In the same way the Support areas do not represent a huge demand waiting to lap up all the supply coming in.

It is better to consider the resistance areas are zones where selling pressure increase and support areas represent zones where buying pressure increases.

Now the question is what Resistance and support has to do with VSA? As mentioned earlier the SM generally give due respect to the Resistance and Support areas as they represent zones of Selling pressure and Buying pressure.

In general increased volume with increased spread as the stock approaches a resistance area is a bullish sign. Falling volume and decreased spread would mean that stock would be stalled at these areas.

In the same way decreased volume and spread as the stock approaches support area is sign that the stock would take support in that area and reverse. Increased volume and spread would indicate that chances of the stock breaking the support are more.

If Resistance areas are crossed with high volume it is a sign of bullishness and if the crossing is with low volumes caution is advice. In the same way if supports are broken with high volume it is a sign of bearishness and low volume crossing should be viewed with caution. Going short on a low volume break of support could result in a bad trade.

The SM often attempt to push through the Resistance areas with a huge volume. These are clearly evident on the charts in terms of high volume wide range bars.

In general it always pays attention to resistance zone even if you are using you own trading systems. When "Buy' signals are generated near resistance zones one has to be careful.



### TREND LINES

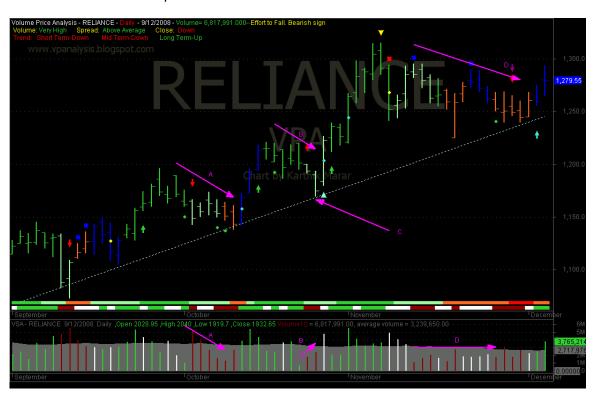
Next we are going to look at trend lines. We all use Trend lines and trend line breaks to decide reversals. We will look at trend lines with respect to VSA.

The general belief in TA is that Trend lines offer support in up trends and also act as resistances in downtrends. We will not go into the details of why and how of this belief. Instead we will look at the how volume and spread can give us clues whether the trend line will hold or break.

For example we will take an uptrend. When the stock retracts towards the trend line, small spreads and lower volume indicate as the stock approaches the trend line indicates that the stock is likely to be supported by trend line. Higher volumes and wide spread indicate a probability of a trend line break. Trend lines are resistance areas and effort is needed to break the trend lines. Wide spreads and high volumes are indications of this effort.

Many times we will see the SM absorbing the supply near trend lines. This is a bullish indication as the smart money is bullish on the stock and is interested in higher prices. So when there is lot of supply near trend lines they absorb the supply to keep the prices above the trend line.

Let us look at an example with a chart



A) We can see that the volume is decreasing and the spreads are narrower as the prices retrace towards the trend line.

- B) Here the volume is increasing as the prices approach the trend line. This would suggest increased probability of a Trend line break.
- C) We have a bar with increased volume and closing near the low. This bar indicates that there is increased supply. The next bar is an effort to Rise bar. This would mean that the SM is interested to keep up the price and they have absorbed the supply on the previous day. Entry / Adds on such effort to rise bars near trend line often result in a good trade.
- D) Here the volume is simply tapered off. There seems to general lack of interest on all sides. (This are area shows a failed test and no demand bars indicating a general weakness). However volume came in near the trend line and stock is again going up towards the right edge.

# **Reversal and Retracement**

One of the difficulties we face when analyze prices is determining whether the stock is going through a reversal or just a retracement. If we assume that a retracement is in progress and it turns out to be a reversal we end up giving away too much. At the same time if we assume a reversal then we would be out of the trade too soon. These apply specially for positional traders.

So how do we get a clue whether it is retracement or a reversal? Following are the basic things one should look at.

#### RETRACEMENT

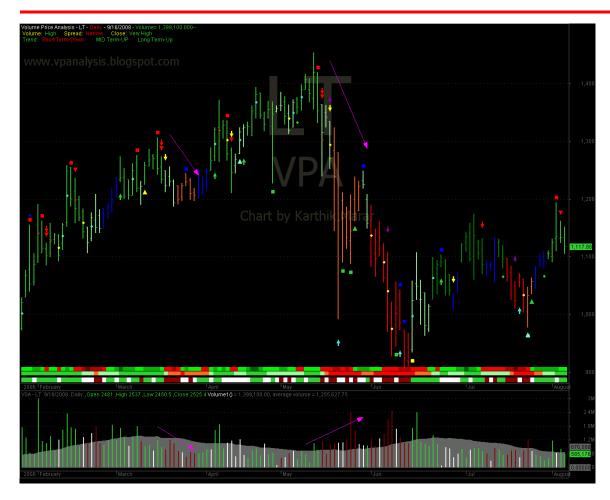
- 1. Lack of volatility
- 2. Small spreads
- 3. Decreased Volume

# **REVERSAL**

- 1. Increased Volatility
- 2. Large spreads. Especially Effort to Fall bars.
- 3. Increasing volume.

The simplest thing we can do is to draw arrows for the stock movement and the volume. In retracements you will the arrows are in the same direction. And in case of reversal the arrows will be in opposite directions.

Just enclosing an example.



### TREND CHANNELS

Next I will touch on the concept of trend channels. Tom Williams briefly mentions this in his book. He calls then Trading Ranges though I prefer the term Trend channels as in we will find the stock is actually trending up or down when we look at from a wider view. This is actually different form the horizontal trading ranges where the stock movement is sideways. Of course I have taken some deviation from his concepts.

Many times you will find a stock moving in a upward or downward channel. We can draw upper trend lines and lower trend lines and they would almost be parallel. Tom Williams divides this channel into upper quarter and lower quarter and most reactions happen in these quarter. He also calls area above the upper trend line( or supply line) as over bought zone and the area below the lower trend line as over sold zone. The middle area is where we can expect the stock to move anywhere.

But I go a step further and I draw a middle line. The interesting observation here is that it is around this middle or mean line where most we see a conflict or tug of war between the bulls and bears happen and many reactions happen around this line. I call this the "Conflict Zone".



From a VSA perspective we will find support or strength coming near the bottom trend line. We will also see weakness creeping in in terms of upthurst bars or pseudo upthrust bars near the upper trend line. In most cases the Trend channel is wide enough to give some nice trade opportunities.

#### TRADABLE BASES

Accumulation bases can be found in various shapes and sizes. The most common recognizable one is the one where the stock moves sideways in a narrow range and the volume has dried up.. However we will also find rectangular bases where the stock moves up and down but restricted within a wider range. You will find weakness coming in at the top of the range and strength at the bottom of the range.

Many of the ranges are easily tradable. For a trader or investor with longer term view the idle time to get in would be when the stock bounces back from the support line. This way it the stock breakout he would have the idle entry point. He also has the option to quit at the stock fails to cross the resistance at the range top, For a short term trader who is adapt in trading the long and short this kind of base provides good opportunities to go long at the support line and go short at the top of the range.

Just like the Trend channels described before we can find a zone in the middle of the range which I call the conflict zone where many reactions take place.

Here is just an example of tradable base. More tradable bases will be covered in my other threads.



