



Float Charts – A Simple Explanation

By Steve Woods

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The Woods Cumulative Volume Float Indicators were invented by Steve Woods and are more commonly known as Float Charts. Float charts give visual form to the expression, *the smart money buys at the bottom and sells at the top whereas the dumb money buys at the top and sells at the bottom*. The smart money is those investors who buy and sell at exactly the right time; and the dumb money is those investors who buy and sell at exactly the wrong time. Float charts also give visual form to the most important of technical terms: *accumulation, distribution, support, resistance, bottoms and tops*.

Accumulation is the price level where the smart money is buying and the dumb money is selling. Distribution is the price level where the smart money is selling and the dumb money is buying. Support is a price level where there are more buyers than sellers and prices stop declining. Resistance is a price level where there are more sellers than buyers and prices stop rising. Bottoms are the lowest price levels on a stock chart. Tops are the highest price levels on a stock chart.

The greatest strength of float charts is as a teaching tool to explain these basic concepts of technical analysis. As technical indicators they often lead or are coincident to the changes in a stock's price direction and offer excellent potential buy and sell signals. Their greatest weakness is that they are deceptively simple in principle but contain a mirror image nature that tends to confuse the analyst as to whether a signal is a buy or a sell.

Float Chart Parameters

The Float

Whereas most analysis of stock charts focus on a stock's price and the volume of shares traded, float charts incorporate a stock's float number as well. The float or floating supply is the shares actually

available for trading. A stock's float is shares outstanding minus ownership by insiders. The easiest way to think of this is to imagine a company that comes public and issues a large number of shares outstanding. Of those shares it sells some to the public and the company insiders keep the rest. The shares that are sold to the public and are actively being traded are the float.

The Float Box

The float indicator used more than any other is known as the float turnover box or simply the float box. It is viewed on a price and volume chart as a gray rectangle with two red horizontal lines. It shows the distance on the chart in which the cumulative total of shares traded equals the number of shares in the floating supply. The box represents the shortest amount of time that a stock's float can completely change ownership and it gives a way of hypothetically estimating the distance it takes for a change of ownership of the stock to occur.

A stock's *current* float box is always found on the far right of a price and volume chart. It gets re-plotted on a day to day basis much like a moving average. The backward cumulative volume count starts with the volume of the current bar which is added to the previous day's volume and that total is added to the previous day and so on backward in time until the cumulative total is equal to or greater than the number of shares in the stock's floating supply.

The float chart software designed to work with float data allows the user to move the current box to previous bars and when the box is moved back in historical studies it reveals that a float box is always found at all long term tops and all long terms bottoms.

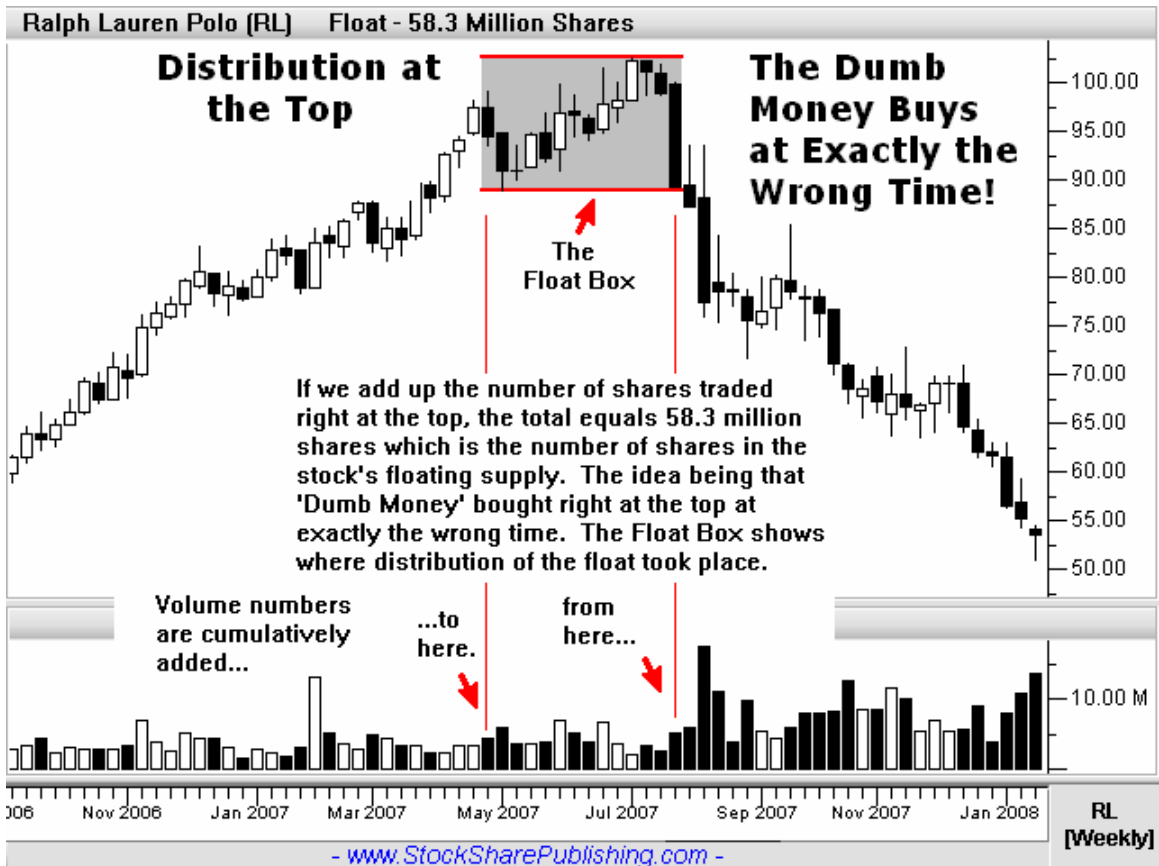


Chart 1

For example study Chart 1 of Ralph Lauren Polo (RL) which in 2007 had a floating supply of 58,300,000 shares. The float box at the top of the chart was created by adding volume cumulatively starting from the bar of July 27th, 2007 over to the bar of May 4th, 2007. The table below contains the weekly volume numbers during this time span and the cumulative totals that were used to construct the float box.

Week Ending	Number of Shares Traded	Cumulative Total	Float Number
1)7/27/07	5,559,100	5,559,100	is < 58,300,000
2)7/20/07	2,669,200	8,228,300	is < 58,300,000
3)7/13/07	3,324,900	11,553,200	is < 58,300,000
4)7/06/07	2,022,400	13,575,600	is < 58,300,000
5)6/29/07	3,693,900	17,269,500	is < 58,300,000
6)6/22/07	6,548,800	23,818,300	is < 58,300,000
7)6/15/07	3,729,600	27,547,900	is < 58,300,000
8)6/08/07	5,088,600	32,636,500	is < 58,300,000
9)6/01/07	6,816,500	39,453,000	is < 58,300,000
10)5/25/07	3,981,200	43,434,300	is < 58,300,000

11)5/18/07	3,586,700	47,020,900 is < 58,300,000
12)5/11/07	3,714,500	50,735,400 is < 58,300,000
13)5/04/07	5,698,500	56,433,900 is < 58,300,000
14)5/11/07	4,358,800	60,792,700 is > 58,300,000

Table 1

It is during the fourteenth week of the backward count in which the cumulative total equals the float number and by the end of the week it is greater than 58,300,000. On a weekly chart the float box is created from the beginning date of July 27th, 2007 over to the week ending May 4th, 2007. The upper and lower lines of the box are then placed at the highest and lowest prices during the 14 week time frame.

The float box is an easy way to show where the change of ownership occurred right at the top as the smart money was selling their shares to the dumb money. For stocks that are making long term bottoms after long price declines the principle is the same. Right at the bottom, the dumb money sells their shares to the smart money. The smart money accumulates the floating supply of shares when they are of the greatest value. Once the float has been accumulated, any new demand drives the price of the shares higher.

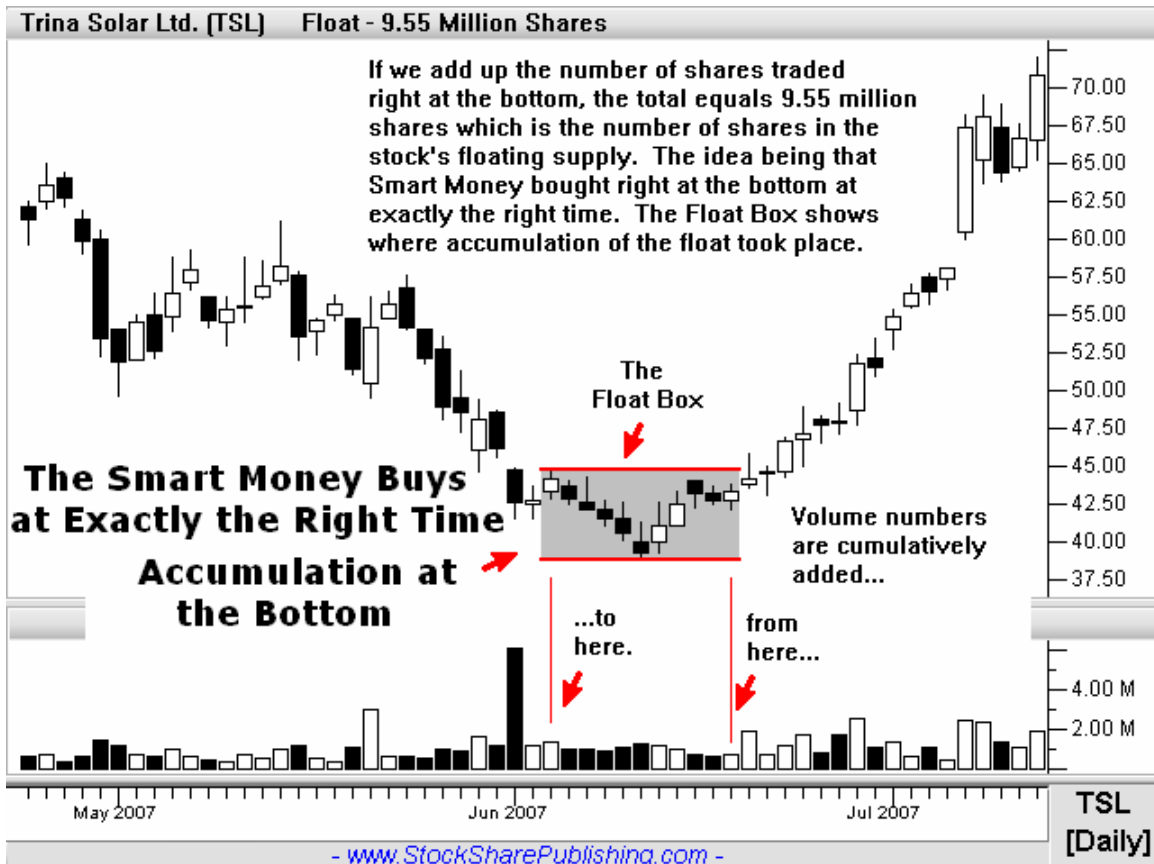


Chart 2

An excellent example of this is Trina Solar Ltd. (TSL). By adding cumulatively the number of shares traded during the 13 day float box right at the bottom we can see the area in which the number of shares traded equals the number of shares in the float. (See Chart 2)

The Float Box as a Measuring Tool

The float box is not only always found at all long term tops and bottoms, it can sometimes also be found to measure the distance of a variety of price moves with amazing exactness. For example, on some occasions a stock that is in an up trend will go sideways for one float turnover before resuming its up trend. This implies that the stock went through a change of ownership while moving sideways and the new owners are holding their shares tightly. Any new demand causes the price to rise. An example of this is seen on the chart of Cal-Maine Foods (CALM) (See Chart 3).

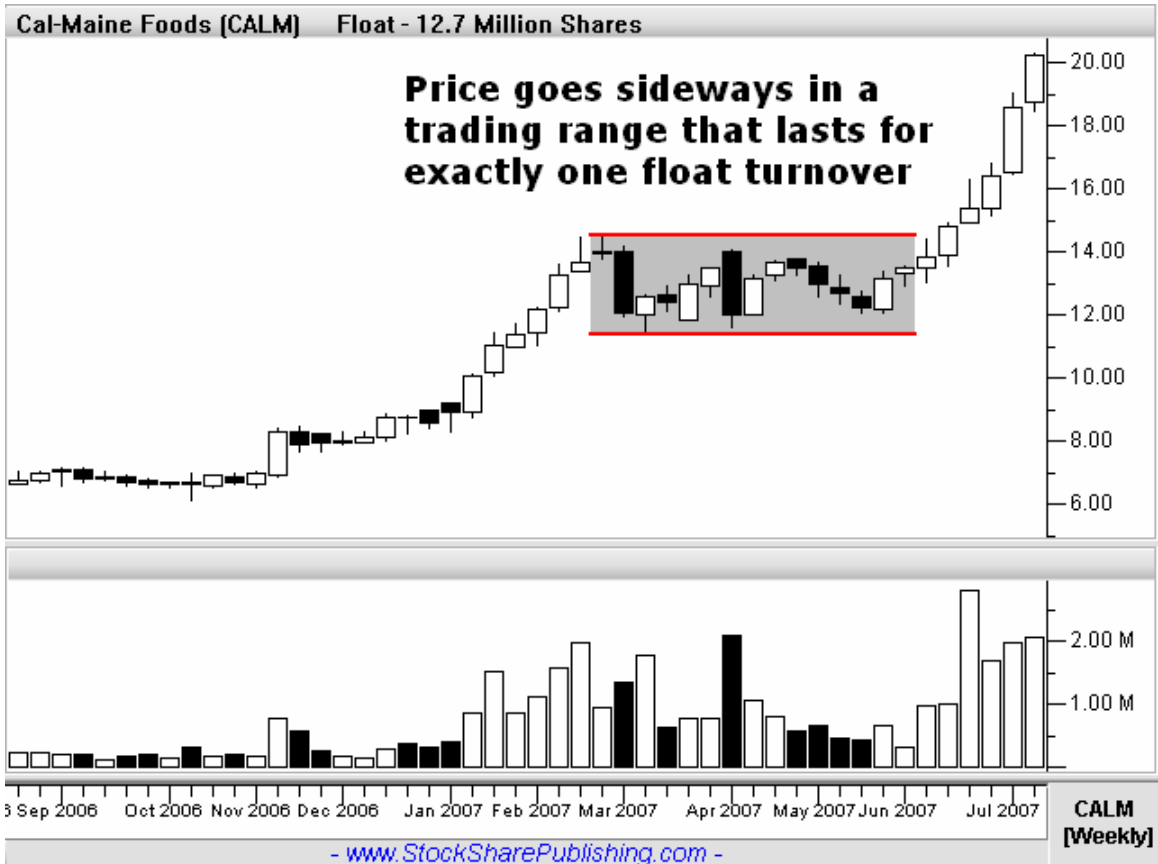


Chart 3

Another quite common occurrence is for price declines to be exactly or almost exactly one float box in length. Here are two examples: JDS Uniphase Corp. (JDSU) and Biomed Realty Trust (BMR) (See Charts 4 and 5).



Chart 4



Chart 5

For those who are skeptical and believe that this is just random look at the chart of Sonic Corp (SONC) (See Chart 6). In the bear market of 2008, it had three price declines and each of them was one float box in length. In stock market lore there is a term that says “don’t buy a falling knife” which means be careful about buying stocks that are in free fall as they can easily go lower. For traders who try to buy close to the exact bottom of price declines, float charts offer a measuring capability that can help immensely in finding the bottom.



Chart 6

Although price moves to the upside on occasion last for one turnover they are not as common as moves to the downside. OIS Pharmaceutical (OSIP) is one example. (See Chart 7)

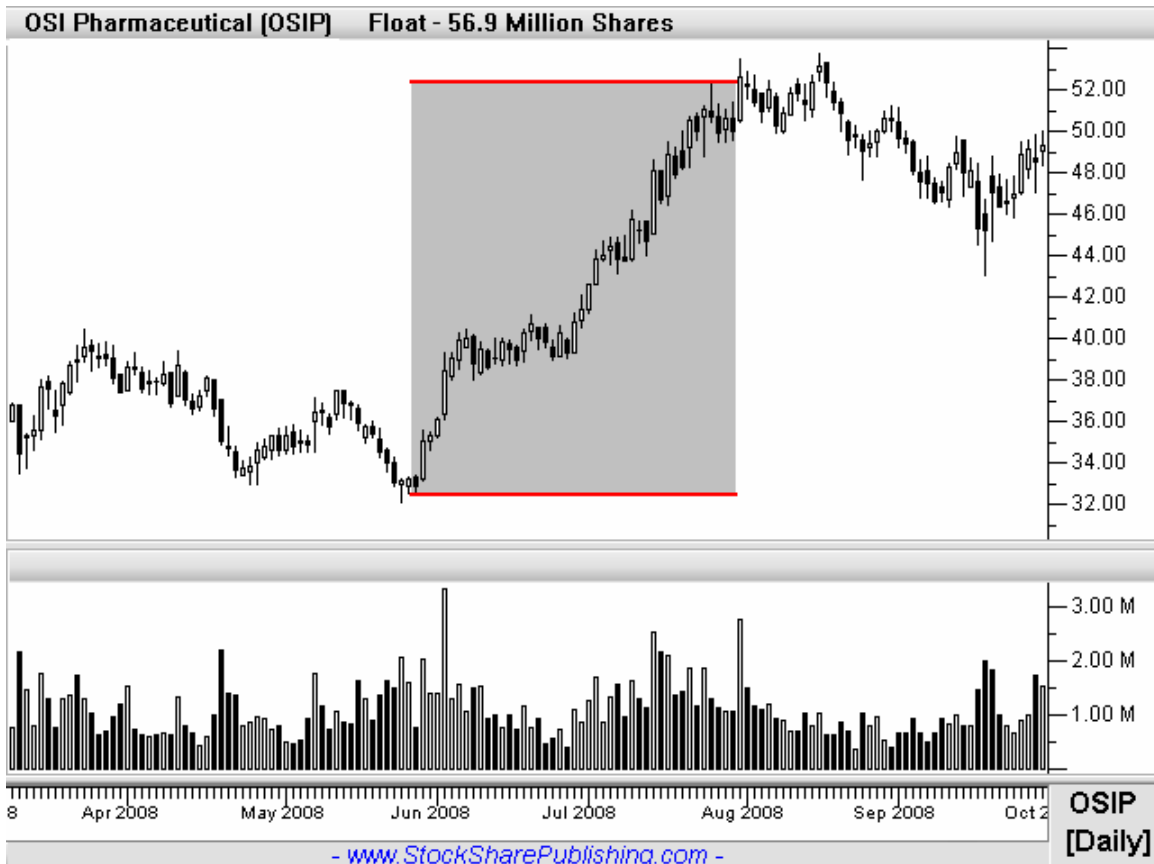


Chart 7

The Float Channel Lines

The second most commonly used float indicators are two channel lines, the 100% float channel lines and the 50% float channel lines. These are used to find support and resistance levels where a stock's price changes direction. The 100% float channel lines are created by using the actual float number; the 50% float channel lines use one half that number. Both the 100% and 50% float channel lines are created by plotting the prices represented by the upper right hand corner and the lower right hand corner of the float box and they are plotted on a day to day basis. The resulting channel lines show the tracks the float box has made in the past. The easiest way to understand how the float channel lines are created is to think of a railroad box car that moves forward each day by laying down new track. The tracks then trail behind the float box as it moves forward day after day.

For example, study Chart 8 and Chart 9 of Ralph Lauren Polo (RL). Chart 8 shows the 100% float channel lines and Chart 9 shows the

50% float channel lines. Note that the 50% channel lines are dotted. This allows us to distinguish them from the 100% lines. Notice that the gray float boxes on both charts are in their current position, which is at the far right of the chart. In normal practice, the 50% float box as seen on Chart 9 is never shown. It is only shown here to demonstrate how the 50% float channel lines are based on the upper right and lower right hand corners of the 50% float box. Ralph Lauren Polo's float is 55.9 million shares, so the 50% float box would be based on 27.95 million shares which is one half of 55.9 million shares.

Also note that on both charts the current price bar at the far right of the float box penetrates below the float line of each float box. The reason for this is that the top and bottom lines are used as triggers to give alerts. If a stock's price is trading in between the two red lines then the lines continue to be plotted at the highest and lowest points of the backwards count. But whenever the price penetrates through the upper or lower line, the line is held at the previous level so that the stock's price can be seen piercing the line and an alert can be given that a breakout above the box or a breakdown below the box has occurred. Breakdown alerts only occur when the lower channel line has been rising. Breakout alerts only occur when the upper channel has been declining.

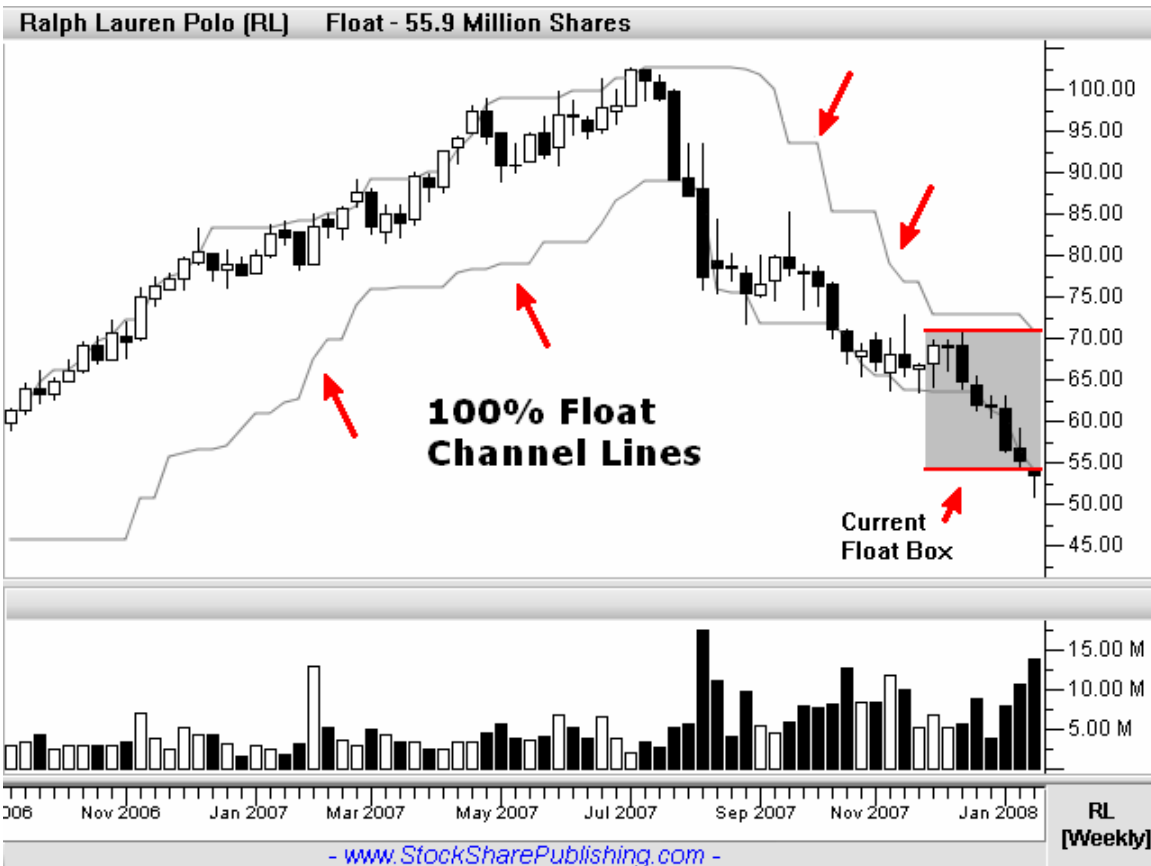


Chart 8

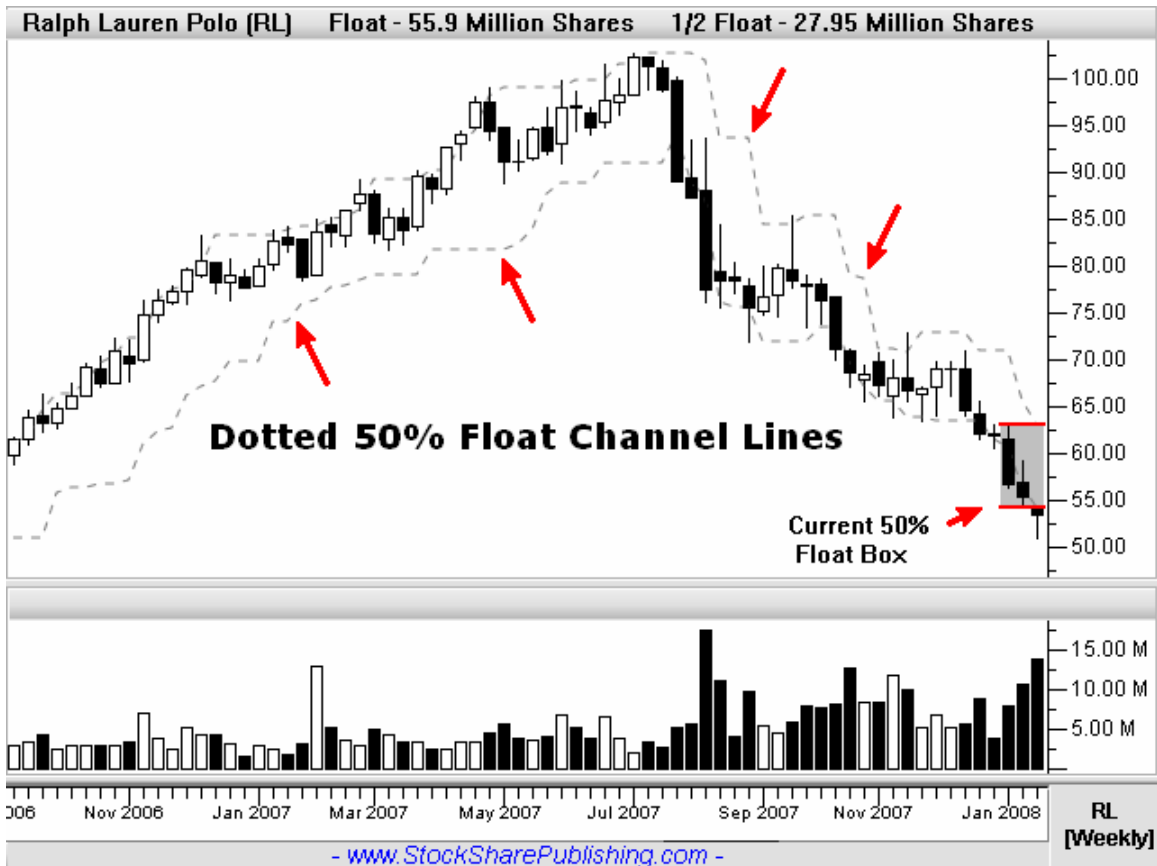


Chart 9

Normally the 100% and the 50% channel lines are not isolated on separate charts but instead are placed together in one integrated format. They have only been separated here to clarify how each is made. So let's look at a normal float chart that combines them together.

Chart 10 shows both the 50% and the 100% float channel lines as well as the 100% float box which is at the far right of the chart. Notice that whenever the 100% channel lines overlap the 50% line, the solid line is given preference and it covers the dotted line and hides it from view. When a stock is trending higher the dotted lower 50% line is visible and when a stock is trending lower, the dotted upper 50% line is visible. Also notice that the 50% float box is hidden from view completely. There is no need to see it because it is the channel lines that are useful. The current 100% float box on the other hand is always plotted on a float chart. This is because it gives us an easy way of looking at the current status of the stock. It is especially valuable for analyzing breakouts and breakdowns and the volume characteristics within the float box.

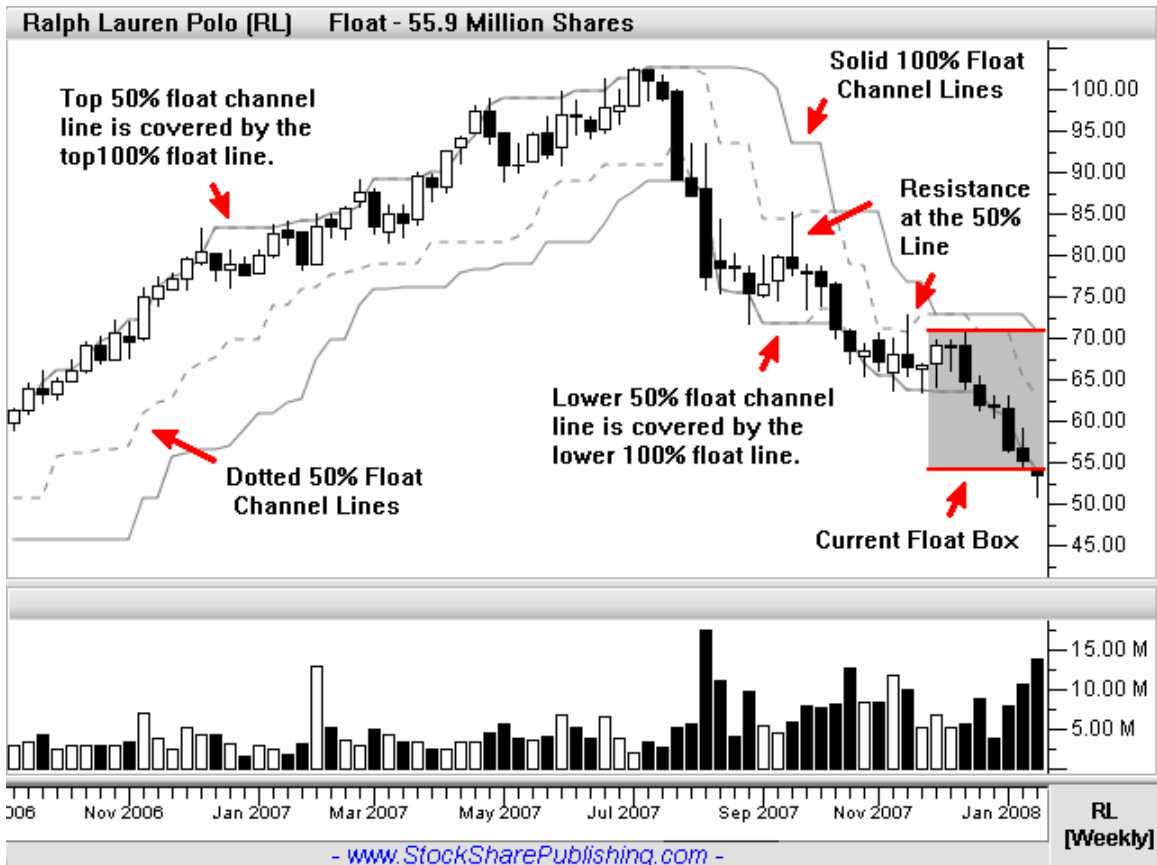


Chart 10

Long Term Change in Trend Signals

Imagine the price of a stock going lower and lower over several weeks. As the price dropped it would continually break below the lower line of its float box. If you were convinced that the company had a great future and the stock's decline was only temporary, then you would want to see the stock's price turn around and head higher.

But how would you determine that the long term down trend has changed. If the stock is going to turn around and head higher it will have to stop going through the lower line of its float box and it will have to breakout above the top of its float box. The initial breakout above the top line indicates that the stock potentially has been accumulated by the smart money and is now headed higher. This is exactly what happened with Trina Solar (TSL). After a long decline, its price pierced the top line of its float box. This was a signal that the

stock was no longer breaking below its float box but it was now breaking above it. See Chart 11

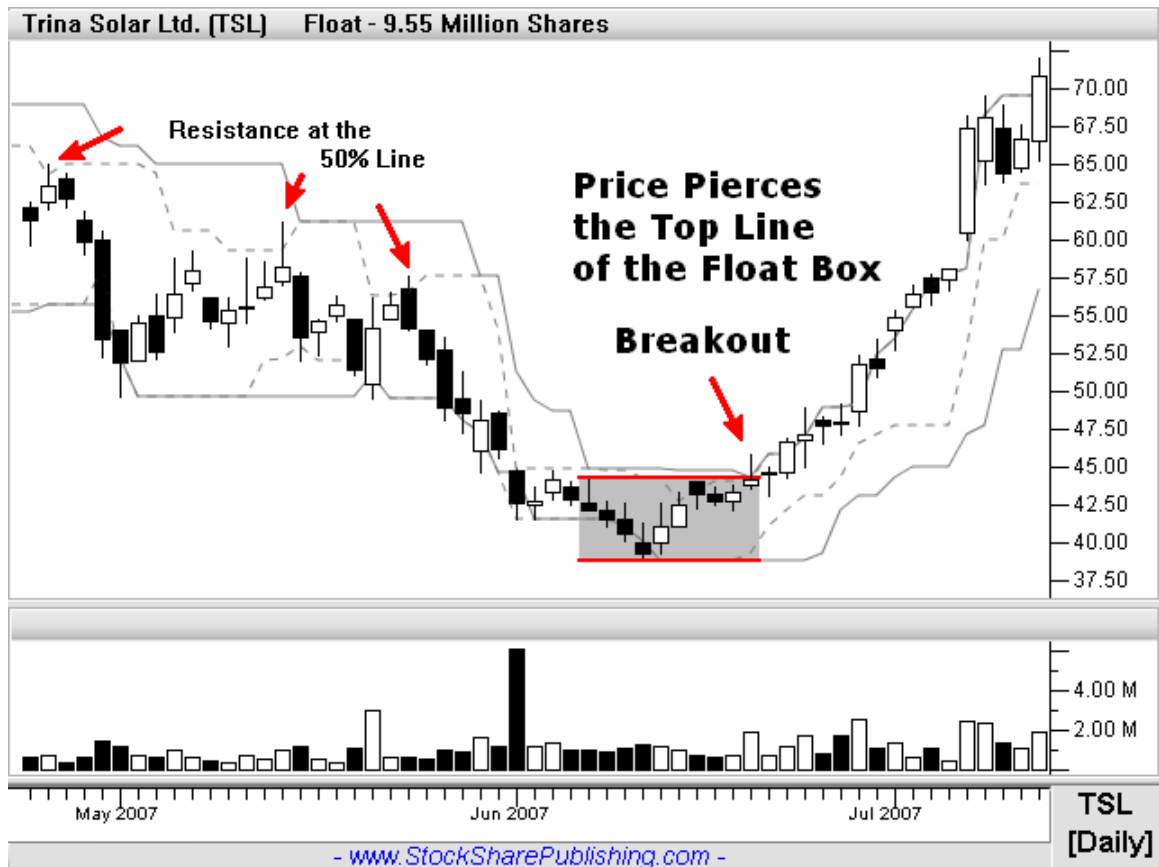


Chart 11

Now imagine the price of a stock going higher and higher over several months. As the price rose, it continually breaks above the top line of its float box. If you were convinced that the company had a bleak future and the stock's high price was only temporary, then you would want to sell the stock when its price turned around and headed lower.

But how would you determine that the long term up trend is actually over? If the stock is going to head lower it will have to stop going through the upper line of its float box and it will have to breakdown below the lower line of its float box. This would potentially indicate that the stock had gone through distribution to the Dumb Money and that the long term up trend had changed. This is exactly what happened with Ralph Lauren Polo (RL). After a long rise, its price pierced the lower line of its float box. This was a signal that the stock was no longer breaking above its float box but it was now breaking below it. See Chart 12

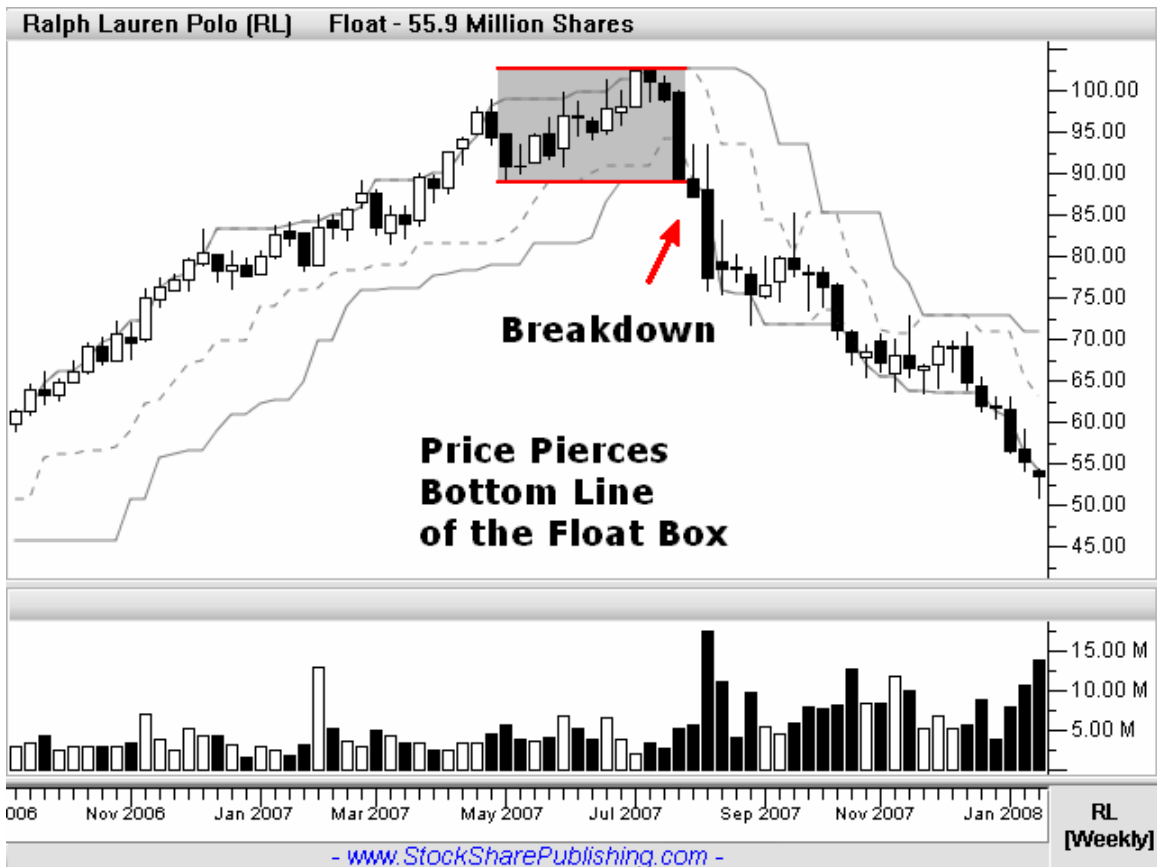
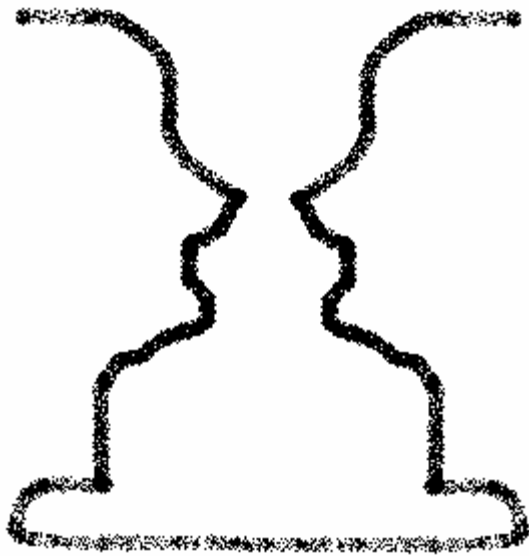


Chart 12

Deceptively Simple – The Mirror Image Illusion

If all we had to do to make money using float charts was simply to wait for a stock that is in a down trend to breakout above the top line of its float box and then after a big price rise simply sell it when it broke below the lower line, then float charts would be the holy grail of all technical analysis indicators. Unfortunately making money in the stock market is not that easy. The reason for this is that float charts have a mirror image illusion.

The best example of a mirror image illusion is the drawing of two people facing each other that also looks like a goblet. (See Figure 13) The tendency is to see what you want to see.



**Do you see two faces
or a goblet?**

Figure 13

What this means is that when a stock breaks below the lower line of its float box after a long price rise, its price may be headed lower or it may do the exact opposite. And when a stock breaks above the upper line of its float box after a long price decline, its price may head higher or it may do the exact opposite. This is because the upper line of the float box may or may not be a line of price resistance and the lower float line may or may not be a line of price support.

False Breakouts and False Breakdowns

Just because a stock breaks out above its float box after a long decline doesn't mean that its price will continue to move higher. In fact breakouts have a strong tendency to do just the opposite. Look at Chart 14 of U.S. Steel (X). From what we've discussed so far, it looks as though it is headed higher because it has just broken out above a float turnover box at a long term bottom. Now look at Chart 15, thirteen days after the initial breakout. U.S. Steel was 45% lower!

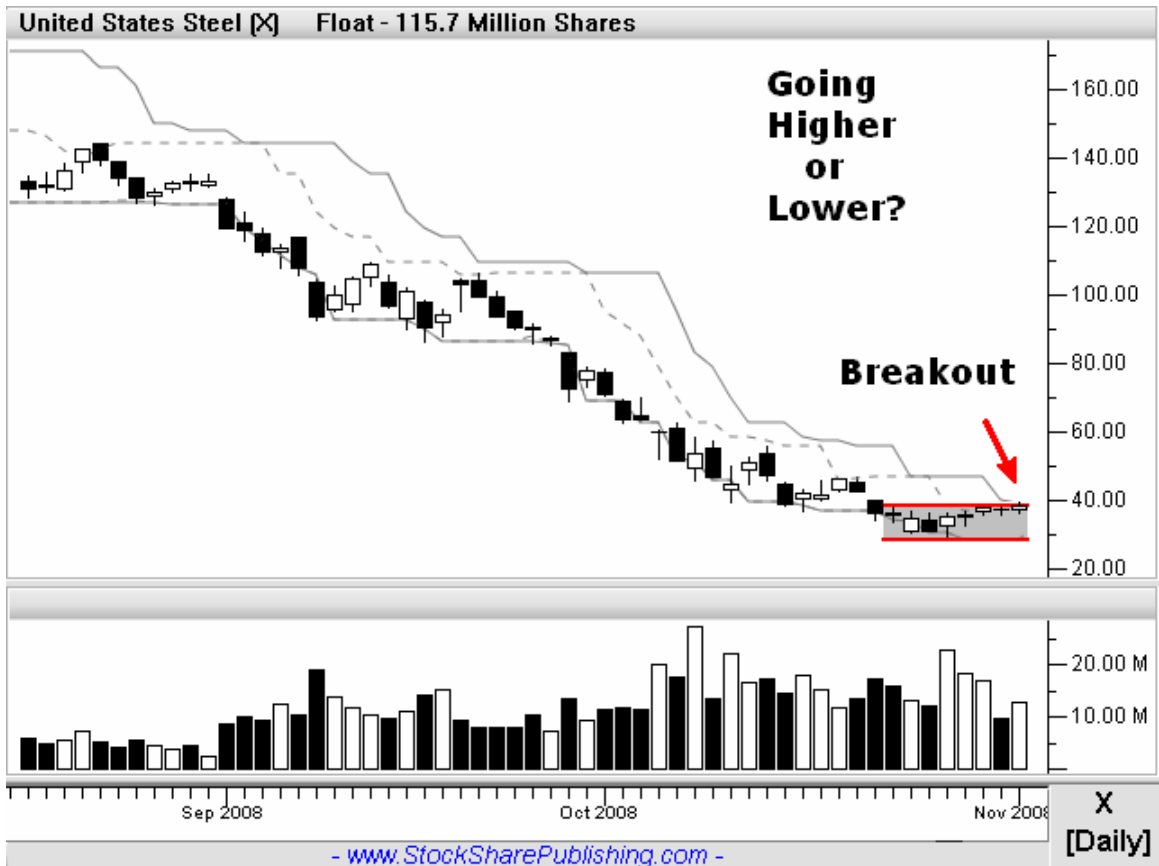


Chart 14

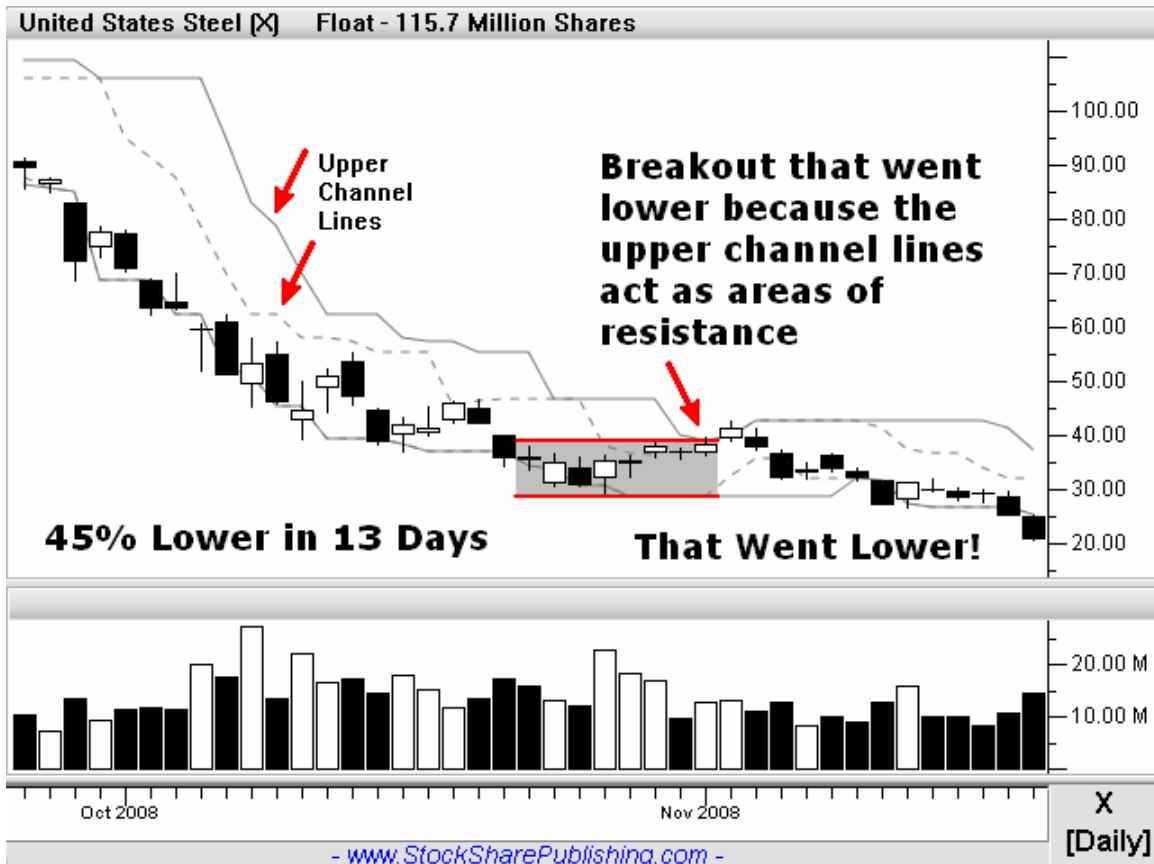


Chart 15

The same is true for stocks that break below the lower line after a long price rise. Look at Chart 16 of AMR Corp. (AMR). It looks as though it is headed lower because it has just broken down below a float turnover box after a long price rise. Now look at Chart 17. Sixteen days after the initial breakdown, AMR Corp was 34% higher!

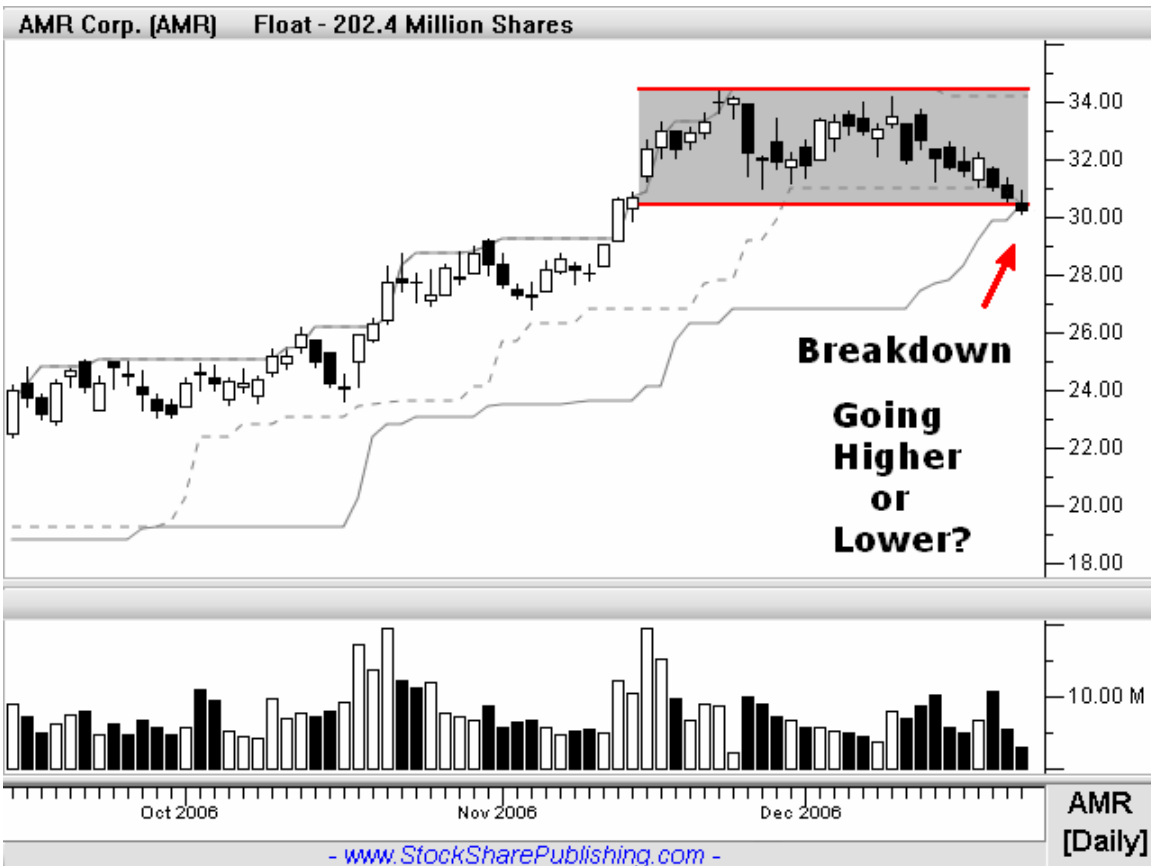


Chart 16

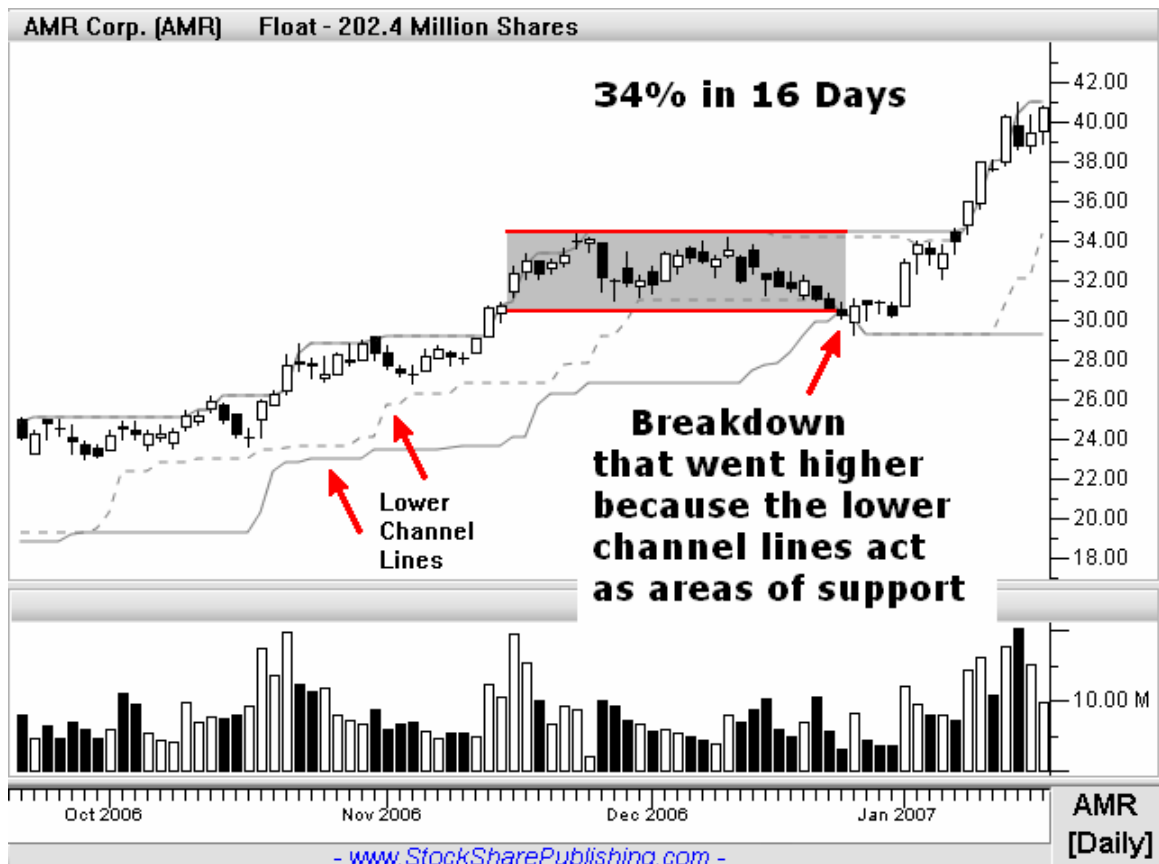


Chart 17

Solving the Mirror Image Dilemma

The solution to the mirror image dilemma can be summed up in the word: patience. When a breakout or a breakdown occurs it is imperative to wait for at least one or more *days of confirmation* in which the stock has what is called a *follow through day on volume*.

A follow through day on volume occurs when a stock's price direction is confirmed by volume that is greater than its average float volume. (The average float volume is the average number of shares traded during a float turnover. For example, if a float box is 20 days long and during the 20 days, 200 million shares traded, the average float volume would be 10 million shares.) Three examples of follow through days on increased volume can be seen on Charts 18, 19 and 20.

Follow through days do not guarantee that the stock's price will head higher but they increase the probability of a winning trade.

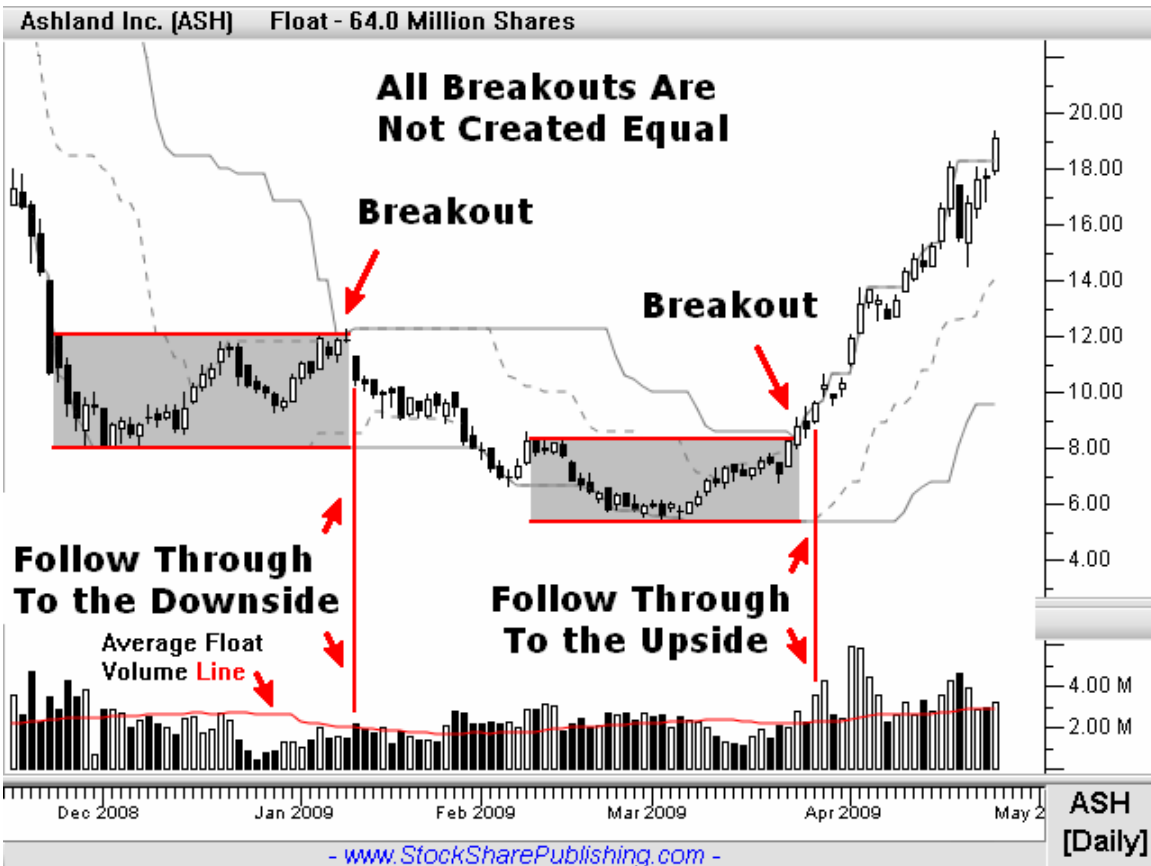


Chart 18

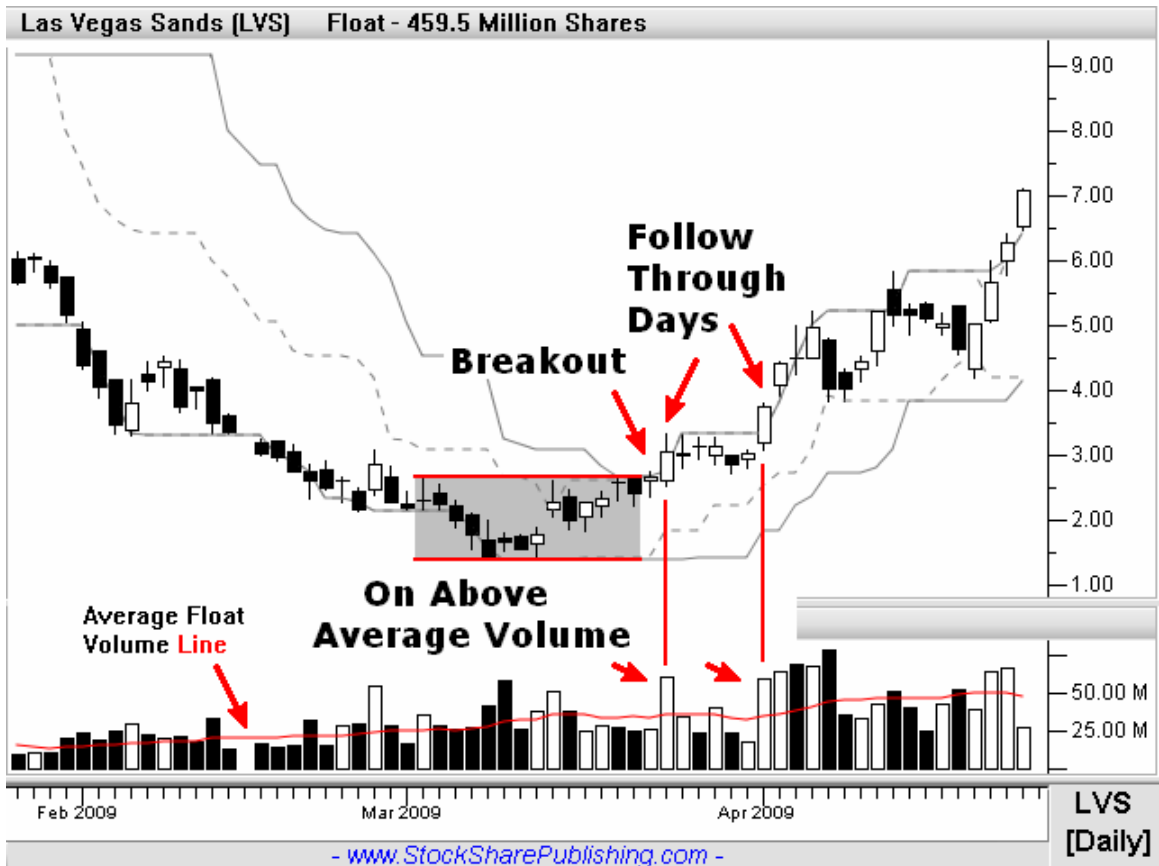


Chart 19

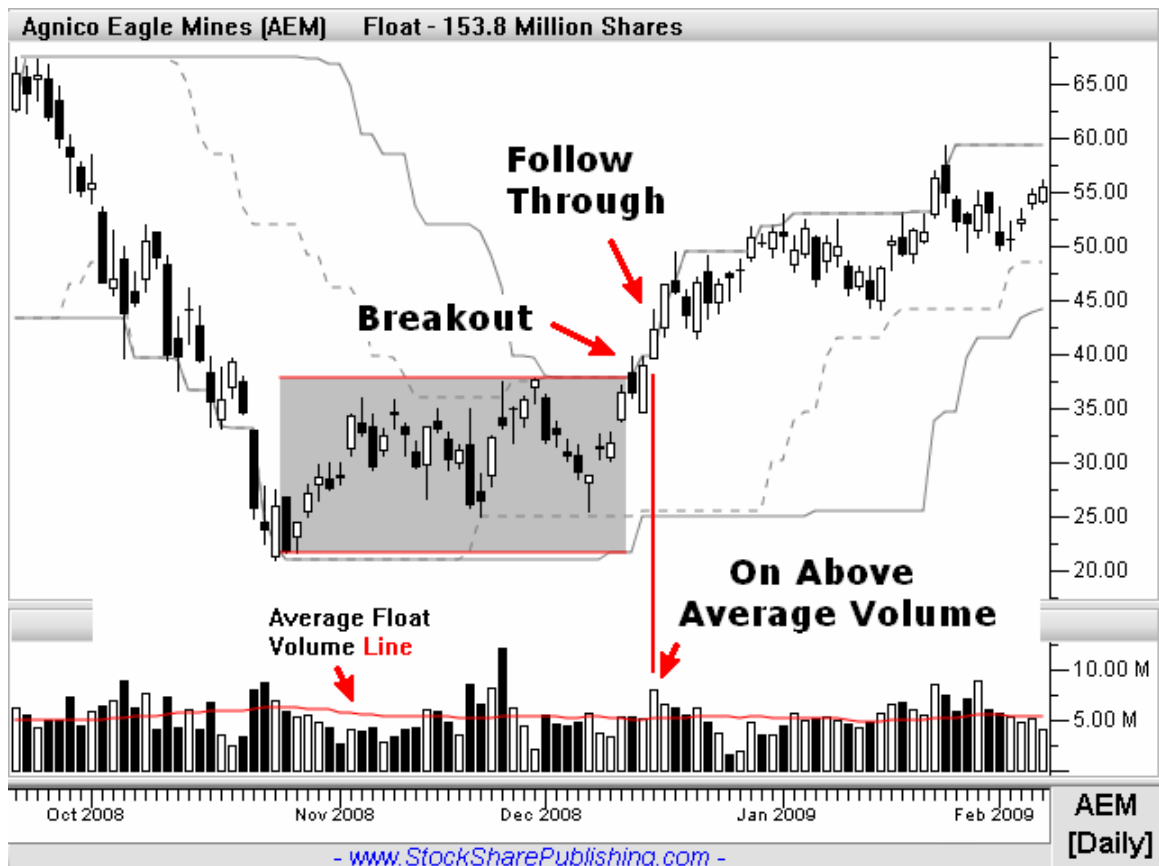


Chart 20

The 50% Channel Line as a Point of Support

Now that we've seen that the 100% float channel lines can help us locate areas of support in a rising stock and areas of resistance in a declining stock. Let's now look at the 50% float channel line. This line also helps to locate areas of support and resistance as well. Study charts 21 and 22 and you'll see a good example of this. In chart 21, the price comes right down to the 50% float channel line, finds support and bounces higher. In chart 22, the price rises up to the 50% float channel line, finds resistance and drops lower.

How is it that both the 100% and the 50% float channel lines can locate the exact areas that a stock's price will reverse direction? The reason is simply that the float boxes that are creating the lines often expand like an accordion away from a day at the back of the box which has a lot of volume. On a stock that is rising, this is called a day of strength in the background. On a stock that is declining, this is called a day of weakness. These are days in which the stock went higher or lower with a lot of volume. This indicates that a lot of buyers or sellers

came in at that level in the past and will likely do so again at that level. Since the 50% and the 100% lines are created from float boxes that can extend back to a day of strength or a day of weakness, they often show up as the exact point where the stock reverses direction. Chart 20 shows a day of strength in the background and chart 21 shows days of weakness. In both cases the stock reversed direction right at the dotted 50% float channel line.

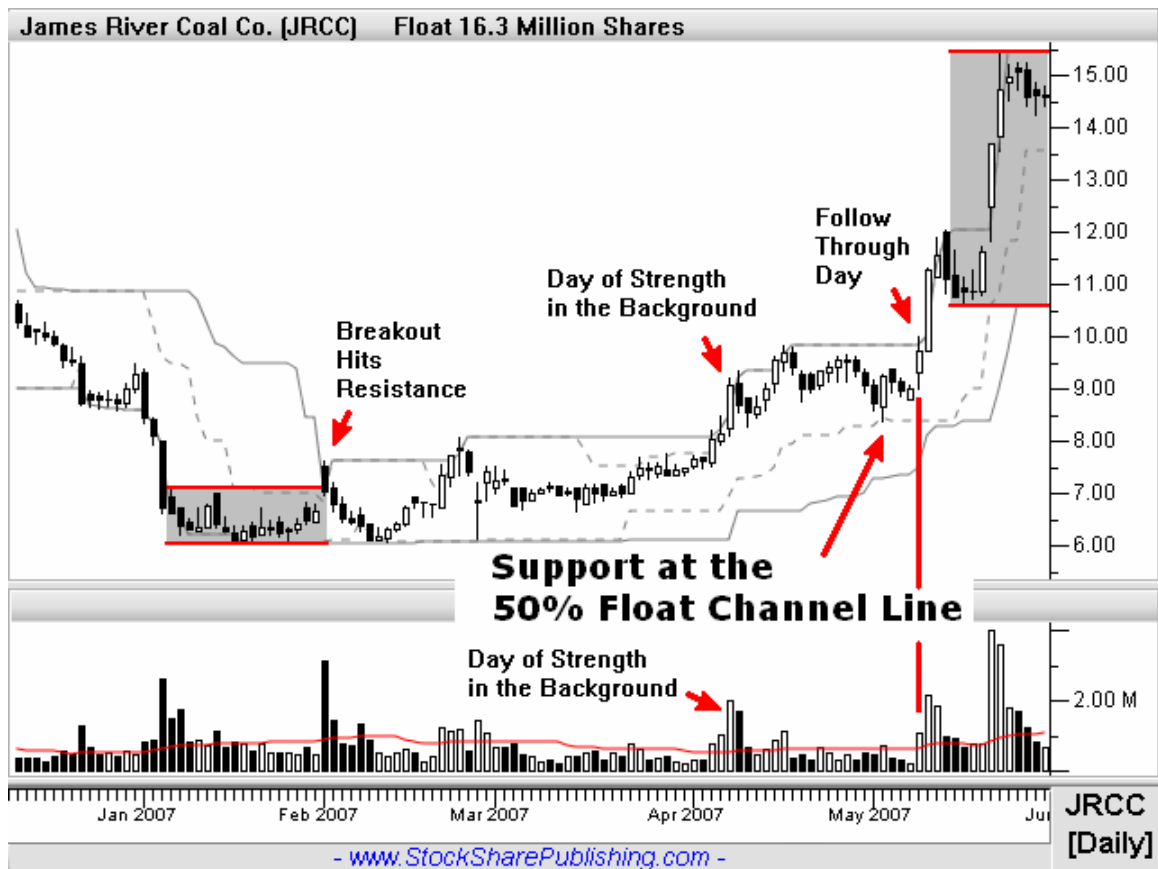


Chart 21

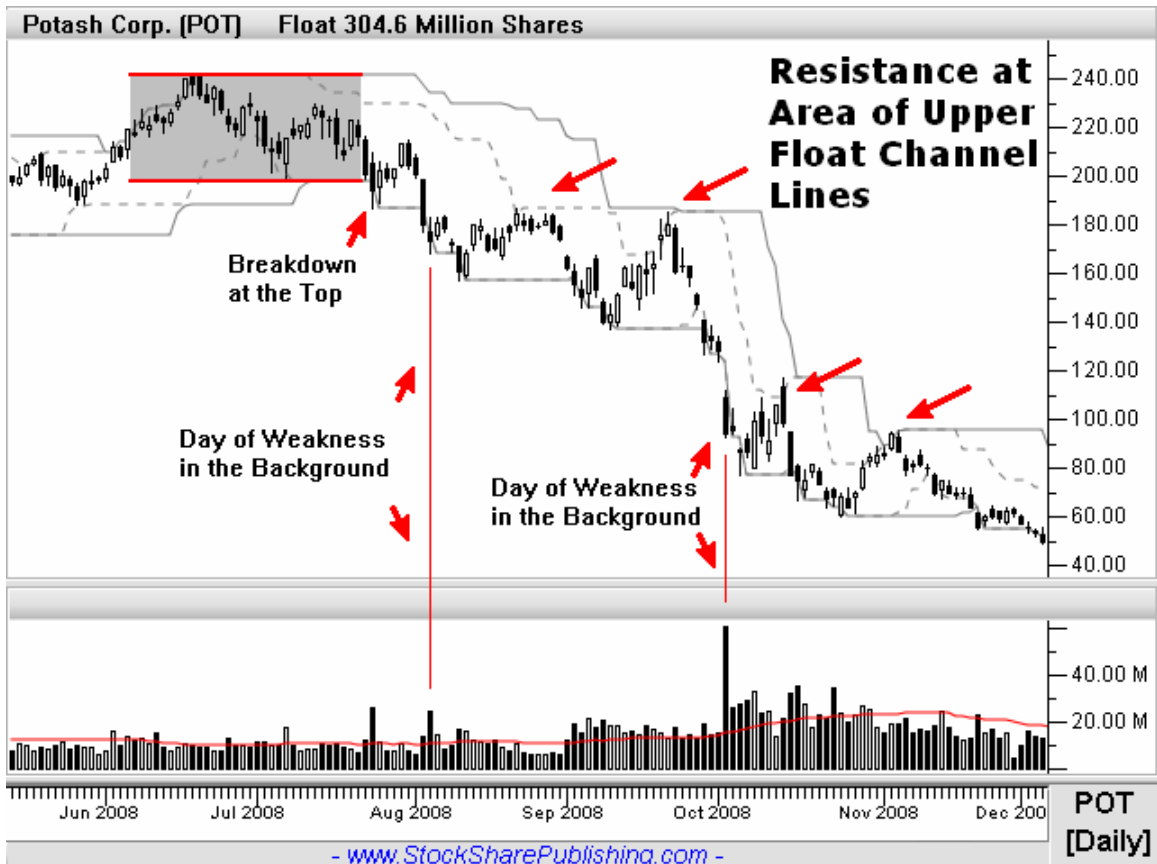


Chart 22

A New Branch of Technical Analysis

In summary, float charts are a new development in the history of technical analysis. Technical analysis of financial markets begins with Japanese candlestick charts and point and figure charts in America. Price and volume charts are now the most commonly used charts. Float charts are a new paradigm in this history. They are the first charts that incorporate the number of shares available for trading into the charting process. The only data available for technicians is price, volume, time and now float. As has been demonstrated in this short presentation, they are an excellent tool to help explain basic chart concepts. They also are a useful tool to help investors and traders in their search for profits.