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## IT CAN'T HAPPEN AGAIN, OR CAN IT?

What were you doing on May 6 ${ }^{\text {th }}$, 2010 at 2:41 PM, New York Time? I was watching, dumbfounded, as stock prices and the averages tumbled. Prior to the start of the drop the Dow was already down about 300 point for the day, but then, in the next five minutes another 900 or so points were lost. Some stocks dropped almost instantly to a penny a share while others rose to $\$ 100,000.00$. Of course, a few minutes later they were on the rebound, so some 800 points of the loss were regained in the next twenty minutes. But the damage, overall, was still huge and lasting.

All this comes back into focus at this time because of the report on the "Flash Crash" released at the end of last week. This was a follow up to an earlier assessment of the causes of the crash back on September $30^{\text {th }}$. At that time a number of reasons were examined and most discarded. It did not look like human error (fat fingers) or blind panic. It looked to be more related to our high-speed technology. At the center of the problem appeared to be a large sell order in E-Minis, and a resultant flood of trades from the High Frequency Traders. From a fundamental standpoint the precipitating news of the day was often cited as the Greek credit crisis. The actual drop and rebound during the day was obviously a huge panic of some sort. But, in reality, the report neither conclusively found the cause, nor was it able to provide a fix.

On Friday, February $18^{\text {th }}$, 2011, the new report did little more than put forth ideas for "consideration" and "further study". But it did point out that there have been other mini crashes in a number of individual issues since the Flash Crash. In other words, the problem still exists, barely understood and completely unsolved. That is where we are today.

That is not to say that panics and crashes are something new. They are as old as markets. We could go back to the South Seas Bubble, or the Tulip Mania. There were panics in 1837, 1857, 1861 etc. We have all heard and read about 1929. Some of us were shocked by the crash of 1987. That was the first that seemed to have roots in derivatives and technology aided trading. But May $6^{\text {th }} 2010$ was something different. It was so instantaneous as to be staggering in its impact. It was completely irrational and illogical. True, all panics and crashes are, by definition, irrational. However, they are more understandable because we can observe the human emotions and reactions at work. 2010 seemed to be done by machines not people. But of course, behind those computers are the people who designed the programs and built in their own concept of reactions to situations. But the instantaneous responses accelerated the entire process. I imagine many of you watched "Jeopardy" last week, in which two of the best Jeopardy players ever were pitted against a computer. They were trounced. They had, I think, just as much knowledge, but they were beaten by the response time of the computer. Is this what we are dealing with in our markets?

Looking at the May $6^{\text {th }} 2010$ market, and comparing it to other markets, it still seems as though the same basic technical considerations apply, but perhaps they are accelerated. On the pages that follow I want to look at what happened, and how it compared to other more traditional crashes. Then I want to see how it compares to current conditions, and try to look for ways we can spot the likelihood of another crash. I think we have to realize that market crashes and panics are not an exception to normal market behavior, but a part of normal market behavior. Just as we have bull markets and bear markets, and just as we have bubbles, we occasionally have crashes. We would like to set them aside and not look at them, or think of them as an irrational anomaly, whereas they are a normal part of market behavior that come along from time to time. There are ways to
spot the likelihood, at least, of a major correction. It may not take the form of a crash, but then again, it may.

Lets start off by looking at the May $6^{\text {th }} 2010$ break. In that it was so short-lived one might prefer to call it a panic, but there are reasons for calling it a crash. One is that it came off a market high. Another is that it was not the termination of a decline. Panics are likely to be over in a hurry, and are usually based upon a single disconcerting occurrence. Crashes usually lead to further weakness, and have a longer-term effect. So this looks more like a crash, but, again, this one was unique.


Actually the market started to move lower only three or four days before the big drop. In the process the ascending trendline was broken, and perhaps more important, volume had started to become heavier on the downside about two weeks earlier. So maybe there was some warning, but not much. The rally that followed was not able to carry very far, and led, within less than a month, to a lower low. Even that did not get it over with. Not until the lower low in July had the slide apparently ended.


The Candlevolume chart, above is giving us a rather different perspective. The crash day changes because of the close way above the low. But what is really interesting is the different appearance of the entries in the two ellipses. In the first we have not only tight trading ranges but low volume and little or no change day after day. The second ellipse contains very different entries. We have wider trading ranges and heavier volume. Apparently the market was undergoing a discernable shift at least week before it fell apart. We will look more at these factors later.

Shown below is what has happened since. So far we are seeing volume coming in about equally on up days and down days, with no discernable sign of a change in emphasis, or a show of weakness. We have two extremely similar upward legs since August, punctuated by the pullback in November.


Now, lets look at the 1987 crash. Are there any lessons to be learned here?


Pleasse be aware particularly of the unexciting trading in the weeks prior to the break. Volume did not expand. Trading ranges were narrow. Harry Shultz, in his 1972 book Panics and Crashes repeatedly emphasizes that they come out of nowhere. Of course..or they would not occur. The 1987 crash was a complete surprise to most. The only clue was a bit of an increase in volume to the downside in the weeks leading up to the crash. But trading ranges were narrrow, overall volume was unimpressive and daily movement was contracting.


The chart above using the Candlevolume methodology shows the tight ranges, and the lack of movement. But here too we see that the volume started to increase, and the trading ranges started to extend to the downside in the days just prior to the crash. There was not much warning, but there was a little.

And below, 1929.


Again, out of the blue, totally unexpected and unsignalled. Perhaps the downside volume was a clue, but not much of a clue. Volume was light, tradmg ranges were small, and daily changes were getting small.

So, the downside volume was one clue, that a decline might be starting. That is not to say necessarily a crash, but probably a slide of some size. All tops do not lead to crashes, of course. Most tops have lots of similarities, but they do not all portend what we saw last year. But crashes are certainly a part of the marketplace, and the current situation, outlined at the start of this piece, with an underlying flaw that is still barely explained, much less understood, makes it more important that we guard against participating in a reoccurrence. There are other signs to look for. They are characteristic of most market tops, whether or not followed by violent breaks.

We mentioned above the light volume. One would expect markets to top out with big volume, with buying frenzies, with irrational trading. Often that is a characteristic of a bottom, but strangely not a top. Tops usually consist, as we saw above, of tight trading
ranges, and a rolling over. The bulls only reluctantly turn control over to the bears. But volume remains relatively light.

On the chart below I have calculated the average daily volume on a ten-day basis and plotted it against the market for the last six years, inverting the volume scale so that peaks in the line represent low average daily volume.


As can be seen, volume tends to make an extreme near intermediate term market highs, and the general trend of the volume tends to be quite subdued during a longer term topping process. Last year we had a spike that was early, a pullback, and then a second spike as the top was made. That is very similar to what we have seen in the last month.

This lack of excitement is well seen on our Market Seismograph, shown below. It indicates a lull and complacency.

## MARKET SEISMOGRAPH



Longer term- that complacency shows up on the lack of volatility. The chart below is a plot of the average daily market change, regardless of direction, calculated monthly and going back many years.


The blue line, the volatility, can remain low for a long time as a bull market progresses, so is much more of a strong signal on bottoms. Nevertheless, when it gets to extremes in complacency one has to be somewhat concerned. It was at an extreme last April and is at a similar level now.

On the chart below we are seeing the recent levels for the various Arms Index moving averages. I have inserted a vertical blue line to indicate the market high just prior to the sudden Flash Crash last year.


Notice that all the indices made extremes ahead of the decline. By the time the decline took over the shorter term AI moving averages had gotten well beyond their most overbought levels. The less sensitive and more long-term 55-day was still very close to its extreme when the decline began. It looks as though the rush to the buy side, which had swung the volume way over to the advancing issues had started to lose momentum before the prices turned down. Here, perhaps, was an early warning.

Now look at the current readings. The 55-day is still making a new extreme overbought. It is far more overbought than it was last May. The others, however, went to extremes not seen in many years, and then backed away from those levels, but the market continued to advance. Recently they have again worked their way back toward more overbought levels. Was this an early warning or a false signal?

Lets look at more history, particularly for the 21-day and the 55-day moving averages. Here is a really long-term picture of the 21-day.


The recent reading on the 21-day was the most extreme in the overbought direction since the absolute market high at the end of 1999. Going back, we are taken to the late '80s. It is apparent that such a reading as we saw recently is extremely rare, and is a warning to be heeded.

But what did that extreme in 1987 really look like, coming as it did just before such a violent collapse? Below is a close-up


Interesting! The extreme in the 21-day AI was made in late August. The market held up fairly well afterward and the 21-day AI backed off from the extreme. It again went somewhat more overbought in late September, shortly before the decline got going. Below we see what it looks like today.



The long-term picture of the 55-day is similar but a bit less extreme at this time.


A couple of other indicators I like to watch are MACD and RSI. Shown applied to the Dow on the chart above, MACD is still barely positive, but its overall level is usually equated, as can easily be seen, with market tops. It would take very little weakness to drop the red line and cause a crossover. This indicator could provide a good warning of the start of a decline. Similarly, the RSI is at an extreme. Look at the other times it has been here.

It looks as though there continue to be a large number of signs that we are in a topping area. Volume, AI, trading ranges, MACD, RSI, ignoring of news, complacency, persistent but small advances day after day all are warning us that it is a one-sided market. In the past, as we have noted above, such action has been a precursor to a decline, but not necessarily a panic or crash. So I do not want to come across as an alarmist. But I am concerned that we seem to have an underlying potential for another traumatic break that is neither understood nor preventable.

On the other hand, there is not yet any evidence of a turn. To become concerned we would need to see a number of days in which the market moved lower, volume became heavier and trading range became larger. We would also see a crossover in the MAACD and the breaking of some likely support levels. It seems as though the first part of a scenario has occurred or is occurring, but there is no evidence yet of a shift to the next stage.

On the next chart we have a closer look at recent Dow Industrials trading. The 12,075 level was resistance on the way up, and is therefore likely to serve as support in a pullback. Moreover, the ascending trendline is encountered in the same region. So a drop below that level in the next few days would seem to be significant. A penetration would suggest a move to 11,750 .


In terms of the S\&P the level to watch at this time is about 1313.


