The Importance of Balance

Why the Major Classes of Technical Indicators Are
Best Viewed In Conjunction and Across Time Frames.

"In danger all that counts is really carrying out all that has to be done - thoroughness - and going forward, in order not to perish by tarrying in the danger."

- The I Ching [1]

Most fledgling technical analysts suffer from the Holy Grail syndrome: they look for the one indicator which can consistently tell them everything they need to know to be a successful trader or investor. Most experienced, well-rounded analysts can appreciate the frustration of the beginner who experiences great success at first with a particular indicator, only to have it fail miserably for a time before it (likely) once again becomes a reliable arbiter of the price trend, and useful market entry and risk management tool.

Upon reflection from the vantage point of experience, it is only natural that indicators have phases of greater and lesser reliability. The market has distinct phases of trending and consolidation; volatility and inactivity; bull and bear. Aside from the fact that technical signals only succeed a certain percentage the time, some indications are more reliable, or are not to be trusted, depending on the market phase.

What is troubling the approach of the novice is likely not so much a poor choice of primary indicator as a lack of thoroughness. That is not to say they are not diligent about updating and reviewing their indicator of choice. Rather, no one indicator can always adapt to all of the various trend and tone changes necessary to sustain successful signals with reasonable risk. As such, they suffer from a lack of confirmation from other indicators (i.e. a filter or secondary signal) which can confirm the current degree of reliability for their primary technical indicator.

One of the best ways to achieve a more thorough approach is to use indications from the different classes of technical analysis in conjunction with each other, and compare signals from different time frames for confirmation (or mitigation.) The temporal comparison is especially easy to state in principle; it is part of most experienced analysts approach, and has been the subject of many previous technical texts, articles and courses:

> Compare suitable (for your temperament) and reliable (relatively) long term, intermediate term and short term indications to keep your trend view, and trading/investment decisions, in perspective.

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[1] Wilhelm, Richard, *The I Ching*, Princeton University Press, Princeton, Copyright 1950 by Bollingen Foundation Inc., p. 115., as translated into English by C.F. Baynes.

Easy enough said. And for those with the energy and enthusiasm for technical analysis, not really too terribly hard to achieve. Depending on their scope of trading or investment, people can look at what their favorite technique tells them about the different scopes of trend activity.

Through the use of weekly and monthly charts, long term trends and indications can be readily reviewed. With modern computer analysis, focusing down to intermediate- short term activity is feasible with charts and indicators on anything from a daily to a five minute data set. If there is one thing that would assist most beginners, even if they went no further, it would be to follow their favorite indicator across a series of time frames (unless the creator of the indicator specifically warned against it.)

Yet, most indicators are best used in conjunction with indicators from other classes of technical analysis. This is not just my opinion. It is the specific advice of quite a few creators and reviewers of advanced technical indications, such as relative strength index and moving average convergence/divergence, among others. They advise that indicators signal an underlying condition, but this must be reinforced by confirmation from chart (i.e. bar chart breakout) or moving average trend signals.

This is just where the novice's lack of experience inhibits their further development: not having seen very many types of analysis, they have trouble putting them in perspective with each other. This frame of reference normally requires years of trial and error, and no small amount of pondering the implications of each form of analysis. And, in fact, there is no real substitute for experience and due consideration of each type of indication to determine which are best suited to an individual's investment or trading style, and analysis needs. Yet, computers make quite a bit of retrograde analysis accessible, and extensive review can replace some degree of real-time experience.

Four Major Classes

That said, there are some useful guidelines for the myriad technical analysis techniques, and how they work together. In order to avoid presenting a condensed course on each indicator within this article, I suggest you research further any specific technique comments which you do not understand. However, the foundation for comparing all technical analysis indications can be plainly stated to provide a basic frame of reference:

> There are four major classes of technical analysis: pattern identification, trend following techniques, overbought/oversold indications, and cycles. All technical signals or indicators fall into one of these classifications, or is a hybrid of two of them.

A brief guide to the major classes of technical analysis techniques follows, with mention of some well known hybrids at the end. This is in no way a complete list; just a general overview of where some of the most popular indicators fit in the big picture.

Major Classes of Technical Analysis Indications

Pattern Identification:	Most Basic:	Bar Charts
Other:	Point & Figure; Market Profile	
Trend Following:	Most Basic:	Moving Average Support and Resistance
Other:	Moving Average Crossover Signals	
Overbought/Oversold:	Most Basic:	Difference Oscillators
Other:	Relative Strength Index; Stochastics	
Cycles:	Most Basic:	Simple Periodic Cycles
Other:	Fibonacci Time Series	

Hybrids:	**Blend Of:**
Moving Average Convergence/Divergence	Oscillator and Trend Following
Average Directional Movement	Oscillator and Trend Following
Elliott Wave Analysis	Pattern Identification and Cycle
Fibonacci Retracements	Pattern Identification and Trend Following

While the above classes are relatively clear to most with any awareness of these techniques, the bigger question still remains: how can they be used in conjunction with each other? While there are some examples from recent trends at the end of this article, the simplest way to view this is to take a theoretical example of a basic indication from one class and ask how this compares to the basic indications from at least two other classes. The reason for this is to be thorough enough to check for confirmation of the primary signal.

For instance, after a lengthy bull trend a market has formed a reversal pattern, a Head & Shoulders top. If successful, this will reverse the up trend. The first question as the market closes below the breakout level (neckline) is: How is the volume? Volume is an integral part of the pattern identification on charts. (Note: daily chart volume should be used almost exclusively.)

Second, as it normally takes some time for the Head & Shoulders pattern to form, have any of the key moving averages (as determined by retrogressive analysis) moved near the breakout level? If so, is the current price level below them, or are they still a support level below the market? If they are still below, they represent the kind of secondary confirmation hurdle which can assist in telling whether the down trend from the breakout is gaining momentum, or failing to perform.

Third, where are the difference oscillator levels (major historic thresholds above or below significant moving averages?) Are we below the nearest ones, or do they represent support below the market which might restrain (if not indeed stop) the current down trend? If the prices are through the nearby oscillator levels, how far down until the next normal oscillator support levels?

So, just in the brief example above we have reviewed a basic trend signal (pattern reversal) and considered whether the coincident indications from a trend following technique (moving averages) and overbought/oversold indications (difference oscillator trading bands) have confirmed the pattern breakout or not. Admittedly, even this simplified case requires some knowledge and experience to understand.

Confluences

Yet, sometimes the clearest signals are also those where the critical levels from a series of indications reinforce each other. Of necessity the indicators should be from different classes of techniques, to assure that the confirmation is not just the same signal in slightly different form (i.e. same pattern on a bar chart and a point & figure chart.) Ideally, at least one of the coincident indications should be from a different time frame, as all converge at or near the same price level at the same time.

Drawing on a geographic metaphor, I call this a "confluence" of indicators. Much like a group of tributaries entering a river in close proximity will significantly enhance its flow, a group of indications from different classes of techniques all pointing to the same price level as critical will increase the decisiveness of current market activity in that area.

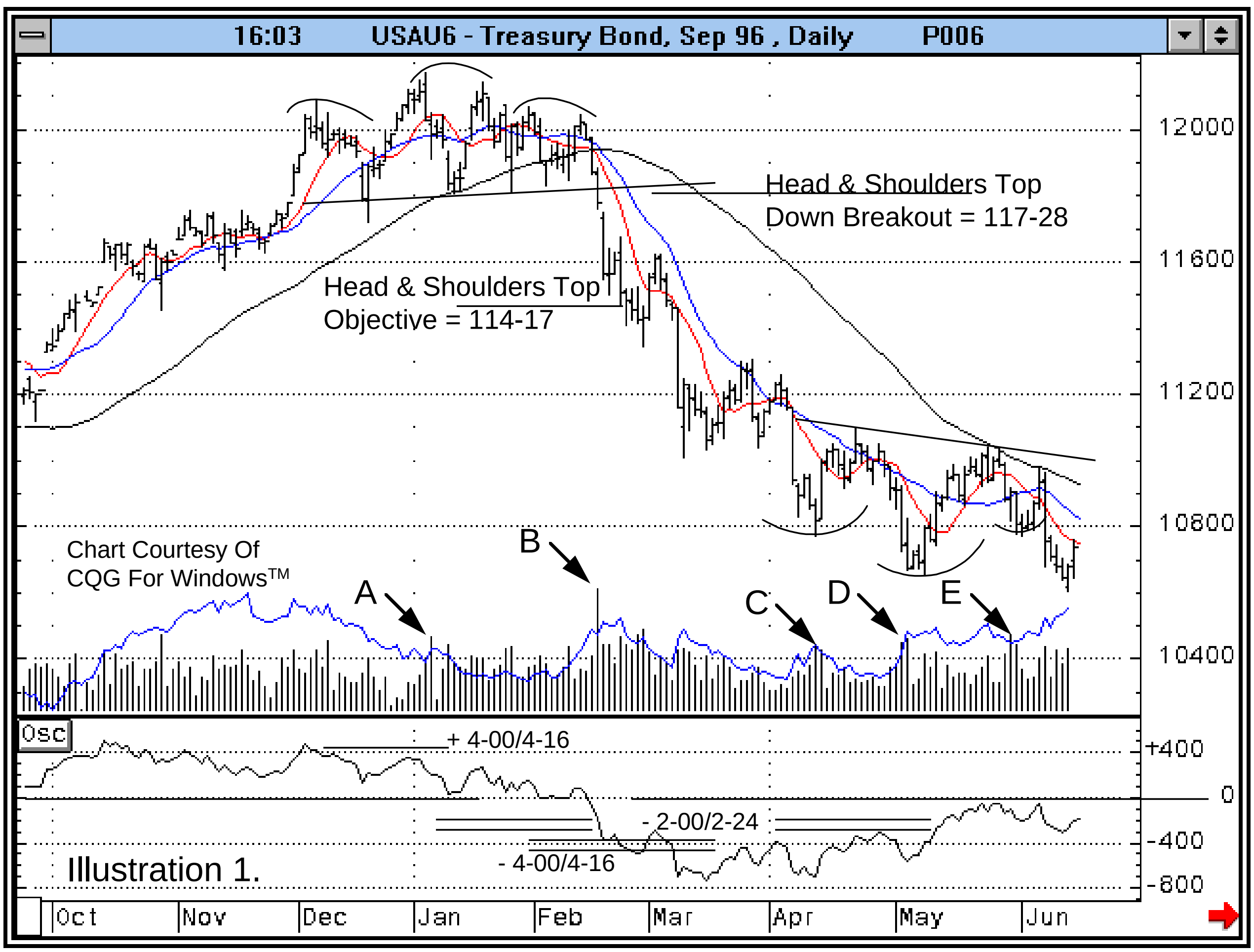
The following examples demonstrate the importance of confirmation from different indicators and across time frames. To keep the discussion consistent, we will use a Head & Shoulders Top as our first example, just as in the discussion above.

Note in illustration 1 on page 5 that the Head & Shoulders Top in the September U.S. Treasury Bond future from late 1995 to early 1996 was already below the key daily moving averages (9, 18 and 60) by the time it broke down through the neckline. Volume was already heavier on the breaks from about half way through the pattern (A); and volume, as we shall see in our second example, is a major consideration when assessing the reliability of reversal patterns. During the ensuing breakout downswing T-bonds also broke the oscillator support at parity with the 60 day moving average (the “0“ level on the lower chart, i.e. they were below the 60 day moving average), which is often a negative trend signal.

Volume increased sharply (B) on the ensuing break, with no heavy Volume on higher closes to counter this shift to bearish momentum. The secondary Head & Shoulders support at the 114-17 objective was tested and held briefly. Yet, during the initial slippage below the objective in mid-February, the market overran important oscillator support at 2-00/2-24 below the 60 day average (illustration 1, lower chart.) It did not hold until the next oscillator support band at minus 4-00/4-16.

As it never recovered above the minus 2-00 threshold, it was still vulnerable to the aggressive bear trend. This was confirmed on the early March sharp break which took the market below the minus 4-16 oscillator level to aggressively reassert the bear trend.

This is an excellent example of the confluence of patterns and indicators converging within a relatively narrow range. Once the Head & Shoulders down breakout occurred, there were no countervailing forces to oppose it. The extended trend overrunning the Head & Shoulders objective and failing to rally back above the previously violated oscillator levels on the brief recovery in late February was confirmation of the virulent nature of the bear trend in progress.



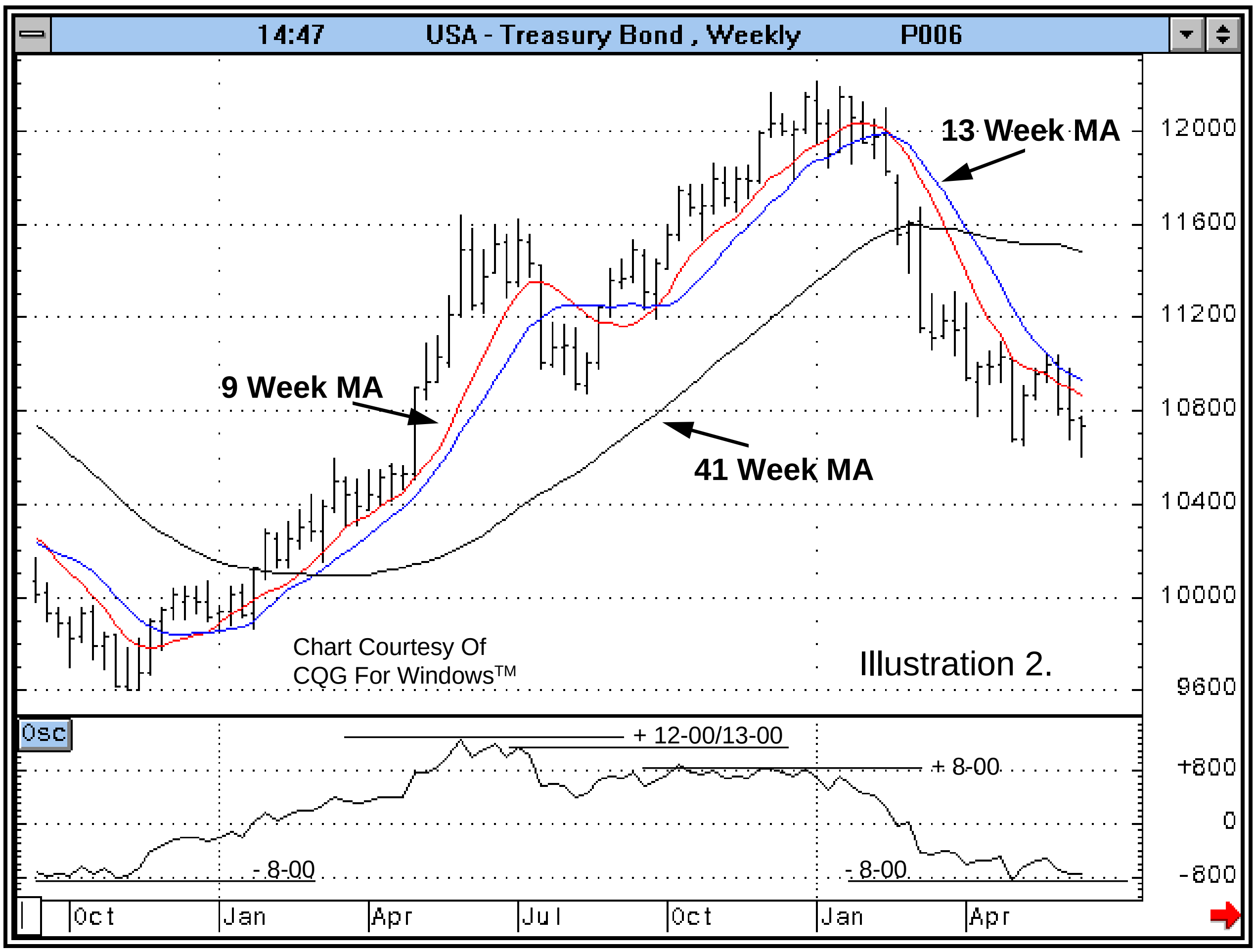
Different Time Frames

To extend this analysis into another time frame, we review the weekly continuation Treasury bond chart and indicators in illustration 2, below. By the time the T-bonds broke the neckline of the Head & Shoulders Top, they were already well below both the

9 and 13 week moving averages; a brief glance at this chart will confirm that they are important intermediate term trend support and resistance.

Actually that's a bit unfair, because it's really counting one indicator twice. The 13 week average is normally approximately the same as to the 60 day moving average: allowing for a few holidays, 60 *trading* days is roughly the same as 13 weeks, or one quarter.

Note that on the bounce from the 114-17 objective in late February - early March, the market was already below the 41 week moving average and could not sustain activity back above it on the bounce. The 41 week is another proxy for a widely followed indicator: allowing for holidays, it is approximately equivalent to the 200 *trading* day moving average.



Non-Confirmation

Most of the things which were right about this top were just the opposite during the inverse Head & Shoulders Bottom from early April to early June. The volumes remained decidedly bearish during this basing attempt (see illustration 1.) Volume was quite heavy on the breaks at the low of the left shoulder (C), low of the head (D), and (especially destructive) very heavy on the late May drop to form the right shoulder (E).

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As volume should be heavier on some of the significant closes in the direction of the trend, this volume pattern would be most unusual for a true bottom nearing completion.

As opposed to the previous successful top, the market was also just coming up to challenge the 60 day (and therefore the 13 week) moving average at the neckline. It could not even muster the strength to complete the pattern before breaking below the low of the right shoulder. This negates the pattern bottom and usually leads to a new low, as this market soon achieved.

Conclusion

The history of the market is littered with partially completed patterns and failed breakouts which could not overcome secondary forms of resistance to which the primary pattern could not alert the analyst. Of significance at most times is whether volume is reinforcing the trend or the potential reversal indications of the trend. Combining selected factors to understand the broader trend influences can be very useful in assessing how our primary indicator is performing during significant phases.

Even if we acknowledge that technical analysis can not guarantee the direction of a trend, it is important to know whether the price levels for the indicators are all grouped at or near one decisive price, or spread out over a range requiring a series of incremental confirmations of the trend. And that is why it is important to have a balanced, well rounded view of technical indications, and an appreciation of how the different classes of indicators interact with each other.

- Alan Rohrbach
June, 1996