

The Lucas Series: Part Two

Jeff Greenblatt on unlocking the key to intra-day cycles

The biggest challenge an intra-day trader has is negotiating the maze of twists and turns to determine which opportunities have the highest probability of working out. In part one of this series I showed how financial markets turn according to a precise, repeatable natural order of events that anyone can follow. I showed how swing traders and investors can take advantage of intermediate to longer term trends. In this article I will untangle the mystery of intra-day charts and show you how intra-day trend structures work, down to a one-minute chart.

Elliott found that financial markets move in repeatable, recognisable patterns. His Wave Principle is based upon the premise that impulse waves (larger degree trend) move in fives and corrective waves in three with common Fibonacci price retracements. While retracements may be common, no two are ever alike. The biggest complaint among Elliotticians and those aspiring to learn Elliott is how subjective the method can be.

The same can be said for dynamic cycle analysis. Most experts agree there is a four-year cycle in the Dow, but how many people thought it topped last March? If you put a bunch of Elliotticians and cycle analysts together there can be as many interpretations as there are people in the room. Are we at the top of a third or fifth wave? Is it a triangle or complex flat correction? Has there been a truncation?

These issues are confusing for swing traders as well as investors. For the intra-day trader, these issues are even more daunting simply because the time period is smaller and the action is faster. Decisions must be made quickly. Too much thinking means not pulling the trigger or, worse, getting filled with a poor risk/reward ratio.

Previously I introduced the Lucas series, which is similar to the Fibonacci sequence. Its important numbers are 7, 11, 18, 29, 47, 76, 123, 199, 322, and so on. The significance of the Lucas series is that



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the higher we go in the sequence, two numbers divided into each other come closer to yielding the .618/1.618 ratio which is so important to the Fibonacci sequence. Together with the Fibonacci sequence, Lucas dictates when a chart will turn in any time period. Understanding how these sequences work will enable you to understand market logic and precision as you never have before.

The challenge for the intra-day trader is to establish opportunities for entry, then to scale down and choose only the highest probability situations to increase profit potential. All traders get stopped out, but the idea in maximising profits is to reduce the number of times we get stopped out and the resulting commission and slippage costs.

In part one we learned how the Nasdaq traced out a 90-week triangle from the January 2004 high to the October 2005 low. Every turn in that pattern occurred on a Lucas weekly bar. Exactly the same thing happens every day on an intra-day basis. I have back-tested this on the Dow and Nasdaq Emini markets over the past five thousand hours of activity. These markets are turning on repeatable number sequences that anyone can track – but, like snowflakes, no two patterns are

exactly alike.

I follow the Nasdaq Emini market in three time periods (see figure 1). I have one-, five- and 15-minute charts at all times and keep a running total of the five- and 15-minute bars from pivot to pivot. The one-minute trends take care of themselves.

Typically, when a new trend commences, on a five-minute scale it will hit a high point in the 21st, 29th or 34th bar. There will be a retracement of five, eight or 13 bars before the start of the next upward wave. For instance, a pattern may top on 21 bars, retrace 13 bars for 34 and start up again on the 35th bar. Often it will top on the 61 bar time window (60-62), then retrace 18 (Lucas) bars. At that point it is 78-79 bars (Fibonacci derivative) off the low, where it will take off again.

Depending upon market conditions and size of the pattern, many intra-day cycles will reverse on either the 161st, 233rd or 261st bar of the pattern. For instance, the final October leg of the sell-off in the NQ completed in 234 (Fibonacci 233+1) 15-minute bars.

In a 15-minute time period a trend might commence with an 11 bar move and retrace for seven bars (see figure 2). Adding these two Lucas numbers together yields another Lucas bar at 18, which is 54 five-minute bars. It is in this 55 five-minute time period that pullbacks and tests of support or resistance will end and the larger degree trend will continue.

Market precision is such that turns will frequently occur when the five- and 15-minute bars line up. Often a correction will come to an important support/resistance area. It will then bounce or hover sideways for a spell. Price action will hover around that area and retest it. Only when it hits a significant time bar will it revert to the larger degree trend.

One of the best examples of this occurred in December, at the recent Federal Reserve Open Market Committee meeting. From the high on Monday morning at 1719 until the low at 1716 on Tuesday afternoon, the NQ traced out a 47 15-minute (Lucas) bar triangle, which completed within one bar of the Fed announcement. What happened next was amazing. The triangle completed upon the Fed announcement and proceeded to spike 15 points in the next 30 minutes, or just two bars.

This example demonstrates that following the time sequence eliminates much of the subjectivity that comes, not only with Elliott, but also with other dynamic cycle methods. Was this pattern a triangle or a complex sideways flat? Does it really matter? What matters is the pattern completed on the correct number of bars (47). All we need is pattern recognition. It does look like a triangle. I've discovered that many patterns that look like triangles will fail in the latter stages, but the ones that confirm will always end in the correct number bar.

For instance, we recently had a confirmed triangle in GOOG. From the 25 November high at 431, this stock traced out a 78-hour triangle that completed at 412 on 12 December. The 79th hour saw a large white candle, which was the breakout of a move that topped at 446. I'm sure it is not a coincidence that that leg topped at 446 on the 29th (Lucas) hourly bar out of the breakout from the triangle.

Figure 3 shows a couple of excellent examples of how typical intra-day charts work on the Nasdaq Emini contract.

The first example shows a complete cycle on a five-minute basis. From the initial low we have a first wave and pullback which breaks out to the upside on the 7th bar. The move then spans the next 11 bars and completes on the 17th bar. The 18th bar already begins the pullback. The pullback is short and the 21st bar brings another break to the upside. This move ultimately tops in 34 bars.

A retracement ensues and a bear move works exactly the same way. The first low is on the 13th bar. There is a secondary high on the 16th bar off the high, which, more importantly, finally breaks down

on the 21st bar. The most important aspect of this example is that the entire pullback completes in 29 bars, which also clusters with the 62nd bar off the initial low. This is a complete 62-bar cycle. If the overall trend is up, a common occurrence will be a low to low cycle corresponding to an important Fibonacci relationship such as the 60-62 bar cycle. What is not shown is that the next day price action takes out resistance at 1688.

The final example shows how a typical one-minute chart works on any given day in the Nasdaq Emini. Elliotticians call this pattern an ABC correction off a low. Regardless of price, the first leg proceeds to trace out moves of 18 and 13 minutes, which sandwich a small

pullback of 13 minutes. A small B wave correction ensues of 11, 18 and 21 minutes. Up to this point on a five-minute chart this would correspond to an 8-bar move. The 9th bar is a doji reversal and the B wave correction spans 11 bars. At this point we get a reversal on the 19th bar (Lucas 18+1). The big move has legs of 26 and 33 minutes, which are separated by an eight-minute pullback. The C leg up completes in 67 minutes, which is one less than a Fibonacci derivative 68. The number 68 is derived from a double 34 or 6.84 extension. On a five-minute basis the whole move completes in 33 bars, which is a Fibonacci 34-1.

What is the best way to trade these patterns? Depending upon

your risk aversion level you can either wait for a cluster in two time periods to pull the trigger on the highest possible risk/reward ratio, or wait for confirmation by a large candle. For instance, in the smaller time period, the completion of the B wave in the one-minute example (11, 18, 21 minutes) clustered with the 11 five-minute bar correction. In the five-minute example the completion of the entire pattern ended on a 29-bar wave, which corresponded to a 62-bar low to low cycle in the larger picture. The next move up was very profitable.

These three examples should help to untangle the mystery of intra-day charts. These are not random occurrences. I've observed thousands of hours of intra-day action, not only on the Emini charts but also for gold, bonds, US Dollar, Forex, crude oil and stocks. The method works universally and complements traditional technical indicators.

In summary, financial markets have their own language, which is easy to learn. Regardless of time period, any trader or analyst can learn to get an edge on the competition by anticipating when conditions are ripe for a turn. And a trader can save money and needless frustration by knowing when a turn is not likely to occur.

"The man who knows time cycles can predict the future, protect his opportunity to start to study mathematical, scientific rules for making accurate deductions to determine the trend of stocks, business and commodities," stated Gann in April, 1954.

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FIGURE 3: FIVE-MINUTE MINI NASDAQ 20 DEC



Source: Prophet Financial Systems www.prophet.net