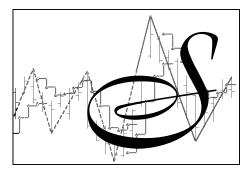


The Ergodic Candlestick Oscillator



ometimes we are lucky (due to our diligence) and we

find a tool that is useful and does the job better than previous tools, or answers tough questions such as: How do we solve the problem if we are trading intraday and the market has a gap opening? Most oscillators take time to catch up after a gap opening, and the trader has to wait for a number of bars to pass before the oscillator becomes valid again.

My friend Bill Blau overcomes the gap open problem with a clever development that is based on candlestick charting: The Ergodic Candlestick Oscillator (ECO) and its Signal line. The double smoothing Blau employs has an effect that overrides the gap situation in the MACD type indicators. Bill's book, *Momentum, Direction, and Divergence*, published by John Wiley & Sons,

shows the power of double smoothing. In fact, Perry Kaufman discusses this in his latest book, *Trading Systems and Methods*, also published by John Wiley & Sons. Those of you who may be interested in a highly technical description should check out these two books.

Bill Blau not only gave his blessing to use his calculation, but we have injected some of his private adjustments to his previously published calculations.

As we get into actual usage you will see how the Own/Next/Higher time period calculations exclusive to Fibonacci Trader users can empower our approach to the market. Especially when we place the Daily Ergodic Candlestick Oscillator (ECO) on the 50-minute bar chart and combine it with the 50-minute ECO.

As mentioned earlier, one of the strengths of this oscillator is for intraday trading. Unlike most



Chart 1: Ergodic Candlestick Oscillator. The ECO for this June 1999 T-bonds plan (D/W/M) is set at 13-periods. The "a-b" setups are crossover signals.

other oscillators it can handle opening gaps without the usual lag. But as we shall see it is also useful for daily bars. The settings may be different but the concepts are similar. Let's start with Chart 1, the daily T-bonds for the last three months. The ECO for this plan (D/W/M) is set at 13-periods (days). While your are setting the lookback period please make the "symbol" circle 2 on the ECO line. Change the Signal Line to different color.

Not only does the ECO Line cross above and below the Signal Line, giving us a reasonable filter to buy and sell with using any entry and exit trigger of your choice for your plan, but the ECO line's dots and their change of direction can also be a tool.

Along the ECO line Charts 1 and 2 you will notice a small "a" and "b." These denote whenever the ECO line changes direction from dot "a" to dot "b" and the dot "b" touches or closes past the Signal Line. Here, "b" must at least touch the Signal Line to be useful.

There were seven occurrences of this setup in the last 12 weeks. Only points "x" and "y"

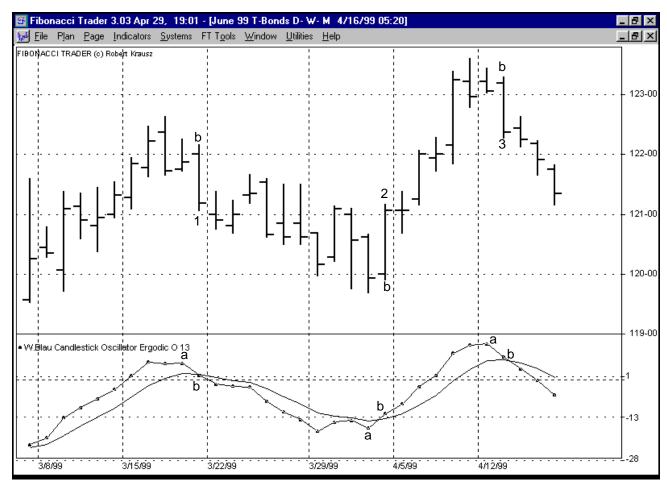


Chart 2: June 99 T-bonds Daily/Weekly/Monthly Plan. Here are three setups using the ECO Line and the Signal Line. Notice that in each example of the "a-b" setup the near term peak or low had been seen.

were a tricky four day rally in from 2/1/99 to 3/1/99. The other six "a-b" setups provided us with potentially tradable situations. Note how near the signals are to the start of a move.

I want to emphasize that this is not a stand alone system because it is not 100%, not that any tool is perfect, but as a guidance system it can be used in a number of ways. We will examine Chart 2 as to usage and guidance.

Chart 2 is a zoom-in version of Chart 1. Let's take a close look at the last three instances of the ECO's "a-b". These are labeled 1, 2 and 3. A factor that all three have in common is that once an "a-b" sets up on the ECO line, the high or low of the bar that caused the setup is not surpassed before the next "a-b" setup occurs. This seldom occurs and I suggest that you use three ticks past the high or low of the setup bar as your risk point. Check it out and you will see. Now, what does this mean?

Look at bar labeled 1 in Chart 2. Directly below is the "a-b" setup, in other words this bar caused the setup. From that day 1, the Eco Line is below the Signal Line indicating that short positions are

more appropriate than long positions until the next "a-b" sets up directly below bar 2.

As I said earlier, after an "a-b" sell setup occurs, such as at Bar 1, very seldom is the high of the sell bar 1 taken out by three ticks until the next "a-b" happens in the opposite direction.

Therefore, to use this information is to be aware of this Bar 1's high, and add three ticks, and that can be a stop for a short. If the dollar amount you are willing to risk is too great then you should pass on the trade. There will be more trades.

You can see that Bar 1's high was not challenged before the next "a-b" occurred. So during this trade from Bar 1 your stop was not ap-

If the dollar amount you are willing too risk is too great then you should pass on the trade. There will be more trades.

proached. Same thing occurs on Bar 2. I would have put my stop just below the low of Bar 2, and it turned out that this was a profitable long. Next, we had an "a-b" below bar 3. Our stop at Bar 3 was safe on this short sale setup. Does this always work? No, there will be stops hit, but check it out — it could be useful. I have used this these last twelve weeks as the charts are up to date as I write and trade.

Another way to use this information is to use it as a filter for your intraday plans. Let's look at the long setup from Bar 2 on Chart 2. At point "b" the ECO Line was just above the Signal Line. Keep your eyeballs peeled because once the "b" occurred, not only does the ECO Line move above the Signal Line, but the dots of the ECO line kept rising, thus confirming the long position. This lasted for six days.

As this setup occurred you could take long positions via an intraday plan, providing each day you take action if the market is above the day's open. This could have been the basis for trades on some three bars after the Bar 2 setup. We will look into the subtleties of an intraday plan next. Note that Bar 2's low (your stop) was not touched.

Now, Bar 3's "a-b" setup provided us with a potential shorting opportunity, which is the current phase of the market as I write this, the evening of April 18th.

Chart 3 is a useful example that introduces my multiple time frames concept with the ECO analysis and the Dynamic Range incorporating the High Time Periods Dynamic Fibonacci Channel (DFC). Let your imagination soar.

We are mixing time frames to check the geometry of the time frames we are trading, which is the 50-minute bars. Here are the settings:

DFC set to High (Weekly), 5 periods
DFC set to Next (Daily), 5 periods
Dynamic Range set to Next (Daily), 1 period
ECO set to Next (Daily), 3 periods

Please set the ECO symbol to circle 2, so you can easily distinguish crossovers of the Signal line.

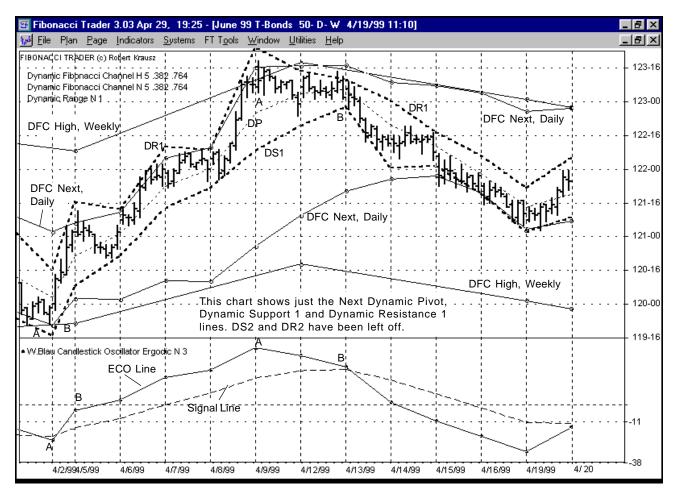


Chart 3: June 99 T-bonds 50-minute/Daily/Weekly Plan. Here, we are incorporating the Dynamic Range, the Dynamic Fibonacci Channel (daily and weekly) and the 3 period Daily Ergodic Candlestick Oscillator.

Let's take the next explanation nice and easy, step by step, and then tie it all together. There are two sets of "A-B" setups. (We'll use capital letters for the intraday plan.) The first is to the long side, and the second is for short sale positions.

1st "A-B" 4/2/99

A) 50-minute Bars touches the lower Daily DFC and the Daily DFC touched the Weekly DFC. This was covered in the previous issue of the FTJ.

B) The Dynamic Pivot (DP) is angled upwards and so are the Dynamic Resistance 1 (DR1)

and Dynamic Support 1 (DS1).

C) The Daily ECO (set at 3 periods, N) on the close of that day sets up a clear "A-B" pattern. Please note that that if you are watching this in real time then the "A-B" setup occurs during the trading day. But you will only see that if you watch during the day as all of these tools are live and changing on a tick-by-tick basis.

The market at this point has shown its hand and is displaying an upward bias. Note the nice upmove. The DP, DS1 and DR1 are all pointed upwards until 4/9 when the DR1 slams down-

ward and the DFC Daily channel's top band levels off.

At this point a down sloping "A" sets up on the daily ECO line. But, it is not until two days later that the down sloping ECO Line touches the Signal Line and we now have a down sloping "A-B" setup.

Look at the bar chart (50-minute) on 4/9, DR1 was sloping downwards but DS1 is sloping upwards. The same thing happens on 4/12. Here, the market enters into a congestion trading phase. We have seen this pattern before!

Now let's check out 4/13.

- A) The ECO Line goes below the Signal Line, a nice filter for a short. It stays in that same mode for four days.
- B) The Dynamic Pivot points down and stays pointing downward for four days.
- C) The DR1 and the DS1 mostly point down.
- D) On 4/19 the dots of the ECO Line turns up and touches the Signal Line. This could be a new "A-B" setup.

Chart 4 is the S&P 500 June contract, 9-minute/45-minute/Daily Plan. We'll look at some potential combinations that can be used in conjunction with the ECO.

Here, we'll make use of all three time periods, the 9/45/Daily.

1) The Daily DFC is used to define the extreme parameters. This is set at 3 periods (on daily

bars, our High time frame).

- 2) The 45-minute Dynamic Trio[™] flips to the upside on 4/20 at point "AAA". Note the effect on retracements 1, 2, 3, 4 and 5 as prices test the 45-minute Dynamic Trio (Next), and the market holds at support. Each of these provide a possible entry to the long side. But does the 9-minute ECO confirm? What does the 45-minute ECO say?
- 3) The 45-minute ECO (set to 26-periods) supported the up trend, and, yes the Signal and the ECO Line touched late in the day on 4/22 but the ECO Line never went below the Signal Line.
- 4) The 9-minute ECO (set to 26-periods) does a nice job of fine tuning the trend. After point "AAA" occurs look at how many retracements were supported by the 9-minute ECO. If it was used as a type of filter, as in points 1, 3 and 5, you can see reasonable buy indications. These were also backed up by the 45-minute ECO.

Chart 5 is also the S&P 500 June contract, 9-minute/45-minute/Daily plan and provides an interesting picture. Let's add our old friend the Daily Balance Point Steps. This is combined with the Daily DFC and the 45-minute ECO and should make you smile. Check it out point by point.

From point A to point D the daily trend is up based on the rising Daily Balance Point Steps. On the close of day D the Daily trend turns down.

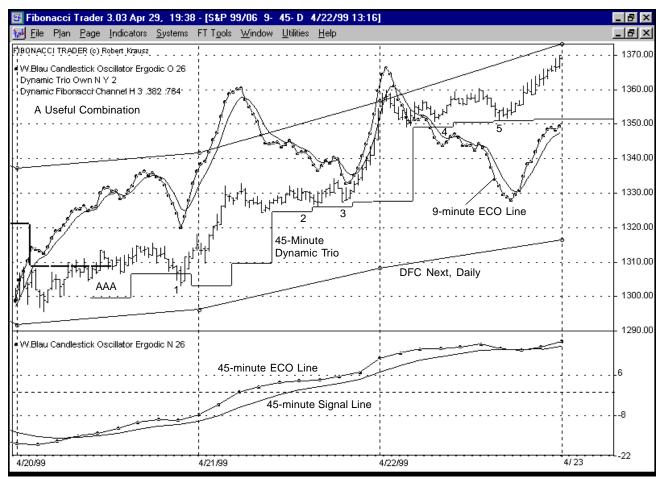


Chart 4: June 99 S&P 500 9 minute/45-minute/Daily Plan. This chart shows the Daily Dynamic Fibonacci Channel (DFC), 45-minute Dynamic Trio, 9-minute and 45-minute Ergodic Candlestick Oscillators.

But note at Day B, the prices penetrate below the steps. In addition, the prices had touched the upper band of the DFC and the DFC had turned down. Now, if you look at the 45-minute ECO, did it support a possible short?

The rally from points C to E was a counter trend rally. Any short sale from point E was with the daily down trend. Nice opportunity, as a fast 50 point move down to point F followed the temporary penentration of the falling Balance Point Steps and the near touch at resistance based on the Daily DFC.

Next, after the steep fall the market touched the

Daily DFC at point F. Prices then rose to check out the daily Balance Point Steps which are still in a daily downtrend. But, at point G prices pass the BP steps to the upside and the next day at point H the daily trend turns (similar to points B through D). So if you bought at point F it would be a trade counter to the Daily Trend. Please note that the 45-minute ECO supported this counter trend move. I leave it to you to check out the 9-minute ECO.

As you can see our tools are getting sharper, but it takes more time to explain, hence we spread these two new tools over two issues of the Fibonacci

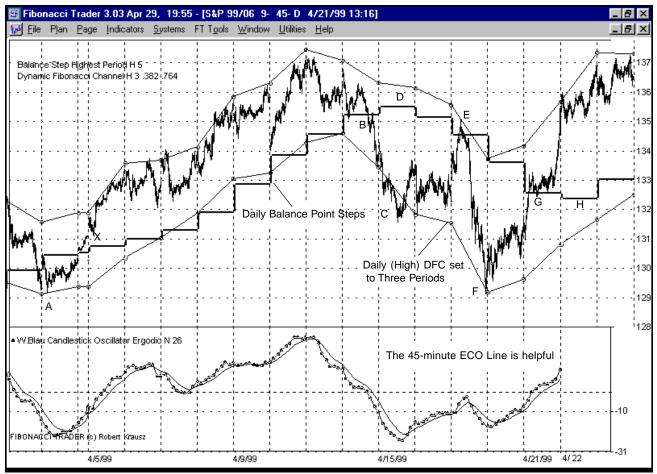


Chart 5: June 99 S&P 500 9-minute/45-minute/Daily Plan. Here are the 9-minute bars with the Daily DFC, and the Daily Balance Point Steps.

Trader Journal. We will carry on with further details of these techniques in greater detail in the future.

Please watch these tools in realtime if you can. But if you do your backtest bar-by-bar you will see how the Higher Time Frames for the DFC lines move about. I can only show you a static picture on these pages.

However, I am investigating a multimedia program called Lotus Screencam, which would enable me to place on a CD-Rom a set of moving charts with a voice explanation. This should be a useful addition to the Fibonacci Trader Journal.

Thank you for your patience in waiting for the last two Fibonacci

Trader Journals. Hopefully, it was worth it. There is more coming, especially a closer look at stocks and some major news.

I wish you super trading,

Robert Krausz MH, BCHE

The Fibonacci Trader Journal is copyrighted and published by the: FIBONACCI TRADER CORPORATION

1835 US1 South 119, Suite 352, St. Augustine, FL 32086.

Phone: 512-443-5751, Fax: 512-443-7119, www.fibonaccitrader.com

This journal is for educational purposes only. Futures trading is a high risk situation. This publication is not rendering any trading advice. Please consult the services of a professional competent person.