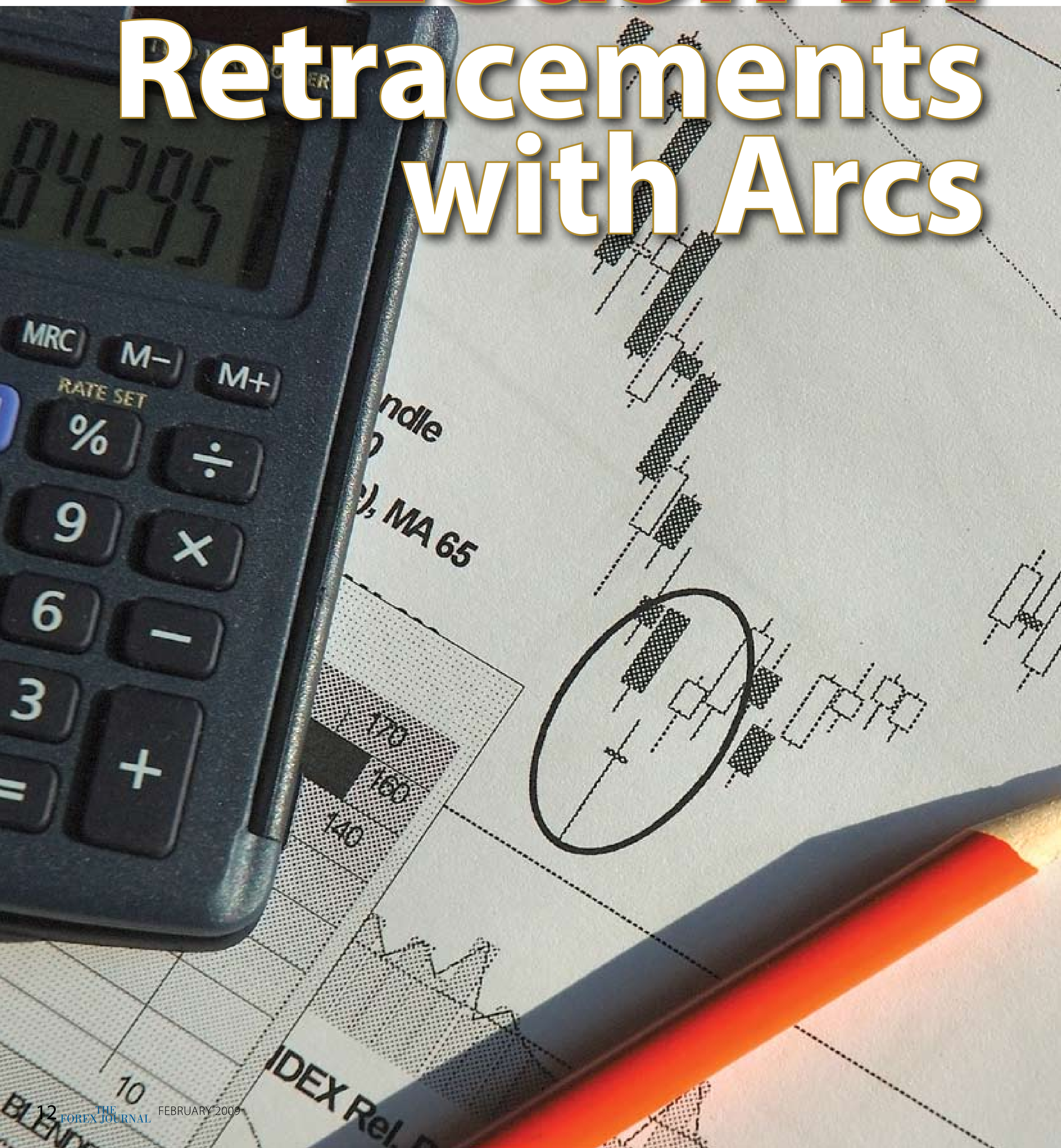
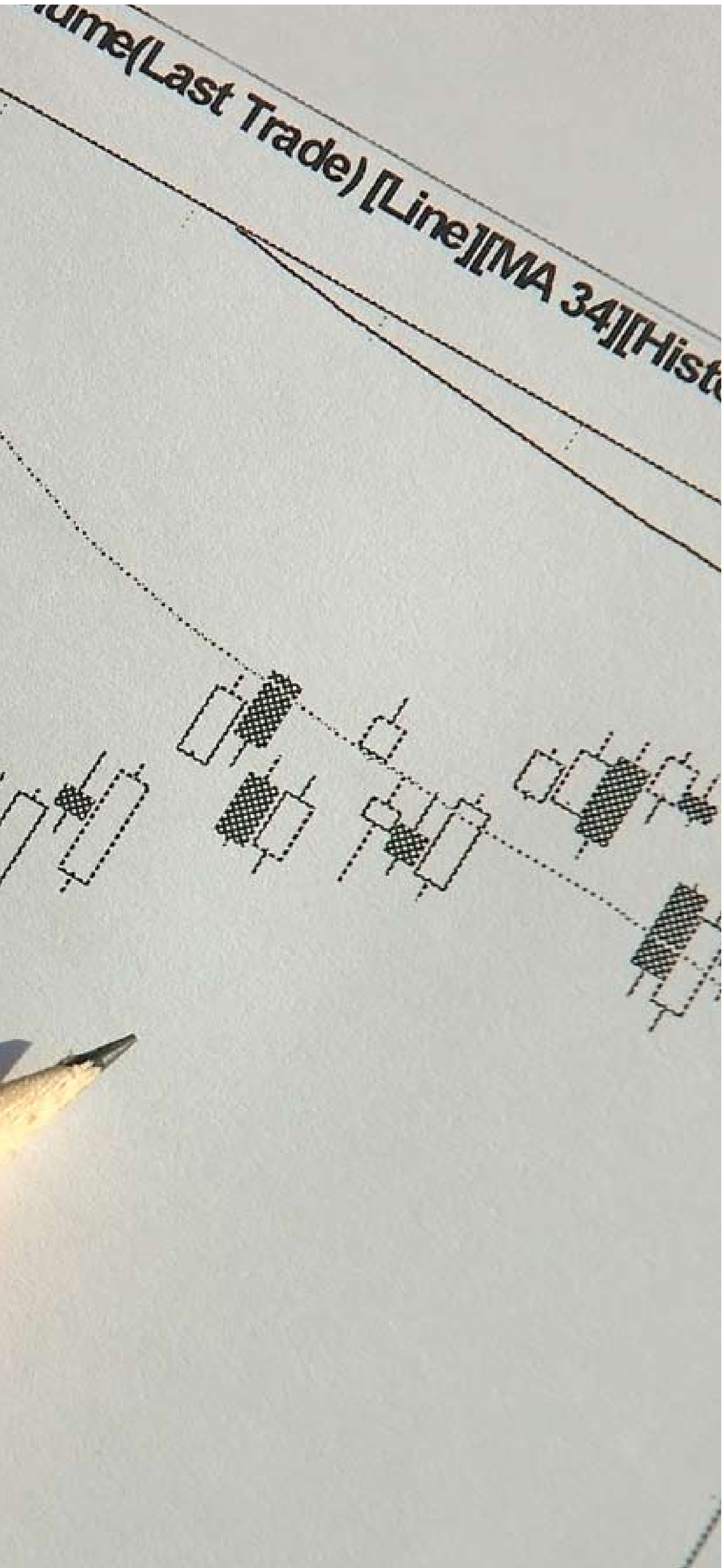
CORNELIUS LUCA

Leash in Retracements with Arcs



The ability to identify and follow trends is a major focus of interest for technical traders. Cornelius Luca discusses using a full spectrum strategy of Fibonacci retracement levels with Fibonacci arcs to lead to profitable trading.



Trend analysis is a major focus of interest, as the ability of traders to identify and follow them should translate into profits. More often than not, trend analysis is limited to the use of trendlines, channels and simple Fibonacci horizontal retracement levels. Trading is more complex than that, so I suggest employing arcs, in addition to the horizontal lines, when dealing with the duration and the timing of trend retracements.

Retracements

While currencies generally trend well, they often encounter considerable retracements. Despite the availability of information, some traders still remain committed to using a simple set of Fibonacci retracement levels that consist of three horizontal lines at 38.2 percent, 50 percent and 61.8 percent. The 50 percent ratio is not even a Fibonacci retracement and is bundled in, due to its technical significance as the equilibrium level. Remember that Fibonacci retracements are only an application of Fibonacci's series of numbers; thus, one should be more creative in using these important ratios. For additional information on this topic read Technical Analysis Applications – McGraw-Hill, 2004, and Trading in the Global Currency Markets – Penguin Books, Third edition, 2007.

As you may know, the Fibonacci ratios are named after Leonardo of Pisa, or Pisano, an Italian mathematician. He is credited with introducing Hindu-Arabic numerals to Western Europe in his work titled Liber Abaci or Book of Calculations, approximately eight centuries ago. The Fibonacci sequence consists of a series of ascending numbers in which every new factor consists of the sum between the

Figure 1 – Euro/dollar's strong medium-term downtrend between July and October 2008. The standard three horizontal Fibonacci retracement lines do not really help in the short term. The 38.2 percent line was reached only 1 ½ month from the bottom.

previous number and itself, starting with 0. The beginning of the series is as follows:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, (etc.)

The Fibonacci ratio is found in the geometry of the logarithmic spiral, which is widespread in nature. The spiral has the property that the ratio of the length of the arc to its diameter is 1.618, which is the inverse of 0.618. Fibonacci proportions are found in the double helix of the DNA molecule. For us, traders, the Fibonacci ratios are identified and used by Elliott wave analysts.

Let's recap some of the numerical relationships from the Fibonacci series.

1. The sum of any two consecutive numbers equals the next consecutive number.
2. Following the first four numbers, the ratio between two consecutive rising numbers approximates 0.618, which is a common retracement used by traders.
3. As the numbers rise, the ratio between two consecutive descending numbers approaches 1.618, which is the inverse of 0.618.
4. The ratio between two alternating ascending numbers approaches 0.382 and the ratio between two consecutive descending numbers approaches 2.618.

Standard Fibonacci retracements

While the simple set of Fibonacci retracement levels is very common to the point of being over-used, there are other tools to be considered. Traders may be attracted by the safety of the obvious, but the problem is that everyone else is chasing the same three horizontal lines. As a consequence, the results often prove less than stellar.

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Figure 2 – Euro/dollar's medium-term downtrend between July and October 2008 with additional horizontal Fibonacci retracement levels.

Figure 1 shows a good example on the EUR/USD chart with a powerful medium-term downtrend between July and October 2008. Also shown are the standard three horizontal Fibonacci retracement lines. The nearest line for the price is the 38.2 percent line, of course, but how really useful is this line? The market took 1 ½ month to reach it, so during this period it was of no help. On the flip side, after it reached the 61.8 percent line, the market held on a closing basis before the EUR/USD turned south again.

In order to improve the significance of these retracements, traders should add more lines based on the Fibonacci ratios, such as 23.6 percent and 78.6 percent. In fact, there is more. If you want to use the full set of Fibonacci retracement levels, you could experiment with the 14.6 percent and 85.4 percent levels as well. Using these levels will enable you to use more sensitive triggers. A full set of Fibonacci retracement levels can be seen in Figure 2. Take a look at the same EUR/USD chart after adding the additional four Fibonacci retracement levels. The 23.6 percent horizontal line was a perfect trigger for the assault on the obvious 38.2 percent line.

Fibonacci Arcs

Now that we reviewed the Fibonacci ratios, let's use them for plotting arcs. Just like the horizontal lines, the arcs provide both price support and resistance levels. Since they are not flat lines, the arcs' signals are faster. The arcs also provide a timeframe for the retracements. With this method, a trader can connect the lowest low and the highest high in an uptrend or the highest high and the lowest low in a downtrend with a line called the Anchor line.

Then, the Fibonacci ratios of your choice can be marked, perhaps at .236 .382, .50 and .618 percent on that line. With the help of a compass or, preferably, with the help of

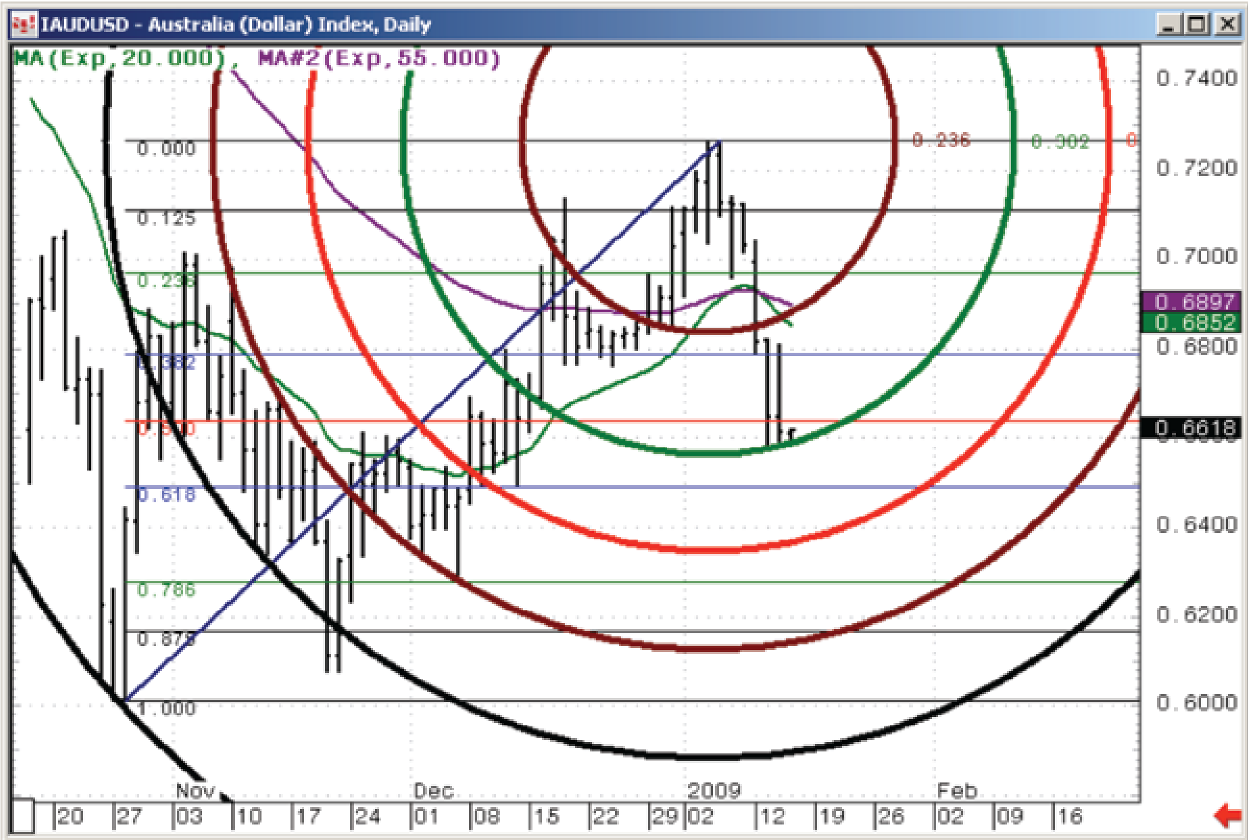

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Figure 3 – Arcs applied to the retracement within the uptrend of the AUD/USD.

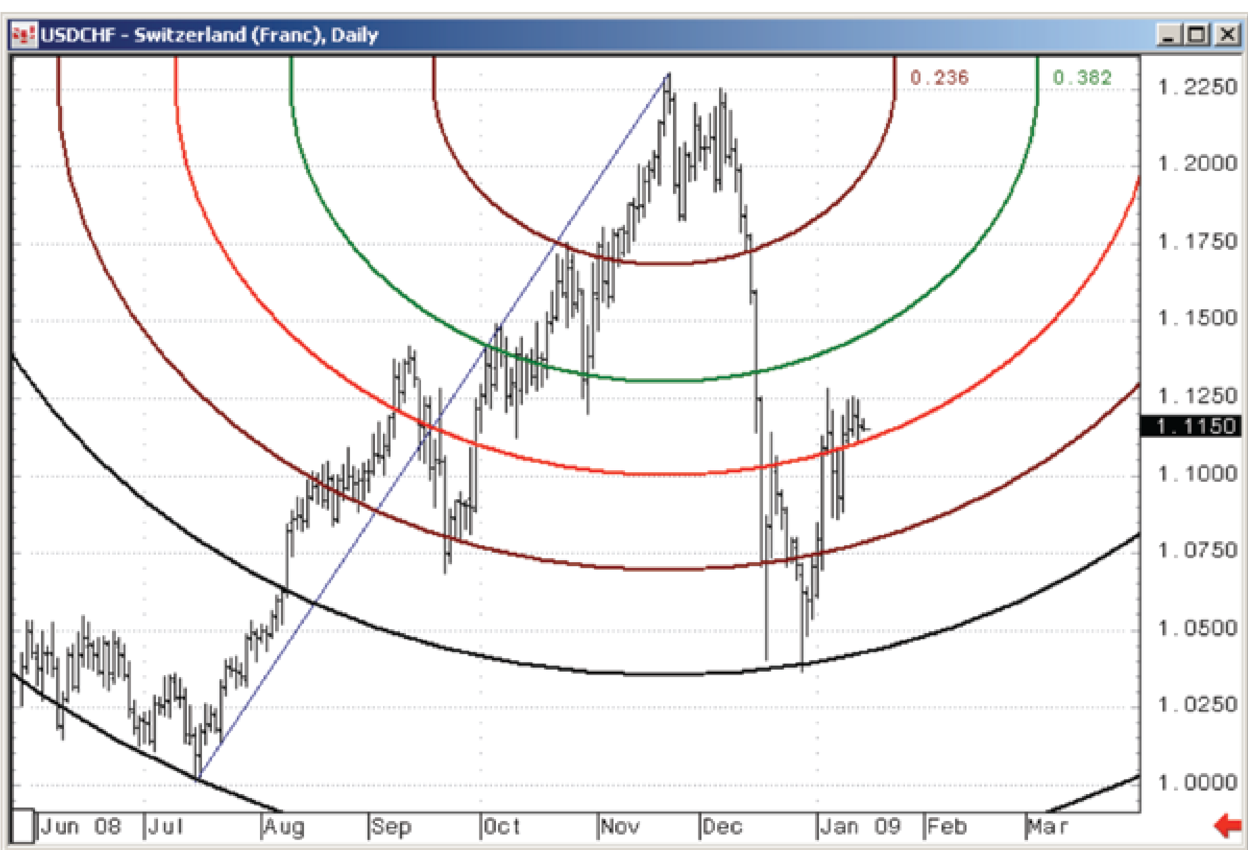

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Figure 4 – Arcs applied to the USD/CHF shows their strength and the need for a full set of retracement ratios.

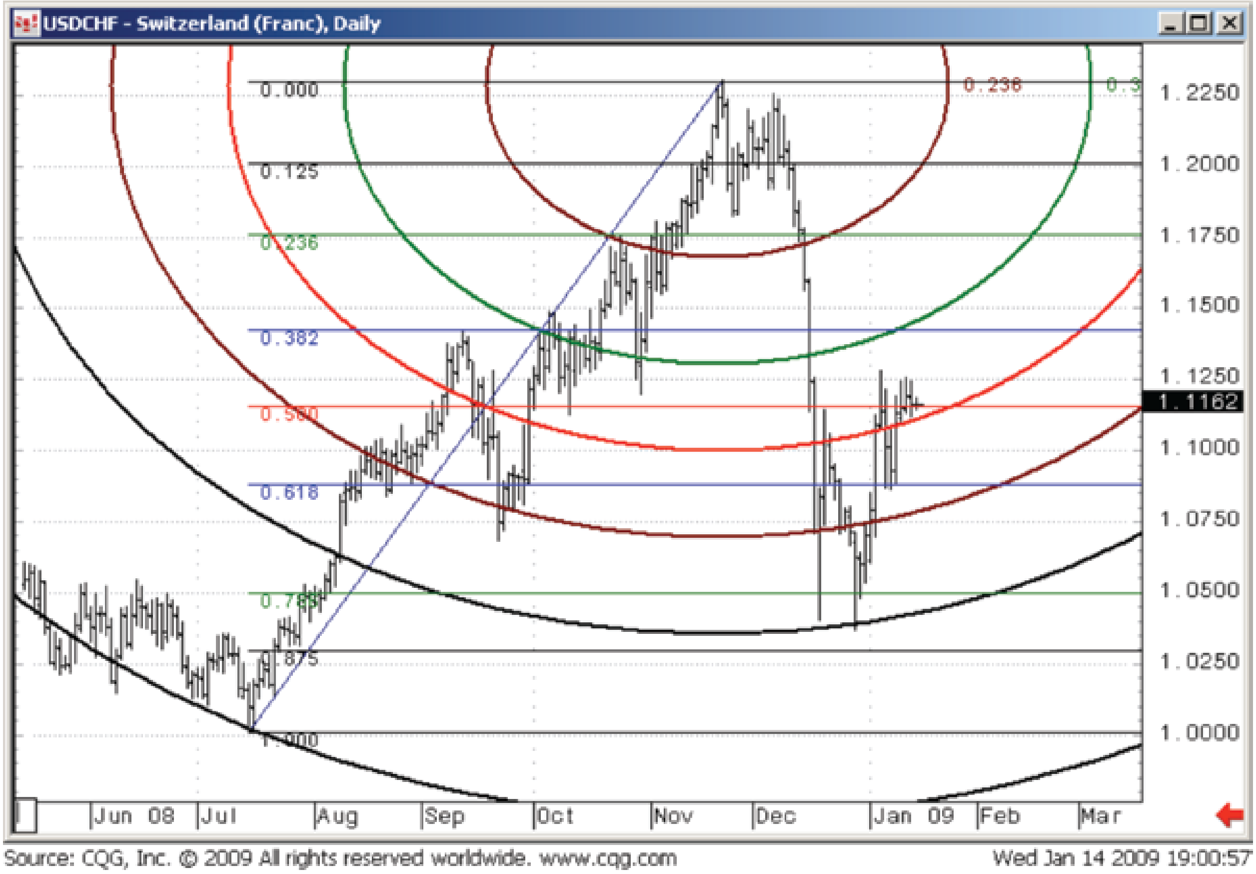

Figure 5 – Arcs lines and Fibonacci horizontal lines applied simultaneously to a dollar/Swiss franc chart.

the powerful and friendly CQG software, these levels ca be extrapolated into the future from the end of the uptrend or downtrend in order to achieve both price and time targets for retracements. Figure 3 shows an example of the arcs on the AUD/USD daily chart.

The AUD/USD had been climbing between October 2008 and January 2009. Since then, the pair has encountered a sustained decline. AUD/USD obliterated the initial support from the arc at 23.6 percent on a closing basis and marched lower! Then, the pair tested the second arc drawn at 38.2 percent, and this arc held. Even if it gives way in the future, the initial close below the arc at 23.6 percent provided an excellent trigger to sell.

Let's analyze a different example highlighting the advantages of using arcs in your analysis. Figure 4 shows the chart of the USD/CHF, which mounted a sustained rally between June and November 2008. After peaking in November, the pair made a collapsed in a decline that broke the arc at 23.6, 38.2, 50 and 61.8. The dollar/Swiss franc finally found solid support from the 78.6 percent arcs in two different instances.

Obviously, the arcs may be used only while these lines are moving up and to the right for the retracement/extension of an uptrend, or the down and to the right for a downtrend.

Arcs Versus Horizontal Lines – A Perfect Mix

Let's take a look at both arc lines and Fibonacci horizontal lines applied on a USD/CHF chart, as shown in Figure 5. Following its second peak in early December 2007, the pair broke through support from the 23.6 percent horizontal line and 23.6 percent arc in the 1.1730 area at basically the same time. Then, continued to bulldoze its way down through the subsequent horizontal lines and arcs. But while the 78.6 percent horizontal line gave way, the 78.6 percent arc held, and USD/CHF rallied sharply to the safety of the 50 percent line. I recommend using these two sets of retracement levels simultaneously. This should be the recipe for a profitable mix!

Cornelius Luca is the author of Technical Analysis Applications – McGraw-Hill, 2004, Trading in the Global Currency Markets – Penguin Books, Third edition, 2007, Technical Analysis Applications in the Global Currency Markets – Penguin Books, second edition, 2000, and Introduction to Technical Analysis – Euromoney, 1997. He has authored numerous articles in both Stocks & Commodities and Futures.