INTERVIEW

Barclay Leib

Barclay Leib is founder of Sand Spring, a New Jersey based consultancy specialising in providing investment advice and market analysis to institutional clients. Previously he worked as a trader on Wall Street for J. Aron Goldman Sachs and JP Morgan. He talks to us about his application of cycles, especially pi cycles, in his trading and investment decisions.

TA: Can you give us a quick overview of your company and the funds you manage?

BL: I am a 1981 Wilson Scholar Graduate of Princeton University. I launched Sand Spring Advisors LLC (sandspring.com) in late 1999 after 18 years working on derivatives and proprietary trading desks, and one-year working with Martin Armstrong of the Princeton Economic Institute. As a proprietary trader, I had long used Fibonacci techniques as a way to anticipate and project "natural attractor" levels of price resistance in the amplitude of market moves. Martin Armstrong was the person who opened my eyes to other mathematical aspects of market behaviour across time on a cyclical basis.

Today, Sand Spring provides trading advice to the public as well as more specialized trading consultation services to one major New York-based global long-short hedge fund. We also manage a fund of funds allocated to a small mix of outside hedge funds with an ETF overlay portfolio that we design ourselves. Thankfully, despite all the volatility of the past year, 2008 was an acceptable year for us. While the fund of funds suffered a small drawdown overall, it performed far better than the average fund of funds in the industry, and our ETF overlay portfolio within this manager mix created a +52% annualized return. More importantly perhaps, our trading advice helped our major hedge fund client navigate to a +9% year while remaining very beta neutral throughout 2008.

"I EXPECT A GENERAL TROUGH IN MARKETS IN MID-JUNE 2011, FOLLOWED BY A HIGH ON OR ABOUT OCTOBER 15, 2015."

TA: It is a matter of record that you use pi cycles as part of your trading strategy. Can you explain how pi cycles work and how they manage to measure market behaviour? What is the significance of pi for the financial markets?

BL: Everyone learned in high school geometry that the circumference of a circle can be measured by the equation $2\pi r$ (r equalling the circle's radius). Now stretch your imagination a bit and ask yourself, "If this equation measures a full circle or cycle in the physical world, just maybe $2\pi r$ might hold great significance in the financial world. But where to set the radius? Borrowing from the Egyptians who were big believers in the Base 10 system of 10, 100, 1000, lets use $2\pi 1000$ = 6282 days, or 17.2 years.

At this point, one might remember fundamental folks such as Warren Buffet speaking of roughly 17-year market rhythms. I might argue that there is an AC/DC like current within financial markets that alternates the market's complexion every 17.2 years. The August 1982 equity market low was exactly 17.2 years in front of the first quarter 2000 equity market high. This was a boom period. But 17.2 years prior to August 1982 was late May 1965 which for a long while was the all-time high in the DJIA in real terms before Johnson-era inflation set in. 1965-1982 as a whole was a period of stagnating markets, war, inflation, and political scandal (Watergate, etc.). But go back another 17.2 years and you come to March 1948. 1948-1965 ended up being, of course, post-War boom years. However, the 17.2-year period prior to this encompassed the difficult 1931-1948 depression era and WWII years. Do you see the pattern?

I have analyzed financial history all the way back to the birth of the US in 1776 and this alternating pattern of boom-bust is still there. The immediate implication is that the boom high left in early 2000 ushered in 17.2 years of general market stagnation, unpopular presidents, and war that will stretch to 2017. In other words, we're just more than half done a general period of pain. As an investor you need to approach this type of environment very differently than boom periods. During boom 17.2-year cycles, you basically want to buy and hold. During the current type of market cycle, you need to be a good market timer and trader to make much money.

TA: Over what times scales do the cycles work? If they can be sub-divided into smaller cycles, can they be reliably used for intra-day trading for example?

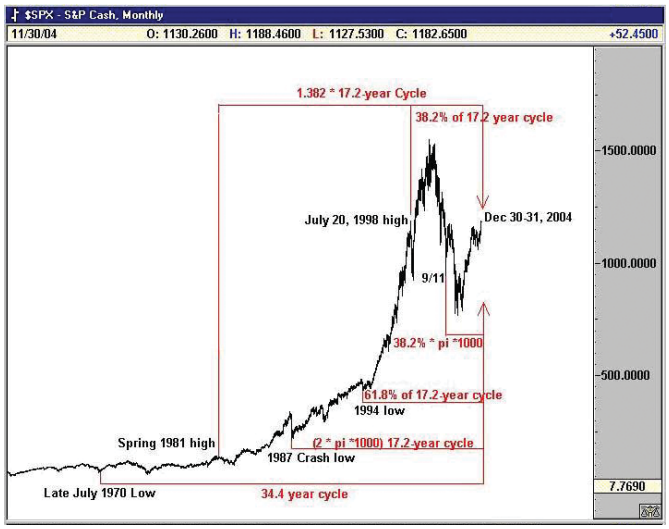
BL: There are likely several different overlapping pi cycles. The one I describe above is just one. Martin Armstrong also focused on a high-to-high pi cycle of just pi x 1000 (3141 days or 8.6 years). Using this cycle, he correctly forecast that July 20 1998 would be a significant high in global equity markets. Go back to your daily chart books and you will find that that day marked the exact high point before the LTCM and Russian ruble crisis of 1998 transpired. Exactly 3141 days prior to this day was December 13, 1989 which was within spitting distance of the all-time high of the Nikkei in Japan, and just in front of the nasty 1990-1991 period of S&L and banking distress in the US.

Exactly 3141 days prior to this was May 8, 1981 – the last business day before Socialist Francois Mitterrand came to power in France, and that country's equity markets and currency began to crumble. This was also the same period where Paul Volcker began taking a sledgehammer to US inflation by raising rates aggressively, driving the DJIA from above 1000 to below 800 18-months later. Go back another 8.6 years from May 8 1981 and you come to October 1972 – just a few weeks before markets melted for the 1973-1974 bear market. The high-to-high rhythm is clear, and generally quite precise – almost to the day.

Taking this same 8.6-year rhythm forward in time from →

July 20, 1998 and the date you come to is Feb 24, 2007. What did this date mark? Friday February 23, 2007 ended up being the historic tights in credit spreads before the whole current sub-prime mortgage market mess started to unravel in the US. On Monday February 26th Chinese markets cracked 8% and other global markets fell 3-6% really for no clear reason. But anyone who was aware of the Armstrong pi cycle was not surprised. I personally was 100% short going into that date and enjoyed the subsequent week immensely. Equity markets did eventually recover to make new highs into October 2007, but credit markets never surpassed their ebullient February 23, 2007 levels.

The 8.6-year pi cycle described above can indeed be divided into shorter intervals. How you do so relates back to how you divide a circle or a clock. A clock has twelve hours. There are twelve signs of the Zodiac. Interestingly, when you divide 8.6 years by 12 you get 8.6 months, and I do follow these shorter cycle rhythms and have found them to have some value – but interpreting them is sometimes more an art than a perfect science. More specifically, I have found that while cycle highs tend to be most precise, cycle lows tend to hit plus or minus several days from when one would expect them. A half cycle of 4.3 months is another date that I track. I have also found that Fibonacci ratios times pi x 1000 can yield interesting and often overlapped clusters of important dates of anticipated turning points.



I have not however brought pi cycles anywhere close to a shorter time horizon such as intra-day trading. Personally, I think that any trader who just stays generally aware of the lunar cycle will have a reasonable edge in trading over shorter periods of time.

TA: What is the success rate of pi cycles? Do they tend work better in some markets than others?

BL: As I described above, I believe that pi cycles are a wonderful and very useful tool to highlight where one resides in an overall market roadmap. Used with other elements of technical analysis they can be a great added resource to a trader or an investor. For example, in 2008, I was expecting an intermediate 8.6 month monthly turn during the third week of March 2008. When Bear Stearns day hit on March 17, 2008, I came into that day 100% net short in my ETF overlay account and went out 50% net long. The timing into that window of time was simply perfect for a low. I generally stayed long until early May 2008 but around 1460 on the S&P I started to get short again based on other technical signals. I did so in part because the roadmap implied by the pi cycle was that between the prior February 24 2007 pi high and an idealized June 14, 2011 4.3 year trough low, the overall trend of the market should be to the downside.

"…THERE IS AN AC/DC LIKE CURRENT WITHIN FINANCIAL MARKETS THAT ALTERNATES THE MARKET'S COMPLEXION EVERY 17.2 YEARS."

The one caveat to using the pi cycle is that it is not always immediately obvious in real time which exact market to focus on. For example, one could have expected that the February 24, 2007 pi cycle date was going to be a lasting equity high. Instead, it was just a temporary equity high, but a more important and lasting turn for the credit markets. In general, coming into each of the important pi dates, one needs to ask: "what is the most stretched and extreme market that is likely to suffer a sudden shift in sentiment?" That is the market where the pi cycle is likely to show up. But that doesn't mean I won't guess wrong and only identify the correct market after the fact. In February 2007 in point of fact I initially thought it was all about equities, and some of the money I made on that turn I started to give back when equities started rallying back in March. It was only several weeks later that I realized that the credit markets were still not taking out their extremes coming into that date.

TA: Who was the first person to really profit from using pi cycles in the markets?

BL: Martin Armstrong was a brilliant market historian and really the first person to use this technique. He also got himself very embroiled managing money for the Japanese where he had yen-overlay exposure in his trading. While his pi cycle analysis was very strong, his fundamental view of USD-JPY ended up being less so. Add in some back-office operational snafus and Marty ended up falling from grace quite badly. But this does not detract from his general brilliance identifying and using different market cycles. →

"THE AUGUST 1982 EQUITY MARKET LOW WAS EXACTLY 17.2 YEARS IN FRONT OF THE FIRST QUARTER 2000 EQUITY MARKET HIGH."

TA: Do you have a money management strategy that you employ when trading using pi cycles?

BL: When an anticipated pi cycle turn date is at hand – particularly a major one – and other technical analysis techniques confirm a potential major shift in a given market, it is an exciting moment. It is a time when I tend to increase my bet size from normal levels and play the turn. But once a market has turned by 10-15%, you have to be more careful. The relevance of that pi cycle turn may last for 1-2 years, but it says less about what may happen over the coming few days or even weeks. In addition, you have to be attentive to having misinterpreted a market turn in the wrong sector as I initially did in February 2007. The pi cycle basically worked but it was a more important turn in credit than in equity markets. You could have still lost a great deal of money if you had stubbornly remained short stocks between March and October 2007. Stocks didn't really start to turn down until 8.6-months later in November 2007.

TA: What is your view of other market cycles such as the 4-year, Kitchen and Kondratieff? Do you they conflict with the pi cycle?

BL: I certainly think that pi cycle theory to financial markets dovetails quite nicely with Kondratieff cycle theory. Three 17.2 year pi cycles equals 51.6 years – within the long-wave 50-60 year duration that Kondratieff proposed represented a full spring (inflation), summer (stagflation), fall (beneficial deflation), and winter (deflation) cycle. It is hard for even me to imagine the winter (deflation) part of this equation – particularly when the US government just effectively guaranteed over $7 trillion of paper and the US just elected the most liberal member of the Senate to be our next President – but who knows.

TA: You have also discussed fractal rhythms before. Can you tell us something more about these and how you use them? You have mentioned that you also use Fibonacci ratios/retracements. How do you combine these with pi Cycles? Don't you have problems with contradicting signals?

BL: I use Fibonacci ratios to anticipate the amplitude of moves in a "natural attractor" type of way. Often you can look at a chart and draw Fibonacci ratio bands on it and just see that the bands don't fit all the intervening highs and lows on the chart. To an artist's eye, it is exceedingly irritating and implies that one of the two price extremes that you are using to draw your bands is not a complete rhythm. Thus one needs to stretch the Fibonacci bands to another level where they will fit the existing price behaviour. I do this on multiple time intervals – monthly, weekly, daily, hourly, and 5-minute charts – and try to find levels in the market that will satisfy Fibonacci fractal rhythms on as many levels as possible. Generally, this type of analysis helps me draw conclusions like: "the trend of XYZ asset, currently trading at $28, is still up for now, but once it reaches a price target of $36.42 it will hit significant Fibonacci fractal resistance, and should turn down from that level at least for a trade, and perhaps for a full trend reversal." This is a tremendous edge to know as it allows you to stay long this asset when others may think the trend is already ending, and flip to short – at least for a trade – at an auspicious high probability level that is pre-definable in advance.

None of this "amplitude analysis" conflicts in any way with the analysis of pi cycles over time. Instead, this type of approach would be a tool that I use to confirm a pi cycle turn. If a Fibonacci fractal rhythm of a given, much stretched, market appears "complete" into a pi cycle turn date, it's like the earth and the stars have all lined up in terms of time and price. Gann would be smiling in his death bed. It doesn't get any better than that. I am a firm believer that if there is a God, he is an adept mathematician, and there is a clear fractal rhythm to markets both in time and price based off of such important mathematical constants as pi and phi.

TA: What are pi cycles telling us about the future? Can we take a view on the next US stock market top?

BL: At present, I expect a general trough in markets in mid-June 2011, followed by a high on or about October 15, 2015 (8.6 years from the last February 24, 2007 Armstrong high-to-high pi date). May 2017 should then bring an end to the 17.2 year cycle of general malaise that began in the first quarter of 2000. Then it will be off to the races again with a "boom period" between 2017 and 2034. But 2034 turns nasty again as it represents a window that is 314 years (pi) from the 1720 South Sea Bubble, 942 years (3 x pi) from the Crisis of 1092, and 1570 years (5 x pi) from the period in which the Roman Empire was falling from power. I only hope to live long enough to witness whatever will be going on in this year. Likely America's excessive debt build-up and negative trade deficits will somehow be coming undone once and for all. ■