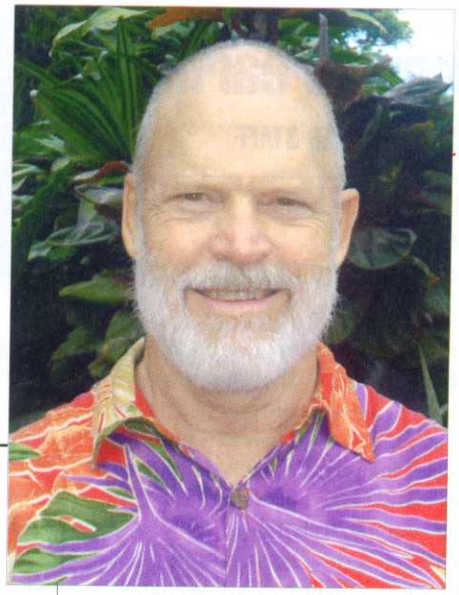
Bill Dreiss

The Revenge of the Trend Follower: This pioneering trader has been riding the waves of the futures markets for more than 30 years — and he just had his best year.



BY ACTIVE TRADER STAFF

A big story line in the trading industry the past few months has been the outsized returns of commodity trading advisors (CTAs) relative to most other investment managers. As hedge funds, portfolio managers, and banks generally went down the tubes with the markets, CTA performance — particularly that of systematic traders — went through the roof.

One of the reasons was the financial collapse created huge trends, mostly down, in a wide range of markets. The incredibly high correlation of these moves meant trend-following systems were profiting from big moves in many more markets than they would be normally.

The Wall Street arb strategies that attempt to eliminate risk do nothing more than warehouse it. That risk shows up — big time — down the road.

The BarclayHedge (www.barclayhedge.com) CTA Index posted a 14.11-percent gain in 2008 — nearly double the median return of the previous 10 years. Barclay's Systematic Traders Index gained 18.12 percent, which was nearly four times its most recent median 10-year return. By contrast, the firm's Hedge Fund Index — after returns of 10.67 percent, 12.39 percent, and 10.22 percent in 2005, 2006, and 2007 — lost 21.53 percent in 2008.

Bill Dreiss is a CTA (a systematic long-term trend-follower), and he had a great 2008 (+102 percent), but he's hardly part of the CTA and hedge-fund explosion of the past dozen years. He's been around longer than pretty much any other CTA you'll bump into — in fact, he was a CTA before the designation even existed. He's seen the good and the bad, including recent years in which his type of trading supposedly had been consigned to the dustbin of history, because as everybody knew, trend following was dead.

His current trading program — Dreiss Research Corp.'s Global Diversified Fund — dates back to 1991, and he's posted a compound annual return of nearly 19 percent during that period, with only five losing years and no back-to-back losers. His career as a CTA dates back even further than this lengthy run, though.

Dreiss, 66, earned a degree in electrical engineering from MIT and an MBA from Harvard before joining a think tank in Southern California in the late 1960s where he worked on state-of-the-art game theory, including World War III computer modeling.

One of his coworkers was a retired Air Force colonel who, as it turned out, had done some commodity trading. Dreiss was interested, and he also had an immediate advantage in terms of researching the markets.

"In those days, you didn't have access to a computer unless you were at a government agency or a big university," he says. "We had access to Air Force computers, and I started experimenting with trading systems."

In the early 1970s Dreiss took a job as a commodity broker to "learn a little about the business and develop some contacts." In 1975 he took a couple of sales types with him and started one of the first CTAs, Commodity Consultants, about a year before the business was even regulated.

"Along with a handful of others, we

Trader Profile

Name: Bill Dreiss
Firm: Dreiss Research Corp.
Style: Long-term trend follower
Market: Futures
Program inception: 1991
$ managed: $1.9 million
CAR: 18.38%

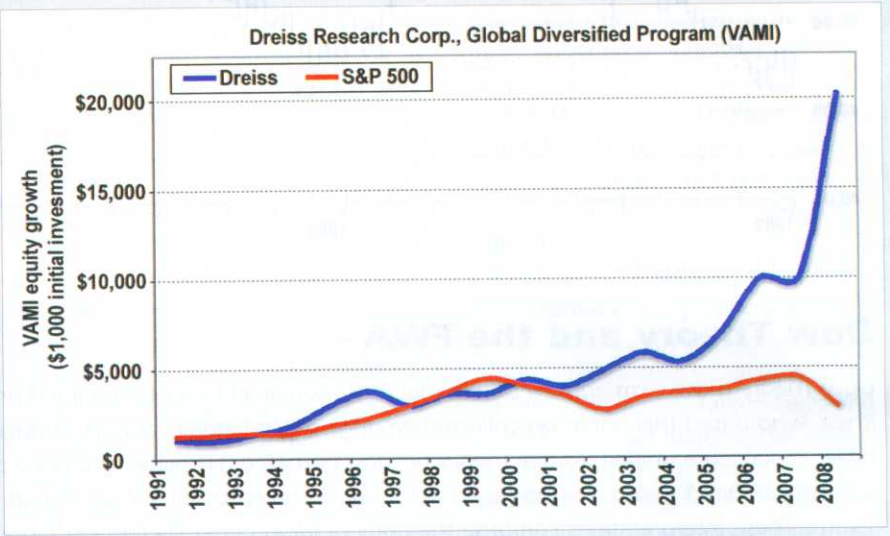
Year	Return
2008	101.84%
2007	1.17%
2006	43.12%
2005	31.11%
2004	-8.97%
2003	19.28%
2002	22.36%
2001	-7.91%
2000	21.65%
1999	-0.40%
1998	22.86%
1997	-22.65%
1996	26.86%
1995	59.76%
1994	38.09%
1993	36.12%
1992	-8.01%
1991	7.55%
Median	**22.01%**
Max	**101.84%**
Min	**-22.65%**
StD	**29.41%**

CAR: Compound annual return.
All data as of Feb. 10, 2009.

Key to success: "Persistence. That's a multi-layered answer."

Rough patch: "I've certainly had times when performance was poor — that's just part of the game. But my worst decision was early in this decade. I was experimenting with trading my equity curve, and one of the things I experimented with was getting out the markets altogether. I tried that, and it was a bad idea. Obviously, it didn't increase my risk, but it definitely decreased my return *(laughs)*!

Blue sky: "Certainly the best period in all the years I've been trading has been the past four months or so. October was just incredible, November was almost as good. And it really didn't involve any decision on my part. All I can say is, I'm thankful I was in the markets."



were essential in establishing the structure of the industry, which has pretty much remained the same to this day, and has also been transferred over to the hedge-fund industry," Dreiss notes. "I've been a registered CTA since they started regulating them, which I think was 1976."

Commodity Consultants lasted about a year, after which the partners split off to form their own firms. Dreiss changed the name of his to San Miguel Associates, which he operated until the early 1980s before stepping away from managing client accounts for several years while researching and trading his own money.

When he started up again as a CTA in 1991, it was as Dreiss Research Corporation. He has been trading his Global Diversified trading program since, managing as much as $40 million in client assets and currently managing around $2 million, as well as "substantially more proprietary money" (personal funds).

Dreiss's trend-following approach is based on the "Fractal Wave Algorithm" (FWA), a pattern-recognition technique that borrows from the fields of chaos theory and fractal mathematics, and which Dreiss characterizes as an automation of Dow Theory (see "Dow Theory and the FWA," p. 54). Basically, the pattern-recognition algorithm identifies turning points, which are then joined to create trendlines, penetrations of which trigger trades. He applies his system to a diversified portfolio of commodity and financial futures on the weekly time frame, with a typical trade length of about six months.

In the course of discussing his long career, the nature of trend following, and the financial markets' current woes, Dreiss minced no words regarding the meltdown on Wall Street and how he thinks money managers irresponsibly treat risk.

AT: Could you provide a little background on the fractal geometry concepts behind your program? I think it's easy to understand that price action might be fractal, but how does that translate into trading signals?

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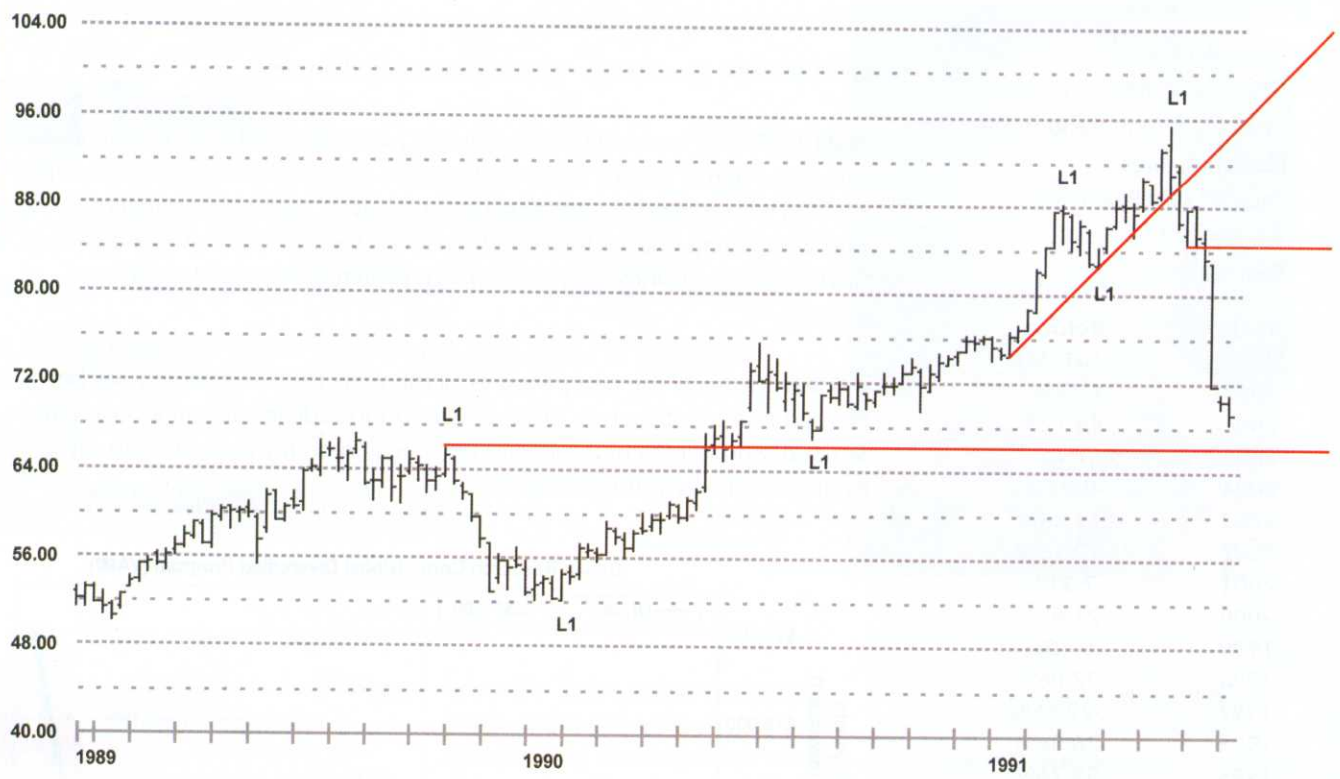
FIGURE 1: DEFINING TRENDS WITH THE FWA



Source: Dreiss Research

Dow Theory and the FWA

Dow Theory is the term applied to a model of stock-market behavior outlined primarily by William Hamilton and Robert Rhea, who based their ideas on collected writings of *Wall Street Journal* founder Charles Dow (1851-1902). Dow himself never proposed a unified, formal theory bearing his name; Hamilton and Rhea compiled and published their work within 30 years of Dow's death. E. George Schaefer and Richard Russell also published popular Dow Theory works in the early 1960s. These interpretations comprise the body of ideas generally termed "Dow Theory."

One of the basic Dow Theory principles is the idea that the stock market as a whole moves in long-term ("primary"), intermediate ("secondary"), and short-term ("minor") price waves: a longer-term upswing, for example, would be composed of shorter-term upswings and downswings, which would be composed of even shorter-term upswings and downswings, and so on. This concept of nested price swings — that price behavior is similar on different scales — is also a basic principle of Elliott Wave theory and more recent theories of price behavior based on chaos theory and fractal mathematics.

Bill Dreiss has described his trend-identification technique using the Fractal Wave Algorithm (FWA) as a systematic application of the Dow Theory. In an article he published in the Technical Traders Bulletin in 1990 ("Automating the Dow Theory with the Fractal Wave Algorithm"), Dreiss discussed the objective basis for identifying trends using the FWA: "If we define an "up" day as a day that closes higher than the previous day and a "down" day as a day that closes lower than the previous day, the lowest level (L0) turning point can be marked on any day a down day follows an up day or an up day follows a down day. The next level (L1) turning point is marked when the most recent L0 high or low is penetrated after a mark in the opposite direction; this results in alternating highs and lows. The next level (L2) is marked on penetrations of the most recent L1 highs and lows, and so on. When this algorithm is applied to stock and commodity price charts, the L1 marks identify Dow Minor trends, the L2 marks identify secondary trends, and the L3 marks identify primary trends."

Figure 1 shows a buy entry signaled when price pushed above an L1 high, and a sell entry was triggered by the penetration of an uptrend line.

BD: The heart of the system I use is called the Fractal Wave Algorithm, which decomposes prices into a series of nested fractal patterns that identify intermediate-term turning points, which are then used to draw the trendlines that trigger trade signals (*Figure 1*). It's a little more complicated in practice, but that's the general idea.

The Fractal Wave Algorithm essentially automates Dow Theory, which is the idea that a nested series of short-term highs and lows form intermediate-term highs and lows, which in turn form long-term highs and lows. It's also similar to Elliott Wave, where you have a nested series of patterns that are self-similar. That's what makes it a fractal — the same pattern is replicated on various time frames.

The unique thing is that the system itself would be very recognizable to anyone who's familiar with technical analysis. The difference is that it's completely automated, whereas technical analysis is typically fraught with subjectivity.

It's clear markets exhibit persistence, which over the long term favors trend followers and weeds out strategies that rely on mean reversion.

AT: So is it a case of identifying a specific reversal point by locating a certain pattern on, say, the weekly time frame and looking for the same pattern on a shorter time frame — daily, or even shorter than that?

BD: No, it can't be shorter-term than weekly because I trade off weekly charts. Essentially, the algorithm relies on what's called a zig-zag. You can understand these [formations] in terms of being short-term, intermediate-term, and long-term patterns, which would normally be described as a series of higher highs and higher lows, or vice-versa.

Let's talk about it in terms of closing prices and an upward zig-zag, which occurs when price goes up, goes down, and then goes up again — higher than the previous high price. Then price makes a zig-zag in the other direction by going down, up, and down. Then, if another upward zig-zag occurs, you now have a zig-zag on the next fractal level — a larger zig-zag made up of three smaller ones. What I'm describing, if you think about it, is simply the Dow Theory pattern.

AT: Did you learn about the Dow Theory earlier in your career, or is the parallel between it and your work something you discovered later on?

BD: No — in fact, we developed this particular program through an effort to automate the Elliott Wave theory, which we found was a futile task. The problem with Elliott Wave is that no two people looking at the same chart will come up with the same wave count.

What we automated was similar to Elliott Wave, but it turned out to more closely resemble to the Dow Theory. It doesn't have the restrictions the Elliott Wave theory has, but it nevertheless gives us a completely objective, automated way to label turning points. That makes it a system, whereas Elliott Wave is not.

AT: You say it's not numeric, though, which seems confusing since you're talking about something you've labeled as an "algorithm."

BD: What I mean is that I've described a zig-zag pattern without making any reference to numbers. In other words, it's a pattern-recognition algorithm. For instance, you could design a similar system that looks at something like the nine-week stochastic, but "nine-week stochastic" contains a number. It can be parameterized — it could be a 10-week stochastic or an eight-week stochastic, which means you run the risk of data fitting until you find something that works.

By contrast, the algorithm I described is a matter of price forming certain patterns. It has nothing to do with any kind of numerical optimization. If my zig-zag patterns determine a trendline, that trendline will break at a certain price level, but the trendline wasn't drawn based on any numerical parameter.

AT: But since you're ultimately dealing with prices, you're working with a collection of numbers. A trendline connects at least two price points, and it could connect more, in which case the number of price points would be a parameter, wouldn't it?

BD: Sure, at some point any trading rule can be determined [numerically], but in this case, it's not a parameter in the sense that it hasn't been optimized.

For example, for an up trendline I need at least two points. That's just standard Edwards and Magee (*co-authors of one of the original chart-pattern books,* Technical Analysis of Stock Trends). When I say it's not parameterized, I mean I simply used the standard definition of a trendline; I didn't experiment with different definitions of trendlines.

You could say that's parameterized because you're taking higher highs and higher lows, but I prefer to call those rules. You have a set of rules to govern a system, and those rules are not normally labeled parameters. If I have a moving average crossover system, the rule that you enter a trade when the moving averages cross is not considered a parameter. What *are* parameters are the lengths of the moving averages, say, 50 days and 200 days.

AT: What markets do you trade, or not trade?

BD: I trade 40 markets, more or less evenly distributed across sectors — 40 percent financials, 60 percent commodities.

AT: Is there any market or market type you won't trade?

BD: No, as long as a market is sufficiently liquid. Also, in order to diversify I might not trade all the markets in a par-

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