Sun-Sentinel, Sunday, October 21, 1990

Wall Street sees flip side of stock panic

Trade quiet 3 years after crash

Reuters

NEW YORK — Three years after the stock market crash, Wall Street brokers say trading is often so quiet they can hear their bank accounts drop.

Even the market's recent comeback has provided only a fleeting boost of confidence in many quarters.

"I've never seen it this bad," said the chief of one Wall Street trading floor, where millions of dollars change hands daily.

His assessment came even as the Dow was climbing.

For the week, the Dow Jones industrial average jumped 122.77 points to close at 2,520.79, a gain of 5.1 percent, more than erasing the previous week's losses.

The index rose more than 60 points on Thursday and on Friday — healthy gains, but not enough to reverse the 16 percent drop since Dow topped 3,000 briefly on a few occasions in the summer. Before Thursday, the Dow had lost 21 percent of its value since mid-July.

Although Wall Street firms as a whole posted a profit in the third quarter, earnings have been falling since the heady days of the 1980s bull market.

"The securities industry is staring a depression in the face — not in the economy, but in the industry," said Perrin Long of Lipper Analytical Services.

Although volume exceeded 220 million shares on Thursday and on Friday, volume has slid to an average of 140 million shares a day on the Big Board in the past several weeks, barely enough to make a trading profit.

The mergers and acquisitions business has dried up, and markets from junk bonds to mortgage-backed securities have shrunk to insignificance.

Wall Street brokerage firms have lost more than 40,000 jobs since the 1987 crash and Long thinks 15,000 more can be cut within a year.

"When you have layoffs and cutbacks, people are not going to be dancing on Broad and Wall Street," Shearson Lehman Bros. Vice President Charles Lewis said.

"There are a lot of people in the business who have not lived through this type of market," he said. "They are not used to people saying, 'I don't want to buy or sell anything.' "

Such despair was not evident in the days after the record 508-point drop in the Dow index on Oct. 19, 1987.

Although the market's decline since its peak in mid-July falls short of the 37 percent drop in 1987, rising oil prices and the standoff in the Middle East and the budgetary wrangling in Washington have confused investors, said William LeFavre of Advest Inc.

"It's like they turned off the water faucet. I've never seen things come to a halt so quickly," he said. "When they don't know what's happening, they sit on their hands."

After Thursday and Friday's comebacks, however, some analysts said they were encouraged, especially after weeks of bad news.

"Certainly the oil and the budget were big factors in the market," said Guy Scott, vice president at the Boston Co. "On the other hand, just on a technical basis, the market was very oversold."

Much of the impetus for the upward swing in stocks came from the falling energy prices. Crude oil for November delivery slid nearly \$6 for the week to close at \$34 a barrel on the New York Mercantile Exchange.

"Oil prices coming down this week was a big plus," said Charles Jensen, chief technical analyst at MKI Securities. "But we're not out of the woods by any means."

Some analysts said the market's long slide may be nearing an end.

"I think the market is bottoming now, because earnings aren't going to be as bad next year as many people think," said Elaine Garzarelli at Shearson Lehman Bros.

Many stocks are 50 percent or more below their highs of the last year, she said.

"We're trying to find the bottom of the market," said James Kalil Sr., president of Compu-Val Investments Inc.

AP file photo

Activity is often quiet on Wall Street, where three years ago, traders on the New York Stock Exchange watched as the Dow dropped 508 points.

29 July 1993

Notes from Conversation with John Boyd on "Science of Military Art"

These are some points that I should not forget to make later in the article.

- The moment you introduce **friction** into the phenomenology of war, you also introduce **nonlinearity**!

- Should also stress the **water-ballon analogy for friction** (i.e., when you take a large ballon and squeeze it down in one place, you simply cause it to expand somewhere else). The analogy is not exact, of course. If the ballon's small enough you can pop it. But with friction, "squeezing it down to zero in one place" simply tends to make it pop out or manifest itself in some other place that you didn't expect.

- Emphasize that you don't have to fall in love with the **term *friction***. You can use, instead, *undecidability*, *entropy*, *nonlinearity*, *uncertainty*, *algorithmic incompressibility*, etc.

- Lastly, if the concept of friction in war has validity, then you ought to be able to apply it to concrete cases and make concrete predictions that subsequent experience can prove or disprove. If you can't do that, then you're not being scientific. The **MTR predictions of transparent battlefields in which friendly friction is zero and the enemy's infinite** provide a case in point. Either the recurring predictions from the technology types (cite the CSIS MTR piece as well as Carolyne Hart's RSTAKA briefing slides as examples) that we will soon be able to achieve such a situation on a regular basis are wrong, or else my reconstruction of friction is not a fruitful concept. It is crucial to see that subsequent military experience could conceivably disprove this consequence of the concept!

30 April 99:

These suggestions eventually got carried forward into Clausewitzian Friction & Future War.

Barry Watts

Kennelly Ms Janet S

From: WATTSBA@mail.northgrum.com
Sent: Tuesday, April 20, 1999 6:44 PM
To: kennellyjs@mcu.usmc.mil
Subject: FW: OODA Loop

attach1

Janet,

I thought these notes might be of interest. Dan DeMots asked for the OODA loop slides and I decided to provide some additional context and, in the process, I may have recalled some odds and ends worth keeping.

Barry

-----Original Message-----
From: **Watts, Barry**
Sent: Tuesday, April 20, 1999 6:07 PM
To: 'DeMots, Dan'
Subject: OODA Loop

Dan,

These slides expanding on John's O-O-D-A loop notion are one of the last things he did before he began his fight with cancer. I first ran into Boyd in 1975 or so, when I was teaching philosophy on the Air Force Academy faculty. Ray Leopold, in the EE department, had worked for John (along with Chuck Spinney) on the Air Staff prior to 1975. In the mid-1970s Ray regularly brought Boyd out to lecture cadets in his engineering courses. (Boyd's ski-mobile metaphor was a recurring topic he raised with advanced engineering students.) As best I can recall, Boyd also talked to the Aero department about energy maneuverability, fighter design, etc. (To recall the context, the F-15 was already flying by then and John was working on the F-16. So there was a lot of interest in fighter design at the time.) In any event, I started talking to Boyd during this timeframe because of our mutual interests in air-to-air and things such as Goedel's incompleteness results and Heisenberg's uncertainty principle. (I had joined the Academy faculty in 1974 after spending two years at the University of Pittsburgh studying mathematical logic and the philosophy science.)

I pestered John for years to turn his various piles of briefing charts on subjects like "Patterns of Conflict" into a book. He never did. As I said on the phone, he found the finality of papers and books too limiting, and by then had become much more comfortable with the fluidity of briefing slides (which can always be changed with words or redone for the next presentation).

To the best of my knowledge, the last real prose piece he did was his essay "Destruction and Creation." We argued at length over various aspects of that essay while I was at the Air Force Academy. "Destruction and Creation" was a very abstract piece of thinking about creative thinking, and we spent a lot of time discussing the use or misuse of

Goedel's incompleteness results in conjunction with the second law of thermodynamics and Heisenberg's uncertainty principle. At the time, I felt John was running things together that really needed to be kept separate. Looking back from the perspective of nearly a quarter of a century later, I'm much more inclined to side with John's willingness highlight the conceptual similarities in these results (even though they were from fields which are generally kept separate). He accused me at the time of being too taken with the fine distinctions academic philosophers are inclined to make, and he was probably right.

If you want any of Boyd's other briefings, let me know. I have most of them at home, including the fast transient stuff that was the origin of the OODA loop.

The main point I'd make about the attached OODA slides is how large and complex the orientation part of the "loop" became on this expansion of the original concept. John and I talked extensively about how much more there was to orientation than to observation, decision, or action over the years. It was a recurring topic of (usually late-night) telephone conversations. As a matter of interest, John gave me some earlier versions of these slides, and I provided some comments (although I can't remember what they were other than that they were entirely about the orientation part of the diagram). That said, a related recollection is that Boyd felt at the time that even this more complex version of the OODA loop was a considerable (maybe even enormous) simplification of reality. In his mind, he clearly envisioned a far more complex version of the OODA "loop" sketch, which is why he put 'loop' in quotes and used the word 'sketch'. With all the feedback and feedforward linkages, it wasn't really a loop anymore. And the notion of his more complex diagram being just a sketch obviously indicated that the reality of what he was trying to express was more complex than what he put down in these slides.

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[redacted]