

Fingers of Instability

Purpose

The *CJ* Investment Newsletter deals with the entire spectrum of securities investing, including cash (money market funds), bonds, equities and options. It will evaluate the overall investing environment and then discuss the relative allocations of these asset types, as well as strategies to implement within them. Essentially, it reflects what I'm actually doing with my clients.

These letters are not sent "cold." Either I know you or someone you know gave me your name. Yes, this letter *is* a sales tool. It communicates how I apply my investment strategies, so that you can decide, without any sales pressure, if my thinking is compatible with how you want your money invested. If you're not already a client, I would like to discuss your *becoming* a client. Please call me for more information.

However, that's not its only purpose. Even if you never become a client, if you want this information, I want you to have it – for a while, anyway. My hope is that providing this information and teaching you what I think is important when investing may help you. Please contact me if you have any questions or comments. I'd love to hear your reaction to my letter.

The *CJ* Growth Strategy (back page) has been an ongoing aggressive growth model portfolio since 1/98. Its results continue to be tracked herein.

Quick Look

Market



Next

Expected Move



Summary and Commentary

- The DJI finally sets a new record after almost 7 years. What now?
- The Fed pauses for the third consecutive time.
- We discuss the title topic at length.

Fingers of Instability

In the 5/06 *CJ Newsletter*, I quoted the brilliant John Mauldin from his article titled "Fingers of Instability." The address:

www.mauldineconomics.com/frontlinethoughts/fingers-of-instability-mwo040706.

(Sorry for the tiny size. In order for the link to work, it has to be on one line.) I have referred to this concept since then, but with the DJI in new high territory and uncertainty regarding the markets' futures, especially in light of the 11/7/06 elections, I chose to explore the concept this month due to its high level of importance and potential applicability in the very near future. I give full credit to Mauldin for explaining this work. I have not read the source material, although I plan to when time permits. What follows is my summary of his summary of the concepts presented and applied in the book, Ubiquity, Why Catastrophes Happen, by Mark Buchanan. Any quotes used will be referenced as to whether they come from Mauldin or Buchanan.

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This might be a good time to talk about applicability here, as in “What the heck does this have to do with investing?” I believe many times when you can find a “universal” principle, regardless of where derived, there is at least *potential* applicability to human behavior. After all, human beings are, depending upon your religious beliefs, at least *partly* natural creatures, meaning that natural laws apply to them. In this sense, all of the laws of physics, chemistry, and biology apply to us, not only in our physical bodies, but also in the operation of our minds, that is, thought and behavior. Much of my proprietary technical indicator, the *CJC Indicator*, is based upon the assumption of natural “laws” being applied to human behavior, although not the concepts described in this letter.

(Before you think I’m totally nuts, know that I had a heavy scientific background before becoming a CPA and businessman. Before I ever used the *CJC Indicator* to help invest real money, the principles were seriously tested for many months for reliability and predictability. Any new ideas I develop are scrutinized long and carefully before ever being used on real money. I don’t start out thinking, “I’m right.” I start out thinking, “This idea has promise. Let’s work with it and test it to see if it has any real potential.” When I’m satisfied with my testing, the idea is *then* put into practice. I’ve thrown out at least 10 ideas for every one I continue to use today.)

Buchanan’s book is based upon the work of three physicists named Per Bak, Chao Tang and Kurt Wiesenfeld. They were studying nonequilibrium systems and they developed a computer program to simulate dropping single grains of sand into a pile. Interestingly, they learned that there is NO typical size for an avalanche. Some were only a single grain tumbling down the pile; others were huge avalanches that wiped out almost the entire mountain. Predicting the size of the next avalanche was impossible. Why?

[Buchanan] “To find out why [such unpredictability] should show up in their sandpile game, Bak and colleagues next played a trick with their computer. Imagine peering down on the pile from above, and coloring it in according to its steepness. Where it is relatively flat and stable, color it green; where steep and, in avalanche terms, ‘ready to go,’ color it red. What do you see? They found that at the outset the pile looked mostly green, but that, as the pile grew, the green became infiltrated with ever more red. With more grains, the scattering of red danger spots grew until a dense skeleton of instability ran through the pile. **Here then was a clue to its peculiar behavior: a grain falling on a red spot can, by domino-like**

action, cause sliding at other nearby red spots. If the red network was sparse, and all trouble spots were well isolated one from the other, then a single grain could have only limited repercussions. But when the red spots come to riddle the pile, the consequences of the next grain become fiendishly unpredictable. It might trigger only a few tumbings, or it might instead set off a cataclysmic chain reaction involving millions. The sandpile seemed to have configured itself into a hypersensitive and peculiarly unstable condition in which the next falling grain could trigger a response of any size whatsoever.”

This condition is called a *critical state*, meaning that the state contains the opportunity for significant change. [Buchanan] “... after the pile evolves into a critical state, many grains rest just on the verge of tumbling, and these grains link up into ‘fingers of instability’ of all possible lengths. While many are short, others slice through the pile from one end to the other. So the chain reaction triggered by a single grain might lead to an avalanche of any size whatsoever, depending on whether that grain fell on a short, intermediate or long finger of instability.”

Physicists have previously considered such a state to be rare in nature. However, the sandpile game seems to suggest that such a state can arise naturally – and commonly. [Buchanan] “Could the special organization of the critical state explain why the world at large seems so susceptible to unpredictable upheavals?” [Mauldin] “Could it help us understand not just earthquakes, but why cartoons in a third-rate paper in Denmark could cause worldwide riots?”

[Buchanan] “The peculiar and exceptionally unstable organization of the critical state does indeed seem to be ubiquitous in our world. Researchers in the past few years have found its mathematical fingerprints in the workings of all the upheavals I’ve mentioned so far [earthquakes, eco-disasters, market crashes], as well as in the spreading of epidemics, the flaring of traffic jams, the patterns by which instructions trickle down from managers to workers in the office, and in many other things. At the heart of our story, then, lies the discovery that networks of things of all kinds - atoms, molecules, species, people, and even ideas - have a marked tendency to organize themselves along similar lines.”

[Buchanan, referring to the sandpile game] “...**every avalanche large or small starts out the same way, when a single grain falls and makes the pile just slightly too steep at one point.** What makes one

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avalanche much larger than another has nothing to do with its original cause, and nothing to do with some special situation in the pile just before it starts.

Rather, it has to do with the perpetually unstable organization of the critical state, which makes it always possible for the next grain to trigger an avalanche of any size."

Mauldin continues on, relating this work to other works by other brilliant minds, but that is beyond the scope of our discussion here. The message I'm trying to convey is to help explain the reasons for some of our frustrations in the past few years. **First and foremost, the message from the information above leads us to believe that once the market reaches a critical state, the size of any individual correction is completely unpredictable.** I think we can also conclude that a small correction or even a series of small corrections would not relieve the innate instability of the markets in a critical state without a very large correction that wipes out a significant number of the interlinked fingers of instability.

This new theory allows us to interconnect value fundamentals, Dow Theory and other TA measures as means of determining the likelihood of markets being in a critical state or (for lack of a better term) a "buildable base." I assert here that the markets, especially as measured by the DJI and SPX, continue to be overvalued by most historical measures of value. Importantly, as Richard Russell has stated so many times, the primary thinking behind Dow Theory is the cyclical movements of the markets between undervaluation (buildable base) and overvaluation (critical state).

I believe the market is in a critical state, and has been so since the late '90's. Granted, there was a series of "washouts" that erased many fingers of instability and that created a buildable base during the period from Q3 2002 through Q1 2003. However, even at the market lows during that time, most value measures of the markets were more indicative of historic bull market tops than bear market bottoms. Ergo, the fingers of instability contained within the market were **not** completely wiped out, leaving a high likelihood that the markets experience a major washout or series of smaller washouts until the market reaches some historic measure of a true bear market bottom (a buildable base).

The upshot of this is that it explains why the markets can continue to be so frustrating (*i.e.* not going down) while the *CJ* investment position can continue to be correct. Our bearish stance, supported by both

fundamental and technical analysis now makes sense in the light of the idea that the markets will not collapse to bear market lows without the right "grains falling upon the right fault lines." Conceptually, I was undergoing enormous stress from "knowing" that the *CJ* investment posture was appropriate by all of the cause and effect fundamentals and technicals I believe in and yet watching the market refuse to decline significantly, and, more recently, make a significant upward move. It felt a lot like Chicken Little.

This new theory is not only heartening; it provides *patience* through the understanding that, while an assessment of the market condition may be accurate, the nature of the beast is such that the time and place of the correction that has historically always taken place may be difficult to time, but will eventually happen and pay off if you're positioned well.