

GRANVILLE SHAKES THE WORLD PART 3

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Jack Denny, Professor of Statistics at the University of Arizona, and a person who has carefully looked at Granville's records, wrote as follows:

Thanks for the copy of your joint paper about Joe Granville. My comments on your paper, on Granville and on randomness follow.

About the first test [Gambling Times, April 1981], I interpret it as follows. We have an urn with 256 black balls and 224 white balls. The balls are chosen at random without replacement and, in the spirit of your model, are consecutively laid out. We thus assume that each of the [(480), (256)] arrangements are equally likely.

An individual [Granville], unaware of the number of balls, black or white, observes a phenomenon [the market]; and chooses time t_1 , announcing that black balls will appear more often, then chooses time t_2 t_1 , announcing that white balls will appear more often, and so forth.

If the t_k were specified in advance we can reject the hypothesis that each arrangement is equally likely at level .001332. That is, we can conclude the "market is not random." Moreover, we can reasonably say that Joe makes use of the market's non-randomness. For fair games there is no way to beat the house so we can make similar conclusions about the market and

Joe with the t_k random. I feel less sure about the level of significance .001332 for random t_k .

I mostly agree with what Denny has said. The point about the t_k being random is one which bothers me, and which I haven't in my own mind yet resolved in a way that satisfies me.

This same point was made in a somewhat different way to me by

Granville seems to catch turning points rather precisely. There exists no strategy which can control turning points if the person has no forecasting power.

Professor Mark Garman, Professor of Finance at the University of California at Berkeley.

Garman said:

Suppose that we look at a simple coin matching game to illustrate what the problem may be with these random t_k . You toss a fair coin. When it comes up heads you get one unit from your opponent. When it comes up tails you pay him one unit. Your fortune at any time represents the DJIA in this discussion.

At the beginning of the game you forecast that your fortune is going to increase. Now it is a fact from the theory of the fair coin game

that if you wait long enough and your capital is infinite, there will eventually come a time when you are ahead. In fact, if you wait long enough you can be ahead by any pre-specified amount.

Suppose that you decided in advance to keep playing until you are ahead 100 units. At that point you would issue a new forecast. Notice that your old forecast has come true. You have played possibly a very long time, but during that time you have a net gain of 100 units so for you the "market has been up on average."

Now at the plus 100 unit level you issue a new forecast that you will lose in the next part of the game. Suppose that you keep playing until your fortune has dropped 200 units below the 100 unit level, or until you are at minus 100 units. At that point you stop and issue a third forecast.

Notice that your second forecast, that "the market will be down" (i.e. that you will lose during this second part of the game) has come true. You have played for possibly a very long time, but you have lost 200 units so overall this is a losing session as forecast. One can go on in this vein indefinitely. Thus, in each session the forecast turns out on average to be correct.

My reply is that the amount of time involved for such a forecast to come true may be very long indeed: much longer than the test periods in the work that we have done. Also, it may be (though I am not sure) that the effects of an approach like this are comparatively small.

Unlike Granville, Market Logic hedges its forecasts.

Finally, in the test period Granville seems to catch turning points rather precisely. There is no way that an optional stopping strategy like this can control turning points. There exists no strategy which can control turning points if the person has no forecasting power.

Professor Denny also suggests an alternative to one of our tests: "About the second test. Use the Wilcoxon two sample test, since the null hypotheses of equality of the two populations require only that the pooled sample have an exchangeable (symmetric) distribution. I simply cannot accept the hypothesis of randomness in the market!"

I and my co-authors will look into the use of this test and report back what we learned.

Here is another interesting response to the Granville columns from a professor at a west coast University. I'll omit his name since I'm not sure he would want it printed.

As you can see from the enclosed column from today's S.F. Examiner, and as was obvious from the reaction to G's last signal, there are so many people who believe in G's predictive power that his signals must be correct, at least short-term.

I half expected the Fed to deliberately relax interest rates for a while to push the market up high enough to discredit G. It's hard to believe that those in power can tolerate G's ability to move the market as he does, and I have no doubt that they could manipulate the market for a while to make him wrong. It's an extraordinary situation!

Frankly, I did not read the

details of your paper. Although I am a professional mathematician, I have never studied statistics, never believing all the effort would have much payoff.

It's so obvious to me that G has discovered a pattern with predictive power that the notion of proving this seems silly, except to garner academic recognition for him. You're not

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likely to achieve that because his theory is so simple-minded, and academics only respect complexity, it seems.

Your future section 6 will be interesting because I don't see much rationale for his theory. He has simply discovered a pattern: the DJI is the last to top and the last to bottom, so when its extrema are not confirmed by the majority of other indices, that is the signal.

This can be explained behaviorally: the blue chips are the last to move up because by then the more speculative stocks are losing steam and getting too risky. And they

are the last to bottom because they are so solid the faith in them is the last to erode. But this behavioral pattern need not persist forever.

If I were capable of writing a treatise on Granville, I would place most emphasis on his understanding of market psychology, not so much on his indicators. He emphasizes the game as being "winners vs losers." The winners disguise/ hide what they are doing. The losers make public pronouncements that are usually wrong at market turning points.

In his show he cited the prediction by Alan Greenspan last April that the economy was heading for a severe turn-down as a very bullish sign: Alan Greenspan is a loser. Joe says his secretaries keep a file of the comments and predictions on the inside back page of the WSJ, sorting out the winners from the losers. So this is a version of contrary opinion market forecasting.

He also does an excellent job in his book of showing how the news headlines form a cover or hook to deceive the public. It makes one wonder whether this is done deliberately. Or is it simply that the winners have already discounted the news ahead of time.

I find it curious that the brokers sponsor the Granville shows when he always insults the hell out of them. I guess he brings in customers and that's all they care about.

I just discovered a service called Market Logic, with an explanatory book Stock Market Logic by Norman

Fosback. This man is thoroughly trained in statistics and econometrics and does not appear to be a con-artist like most others. His Institute for Econometric Research in Ft. Lauderdale, Florida has done extensive computer testing of various market indicators. In his book he reports which ones have stood up and which have failed.

His advisory makes one-year, six-month and three-month forecasts for the market in each issue (currently higher, lower and lower, respectively), as well as occasional specific stock recommendations that have done well. I like his calm rationality in contrast to the highly emotional pitch of most other advisors.

Unlike Granville, however, Market Logic hedges its forecasts. The reader does not get a clear signal in every issue.

In the March 6 issue, for instance, the three month, six month and one year projections for the S&P 500 Index are all lower, yet the Major Trend Model is bullish. The Indicator Review is mixed. In particular, the Fosback Index of Mutual Fund cash/assets has been bearish for several months. (We are told that the Fosback Index "shows a splendid record of calling important market turns during the last two and a half decades.") Very confusing.

Answer: I have been favorably impressed by Market Logic and Fosback's book. My impressions are similar to yours.

gt

CALENDAR

JULY 1981 WEST

Reno/Tahoe

1 Sahara Reno: "Leland 4" thru July 5 at the Gilded Cage Cabaret. For reservation information, call 702-322-1111.

Sahara Tahoe: Liberace thru July 13 at the High Sierra Theatre. For reservation information, call 702-588-1111.

2 Harrah's Reno: Lou Rawls thru July 15 at the Headliner Room. For reservation information, call 702-786-3232.

3 Harrah's Tahoe: Helen Reddy and Jim Stafford thru July 9 at the South Shore Room. For reservation information, call 702-588-6611.

7 Sahara Reno: Bubba Lou and The Extremes thru July 26 at the Gilded Cage Cabaret. For reservation information, call 702-322-1111.

9 John Ascuaga's Nugget: Red Skelton thru August 5 in the Celebrity Room. For reservation information, call 702-358-2233.

10 Harrah's Tahoe: Sammy Davis, Jr. thru July 23 (except 15th & 16th) at the South Shore Room. For reservation information, call 702-588-6611.

14 Sahara Tahoe: Englebert thru July 24 at the High Sierra Theatre. For reservation information, call 702-588-1111.

16 Harrah's Reno: Bobby Vinton thru July 22 at the Headliner Room. For reservation information, call 702-786-3232.

23 Harrah's Reno: Mickey Gilley and Johnny Lee thru August 5 at the Headliner Room. For reservation information, call 702-786-3232.

24 Harrah's Tahoe: Bob Newhart and Dottie West thru August 6 at the South Shore Room. For reservation information, call 702-588-6611.

28 Sahara Reno: Sonny Turner thru August 16 at the Gilded Cage Cabaret. For reservation information, call 702-322-1111.

WEST

Las Vegas

1 Aladdin Hotel: Lola Falana thru July 8. For reservation information, call 702-736-0111.

Silverbird Hotel: The McCall Twins thru July 4 in the Silver Star Cocktail Lounge. For reservation information, call 702-735-4111.

Sands Hotel: Shecky Greene thru July 7 and from July 22 thru August 4. For reservation information, call 702-733-5326.

Hilton Hotel: Tony Orlando thru July 6. For reservation information, call 702-732-5111.

7 Hilton Hotel: Bill Cosby and David Copperfield thru July 20. For reservation information call 702-732-5111.

9 Aladdin Hotel: Ronnie Milsap thru July 22. For reservation information, call 702-736-0111.

10 Riviera Hotel: Merv Griffin Television Show taping thru July 14. For reservation information, call 702-737-1755.

21 Las Vegas Hilton: John Davidson thru August 2. For reservation information, call 702-734-7777.

23 Aladdin Hotel: Lola Falana thru August 5. For reservation information, call 702-736-0111.

INDEFINITE: Maxim Hotel Casino: Maxim Talent Showcase, 8:30 p.m. to 2:00 a.m. Sundays in the Cloud Nine lounge. 1-800-634-6987

Sahara Reno Opera House Theatre: Penthouse Pet Review starring Sandler & Young. Call 702-322-1111.

John Ascuaga's Nugget Casino Cabaret: The 50s Follies (no reservations required). 702-358-2233

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