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Dale Rosenthal made money in Grad School playing the Russell 2000 Index's reconstitution. The small-cap benchmark's spring shuffle is a favorite bet for quants like Rosenthal, who now teaches finance at the University of Illinois at Chicago. Over three months in 2004, he made 23% on a portfolio of about a dozen stocks.

"You could have a hedge fund," says the professor, "where you walk in during April and work until August, then turn the lights off." Since 1984, the indexes run by Tacoma, Wash.-based Russell Investments have intrigued mathematically inclined traders, nicknamed quants, because Russell membership is an objective function of a stock's market cap on the last day of May -- as opposed to the inscrutable committee decisions that fill indexes at Standard &Poor's or Dow Jones (which is also known as Barron's publisher).

But the Russell's market-determined composition also exposes it to predatory traders who can manipulate a stock into the Russell -- hurting investors in Russell-indexed mutual funds and angering experts like Rosenthal. Indeed, a continuing study by a pair of researchers at State Street Global Advisors has found evidence of trading that seemed designed to rig the Russell's membership through a surge of buy orders on the index marking date. Russell Investments praises the study and tells Barron's it will seriously consider making changes.

The game of anticipating additions and deletions has a long and respectable history among brokers who service index funds, as well as hedge funds and proprietary trading desks that take positions they hope to unload to rebalancing indexers. More than $2 trillion in investments are indexed or benchmarked to the Russell 1000 Index of the thousand largest stocks by market cap. Another $870 billion tracks the Russell 2000, the next two thousand stocks by market cap after the Russell 1000. To the dismay of Wall Street back offices, Russell makes its annual changes on a single day -- June 26 this year -- and the index funds' stampede can be a Pamplona-type spectacle.

But a less-noticed intrigue occurs on the date when Russell measures stock-market caps to determine index membership. It is May 29 this year. Working as a trader at Morgan Stanley some years back, Rosenthal noticed stocks that surged suspiciously up the ranks on the day Russell took its snapshot. "People actually forced stuff in . . . that is just evil," says the finance prof. "It isn't like you figured something out, but that you made it happen."

Those suspicions seem borne out by the data of Zhan Onayev and Vladimir Zdorovtsov, researchers at State Street who studied the past nine years of Russell reconstitutions. Among the stocks that just squeaked above the Russell 2000 threshold, a disproportionate share of the gains for May occurred on that measurement date -- in- deed, in the last minutes of that day.

The State Street researchers noticed the disturbing trades in the course of another study when they charted the order flow of stocks entering the Russell 2000. That chart, excerpted at lower left, showed a measurement-day spike in buy-order imbalances (defined as buys minus sells, divided by total orders) for all Russell additions, large and small. And over eight years, the imbalances for the smallest entrants averaged three times higher than for the largest entrants. Zdorovtsov and Onayev think that is possible evidence of traders trying to push stocks over the Russell threshold.

"That chart was the 'Aha!' moment for Zhan and me," says Zdorovtsov. Last year, about 200 new additions made it over the Russell 2000 threshold, which was the market cap of the 3000th stock at the close of May 30, 2008-or $167 million. In this year's still-recovering market, analysts like Citigroup's Lori Calvasina predict the cutoff will be down around $72 million. A would-be manipulator might hoard illiquid stocks with market caps under that level, in hope of pushing them up on May 29. The table at upper left illustrates some of the thinly traded, non-Russell names now hover- ing around the $70 million level. Barron's wouldn't recommend buying any stock based on its market capitalization.

Russell's head of index-client service, Lori Richards, praised the State Street study. "We highly value this kind of research," she says. "Over the past nine years, we have made multiple changes to our methodology to preserve its ability to be transparent and to reduce market gaming." Russell now adds initial public offerings throughout the year and has a "buffer zone" on the border between the Russell 1000 and Russell 2000, so that a stock doesn't move back and forth between the indexes unless its size changes significantly. If mischief takes place at the bottom of the Russell 2000, says Richards, the problem is small. Last year's additions to the indexes amounted to just 0.47% of the total weight.

With $3.5 trillion tracking the Russell indexes, that is still $170 billion of assets exposed to manipulation.

The Russell measurement-day imbalances may possibly result from honest speculators, Zdorovtsov notes, and not necessarily from stock manipulators. Still, he and Onayev suggest that Russell put a buffer zone at the bottom of the Russell 2000 as well. Better still, Russell should stop using a single day's price to rank stocks; an average over several days would be harder to manipulate. Russell index executive Richards says those are ideas worth considering.

Finance professor Rosenthal thinks Russell has disrupted the market's operation -- however innocently -- with its one-day-a-year fracas. "It's like showing up at the supermarket," he says, "to buy 1,000 gallons of milk."

NOTES:
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