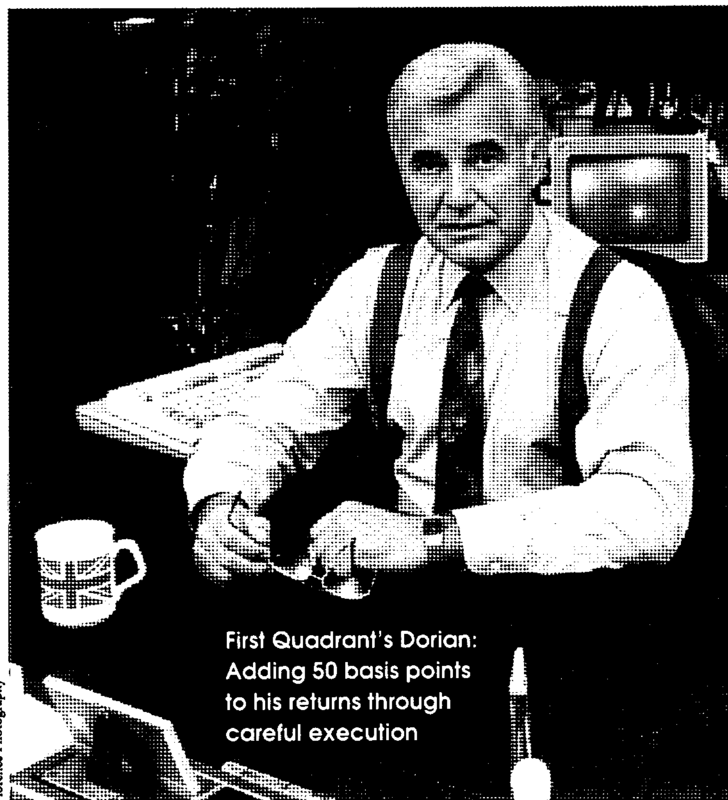
The cost of inefficiency

Pummeled by poor markets, money managers are looking to slash their biggest expense — the cost of trading. Brokers beware!

By Alyssa A. Lappen


First Quadrant's Dorian: Adding 50 basis points to his returns through careful execution

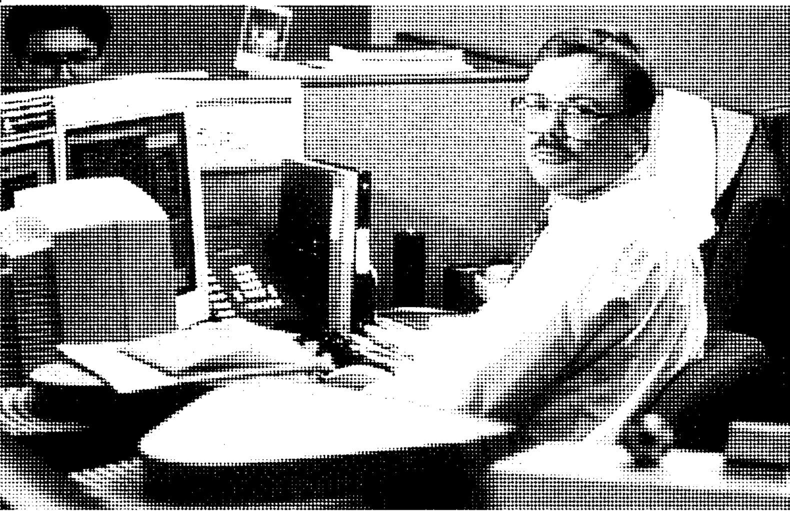
Florence Photography

It's January 6, a relatively quiet Friday in the market. Richard Rosenblatt paces the floor of the New York Stock Exchange's expanded blue room, trying to fill a client order for 5,000 shares of Repsol, the Spanish oil, gas and chemicals company. A maximum limit of 27 3/8 per share in hand, Rosenblatt scurries to the specialist, learns that 25,000 shares are for sale, then runs back to his booth to consult the client, who ups the order to 10,000 shares and tells Rosenblatt to "work it." He dashes back to the specialist, who promises to "stop" (actually, to sell him) 5,000 shares at no more than 27 3/8, the market offer price. But in the crowd milling around the specialist, Rosenblatt finds a natural seller willing to part with 10,000 shares at 27 1/4. Minutes after his nameless institutional customer placed the order, Rosenblatt has shaved an eighth off the price — all for a commission of 2 cents per share.

"I don't always win," says Rosenblatt, whose four other floor brokers and 21 employees at Richard A. Rosenblatt & Co. trade between 1 million and 2 million shares a day, strictly for outside accounts. "Sometimes I suggest that a client pay up or raise the price. It depends on what is more important to him or her — execution cost or opportunity cost." But what matters most to Rosenblatt, who has worked the floor for 26 years, is that he beats his competitors on the quality of execution. In that seemingly nebulous area, he can pick up — or lose — enough points for his clients to have a significant impact on their performance.

Which in turn could well determine whether those clients survive as money managers: With market returns down substantially from their double-digit highs of the 1980s and early '90s (*Institutional Investor*, January 1995), trading costs suddenly matter — a lot. Consultants and pension fund managers now routinely put trading costs on the table as part of their manager evaluations. And regulators, concerned about hidden expenses in securities transactions, are likely to require disclosure of soft-dollar trading costs, particularly by mutual funds.

Among Rosenblatt & Co.'s clients is John Dorian, a former General Dynamics Corp. pension manager who today runs $2.5 billion in equities at First Quadrant Corp., a Pasadena,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Twentieth Century's Bradley: Trading heavily on electronic networks

California–based quantitative manager. In terms of broker executions, First Quadrant rates Rosenblatt either first or second in every quarter. "There are [trading] rules of thumb, and [Dick] knows the rules better than I do," Dorian says.

Until recently, speaking the trading efficiency lingo simply wasn't part of a money manager's job. Now it's fast becoming critical to every manager's success. "For my first few years [of managing money]," Dorian admits, "I thought trading was just an annoying thing you had to do." Now he realizes that trading is by far his biggest cost.

Careful execution, Dorian says, can add as much as 50 basis points a year to his returns: "In a down year that can make the difference between being down and being flat." Dorian measures not only his brokers but also how First Quadrant's trading performance compares with its peers. Citing research done by Elkins/McSherry, a broker that, like Abel/Noser Corp., provides transaction analysis, Dorian says that on his total trading volume (345 million shares last year), only 10 percent of money managers got better values.

This kind of talk makes some traders very nervous. How, they wonder, can managers effectively measure trading much beyond the cost of commissions? "It's pretty hard to measure where and how traders add value," says Jan Twardowski, president of Frank Russell Securities in Tacoma, Washington. Lesa Mills, chief equity trader at Janus Funds in Denver, agrees: "If a manager puts a limit on, it's not fair to measure that execution. It's not that we don't care, but measuring isn't accurate enough for the way we do business." Notes Buzzy Geduld, an over-the-counter broker at Herzog Heine Geduld: "I've never understood those measures people attempt to use. Someone puts up a piece, the stock goes out in one shot, and you can look like a champ or a moron."

But whether they like it or not, brokers are growing accustomed to their clients quantifying what they used to accept as seat-of-the-pants skills. Even the skeptical Geduld affirms that "who you do business with determines the value added. And whether it's one half of 1 percent or 4 percent, God only knows. But is it a number? Absolutely."

Dozens of pension funds, including those of Brooklyn Union Gas Co., BellSouth Corp., Scott Paper Co., Unisys Corp., Shell Oil Co. and Mobil Oil Corp., have taken steps to measure trading efficiency in some form. The sharpest have developed or are working on proprietary in-house systems, the details of which they are reluctant to disclose. "We try to measure the performance of our transactions and compare it with our benchmark on a time-weighted rate of return," says head trader at California Public Employees' Retirement System Carl Guidi, who is further refining his system now. "This is an issue that has been put on the shelf for too long."

"Clients are always looking at trading from the standpoint of costs," says Gerald Scriver, who set up the quantitative equity management firm of Westpeak Investment Advisors L.P. in Boulder, Colorado, for New England Investment Cos. in 1991. Scriver, who has managed money for 30 years, most recently for Invesco, hires trading specialists to track the efficiency of every trade. "We can monitor every portfolio and stock on a real-time basis to show how trades affect their value relative to their benchmark index," he says. Indeed, a host of trading systems and software from companies such as Investment Technology Group, the electronic brokerage firm 80 percent owned by Jefferies & Co., and Bear, Stearns & Co. have made tracking the effectiveness of trades much easier.

The smartest managers have long since gone on the offensive against high trading costs with sophisticated systems and almost religious fervor. Says Harold Bradley, head of equity trading at Twentieth Century Investors in Kansas City, Missouri: "Trading [efficiently] is my gospel. This money belongs to our shareholders, and we work to achieve the most efficient, effective, low-cost trading we can find." Adds Westpeak's Scriver, "A few years down the road, it will be necessary to integrate trading with money management, and the firms that work the old way — trading huge blocks with the big Wall Street houses, doing single-issue trades, with no technology — will see pressure on their performance."

So far, however, anecdotal evidence suggests that Bradley and Scriver are in the minority. "Very few clients have these [trading efficiency] measurement systems," according to Charlton Reynders Jr., whose brokerage firm, Reynders, Gray & Co., takes orders for about 1 million shares a day on an agency basis from major institutions. To prevent brokers from "gaming" the system — trying to beat volume-weighted average prices — those few money managers that have such sys-

tems often don't explain how they work, he says.

Exactly how managers can increase trading efficiency is a matter of considerable debate. In Bradley's view, eliminating soft dollars from the trading equation is a good place to start. Too many money managers treat commission dollars as their own, he says, paying for everything from research to computers by routing trades to brokers who charge six or seven cents per share and rebate a portion of that to the money managers' suppliers. "When you make 40 or 50 percent of your trading decisions because you have to trade in a certain place, you are not getting the best execution," Bradley concludes.

Twentieth Century pays for virtually everything — from research to computer hardware — with cold, hard cash. "We are not constrained by soft dollars or preexecution commitments to trade [with certain brokers]," says Bradley. "We are promoting stringent disclosure requirements on soft dollars." Giant TIAA-CREF shook the pension world in January, announcing that it will stop using soft-dollar arrangements with brokers to pay for third-party services.

Many other money managers are equally devoted to the pay-as-you-go creed. The bang-up 4.2 percent small-cap 1994 return of value manager Scott Black at Boston-based Delphi Management provides but one endorsement for forgoing the ostensible benefits of soft dollars. Black, who manages a total of $635 million, does all his own research, paying maximum commissions of 4 cents a share on stocks under $10 and 5 cents on stocks over $10. To the Shearson Lehman brokers who wanted more, Black once said, "I don't take your research, I don't eat your sandwiches, and I won't pay 6 cents a share." Nor will he direct his clients' commission dollars.

SEC's Woodward: Zeroing in on soft-dollar abuses

Barbara Ries

A far greater number of money managers, however, may soon be forced to disclose their soft-dollar dependency. "Conspiracy may be too strong a word," says Susan Woodward, the Securities and Exchange Commission's chief economist and an expert on trading. "But mutual funds know that their customers pay at least a little attention to expenses. So they pay the adviser, say, 50 basis points in cash and cover annual capital expenses with 10 basis points in soft dollars. Soft dollars should all be expensed." SEC regulators are expected shortly to require mutual funds to disclose all soft-dollar payments, although the fund advisers may not be covered. The Department of Labor long ago voiced concern about the use of soft dollars.

Beyond commissions, however, lie the less quantifiable aspects of trading costs, such as market impact and opportunity cost. Many managers now seek advice on just what constitutes efficient trading and how to achieve it. Some 51 equity managers handling assets of between $300 million and $70 billion in a wide variety of styles, for example, have turned to former Wilshire Associates partner Wayne Wagner, who founded Plexus Group in 1986 and shortly thereafter began to address this very issue. "Everyone is a genius in a rising market," says Wagner. "But when there is no easy money to be picked up, you have to look in the hard places." Focusing on trading efficiency, he contends, can add as much as 200 basis points to returns.

Wagner concerns himself least with commissions and most with the quality of his clients' execution and their opportunity costs. "Our clients send us data on their decisions of what stocks to buy as soon as they hit the trading desk and tell us when they are executed," he says. "So instead of analyzing how stocks are picked, we look at what happens when a stock has been selected, how the manager implements the idea." For each manager, Wagner analyzes about 1,000 buy and sell orders per quarter, following the progress of the stocks for weeks at a time.

Surprisingly, Wagner reports that eight out of ten of his clients would outperform their benchmarks, if only they executed all their ideas when they got them. But trades on the best ideas are often delayed or incomplete because orders are too large relative to an issue's volume. These victims of the supposedly immeasurable implementation shortfall and opportunity cost account for up to an astounding 25 percent of all shares ordered, he says. "Execution is about capturing value," Wagner reports, "not just minimizing costs. Studies suggest that the old saws like, 'Never set the high of the day' or 'Never pay more than the volume-weighted average price' were incorrect because they made you step away from the most important trades."

Managers also have profound weakness when it comes to selling, Wagner says. "More often than not, the focus is on picking good stocks, while the execution and selling processes are ignored." Given the huge flow of capital into equities in the last decade, Wagner worries that few managers have a sell discipline any more. "The down markets really could be quite frightening," he says. And on the downside, losing an opportunity to sell means losing real money. In other words, the cost

of selling is often much higher than the cost of buying, and not selling at all is the most expensive. One of Wagner's earliest subscribers was Richard Driehaus, the Chicago momentum player and successful trader whose Driehaus Capital Management now handles $925 million (*Institutional Investor*, November 1993).

Some managers still go the old-fashioned route, sticking chiefly with traditional brokers, compared with a large and growing number of electronic and agency broker alternatives. A few years ago, for example, Thomas Linkas, director of U.S. and international equities at Batterymarch Financial Management, ditched an old computerized trading system, nicknamed R2D2, that set below-market limits and showed brokers position, size and direction in advance of trading, in favor of a measured process. R2D2's low, 2-cent-per-share commissions didn't help trading efficiency much, since competitors scoped out his best ideas before he could execute his trades, leaving only the worst ones for him.

"Consultants now use trading costs as part of their manager evaluations."

Even managers who've stayed with traditional brokers watch costs carefully. Listen to Delphi's Black, who works primarily with Merrill Lynch & Co., Goldman, Sachs & Co., Salomon Brothers and, in the OTC markets, Herzog Heine, all of which are groomed to work his trades. With these trusted brokers he is still careful to give working orders with limit prices. To take an extreme example, ordering 20 percent or more of a stock's daily volume will definitely hurt the price, especially with small stocks, he notes. "It's a recipe for being stupid and going broke. If you lose one point on a $30 stock, you're giving up 3.3 percent of performance."

Agrees Batterymarch's Linkas: "[Plexus shows] that on trading, the smallest cost is commission, next is market impact, and the largest is opportunity cost, especially if you know how to pick stocks." He uses a proprietary system he calls incentivized basket trading. Each day he selects one or two of ten or 15 brokers to get a large fraction of his trading list — which the broker must complete on that day.

But he tempers market impact by paying a variable commission, depending on how brokers do relative to a bogey, the exact nature of which he is careful not to disclose. "In effect," Linkas explains, "I create a phantom profit and loss on each stock, and based on how the broker does, we split the profits as an adjustment to commissions." Further, if for three quarters a broker ranks least efficient on either of two secret measurement systems, he's history. Linkas is now expanding the concept into his international trading as well.

Crossed orders

Price-conscious money managers are also increasingly eager traders on the burgeoning electronic networks that have sprung up or grown over the past decade. For smaller orders, many managers use the NYSE's Designated Order Turnaround system; SuperDOT now handles 80 percent of the orders and more than half of the exchange's 74.4 billion share annual volume. For example, Robert Garvy, president and CEO of the equity management firm Intech, typically holds 300 positions in his $3.5 billion quant portfolio and trades all of them through direct electronic bulletin boards linked to his brokers. Garvy can trade seconds after his mathematical algorithms have identified stocks and his computers have checked liquidity.

Working via SuperDOT machines, his brokers charge only 2.5 cents a share — and reduce or avoid market impact. "I get instantly to the floor of the New York Stock Exchange, with orders executed at the last price if they are for less than 30,000 shares," Garvy says. "It's an extraordinarily efficient trading process." That's another reason, together with his quant methods, that Garvy can run his entire money management firm with only five professionals, plus one associate and two secretaries.

Electronic trading systems allow managers to trade at low, 2-cent commissions while also reducing the bid-asked spread. Instinet Corp. now handles an average of 20 percent of OTC trades during the market day, up from only 12 percent early last year. This huge gain has more than kept pace with the Nasdaq's volume, which grew 12 percent, to 74.4 billion shares last year, from some 66 billion shares in 1993. And on listed stocks with spreads of one eighth or more, business is also growing; here institutions increasingly split the spread down the middle, shaving at least one sixteenth — or 6.25 cents — off their price.

Another key electronic trading forum, ITG, now handles an average of 8.5 million shares in four daily "crosses" on its Posit system during market hours, up from about 6.6 million shares a day in 1993. When orders of buyers and sellers match, they split the market bid-asked spread evenly between them. "We have crossed from 100 to 1.2 million shares in a single trade between natural buyers and sellers, who never find out who is on the other side," says Raymond Killian Jr., president of ITG.

Posit actually completes trades on less than one fifth of the 50 million to 60 million shares clients post on the system each day. But very often, mixed into that seemingly insignificant percentage are some very difficult deals, which is one reason that Posit's more than 300 institutional clients keep coming back for more. Recently, a month's volume of Tecumseh Products, a small machinery manufacturer, traded on a single cross. And a major mutual fund trader recently swooped in on 310,000 shares of a stock at below-limit prices via a series of tickets averaging only 3,100 shares.

Says Killian: "A trader with 50,000 shares is crazy not to try this system first; if his block doesn't trade, he hasn't hurt himself. It's the old tree falling in the forest" — that is, the only data to leave the system is price and volume on finished trades, a cloak of anonymity that managers relish.

Often, if orders remain open on Posit at the market's close, managers take a stab at Instinet's 6:00 p.m. crossing session or R. Steven Wunsch's aftermarket Arizona Stock Exchange. Although still tiny, the latter is also growing at a fantastic rate. Traders now crowd some 20 million shares a day onto Wunsch's screens looking for partners at his 5:00 p.m. eastern time auction. Volume has climbed 20 percent since

last year, to a recent average of 560,000 shares a day.

"You have to include all the [alternative electronic] options before collective volume gets to even 10 percent [of total market volume]," says Wunsch, who founded his company in 1990 after leaving Kidder, Peabody & Co.'s index futures and customer program trading business. Alone, the electronic crossing networks account for less than 2 percent of the total market volume, he says. But at current rates of compounded growth, he says it is possible that in the next decade or two crossing could become the main way to trade.

The Arizona exchange's fixed trading time, Wunsch claims, really makes it a single-price auction, allowing for the kind of price-setting mechanism used by most of the world's markets until they grew too big to trade in a single place at a single time without automation.

The growing popularity of these electronic trading mediums has generated a swirl of controversy. Wunsch is ridiculed by some big-money brokers because he dares to challenge the established market structure. Others knock those electronic systems that, like ITG's Posit, give access to big Wall Street trading desks. Brokers and hedge funds, gripes Twentieth Century's Bradley, have begun to corrupt electronic systems by ordering small lots simply to learn what is available, a practice called "pinging."

One way to avoid such contamination is on the 25-year-old crossing network run by Robert Brandt at Robert Brandt Co. in West Los Angeles. Brandt's system routinely scrambles and unscrambles orders to block access to computer hackers and brokers, and his five traders finish all deals orally. Although Brandt says he has no explanation, that may be one reason that despite relatively high, 4 cent and 6 cent commissions, his volume grew last year to three times its previous peak. Another could be that, like Instinet and Posit, Brandt often completes hard orders in big volumes.

Capital crunch

With the markets spinning away from them, the traditional brokers are rehearsing all their old protectionist arguments. "I'm always for competition," says Robert McCann, the head trader at Merrill Lynch, whose 27 floor brokers handle more than 20 million shares a day through the institutional block trading desk but do no proprietary trading. "And the electronic markets have found a niche and an economic reason for being. But collectively they could hurt the market, because if you direct enough order flow to them, then you start to contaminate or dilute the pricing mechanism." McCann contends that this would mainly hurt retail customers, an important client base for Merrill Lynch.

Another worry that money managers as well as brokers express is that as orders have shifted away from big traditional brokers, they have become less willing to put up capital to create liquidity. "It's different than it used to be, particularly in small- and mid-caps," says Delphi's Black. "Sometimes it takes weeks to get out of a thinly traded stock." Says the head trader of one major brokerage firm, "Some institutions want to increase commissions to have our capital to facilitate

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trades, and others have undertaken academic studies on this question." Adds Herzog Heine's Geduld: "In the short term the electronic markets are very efficient. But in the long term, capital commitment and professional trading is worth something. A market maker needs a spread to do the tough trades, and long term, managers will not live very well without them."

Counters one government official: "Investment bankers make a lot of money not by being most efficient, but by figuring out which customers are chumps. This applies to all big brokers. They don't screw guys who are really smart."

"Let the customers go where they want to go," says SEC economist Woodward. "The [electronic] systems are very fair. In the long run you may see fewer specialists and dealers, but it won't be to the customers' detriment. Patient traders — pension funds and mutual funds — will benefit the most." She supports this assertion with results from a recent study of two classes of NYSE shares — those governed by Rule 390, which says that all NYSE members must trade on the exchange, and those listed after 1978, tradable under Rule 19c3 off the floor, even by NYSE members.

"We matched the float and volatility on and off the exchange, and there was no discerning between 19c3 and 390 stocks," she says. "Both markets are efficient, even though the post-1978 companies are younger, smaller and have more volatile shares."

Managers such as Jacques Perold, head of structured trading at Fidelity Management & Research, need no prodding to measure trading efficiency. "We subscribe to all the major studies, and we show up very well," says Perold, the brother of efficient-trading guru André Perold, a professor of finance at Harvard University. Electronic mechanisms, among other things, help Perold to keep a lid on his costs. For example, he recently traded 21 days' worth of volume on the security company Pinkerton's via a single electronic cross. "Our strategy is to use all the trading vehicles we can to trade as efficiently as possible. We are big and we are active, and we have to be very careful not to push prices around," he says.

Twentieth Century's Bradley likewise trades heavily on electronic networks. "Electronic trading is anonymous and extremely low-cost," he says. "For six years we have done our most difficult business on these systems, saving 50 to 300 basis points over the cost of traditional brokers on the round trip. Most of that is a result of bad market structure. Systems like Instinet's continuous trading eliminate the leakage about orders, removing suckerfish from the pond."

First Quadrant's Dorian also uses ITG Posit, Instinet and a host of other electronic mediums. "Our average turnover per year is 200 percent," he says, noting that at least two trading days per month see him buying or selling as many as 9 million shares, with perhaps 2 million of these running through the crossing networks. He also likes guaranteed programs, in which major brokerage firms agree to buy or sell market baskets of as much as 2 million shares, sight unseen, at the previous day's closing prices and before the market opens, plus or minus 10 cents a share. Often Dorian takes as much as 25 percent of a single issue's daily volume. Such turnover could hurt performance if he were not carefully tracking efficiency. But for four years his market-neutral strategy has returned a total of 6 percent over Treasury bills, and his core equity strategy, 4 percent more than the Standard & Poor's 500.

Despite recent developments, the art of measuring trading efficiency is still in its infancy. Even savvy money managers routinely fall in the bottom half of the universe on this score. Says the SEC's Woodward: "Some of the smartest people I know just look at price and compare it to the high or low of the day and rate trades from one to 100. And if they come out at 45, that's pretty good." However, she concludes, "It's better to have some system of measuring executions than none." Indeed, if a manager measures ten brokers with the same flawed system, at least their results make sense relative to one another.

But the idea of measuring trading efficiency is growing up fast. And as it gains momentum, managers with no system in place are very likely to see their performance suffer. They had best wake up soon. Too much bad performance and they will have no business. ◼