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TRADING practicalities

It's easy to get lost in all the information available to traders these days. There are a million and one Web sites dedicated to almost as many different trading and investment approaches, not to mention scores of fundamental statistics, technical indicators and round-the-clock news. (There's even a magazine or two for traders out there.)

Bombarded with all this information, some traders react by arming themselves with the most complex theories, indicators and software — the more the better. (Why rely on one idea when a dozen will do?) True, a conscientious trader is obliged to perform a great deal of research, but where's the line between due diligence and meaningless over-analysis?

Trader and money manager Linda Bradford Raschke is living proof that the road to trading success is not necessarily paved with analytical excess (see "Linda Bradford Raschke: The rituals of trading,"). As she points out, many traders spend the first few years of their careers experimenting with various unsuccessful trading approaches before finding something that works for them. At some point, it seems traders who are going to succeed have to put away their toys and get down to business.

So when Raschke — a trader with more than 20 years experience as a futures, options and stock trader — talks about how she makes a living, it shouldn't be surprising the discussion doesn't revolve around arcane formulas, neural nets or fuzzy logic. Instead it focuses on price action — basic principles of congestion and distribution, support and resistance, continuation and trend that less-experienced traders sometimes bypass in favor (ironically) of more "sophisticated" approaches.

It's also not surprising Raschke talks about the importance of the trading *process* — how execution (knowing what kind of order to use in a particular situation, for example) is responsible for a large measure of any trader's success, and why daily preparation is so important to the bottom line. Even if your

analysis is right on the money, it won't do you much good if you sabotage yourself with poor execution — a lesson that also plays itself out in "Anticipating breakout and beating slippage". This story looks at how to improve trade entry by identifying high-probability breakout setups that allow you to get in the market early with limited risk.

In "Trading the Wyckoff way: Buying springs and selling upthrusts," contributor Henry O. Pruden, professor of business and executive director of the Institute for Technical Market Analysis at Golden Gate University, provides a different perspective on this subject: how to trade false breakouts, using the concepts of Richard Wyckoff (a technical analysis pioneer cited as an influence by Raschke in her interview).

The practicalities of trading are also addressed in "The direct connection", in which Gibbons Burke looks at the differences between Web-based and direct-access brokers, and how you can decide which kind best suits your trading needs. For investors, such choices are marginal; for active traders, they're crucial.

No matter what your trading approach is, you have to know the kind of market you're in to be able to apply it successfully. And in terms of trade execution, the market — like it or not — is increasingly impacted by the rapid changes in the online trading environment. In this month's "Inside the Market," we look at the latest developments in online trading regulation and technology — payment for order flow and after-hours activity among them — and how they're shaping tomorrow's market.

It's never too early to start preparing.

Mark Etzkorn, Editor-in-chief



At some point, traders who are going to succeed have to put away their toys and get down to business.

THIS MONTH'S **Contributors**

▼ **Chuck LeBeau** and **Terence Tan, Ph.D.**, wrote this month's Risk Control & Money Management article.

LeBeau is co-author (with David W. Lucas) of *Computer Analysis of the Futures Markets* (McGraw-Hill, 1992) and founder of the System Traders Club (traderclub.com), an organization providing members with educational material and guidance relating to the design and testing of computerized trading systems. He has more than 30 years trading experience and has been a consultant to major financial institutions including the Bank of China in Beijing and the Abu Dhabi Investment Authority in the United Arab Emirates.

Tan has been trading and developing computer-based trading systems for the financial markets since 1993. He is a programming consultant specializing in the evaluation, development and implementation of proprietary trading systems. Clients include LeBeau's System Traders Club and Nelson Freeburg's Formula Research. He can be contacted by e-mail at tanck@csi.com.

The two are currently finishing a book about exit strategies and have recently created a Web site for short-term stock traders, www.streakingstocks.com.

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▼ **Steve Wendlandt** has more than 15 years of trading experience in the stock, futures and options markets. He is currently the chairman of Sequoia Capital Management Inc. and a principal of GRO Corporation, an online broker-dealer offering direct access stock trading through GRO. He was also a former Commodity Trading Advisor specializing in mechanical systems trading. Wendlandt primarily focuses his time researching and trading U.S. equities and options. His e-mail is swendlandt@gro.com.

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▼ **Gibbons Burke** is a Silicon Valley, Calif.-based independent trader, writer and software developer. He operates TraderCraft.com, a Web site that provides tools and information for mastering the craft of trading.

Burke has 23 years of experience in the financial markets at firms such as CompuTrac/Telerate, Logical Information Machines, Dow Jones Markets and Quote.com. He has had hundreds of columns and articles published in *Futures* magazine and spoken at industry conferences on topics such as the Internet, technical analysis and system development, and money management.

▼ **Allen Sykora** has been a journalist for 21 years, including several years covering foreign exchange trading and the futures markets. He has interviewed dozens of traders, profiling many of the top names in the stock and futures industries.

Sykora has held positions as editor and reporter for newspapers in Minnesota, Iowa and Alaska and has worked as a freelance writer for *Reader's Digest*, among other publications.

▼ **Ted Tesser** is a certified public accountant and president of Waterside Financial Services, Inc., Boca Raton, Fla. He specializes in assisting traders create and manage more profitable trading businesses by implementing sound trading, business and tax management strategies. He also actively trades small-cap stocks, bonds, mutual funds, futures, options and currencies.

Tesser has authored more than a dozen books and manuals, including *The Serious Investor's Tax Survival Guide*, *The Trader's Tax Survival Guide*, *The Ultimate Tax Shelter*, and *Tax Strategies for Traders*, among others. His latest book, *The Trader's Tax Solution* (John Wiley & Sons) was released in January. You can reach him at (800) 556-9829 or at tbtester@aol.com.

▼ **Oliver L. Velez** and **Greg Capra** are the co-founders of Pristine.com (www.pristine.com), an online educational service for active self-directed traders, and co-editors of its flagship product *The Pristine Day Trader*. They also are co-authors of *Tools and Tactics for the Master Day Trader* (McGraw-Hill, 2000). Both Velez and Capra have advised professional traders, money managers, mutual funds and hedge funds.

▼ **Steven J. Hendlin, Ph.D.** is a clinical psychologist with more 23 years in private practice. He has been successfully investing in the stock market for more than 20 years and actively trading online as a position trader since 1996. Hendlin's latest book, *The Disciplined Online Investor*, (McGraw-Hill, 2000), addresses the unique psychological issues facing active electronic traders and serious online investors. He can be reached at golfdoc@home.com.

Information, please

BY JEFF PONCZAK

Let's face it: In the Internet age, information is everywhere. A glut of financial and stock-related Web sites has made it easy for people to research a particular stock, whether it's Microsoft, Dell or Bob's Donuts and Radiators. Historical charts and prices, news, balance sheets, message boards — if a company is publicly traded, there are nuggets of information just waiting to be mined.

Still, while traders have a list of sites they rely on to dig up the best dirt, there's always a little voice in the back of their mind saying, "But what if I'm missing something?" A pair of Web sites — Company Sleuth and EquityWeb — are trying to answer that question with "Don't worry — we've got you covered."

Both sites work essentially the same way: Type in a ticker symbol and you'll get a page full of links about that particular company.

The EquityWeb (www.equityweb.com) home page has a plethora of general links to news, commentary and other market-related sites. It provides charts of the major indices, and tables of the most active, biggest-gaining and biggest-losing stocks on U.S. and Canadian exchanges. It also provides this information for the Chicago Board Options Exchange, although accurate data for the CBOE and the exchanges north of the border was sporadic, at best. The home page also features charts on market movers, info on earnings estimates and

a daily calendar.

EquityWeb's main purpose, however, is to dig out information on individual stocks. Type in a symbol on EquityWeb's home page, and you'll get a page with 12 different categories for that particular symbol: Quote, Chart, News, Earnings, Filings, Profiles, Financials, Wall Street Recommendations, Ratios and Stats, Insiders, Competitors and Valuation. All are self-explanatory, and all (except for Ratios and Stats, and Valuation) give you multiple options within each category. For example, in the Quotes section there are links to quotes from Yahoo, CBS MarketWatch and Quote.com, among others. There are also links to option chains. Charts allows you to choose from eight different charting sites, while News has links to a dozen sites.

On the side of the links page are six more categories: Discuss (links to seven message boards), Search (links to eight search engines), Other Links (including Stocksites and Trading Day), Price Data (up to a year back, in decimals or fractions) and Miscellaneous (links to sites such as CNET Splits and Dreyfus Dividends). We're not quite sure why these six weren't made part of the main links table although we must admit it does make the page a bit easier on the eyes.

The biggest problem with EquityWeb is that the links don't update according to the stock you're looking up. So, while you'll find viable information at every link for a popular stock such as AOL, stocks that aren't as heavily traded will result in a lot of useless links. For example, not every stock will have an options chain, some stocks are not covered by analysts and not every piece of news on a company will reach every news site. There's no way to tell whether a link will produce a valuable piece of data or just waste your time.

Company Sleuth (www.company.sleuth.com) is part of the bigger www.sleuth.com site. When you enter a ticker symbol, the links that Sleuth provides are not as extensive as EquityWeb, although Sleuth does give you a delayed quote and one-month chart along with links in the following categories: News (which includes news, charts and info such as short interest), Buzz (message boards, plus rumors and earning whispers), Intellectual Property (domains, trademarks and patents), Inside View (SEC filings, litigation) and Outside Perspective (analysts ratings and broker reports). To get to any of the links, you must be a registered user (it's free and simple to sign up). Like EquityWeb, Sleuth provides the same links on all companies, whether they're appropriate or not. However, if there's a new addition



to a link on a company you're searching, Sleuth will denote it. As a registered user, you can choose up to 10 stocks to put on your "stakeout list." If you choose, Sleuth will send you a daily e-mail listing your selected stocks and any information (i.e., bulletin-board listings, SEC filings, news) new to the stock since the previous day. Sleuth also allows you to download updates onto your Palm Pilot or other handheld device.

Granted, there's not enough time to check every page on the Web for every stock you're interested in. If nothing else, though, these two sites provide an easy way to access company-specific information on various message boards, which has become a *status quo* source of information for many traders. And, when it comes to information, too much is certainly better than too little. ☺

An Uplinking experience

BY JEFF PONCZAK

While cutting the grass or painting the house may be on the weekend agenda for many people, there are some traders who just can't stay away from the markets.

If you're one of those people — or if it rains and your outdoor plans go awry — then you might want to check out Marketuplinks.com (www.marketuplinks.com). Marketuplinks isn't big on flashy graphics, proprietary trading techniques or an abundance of stats and charts. Instead, the site provides links. And links. And more links.

The links are divided into seven categories: Stocks, futures, mutual fund, bond, Forex, global and investor services. Each category (except investor services) has seven sub-sections (advisories, brokers, quotes, news and commentary, resources, exchanges and software) and each sub-section is broken down into smaller sections.

For example, the Stock/Advisories/Day trading section contains 11 links, ranging from a day-trading resource center to a site that allows you to day trade index options. Futures/Resources/Discussion brings up five links, some directly related to discussing futures, some only peripherally so. Many of the sites overlap each other, and there's no real science to finding the perfect site — it requires plenty of clicking. A search function is available, but when we searched for "day trading," the results included sites with the words "trading" and "toDAY" in them.

Each site can be rated by users, and Uplinks compiles its Top 10 "cool" sites and lists them on a separate page. However, the criteria used to select the top 10 is unclear, as it's obvious that the number of hits or users' ratings are not considered. Uplinks also has a separate list of its new links,

so frequent users can go to one central page to see what they might have missed.

With each link, you have three useful options (besides merely clicking on the link and going to the page): You can save the link in the "mylinks" section, where you can take your favorite pages from all the various sections and put them all on one common page; you can e-mail the link to the page to a friend (or just e-mail it to yourself as a reminder); or you can opt to open the link in a new window. The latter option is particularly helpful, as it allows you to surf the new site while keeping Marketuplinks in a separate window, eliminating the need for incessant use of the "back" button on your browser.

Marketuplinks claims it has "thousands" of links. Taking a quick look at the home page, that's not hard to believe. Finding the ideal site may not be the easiest thing to do, but if you've got a few hours to kill, you may be able to locate exactly what you're looking for and uncover a hidden jewel along the way. ☺



NEW Products

- ▼ **Online Trading Academy (OTA)** and **Tradescape.com** have launched an eight-hour, interactive multimedia direct-access trading CD-ROM, "Fundamentals of Direct-Access Trading." The CD is based on OTA's Nasdaq Level II one-week Trading 'Boot Camp' program and uses the Tradescape Pro software as its interface. It features 12 training modules on topics such as reading NASDAQ Level II Quotes, risk management and discipline, technical analysis and charting, and trading terminology and psychology. Interested individuals can preview the hour-long first module "Introduction to Direct Access Trading Level II Preview Course" at no charge by visiting either www.tradescape.com or www.onlinetradingacademy.com.
- ▼ **CSI** announced the availability of Unfair Advantage version 2.2.0. featuring several new components, including a function that allow users to convert personal analytical trading approaches into computer code using languages Perl and Basic, and updated charting capabilities that convert world futures markets in any currency into local trading units or total contract value.
Also, the software now supplies Steve Briese's Commitments of Trader data and indices with any applicable chart and provides stock and fund data adjusted for stock splits, dividends and capital gains. For more information visit www.csidata.com.
- ▼ **Prophet Financial Systems Inc.** has launched ChartStream — live, dynamically updating intraday charts showing the market's performance throughout the trading day. Available at the Prophet Web site (www.ProphetFinance.com), ChartStream is available free of charge with delayed market data. Subscriptions with real-time stock data are \$19.95 per month, including exchange fees for the North American stock exchanges. ChartStream includes a library of mathematical studies for technical analysis and features zoom and resizing tools. The service provides 10 days of intra-day data and comprehensive coverage of the North American stock exchanges, including small-cap and bulletin-board stocks, IPOs and Canadian issues, plus worldwide indices and hundreds of futures markets. ChartStream is also available for license to businesses and organizations wishing to add financial content to their Web sites.
- ▼ **Data Broadcasting Corporation** (www.dbc.com) has released version 5.3 of its eSignal software. New features include a redesigned Nasdaq Level II window and market-maker ticker. It also has enhanced alerts capabilities that allow users to set alerts on more than 20 fields and set global alerts on each symbol tracked in the layout, which will automatically re-arm according to user specifications. Also, customers can now create symbol overlay charts in historical and intraday modes and display up to 30 days of intraday data. The upgrade to eSignal 5.3 is available to all subscribers free of charge.
The company has also launched My eSignal, a customizable Java-based quote service that provides real-time streaming quotes, specialized trading information, news, charts and links to other trading tools in a browser-based format. Customers can access detailed research on companies from Baseline and MarketGuide reports, create historical charts and apply valuable studies including moving averages, stochastics and Bollinger Bands. My eSignal displays each individual trade as it occurs and offers a live, online customer service through Live Rep and an online chat service for users. To register, go to <http://my.esignal.com>.
- ▼ **Watcher Technologies LLC**, a subsidiary of Datek Online Holdings Corp. and developer of professional trading software, will provide its WatcherPlus direct access trading platform to WorldCo Financial Services. Worldco specializes in equity trading for professional proprietary traders, institutional money managers, hedge funds and high net-worth individuals.
- ▼ **Quick & Reilly** (www.quickandreilly.com) has teamed with w-Trade Technologies to offer wireless securities trading to its customers. The partnership will allow users with almost any wireless device (such as cell phone, pager or handheld computer) to access their portfolios.

Send your new product information to:

Amy Brader, Managing Editor or Jeff Ponczak, Associate Editor
Active Trader Magazine
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Fax: (312) 775-5423



Software SCREENING: DynaStore Light

If you've ever been frustrated by cable and satellite data feeds, look no further. DynaStore Software has developed a product, DynaStore Light, that allows TradeStation and MetaStock users to use price data feeds (real-time and historical) not typically supported by these popular analysis platforms. DynaStore essentially converts price data into the Data Broadcasting Corp. (DBC) Signal format, which can be supported by these programs.

For the purposes of this review, DynaStore Light was tested using Quote.com's QFeed Internet data feed and Omega Research's TradeStation analysis platform. (Alternate data sources are listed in "Software summary," opposite page.)

Features

DynaStore allows you to import existing stock, future and mutual fund symbol portfolios from TradeStation and MetaStock, as well as collect real-time data for use in these programs.

DynaStore has a Windows-type interface that uses drop-down menus to select the various types of data to export to TradeStation or MetaStock. Also featured are connection status and server performance. If your Internet connection fails,

Product: DynaStore Light and DynaLoader
Company: DynaStore Software Corp. 325 Bogert Ave., Suite 484, Toronto, ON Canada M2N 1L8.
Web address: www.dynastorelight.com
E-mail address: Development: support@dynastorelight.com; Sales: ron@dawes.com
Phone: Development: (416) 225-3174; Sales: (972) 769-2256
Fax: Development: (413) 332-3068; Sales: (603) 324-6312
Required System: Windows 95/98/NT; 2 MB of RAM in addition to that needed to run TradeStation (versions 4 and 2000i) or MetaStock (versions 6.52 and 7.0). Internet connection (Dial-Up or LAN).
Price: \$350 (DynaStore Plus); \$250 (DynaStore Light, feeder only); \$100 (Upgrade to DynaStore Plus includes DynaLoader).

DynaStore will automatically restart the dial-up connection and feed data to your other programs.

The DynaLoader component of DynaStore is a good end-of-day price data collection tool. No more late-night downloads — just connect to the Internet, specify the portfolio to collect and you're off to the races. The program also allows you to monitor the number of users on a particular server and move to the next one with the click of a button if the server is too busy.

Performance

DynaStore delivers data quickly and accurately, and the program never crashed running on Windows 95/98. The only problem we had was adding symbols in real time. The function requires that you stop the data feed and alter the portfolio in both DynaStore and the global server for TradeStation.

The DynaLoader is easy to use. It connects to the data servers, finds the fastest one and downloads the specified data.

DYNASTORE

DynaStore gives MetaStock and TradeStation users the ability to import price data from a variety of sources.



User-friendliness and support

DynaStore offers a free trial that works three hours at a time. You can download the demo or buy the program through the Web site.

DynaStore is relatively easy to use once you set it up and fine tune it. The process involves downloading a setup file for DynaStore and installing the DBC server, which may be included in TradeStation or MetaStock. If not, you can download it from DBC's Web site (www.dbc.com). You'll need to delete a file named "winros" from the DBC directory and replace it with the DynaStore version.

Contacting DynaStore via phone is difficult. But both the software developer and the U.S. vendor (the company is based in Canada) are available through the following newsgroup: www.onelist.com/subscribe/dynastore-qc. The Web site (www.dynastorelight.com) also has full documentation on the setup process.

Bottom line

DynaStore Light gives you a very reliable,

alternative data option to use with TradeStation and MetaStock. The major strengths of this program are the cost and the function. The DynaStore/QFeed combination tested in this review came in at less than \$130 per month for real-time stock, futures (CME and CBOT) and mutual fund data — a substantial discount to many competing data sources with monthly price tags more than \$200.

One drawback is the lack of telephone support. But the support on the Web site and newsgroup compensate for this. Another problem is that DynaStore currently does not automatically refresh data. The ideal situation would exist if the program automatically filled in lost data while the global server was not connected to the data feed. (This is a problem associated with TradeStation's global server. The developer is working on a solution.) MetaStock has a refresh feature, so this is not an issue for that charting package.

DynaStore is not completely conventional yet, but look for it to become a serious alternative to satellite feeds and cable boxes. ⤴

SOFTWARE SUMMARY

Product: DynaStore Light and DynaLoader

Who the product is for: Stock traders, futures traders and mutual fund traders

What it is: A program that allows Omega Research TradeStation (4.0 and 2000i) and Equis MetaStock Professional (6.52 and 7.0) customers to use real-time quotes not supported by these charting applications. The DynaLoader allows the collection of historical quotes to be extracted from the server of choice. DynaStore Light works with the following price data sources: QFeed by Quote.com, TAL Trading Tools, Reuters IDNDDE, SatQuote by EAG, BIS/ActivePlus, Tenfore by EAG, Databolsa Finamic, Infobolsa Powerstation, UMDS (Universal Market Data Server). Demo and free trial available.

Upside: Cost and function

Downside: Does not automatically "refresh" data. No telephone support.



The direct connection

Online brokers promise speed of execution, self-empowerment and low-cost trading.

But they're not all created equal — especially for active traders.

Here's what you need to know about the differences between standard Web-based brokers and direct-access brokers when it comes to trade execution.

BY GIBBONS BURKE

The surge in popularity of online trading indicates the Internet has hit a sweet spot in the financial markets. The Web has given the everyday trader access to information and execution capabilities formerly the preserve of traditional brokerage houses.

Previously, the brokerages not only held the keys to the gate that led to the exchanges, they also served to distribute the information needed to make trading decisions — in a way, acting as a filter between the trader and the markets.

The Internet has unleashed a revolution in online investing. Thousands of Web sites now offer investment advice and trading. Analysts who formerly sold their work to the brokerages now com-

municate directly to the trading public via the Web.

In trade execution, a similar revolution is taking place. The function of the conventional brokers is being whittled down to that of an account custodian and identity-verification service. They are still the gatekeepers to the exchange doors because they essentially and collectively own the exchanges. It will probably be some time before this franchise is completely broken.

But not all online brokers are created equal. Different kinds offer different levels of connectivity to the market and, depending on your trading style, one may offer obvious execution and cost advantages over another. Online broker services can be broken into three categories:

- **Traditional broker.** These are the old-line, full-service firms with established lines of business who are trying to offer new online services without cannibalizing the interests and commissions of their sales force.

- **Web-based online brokers.** These firms offer services through Web-based

order-entry systems. Often, their trades are handled by firms such as Knight Trading Group and Spear, Leeds and Kellogg — market-making firms who pay these brokers for “order flow.” (Or, they may take the opposite side of customer orders themselves, profiting from the spread.) Along with firms such as E*Trade and Ameritrade, discount brokerages such as Schwab and Fidelity, which were quick to adapt their traditional models to the online revolution, lead this category in terms of accounts and trading volume.

- **Direct-access brokers.** These brokers enable customers to enter orders directly in a software application designed for the task, rather than through a Web page.

There are good arguments for all three types of brokerage services. Each has its pros and cons. There are even good arguments for having accounts at all three, to diversify your risk and provide backup execution capabilities, and provide greater access to a wider range of financial instruments. Most direct-access brokers, for example, don't offer check-

ing on your brokerage account, or access to mutual funds, futures, IPOs or other vehicles for investment. A well-rounded financial plan should include a variety of instruments to augment the income based on trading.

Direct vs. Web

Most online brokerages provide their services using forms displayed on Web pages. Direct-access brokers differ in two major ways: First, a direct-access broker provides software that enables you to place orders over the Internet without using a Web browser. Second, the direct-access broker lets you control where that order will be sent.

Let's look first at why a software application is better than a Web page for entering trades. These are the typical steps to placing an order with a Web-based online brokerage, in this case Fidelity (see Figure 1):

- which pulls up an order screen.
- 7. Select the order type — “Buy,” “Buy to Cover,” “Sell” — from a pull-down menu.
- 8. Type the quantity of shares to transact.
- 9. Type the ticker symbol.
- 10. Type the limit or stop price.
- 11. If you want a special order (good-till-cancelled, fill or kill, immediate or cancel, on the close, on the open) select that from a pull-down menu. Otherwise, the default choice is for an order that is good till the end of the normal trading day.
- 12. If you want more special conditions to apply (all or none, do not reduce, or both) select that option from another pull-down menu.
- 13. Choose whether the trade will be done with cash or margin monies.

page. You then have to go back and fix the mistake on the order page.

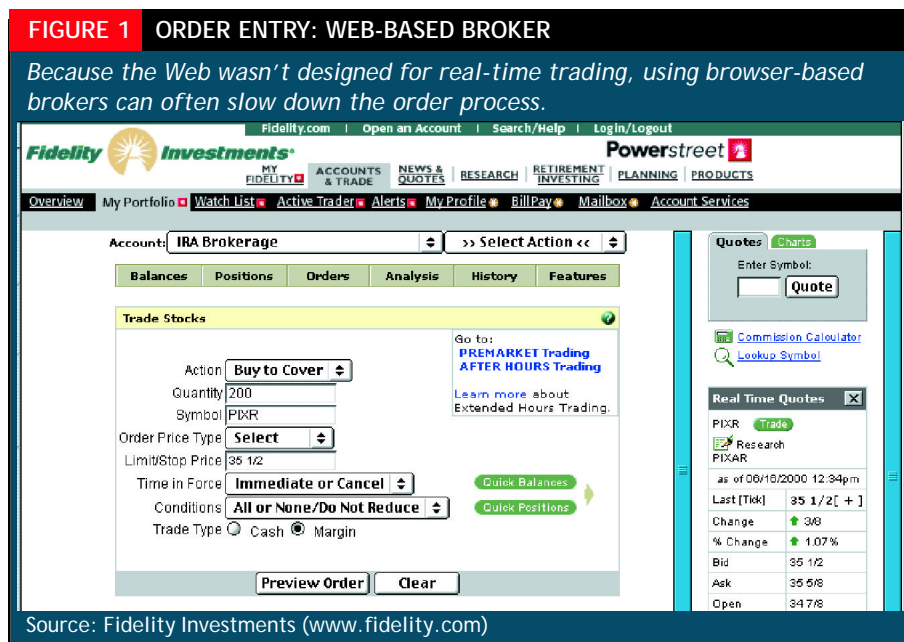
- 16. When you finally get a preview you like, send the order in.
- 17. Wait for the Web server to give you a confirmation of the order.
- 18. When the order is confirmed, go to the Orders page to see if you received a fill. If you didn't, keep pressing the Update button to see if the situation changes.

Just getting an order in can take five minutes or so — not a situation you want to be in when the market is breaking out to the upside. If you are using limit orders, you may need to cancel the order to enter another one at a higher price. And, you can't see the latest prices on these pages. This also must be done by going to another Web page and waiting for it to load.

Contrast this with the order process used by a direct-access broker, in this case using CyberCorp's CyberX application (Figure 2):

- 1. Connect your computer to the Internet.
- 2. Launch CyberX.
- 3. Type your account password and hit “Enter”.
- 4. Type the symbol you are interested in.
- 5. Enter the number of shares. You can preset a default number of shares, and the application will usually remember your last settings.
- 6. Click the “Buy” (or other applicable order) button.
- 7. A dialog appears asking you to confirm your order. If you click “Yes,” the order is sent. (This confirmation dialog can be turned off, if you are confident in your abilities.)

- 8. Check the message window for a confirmation message. Your open order will now appear in the Orders window.
 - 9. When the order is filled (which can be in a matter of seconds), another message will scroll across telling you that you were executed. You don't have to keep pressing an update button.
- When an order is filled, the position is



- 1. Connect your computer to the Internet.
- 2. Launch your browser. (Sometimes steps 1 and 2 are combined into one.)
- 3. Point your browser at your broker's Web page.
- 4. Log onto your broker's Web site.
- 5. Choose the account you want to trade in.
- 6. Select an action — “Trade Stocks”
- 14. After all that, click the “Preview Order” button.
- 15. Wait for the Web server to get the order, process it back, and then show exactly what you just spent five minutes typing. If there are any problems with your order — if you have forgotten, for example, to specify whether this was a buy or sell — you will get an error message on the preview

moved from the Orders screen to the Open screen. When you close the trade, the order is moved to the Exec(uted) area. Net profit and loss on all open positions are tracked in real-time as the

financial markets. It was designed to share academic research in nuclear particle physics. A Web browser is a universal information display machine; in trying to be all things to all users, it doesn't do

a very good job in some particular cases — like trading — that require extreme speed and interactivity.

The same thing applies to getting price quotes and other market information. Web pages are not well-suited to delivering streaming information. The “push” technology that began when the Web first started was a flop for financial data. By the time the page loaded, the prices displayed were yesterday's news.

The Java programming environment was supposed to solve these problems by providing a more dynamic box within the browser window. There are a few somewhat capable Java “applets” that can handle real-time quotes, but they aren't problem-free. Java still suffers from the fact that it is a virtual computer running within your real computer. To make things happen, programming instructions written in Java

must be translated on the fly to the language spoken by your computer. “On the fly,” though, is perhaps the wrong phrase; it should be “on the crawl,” because Java applets are *slow* compared to native applications that are designed to run on your computer. Another problem with Java applets is that they have to be downloaded every time you want to use them. Java still has a lot of potential to deliver more dynamic Web-based interfaces, but it is not yet a mature technology.

Part of the larger problem in the online brokerage arena is perception. Because most people experience the Internet via the Web (and experience all

that the Web does very well) the perception is that the Internet is the Web. They don't realize that the Internet itself is just a bunch of computers connected to each other, and that you can use something besides a Web browser to send and receive information over the Internet.

For example, when CyberX (running on your computer) connects to CyberCorp's servers in Austin, Texas, you don't even have to have your Web browser running. It is dialing up the server directly without using the Web at all. The communications between CyberX and the server can be relatively small compared to a Web page, which can contain elements that are quite large and can take a long time to fully load on your computer.

With a direct-access broker, the “page” you are looking at is already known by the application. All it needs is the numbers to fill in where appropriate. This makes fewer demands on your Internet bandwidth, and means that a direct-access broker with an application doing the display work can deliver its services more efficiently to more customers without the traffic bottlenecks that sometimes bedevil Web-based brokers.

Paper route

The second major advantage the direct-access brokers provide is the flexibility of being able to manage how your order is handled and by whom. For example, CyberX lets you route Nasdaq orders to the Nasdaq SelectNet and SOES systems, both of which let you specify the market maker to which the order will be sent. It also allows you to route the order directly to a number of Electronic Communication Networks (ECNs) such as Island, Instinet, Attain, Archipelago, REDIBook, MarketXT and Bloomberg. Or, you can use a couple of auto-routing mechanisms that check each of these markets and execute your order wherever the volume of shares at the price you specify can be found.

The RealTick III software (www.realtick.com) by Townsend Analytics also is a favorite of day-trading brokerages because it offers many different trade-routing options. Several direct-access brokers are based on the use of private-label versions of this software.

Preferred Trade (Figure 3) provides a unique ability for option traders. You



market updates. Your buying power is updated immediately as well, a significant advantage over brokers who don't give you an updated account balance until after the close of the day, or sometimes not until the next morning.

Clearly, this is a much more streamlined process. What makes this possible is that the CyberX application, like other direct-access programs, was written to do one thing and do it well — let you enter orders into their system with lightning speed and keep abreast of your account positions in real time.

The Web-based interface is clunky and awkward because the Web wasn't designed for real-time traders in the

can route an option order directly to any of the exchanges listing the option. Quite often, opportunities arise during the day where exchanges are quoting ridiculous prices for options. You can pick up a bargain on one of the exchanges and sell it immediately at a profit on another one. These opportunities are often short-lived, but they exist, and it would be impossible to do this sort of strategy without the capabilities offered by Preferred Trade.

This flexibility eliminates what can be particularly costly and mostly hidden in the world of Web-based online brokers: middlemen. Many brokers either take the opposite side of customer orders (profiting from the spread) or route them to third-party market makers who actually execute them. The originating broker (who is working for you) gets paid for each order they send to the executing broker. The executing broker makes this money back (and then some) by fielding your order against other orders coming in from customers.

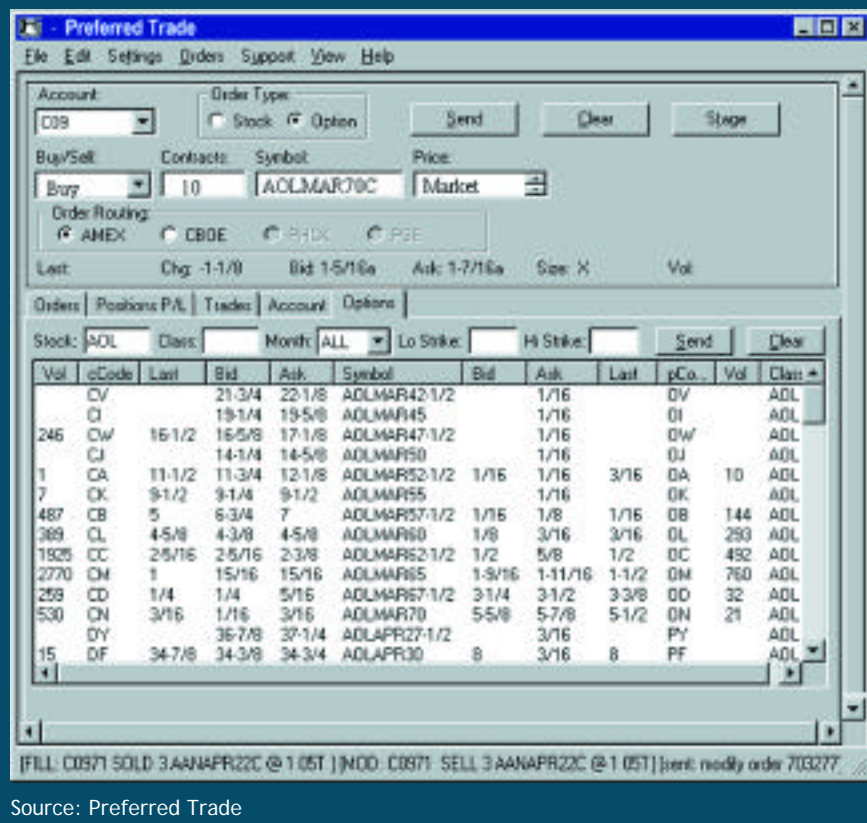
This payment for order flow makes it possible for some online brokers to offer extremely low commissions, because they will make it back in the end. Choosing a broker because they have the lowest commissions can sometimes be a case of being penny wise but pound foolish, as the saying goes.

To its credit, Datek Online (www.datek.com) will refund to the customer any payment it receives for order flow. The company is one of the best Web-based online brokers for the very active trader. Datek Online owns the Island ECN, which is the most active ECN other than the institutional gorilla Instinet.

It is interesting to note that the direct-access brokers do not receive much attention from Web sites purporting to find the best online brokers. Gomez.com is one site that has a lot of clout when it

FIGURE 3 ORDER ROUTING

Preferred Trade allows users to route option orders to any exchange.



Source: Preferred Trade

comes to rating online brokerages, but they are complete Web snobs. In rating the brokers for suitability in the "Hyperactive Day Trader" category, Gomez.com didn't even mention the availability of streaming quotes or direct-access capabilities.

For a list and plenty of reviews of several day-trading brokers who offer direct access, check out www.sonic.net/~donaldj/day.html.

Is direct-access technology the right thing for everyone? If you are the sort of position trader who puts his or her stops in and doesn't even watch the markets during the day, direct access won't buy

you a whole lot. Also, although direct-access brokers are dropping their commission rates, they are still, on average, more expensive than Web-based discount brokers. Also, some require larger minimum account balances than standard online brokers.

But if you consider yourself an "active" trader — and certainly if you are considering the kind of trading where every tick counts — direct access is the way to go. It is like driving your own car rather than taking the bus: You get there quicker, do a lot less waiting around and have far more control over your route. 🚗



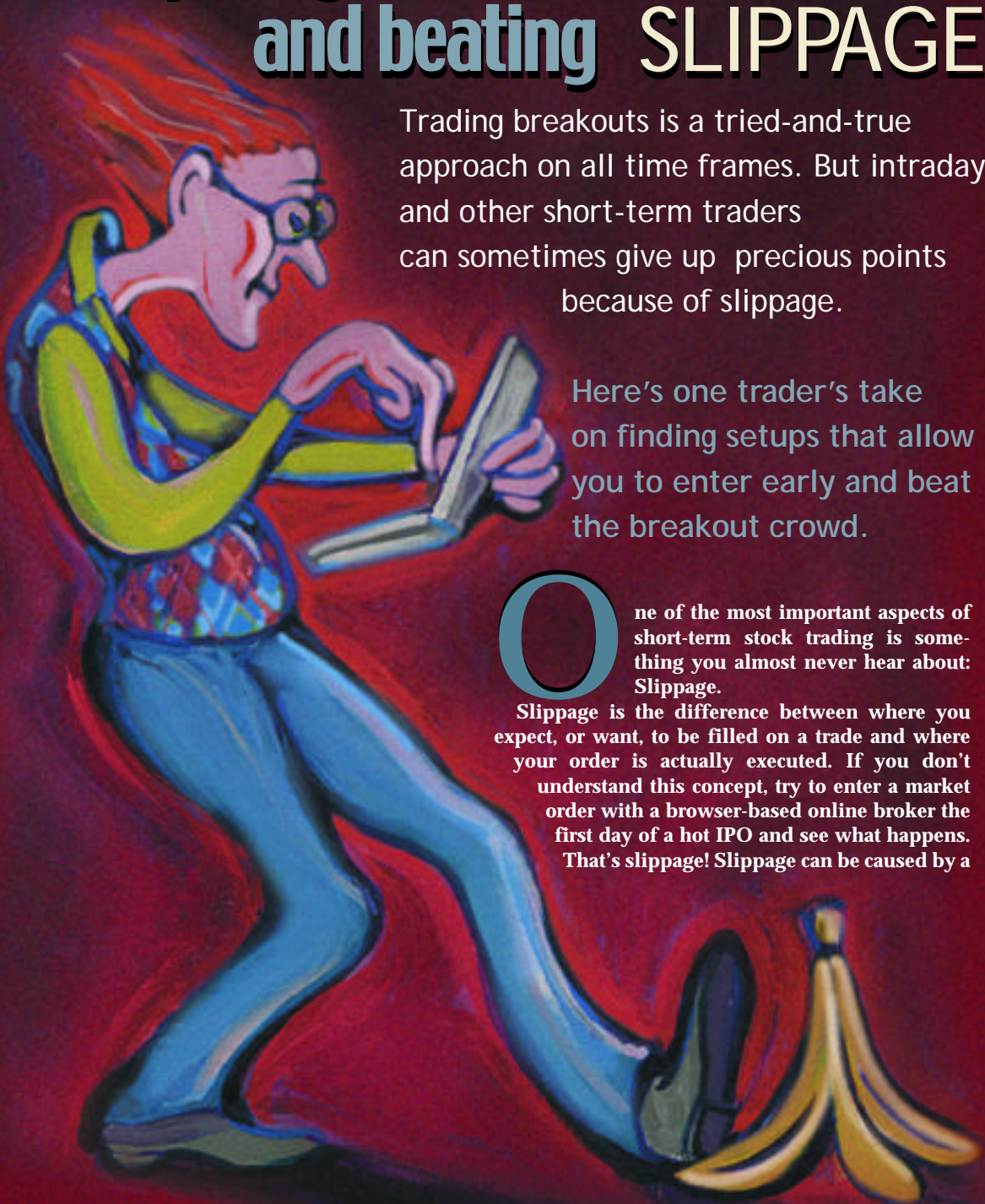
Anticipating BREAKOUTS and beating SLIPPAGE

Trading breakouts is a tried-and-true approach on all time frames. But intraday and other short-term traders can sometimes give up precious points because of slippage.

Here's one trader's take on finding setups that allow you to enter early and beat the breakout crowd.

One of the most important aspects of short-term stock trading is something you almost never hear about: Slippage.

Slippage is the difference between where you expect, or want, to be filled on a trade and where your order is actually executed. If you don't understand this concept, try to enter a market order with a browser-based online broker the first day of a hot IPO and see what happens. That's slippage! Slippage can be caused by a



BY STEVE WENDLANDT

If you want to **trade a stock** when the **overall market is trending** in the direction of your potential trade, and the **stock repeatedly tests a support or resistance level**, you should **enter before the breakout**.

number of factors: Poor execution by a broker, communication failure or other technical problems, or fast market conditions.

While it's true that we all try to keep our costs down to the bare minimum without sacrificing service or technology, slippage is probably the most overlooked and significant cost in trading. But through a little-known tendency, you can make slippage work for you instead of bleeding you dry. In fact, if most of your trading techniques are breakout related, you can use this trick on almost every trade you enter. But first, let's look at why it works.

One tick at a time

Tom DeMark, a highly regarded trading system developer who has worked with such top traders as George Soros, Paul Tudor Jones and Steve Cohen, wrote a book (his second) called *New Market Timing Techniques: Innovative Studies in Market Rhythm and Price Exhaustion* (1997, John Wiley & Sons, New York). In it, he explained what probably is one of the most significant discoveries in the markets: the TD One-Tick, One-Time Rule.

This rule states if a market makes a new high or low just once (a single print) and backs off from that point, that new high or low should hold for a significant period of time. In fact, most significant highs and lows only print one time at the extreme price.

It makes sense that the opposite also is true: If a price prints more than once at a certain high or low, then that high or low will be broken in short order almost

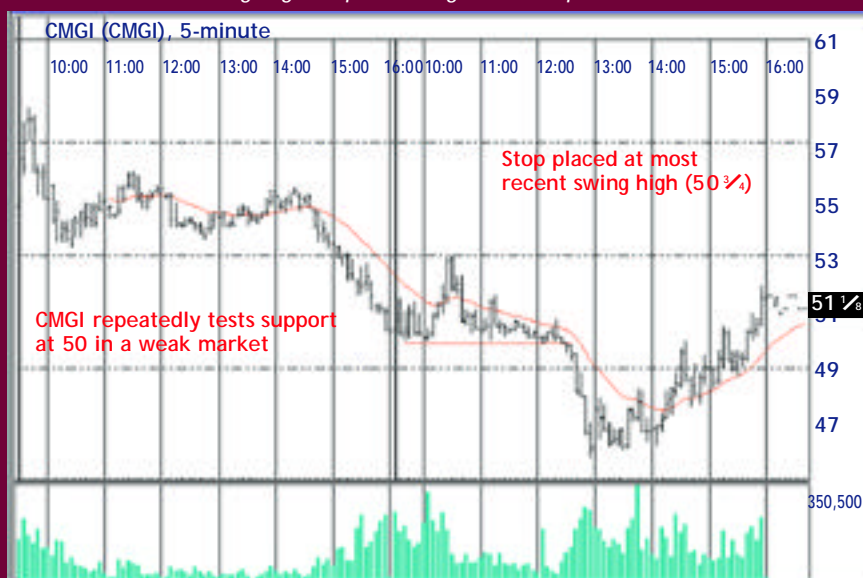
every time. From that, it follows the more a particular level is tested, the weaker it becomes.

In layman's terms, if a stock continually prints or finds support or resistance at a certain price, the odds are extremely good that price level will be broken

of CMGI. The stock bounced off support at 50 six times (and who knows how many prints actually occurred at that level). Every time a stock tests a support or resistance level, that level gets weaker and weaker, as if a hammer and chisel were chipping away at it.

FIGURE 1 CHISELING AT SUPPORT

Repeated tests of a support level increase the odds of a downside breakout. A short position can be established in anticipation, with a stop just above the most recent swing high to protect against an upside reversal.



Source: CyberTrader by CyberCorp.

shortly. That is invaluable information for any trader who uses breakouts as part of his or her strategy.

Figure 1 (below) is a five-minute chart

Fortunately, most people view support levels as opportunities to go long, while breakout traders view tests of support as fuel to propel an eventual break-

out. In this example, not only are traders establishing new long positions with their stops just below the support level at 50, there are also many traders waiting to short the stock once it does break down. Don't forget that all the people who bought the stock around \$50 will either be stopped out or will wait for an opportunity to breakeven on their trades. The bottom line is that when support at 50 is penetrated it quickly turns

Let's look at a second example. In Figure 2, Netro Corp. (NTRO) was bouncing off the $82\frac{1}{2}$ level for about two weeks. The day it finally broke that support level (March 30, 2000) was a very weak day in the broader market indices, which helped the stock to finally break down. A good opportunity to short NTRO came at the prior day's close when NTRO closed right at the support level for the second day in a row. The

a rock, who is going to hit your offer?

The bottom line is that if you want to trade a stock when the overall market is trending in the direction of your potential trade, and the stock repeatedly tests a support or resistance level, you should enter *before* the breakout. Most times, you even can avoid paying the spread because the stock will be whipsawing back and forth between the bid and offer. If you wait until the stock breaks out you are almost always forced to pay the spread — if you can get it at all.

But, you may ask, what if the stock never breaks out? Should you hold the position until it does, or should you exit the position on the close? One approach to reduce risk is to use the last swing low or high as your initial stop-loss point. In the CMGI example, you could have placed an initial stop loss at $50\frac{1}{2}$ which was the last swing high on the five-minute chart. With a stop in place, you can simply wait for the breakout to materialize. The only reason not to hold the position is if the overall market begins to move counter to the trade (i.e., you're long, waiting for the breakout, and the market begins to drop precipitously).

But you must use caution when entering breakout trades early; you never want to enter a trade that is counter to the overall market momentum. For example, before entering the CMGI trade on the short side, you should have checked to make sure the Nasdaq and S&P 500 were both weak on the day and trending lower. The weakness of these indices would help pull the stock below the support level.

Figure 3 shows one last example. On May 25, Warner Lambert (WLA) opened for trading at $121\frac{1}{2}$, just under the down trendline of a nice triangle pattern. The pre-opening call was for the Nasdaq and S&P 500 to go higher that morning, and they both began to rally from the open.

This created a setup to go long before the actual breakout above the trendline. As soon as WLA began to move toward the trendline, a buy order was entered at $122\frac{1}{2}$, well before the $123\frac{1}{2}$ breakout point. Not long after, the overall market

FIGURE 2 EARLY OPPORTUNITIES

A close at the low of the bar preceding the downside breakout, just at the support level, offers an early entry opportunity for a short position.



Source: CyberTrader by CyberCorp.

into significant resistance.

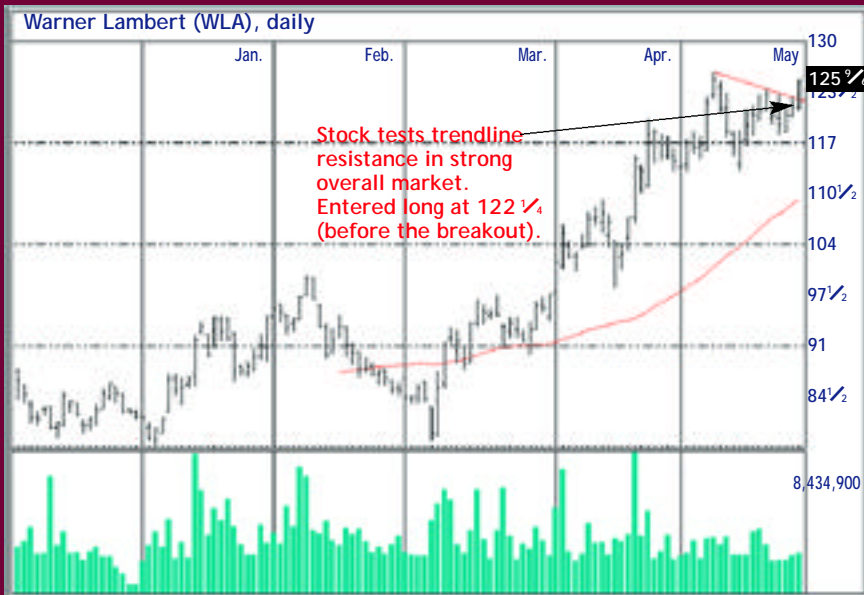
Here's the question: If, because of repeated tests of the support level, the odds are very good the 50 level will be broken (and the broader market indices support this view), why wait for the breakout? Doing so increases the odds of having to chase the market or missing the trade. In this case, if you wait for the stock to trade at $49\frac{15}{16}$ and then try to establish a short position, you'll probably end up missing the trade waiting for an uptick.

next morning NTRO gapped lower and continued to drop dramatically. It would have been difficult to get short after the market opened for trading on the day of the breakdown (although, there were some upticks in the pre-market).

All breakout traders know it's very difficult to get short once a stock breaks through support, if the trade is any good. You must either wait for an uptick (which may not happen) or offer it short $\frac{1}{16}$ higher than the inside bid (for Nasdaq stocks). But if the stock is dropping like

FIGURE 3 GOING WITH THE MARKET

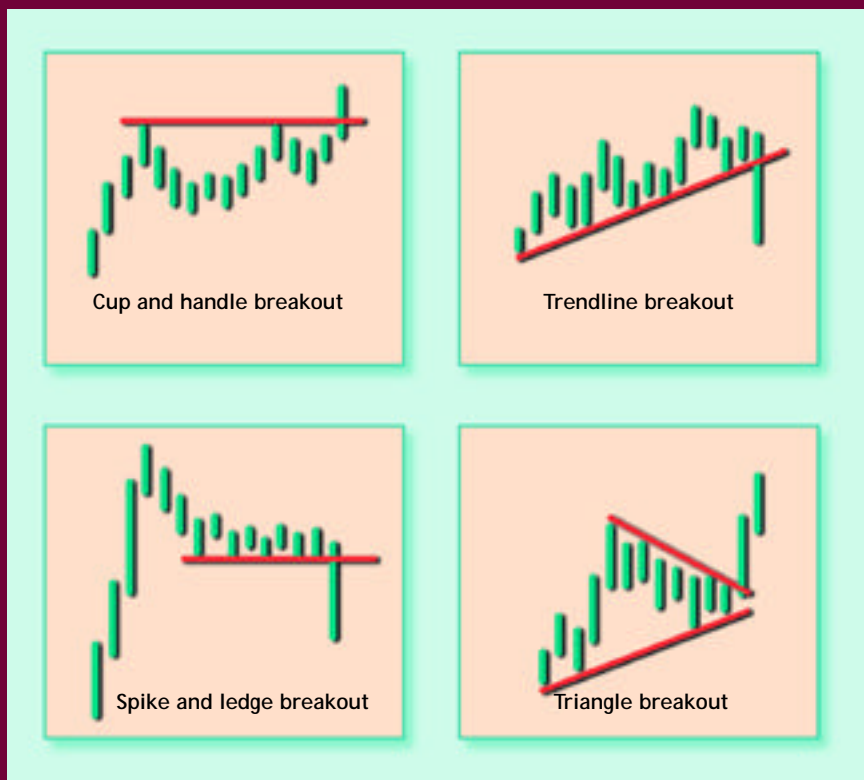
Pre-breakout entry should be confirmed by the broader market indices. In this case, establishing a position in advance of a breakout above the trendline was supported by strength in the S&P 500 and Nasdaq indices.



Source: CyberTrader by CyberCorp.

FIGURE 4 BREAKOUT PATTERNS

A sampling of the breakout patterns short-term traders can use on any time frame. They provide well-defined support or resistance levels you can use to anticipate breakouts.



strength helped pull WLA through the trendline; it continued to rally for the rest of the day.

Had you waited for WLA to print at $123 \frac{1}{6}$, you would have been filled at a minimum of $\frac{1}{6}$ worse than the early entry price. Those extra fractions add up quickly. You can usually gain an extra $\frac{1}{8}$ (sometimes as much as a point) simply by realizing that support and resistance almost always get broken. Try the following experiment: Multiply 50 percent of all the shares you have traded over a given time period by $\frac{1}{8}$ and see what you come up with. That's being conservative.

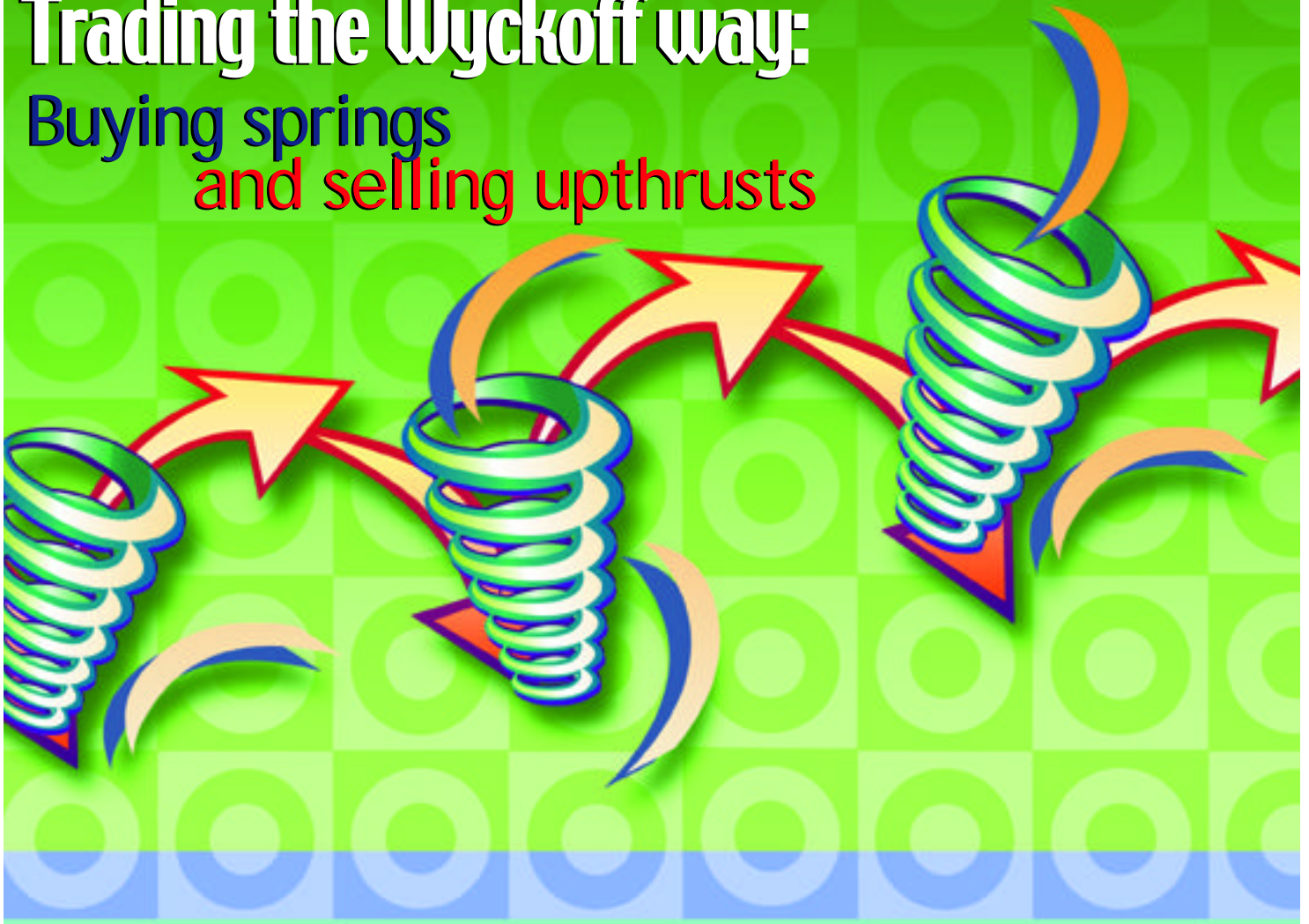
You can use this entry technique on any breakout-related trade in any time-frame, including breakouts from daily and intraday cup-and-handle patterns, triangles, trendline breakouts and spike and ledge patterns (see Figure 4). Very rarely should you wait for the actual breakouts to materialize on any of these patterns. Remember, slippage affects you whether or not you make a profit on the trade. Most traders don't even think about the effect of slippage on their winning trades; they only think about the losers. And don't forget about the trades you missed completely because the stock just ripped through the support or resistance level and you couldn't even get a partial fill.

We tend to forget about those missed opportunities completely, but those are usually the most potentially profitable trades because the stock is moving so forcefully. This approach will also help you on the breakout trades that don't materialize because you'll have a better entry price and may even be able to still garner a small profit or, at worst, scratch a trade from these false breakouts.

No approach is without risk, but in certain situations entering early can yield excellent trading results.



Trading the Wyckoff way: Buying springs and selling upthrusts



Picking tops and bottoms can be risky, but understanding concepts like Wyckoff's springs and upthrusts allow you to identify low-risk, high-reward trade set-ups based on false breakouts.

BY HENRY O. (HANK) PRUDEN, PH.D.

Before the rudiments of technical analysis were spreading like wildfire via the Internet, bookstores and television, the general public or "the crowd," would join a trend only after it had been well underway.

Nowadays, however, "the crowd" often rushes into a stock, a sector or a market at the first clue of a price breakout from a congestion zone. But as Joseph Granville, a famous technical analyst and trader, once said, "[In the

If you want to trade like the professionals, consider selling an upside breakout rather than buying it.

markets], whatever is obvious is obviously wrong.”

So, if the crowd is rushing in at breakout time, who is left to take the other side of the trade? The answer is the better-informed professionals, who have conditioned themselves to act in accordance with another old saying, “One should fear to tread where fools rush in.” Hence, if you want to trade like the professionals, and not count yourself among the fools, you may want to sell a breakout rather than buy it — especially when the popular stocks of the day are under consideration.

To avoid being caught with the crowd, you should contemplate buying springs and selling upthrusts — two insightful, but often overlooked, principles of Richard D. Wyckoff, an early advocate of technical analysis who codified the best practices of the famous traders of the early 1900s. His principles and procedures, which came to be known as “the Wyckoff method,” are based on reading chart patterns.

Don't expect to discover a set of precise mechanical rules with the Wyckoff method — instead, you'll discover insights, general principles and guidelines that will help you interpret market behavior.

The patterns

A **spring** is a price move below the support level of a trading range that quickly reverses and moves back into the range. A spring is an example of a “bear trap” because the drop below support appears to signal resumption of the downtrend. In reality, though, the drop marks the end of the downtrend, thus “trapping” the late sellers, or bears. The extent of supply, or the strength of the sellers, can be judged by the depth of the price move to new lows and the relative level of vol-

FIGURE 1 NO. 2 SPRING

After dropping below support, BVSN rallies back into the trading range and signals a buy after a secondary test of support.



ume on that penetration.

An **upthrust** is the opposite of a spring. It's a price move above the resistance level of a trading range that quickly reverses itself and moves back into the trading range. An upthrust is a “bull trap” — it appears to signal a start of an uptrend but in reality marks the end of the up move. The magnitude of the upthrust can be determined by the extent of the price move to new highs and the relative level of volume on that movement.

Springs and upthrusts are divided into three types — No. 3, No. 2 and No. 1.

The rules

A No. 3 spring occurs when a modest penetration of support is accompanied by volume that is relatively light compared to the volume of prior down-

moves. The shallow price penetration and low volume indicate sellers are exhausted. No. 3 springs should be bought immediately.

No. 2 springs penetrate more deeply below support with greater comparative volume than No. 3 springs. This indicates sellers are still abundant during the break. Therefore, a second test of support is necessary before a buy can be signaled. After the initial break below support, price should move back about one-third into the trading range. Ideally, the volume for this up move should be higher than during the immediately preceding downswing, and also greater than volume of previous rallies within the trading range. The secondary test consists of a down move that, on comparatively light volume, usually retraces less than half the rally off the low established on the first downside penetration.

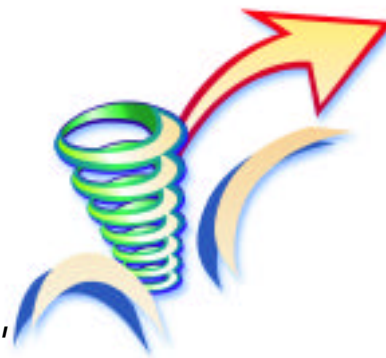
No. 1 springs are wholesale breakdowns below support on volume that is much larger than that of prior downswings within the trading range. Do not buy No.

1 springs; rather, look to sell short if the subsequent rally stops at or below the prior support (now resistance) level, especially if the move back to this level occurs on approximately half the volume of the initial breakdown.

Upthrusts are essentially mirror images of springs. A No. 3 upthrust is completed when, after penetrating resistance on large relative volume, price returns immediately to the average level of closing prices within the preceding range. The No. 3 upthrust is referred to as an “upthrust after distribution.” Sell No. 3 upthrusts immediately.

The No. 2 upthrust usually consists of a larger rally past resistance on greater comparative volume than No. 3 upthrusts. Like its No. 2 spring counterpart, however, a secondary test must be con-

As technical analyst
and trader Joe Granville
once said, "In the markets,
whatever is obvious is obviously wrong."



37% on high volume on Jan. 31 before springing back to the middle of the trading range at 51 3/4 on Feb. 3. A buy order was signaled when the stock fell back below 50 on light volume the next two trading days (the secondary test required of the No. 2 spring), with a stop-loss at the most recent low of 37%. After breaking back above 50 on Feb. 8, Broadvision subsequently skyrocketed to 90 by early March.

The next two examples are in Lucent Technologies (LU). Figure 2 (lower left) shows that Lucent, in late May 1999, fell below previously defined support near 56 on very light volume, immediately signaling a good buying opportunity in accordance with the rules for a No. 3 spring. The stock rallied strongly into July. Although Lucent slumped after the big increase, the stop-loss was never hit.

A new trading range developed in early November, with the stock trading between 72 and 82. When the resistance level was penetrated in mid-December, a short sale could have been executed around 78 — the point where the rally began to falter on relatively decreased volume. But a few days later, when the market fell through the approximate halfway point of the trading range, the sell signal was confirmed, with an accompanying stop-loss around the preceding high of 84 1/2.

Two more examples involve Computer Network Tech. Corp. (CMNT). These setups are practically identical, although they occurred at different times. Figure 3 (p. 44) shows CMNT formed a trading range in the 20 to 25 region during November and December 1999.

The stock penetrated resistance toward the end of the year on increased volume, but soon fell back down below 22. The stock again attempted to rally, with price reaching 25 1/2 on Dec. 30, but it did so on diminishing volume. This failed rally completed the setup sequence for a No. 2 upthrust.

Another similar setup developed in February and March 2000. A selling

FIGURE 2 NO. 3 & NO. 1 SPRINGS

When support is penetrated on light volume, a buying opportunity occurs. Likewise, a price drop through the middle of the trading range after penetration of resistance signals a sell.



Source: TradeStation by Omega Research

ducted before a sell signal is activated. After resistance is crossed initially, price should move back about one-third into the trading range. Volume for this move ideally should be greater than during the preceding upswing and higher than volume during the previous down moves. The secondary test consists of a rally that, on comparatively light volume, often retraces less than half the reaction from the immediately preceding high.

No. 1 upthrusts are legitimate upside breakouts that denote the start or resumption of an uptrend, and are usu-

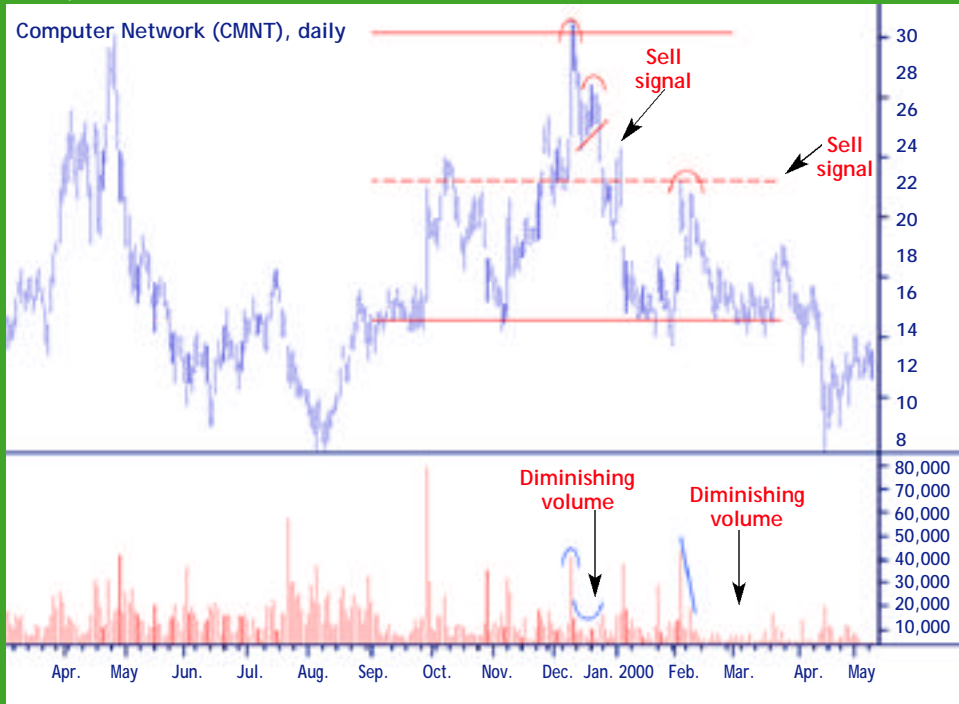
ally accompanied by high volume. Rather than attempting to sell short, look to buy on a pullback that halts at or above prior resistance (now support), especially if the coinciding volume is no more than half the volume of the initial breakout.

In practice

Let's see how these patterns develop in real market situations. The first case involves Broadvision Inc. (BVSN), which formed a No. 2 spring in late January (see Figure 1, left). Price fell below support to

FIGURE 3 NO. 2 UPTHRUSTS

Two similar short-selling opportunities: Failed upside moves on diminished volume set up short trades.



Source: TradeStation by Omega Research

FIGURE 4 NO. 3 UPTHRUSTS

A penetration of resistance accompanied by a volume spike falls quickly; a subsequent test of resistance in February at the middle of the trading range confirms the downward bias.



Source: TradeStation by Omega Research

opportunity arose when price began to decrease past the halfway point of the trading range in mid-March on decreasing volume. In both CMNT examples, stop-loss orders are placed at or just above the preceding highs.

Figure 4 (lower left) shows the final examples, which involve Amazon.com (AMZN) and are a case of several intertwining situations. First, the stock formed a massive trading range between 62 and 110 from late-September 1999 to mid-April 2000. When the stock rose above 110 with a burst of volume in early December, only to turn back down again, it could have constituted a No. 3 upthrust and a sell short order could have been placed around 101 (where resistance for a much smaller trading range had formed). In early February, another short-selling opportunity presented itself when the market once again failed to rally past the halfway point of the range on diminishing volume.

Conclusions

By dividing upthrusts and springs into three separate categories, traders who study the Wyckoff method will be better able to evaluate market behavior around bear and bull traps.

The important thing to remember is that bottom fishing or top picking should not always be avoided or considered dangerous. Recognizing and understanding springs and upthrusts can help you locate reasonably high-reward, low-risk opportunities near the bottoms and tops of trading ranges. 📌



Finding strength with the RATIO SPREAD

How can you define trends and support
and resistance levels?

Moving averages are one thing,
but the ratio spread allows you to find stocks
with better chances of outperforming
the market.

One way to buy stocks that can be expected to continue higher is to compare the price of the stock with a long-term moving average: Only buy a stock if it's above the average (or if the average has an upward slope), and only short stocks with the reverse conditions.

But this very simplistic approach tells you nothing about how one stock might perform in relation to another or to the market in general. Obviously, between a stock that might move up a little and one that might move up a great deal, the latter would be a preferable choice for a long trade.

For instance, if you believe the stock market in general is about to bottom out and make a run to higher ground, it would be a distinct advantage to identify those stocks most likely to lead the pack — that is, outperform the general market, as measured by a broad-based market index.

An easy way to do this is to chart the *ratio spread* between the stock in question and the market index you prefer to compare it with. To do so, simply divide the stock price by the index value. And just as you can apply different technical analysis indicators to the stock price, you can apply many of the same indicators to the ratio spread. Figure 1 (right) shows a 200-day moving average applied both to the price of IBM and to a ratio spread between IBM and the S&P 500 futures index. (More about the support and resistance lines on this chart in a moment.)

The 200-day moving average acts as a long-term support-resistance level. For example, when price (in an uptrend) corrects, it often turns around and continues higher after coming very close to the level of the moving average. If this retracement level also coincides with a recent or significant historical top or bottom, the greater the likelihood price will turn around.

However, it can be very difficult to pinpoint the exact level at which this might take place. For instance, if the stock currently is on its way down from 80 and there is an easily identified support level at 75, the actual turnaround is just as likely to occur at 76 as it is at 74,

BY THOMAS STRIDSMAN

or perhaps at a even lower level.

This is where a similar pattern analysis of the ratio spread can come in handy. Sometimes an individual stock will penetrate a support or resistance level by what seems an amount large enough to constitute a valid breakout, but does not follow through because it still has not reached the corresponding support or resistance level relative to the market as a whole. A moving average applied to the ratio spread provides support and resistance, the same way it does when applied directly to price.

Look at Figure 1. In late November-early December 1997, IBM was testing and penetrating resistance around 54½, from mid-August the same year. One reason for the rather significant penetration (and subsequent retracement) was that the ratio spread still had a little bit to go before it reached its corresponding resistance around 0.052. Notice that the ratio spread just touched the resistance level, but did not push through it.

In late April 1998, IBM broke through the same resistance while the ratio spread broke above its 200-day moving average. This was the first sign of strength in a long time. The stock managed to break through resistance while at

the same time (because the ratio spread moved above its moving average) it could be expected to do better than the market in general. But because the ratio spread still had to break through its corresponding resistance level at 0.052, this was not a good buy signal.

The ratio spread first attempted to penetrate resistance in mid-May, but by this time the market had exhausted itself and pulled back to the moving average. The important thing to notice here is how the start of this decline corresponds to the ratio spread's test of resistance. By just looking at the price chart there was no way of knowing this particular stock was ready for a short-term decline.

The first really good buy signal came in mid-July when the ratio spread managed to break through the resistance level. At this point IBM showed the strength to continue the uptrend and by definition was outperforming the rest of the market. Also, both the price and the ratio spread exhibited a series of higher highs and higher lows — a classic chart pattern that signals the beginning of a new uptrend.

The only cloud left on the horizon was price still had to break through the latest resistance in the 65 to 70 area. A good

indication this would happen came in late September and early October, when price failed to decline all the way down to the moving average, coinciding with the ratio spread's bounce off support at approximately 0.059. Sure enough, when both the price and the ratio spread finally managed to break free of their resistance levels, the price quickly rallied from 65 to over 99, a gain of more than 50 percent in less than four months.

It's worthwhile to point out again that a price resistance level often becomes a resistance "area" because of the influence of the ratio spread. Price will turn around above or below its perceived support or resistance level because of the impact of the ratio spread's support and resistance levels.

Pinpointing swing points

Adding Bollinger bands to this kind of analysis can help pinpoint entry and exit points.

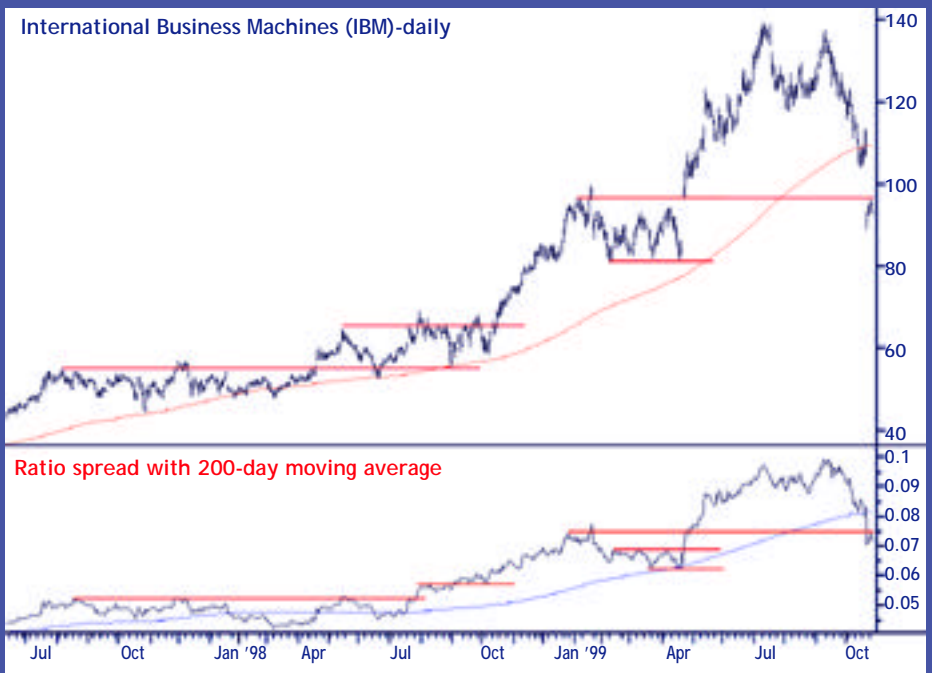
Bollinger bands are constructed by calculating a moving average (standard length: 20 days) and then adding the statistical standard deviation boundaries one or two standard deviations above and below the moving average, creating upper and lower bands that tend to contain price action (see Figure 2). If the standard deviation boundaries are placed one standard deviation away from the mean, they will hold approximately 68 percent of the price action; if they are placed two standard deviations away from the mean, they will hold about 95 percent.

But instead of charting the bands the regular way (overlaid on price), we will chart them as an oscillator, for easier interpretation. The two bottom studies in Figure 3 show such a Bollinger Bands Oscillator (BBO) applied to the price and the ratio spread, respectively. In effect, the upper Bollinger band becomes the overbought line, the lower Bollinger band becomes the oversold line and the price series becomes the "indicator" that fluctuates above and below these levels.

The interpretation of BBO is exactly the same as any other oscillator. That is, very high readings signal the market is overbought and, therefore, likely to retrace some of its latest rally. For very low readings, the opposite holds true. For instance, note how most tests of the support and resistance lines and the

FIGURE 1 RELATIVE STRENGTH ANALYSIS: THE RATIO SPREAD

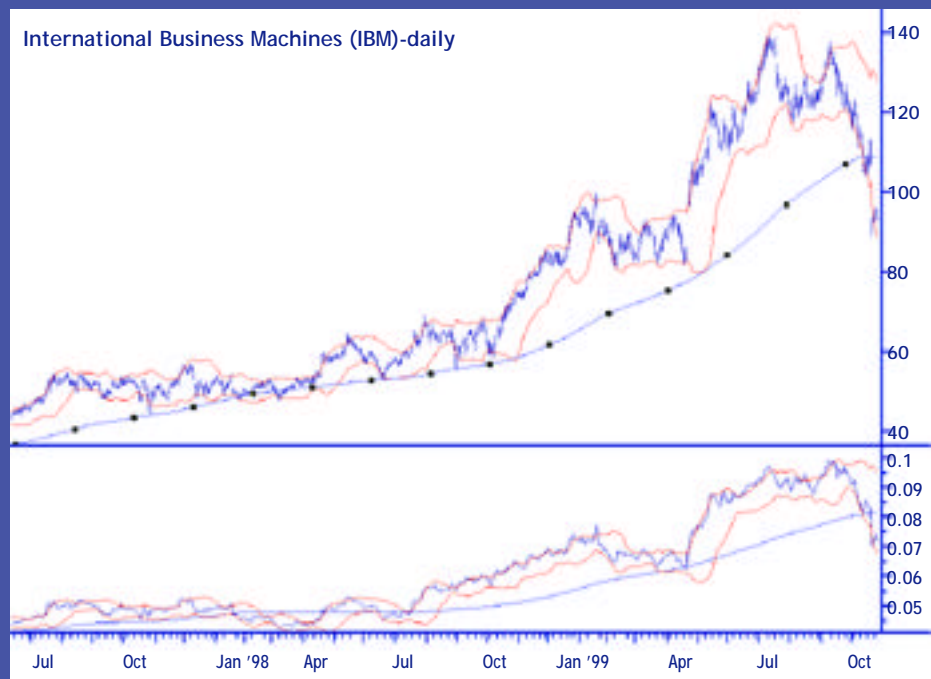
A price breakout is often accompanied by the ratio spread penetrating its resistance level



Source: TradeStation by Omega Research (Data: CSI Unfair Advantage)

FIGURE 2 INTERMARKET BOLLINGER BANDS

Adding Bollinger Bands can help identify exit and entry points.



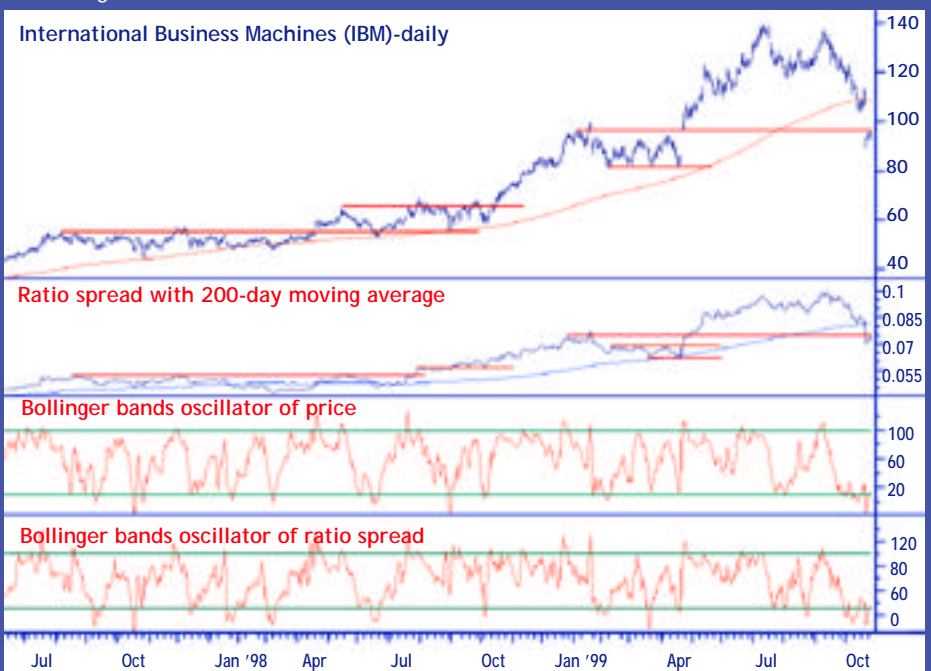
Source: TradeStation by Omega Research (Data: CSI Unfair Advantage)

moving averages in the price and ratio spread charts are accompanied by overbought and oversold readings in both the

oscillators. This means the BBO primarily should be used to pick top and bottoms. If you prefer to trade breakouts, you should

FIGURE 3 AN INTERMARKET OSCILLATOR

Bollinger Band oscillators of price and ratio spread can pinpoint potential overbought or oversold levels.




Source: TradeStation by Omega Research (Data: CSI Unfair Advantage)

not look at the BBO at the time of the breakout, as it almost always will keep you out of the market by signaling overbought when the market is breaking out to the upside and signaling oversold when the market is breaking out to the downside.

Let's take a look at how the BBO could have been used during late 1998 and early 1999, when the market was about to form a trading range in the 80 to 95 area. In late December 1998, both oscillators signaled overbought readings together, indicating the market now could be ready for a retracement after a strong up move. If you decided not to exit at this time, you got a second chance to do so a couple of weeks later when both oscillators once again signaled overbought readings at the same time both price and the ratio spread tested their resistance levels at approximately 95 and 0.074, respectively.

A few weeks later, in late January, both oscillators signaled the market was oversold, as the stock started to form support around \$80. During the following months, this support was tested three times, in conjunction with tests of the ratio-spread moving average and oversold readings for the ratio spread. Any of these points could have been used to establish a long entry. In late April, when the market broke out of the consolidation area, this position could have been added to. Finally, the entire position could have been exited when both oscillators once again signaled mutual overbought readings, in late June or early September.

These two trades managed to catch a combined move of approximately \$75, out of a total of \$95, while spending very little time in the market. Also, in both instances, we not only bought a stock that was expected to move higher, but one that, because of its rising relative strength, also could be expected to do better than most other comparable trading alternatives.

And do not forget, when one stock is expected to do worse than average, by necessity there must be others that will do better. By letting the ratio spread help you be more selective in your trading you ensure you will have money at hand to always take those trades with the highest likelihood of success. 



Gauging the MARKET WINDS

Just as a weatherman must know both the strength and the direction of the prevailing winds to make an accurate forecast, traders must know the strength and direction of market volatility to trade.

Two well-known indicators can help you forecast the market weather.

BY THOMAS STRIDSMAN

Do any of the following statements sound familiar?

“The current calm market conditions will soon be followed by more volatile activity.”

“The longer these low-volatility conditions persist, the more likely the market will make an explosive move.”

“The calmer the market, the more explosive the move to follow.”

We've all heard analysts make statements like these. Usually, they try to back up their statements with a set of well-chosen chart examples showing plenty of historical low-volatility situations followed by huge moves.

Bollinger bands are often used to “prove” this phenomenon. This indicator plots one- or two-standard deviation



boundaries above and below a moving average. These bands expand in times of high volatility and contract when volatility is low.

You can find plenty of situations in which Bollinger bands are very narrow and close to the current price action, followed by explosive moves that make the indicator bulge like an anaconda that just swallowed a wild pig. The top half of Figure 1 shows a 21-day Bollinger band (along with a 21-day moving average) applied to the S&P 500 index.

If you stop and think about it, you realize that the opening statements about volatility are nothing but truisms. Of course high-volatility situations will follow low-volatility situations and vice versa; and of course these will be easy to identify on a chart using hindsight. The difficulty is catching such explosive moves before they happen. That's what we all are trying to do. (To be fair, this does not mean that Bollinger bands are "bad." Quite the contrary, but as with any tool, they can become a lethal weapon in the wrong hands.)

The key word in the statement, "The current calm market conditions will soon be followed by more volatile activity," is *soon*.

What is soon? Is it later today, tomorrow or a week from now? The truth is, nobody ever knows with certainty. It's like the weather. Is it more likely to be sunny tomorrow if it has rained every day for a week, instead of for only a day? Of course not, at least not if we base our forecast solely on how long the current situation has lasted. In fact, in the very short run it is the other way around: If the sun is currently shining in a clear blue sky, it's not very likely to hail two minutes from now.

And what about the second and third statements at the beginning of the article? Again, the weather offers a good analogy. Just because the current storm is more intense or longer-lasting than the last one, it doesn't mean the sun will shine more brightly than usual when the rain eventually ends.

To forecast the weather, we need to look at what is happening around us

and ask a few questions, such as: What time of year is it? Where is the wind coming from and how strong is it? What's the weather like in surrounding areas?

Not until we answer these questions can we start making predictions about what will happen next and approximately when it will happen.

The same is true for the markets, except in this case we need to ask ques-

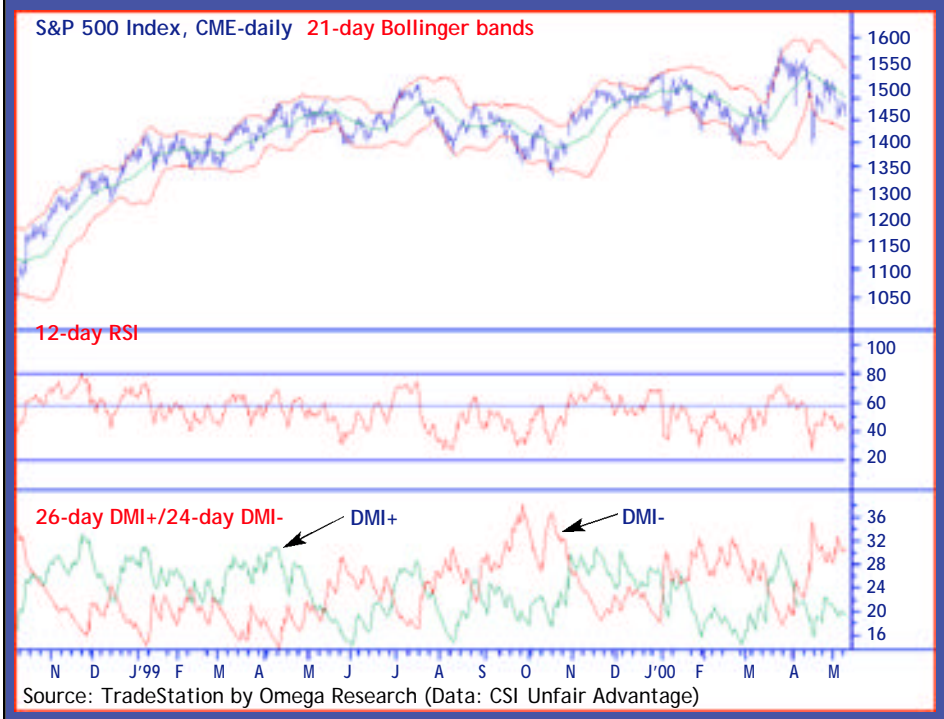
tion about the markets and compare it to the second question about the weather.

Direction matters

Volatility analysis must consider both the direction of price movement as well as the amount of movement. Unfortunately, most volatility measures do not take into account the direction of the volatility, effectively ignoring at least 50 percent of the available information.

FIGURE 1 MEASURING VOLATILITY

Bollinger bands (top) are commonly used to measure market volatility, expanding and contracting as volatility increases and decreases. The relative strength index (RSI) and directional movement index (DMI), below, can be used to measure the direction of volatility as well as its strength.



tions like: What's the direction of the long-term underlying trend? Is the downside or upside volatility changing, and how strong is each? What do the trend and volatility look like in other markets?

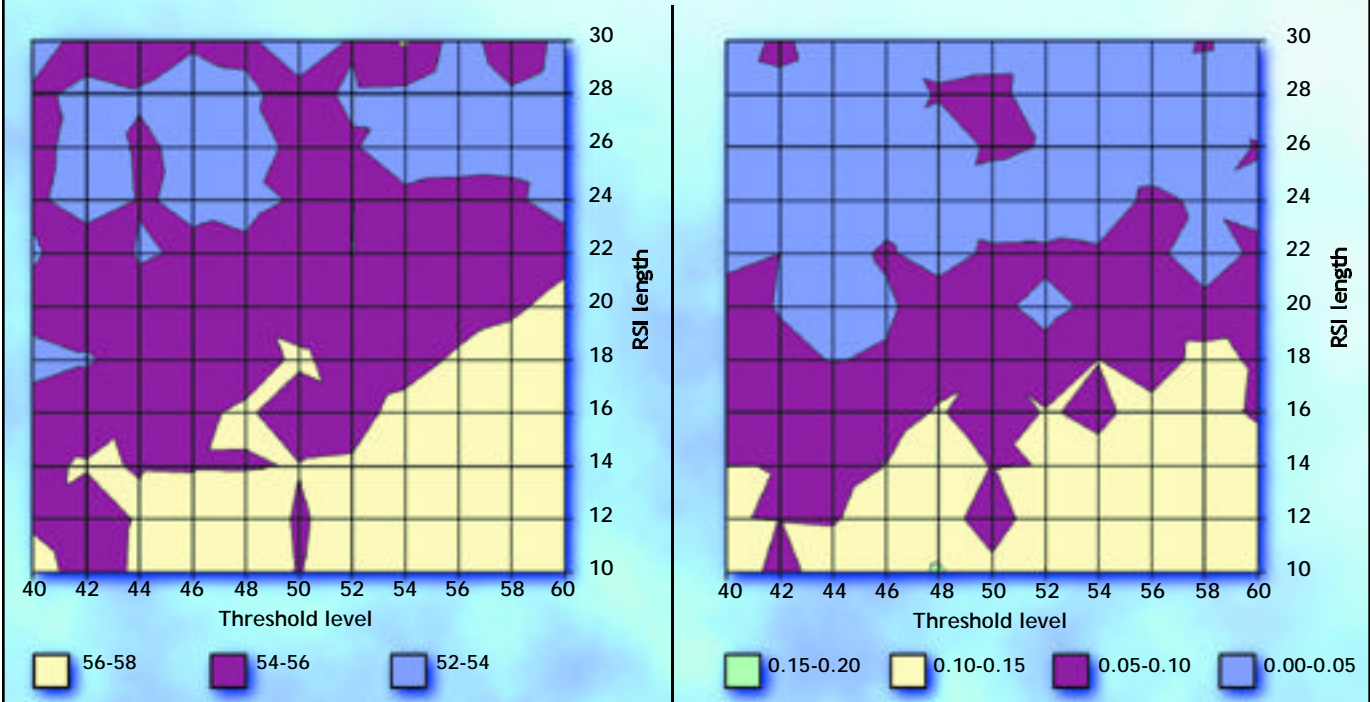
By answering these questions, we can compare the underlying trend of the market with the season of the year and measure it with the help of (for example) a long-term moving average. For now, we will look closer at the second ques-

Think about the weather again. A 40 mph wind can feel like two very different things depending on the direction it's blowing. For example, if you have to spend a winter in Chicago, you probably would prefer the wind coming in from the south, bringing in plenty of warm air from the Gulf of Mexico, instead of having it blow in from the north, bringing nothing but an arctic cold. On a hot, humid summer day, however, you might find yourself wishing for the

FIGURE 2A PERCENTAGE OF PROFITABLE TRADES: RSI

FIGURE 2B AVERAGE PROFIT PER TRADE: RSI

Both the percentage of profitable trades and the average profit per trade for the RSI increase with higher volatility threshold levels and shorter lookback periods.



opposite.

The situation is similar for volatility. First, if the underlying trend is up, you know the long-term odds favor shorter-term price moves to the upside. These odds could be further strengthened if you knew the direction of the volatility — that is, the direction price is moving most forcefully — so you could trade the long side more aggressively when the upside volatility picks up and the downside volatility slows down. This can also help identify long-term trend shifts when, for instance, the downside volatility gets stronger and more persistent over time, even though the long-term price trend still seems to be up. (This is similar to when the days are getting shorter and the mornings colder as a first indication of a change in season from summer to fall and winter.)

The trick then, is to come up with a way of distinguishing between upside and downside volatility. There are a number of rather complicated techniques that could be used to do this, including using separate standard deviation calculations, one based solely on

up moves and one based solely on down moves. There also are tools (for stocks) like the beta coefficient, which measures how much and in what direction a stock is likely to move given a specific move for the market as a whole.

Fortunately, we don't need to use a complicated technique to compare upside and downside volatility. We can simply compare the average up move over a certain time period to the average down move over the same time period. Then we will have an oscillator ranging between 0 and 100, with readings above 50 indicating the upside volatility is currently stronger, and readings below 50 indicating the opposite.

Another way to do it could be to measure how much of today's price action is taking place above yesterday's high (representing upside volatility), calculate an average of this figure for a specific number of days, and deduct the same type of average for the price activity that has occurred below the previous day's low (representing downside volatility).

If these suggestions sound reasonable, please read them through once more. If

they sound familiar, they should, because they are nothing but short descriptions of two of the most popular technical indicators — the relative strength index (RSI) and the directional movement index (DMI).

You can apply standard trend analysis to both indicators to determine if upside or downside volatility is stronger and whether they are increasing or decreasing. These indicators can also filter out trades when the market gives you inconsistent readings. For example, to trigger a long position you could require the RSI to be above a particular "volatility threshold" (say, 50 or 60) and for today's RSI reading to be higher than yesterday's. This would mean that the upside volatility is greater than the downside volatility, and increasing. For the DMI you could make it more difficult for the indicator to signal entry in a specific direction by making the lookback period for that side of the indicator longer than for the other side. For example, you could use a 30-day DMI+ to trigger long trades and a 20-day DMI- to signal short trades. The DMI line with the current

highest reading indicates the direction of the volatility, and the greater the distance between the two lines, the greater the difference in the directional volatility. This way, long trades can, for instance, be triggered as soon as the DMI+ line is increasing above the decreasing DMI- line (vice versa for sells).

The bottom half of Figure 1 shows a 12-day RSI with overbought and oversold levels set to 80 and 20, respectively, and with the upside "volatility threshold" set to 58. Beneath the RSI are DMI+ (measuring upside volatility) and DMI- (measuring downside volatility) lines with 26- and 24-day lookback periods, respectively.

To see if it is possible to use these indicators as volatility measures you can trade any market using random entries and a rule that exits the trade after a specific number of days. If the basic strategy manages to produce profitable results


despite the random entries, the overall results should indicate a minimum for what you could expect using a specific, optimized entry technique.

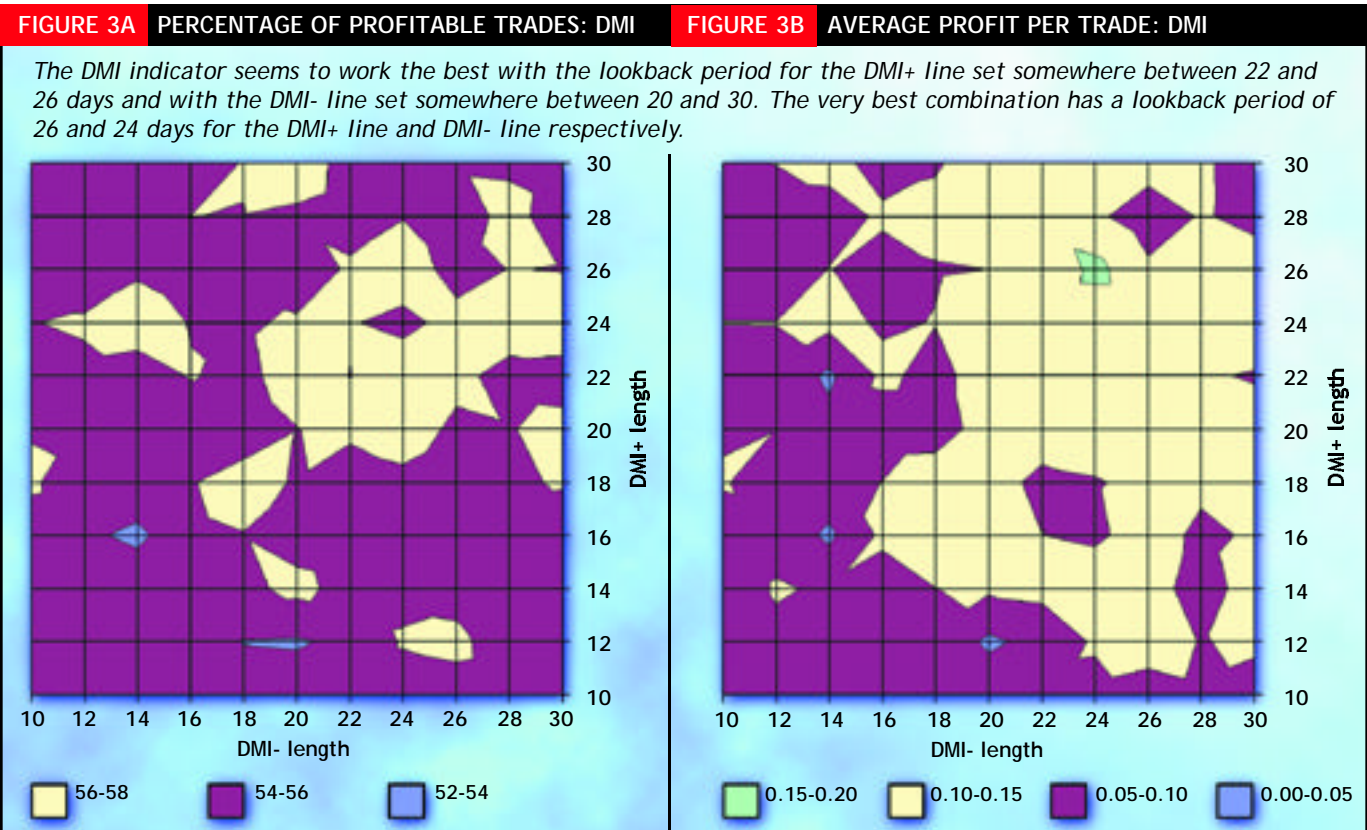
Figures 2 and 3 graph the results of this kind of test (for long trades only) of the RSI and DMI indicators, respectively, applied to the S&P 500 index from May 1982 to May 2000. The volatility indicators function as filters, identifying situations where the directional volatility is to your advantage: Only signals that would be allowed given the RSI or DMI parameters described earlier are taken. The trade length is set to five days. Figures 2a and 2b show the percentage of profitable trades and average profit per trade for the RSI indicator. Both increase with higher volatility threshold levels and shorter lookback periods. (The exception is threshold level of 48 and a lookback period of 10 days that shows a average profit per trade of more than 0.15 percent.)

Figures 3a and 3b show the percent-

age of profitable trades and average profit per trade for the DMI indicator. For the DMI indicator the average profit is the highest with a lookback period of 26 and 24 days for the DMI+ and DMI- lines, respectively.

If the strength and direction of volatility did not matter, we would not have been able to distinguish any significant differences between the different lookback periods or volatility threshold levels. Clearly, however, this is not the case. The conclusion then, is there is a difference between upside and downside volatility and that it pays to keep track of it.

In this test we did not look at whether the upside or downside volatility was increasing or decreasing. Knowing this should improve the results further. Knowing the direction of the underlying trend also should enhance the results, as would substituting the random entry with a good short-term entry technique. 





Trader goes

WHERE THE ACTION IS

BY ALLEN SYKORA

Mike Harrington didn't really mean to become a full-time trader. It just happened.

Like many investors during the recent bull market, he has enjoyed good returns on the majority of his stock holdings. But he still had a handful of duds.

Wanting to "turn those stocks around," he opened an account with an online brokerage firm and began trading on a short-term basis.

"I wanted to see if I could do it," Harrington says. "It was a challenge. I was in the midst of starting my retirement and needed something to keep my mind active.

"I found myself trading more and more every day and every week," he says. "I got up to around 120 trades a month. My highest month was November 1999, with around 400 trades.

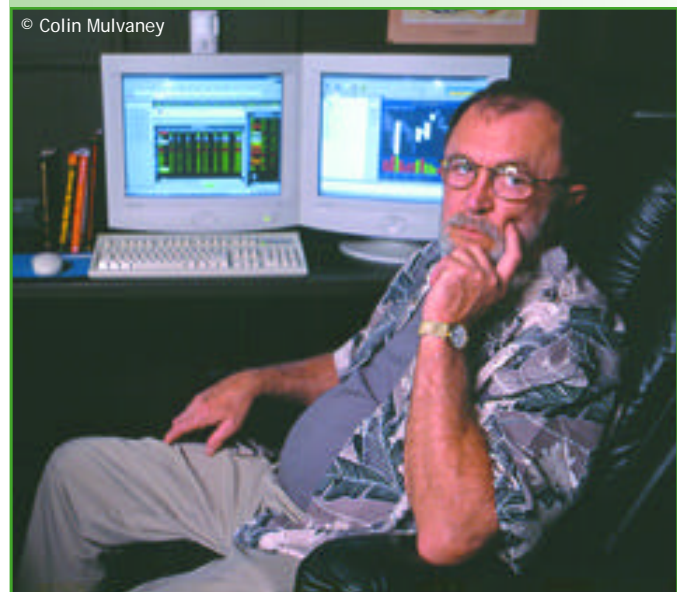
"It became more of a passion than a money-making thing. It's like a chess game. I'm fascinated with the art of trading. Some people count sheep [when trying to go to sleep]; I count symbols on a ticker."

Harrington trades a small portfolio of mostly Nasdaq issues, which he favors because of their high volume and volatility (he also trades the QQQs and select stocks from daily lists of top gainers and decliners).

"If you have a Nasdaq stock and there's good news, it goes up 10 points," he notes. "If it's a NYSE stock and there's good news, it will go up two points."

By focusing on a limited pool of stocks, Harrington tries to develop a feel for the type of moves the stocks may make. He tends to trade only two or three stocks at a time so he can keep a close eye on their movement. While most of his trades last only one to three days, there are times he will hold a position for up to six weeks.

One of Harrington's main tools is stochastics, a widely used momentum oscillator that identifies shorter-term exhaustion or reversal points — levels at which a market might be getting ready to change direction. The indicator ranges in value from 0 to 100, with a low reading indicating an oversold market (potential buying opportunity) and a high reading indicating an overbought market (potential selling opportunity). The sidebar "The



" It all boils down to your trading knowledge and how you react to the market — not how the market reacts to you. "

stochastic oscillator" (opposite page) shows the stochastic formula and an example of the indicator on an intraday chart.

Harrington uses discretion when exiting trades. His ultimate goal is to capture a 30 percent gain, but he will exit sooner if he believes the market may be about to turn. He also uses trailing stops that he generally places 8 to 10 percent away, although he might place a stop further away if he's confident the stock won't rise or fall precipitously, even on bullish or bearish news.

Harrington has developed the discipline to get out of a stock when his stop levels are hit, rather than hanging onto a losing trade with the hope it will bounce back his way.

"If you have a tendency to let it drop below your exit point, you'll find it easier to do the same thing on the next trade," he notes. "And finally, you'll wind up losing a lot of money. You've got to keep your discipline or you will lose."

Harrington lost money during his first few months trading until he began studying charts and developed a better understanding of the market.

"That's your tuition," he says with a laugh. "It's like going to school. You have

Trading setup

Hardware: Two self-made 600 Mhz Pentium III computers with 30-GB hard drives, 256 RAM. Two Mitsubishi 21-in. monitors on main computer and two 19-in. Sylvania monitors on news and research computer. Fenton power protection with automatic self-start. Onan 10-kilowatt generator power backup.

Internet connection: Cable modem on main computer and DSL on news and research computer.

Brokerage: CyberCorp (for trading) and E-Trade (for investing)

Software: Bloomberg and Stock House for news and research. CyberTrader by CyberCorp for trading.



to pay for your books and classes.”

One of his early tuition payments was the result of overconfidence. He didn't take a profit when he could have and exacerbated the situation by hanging on to what became a losing trade.

The stock initially rallied 3 points, then pulled back. Harrington hesitated to get out of his

long position because he expected it to quickly recover and rise again. But pretty soon he had lost close to 8 points.

“The more it dropped, the more I hesitated getting out, because I didn't want to lose that much money and I *knew* it would recover,” he remembers. “I held it overnight, and the next morning it fell even more.”

He eventually suffered a 20-point loss.

Another mistake he recalls making was using a market order when a limit order was called for. Harrington recalled placing a market order to buy shares of the Israeli Internet service Internet Gold (IGLD) after a news report that Microsoft was investing heavily in the company. Because of “technical problems,” his order did not get filled for 11 minutes. Instead of getting in the stock around \$23 — the price it had been when the news broke — he was filled at \$45. The stock then started tanking and he didn't get out until it hit \$28 because of another long delay in execution. At this point, Harrington changed from an online broker to a direct-access firm for his short-term trading. He still uses a “standard” online broker for investing (see “Trading setup,” opposite page).

Harrington advises newcomers to read extensively about trading and take trading classes, either in person or online, and take advantage of online tutorials and trade simulators before risking real money. Additionally, he suggests trading small positions to start, and using stop-loss orders.

“It all boils down to your trading knowledge and how you react to the market,” he says. “It's not how the market reacts to you.

“If you can't afford to lose the money in the market, don't be in it,” he adds. “If you're in this business to make a lot of money quickly, it's not going to happen. Greed will destroy you.

“Some people think trading is like Las Vegas. They think they're going to throw some money on the table and all of a sudden it will double. It doesn't work that way. You've got to educate yourself, do your homework, have a good risk-management plan in place and be sure you can afford it. Trading is a business. You buy a stock wholesale, sell it retail and sometimes you have to put it on sale.”

The stochastic oscillator

The stochastic oscillator consists of two lines: %K and a moving average of %K called %D. The basic stochastic calculation compares the most recent close to the price range (the high of the range minus the low of the range) over a particular period. A five-day stochastic would be the difference between today's close and the lowest low of the last five days divided by the difference between the highest high and the lowest low of the last five days; the result is multiplied by 100. The formula for %K is:

$$\%K = 100 \times \{(C_t - L_n) / (H_n - L_n)\}$$

where

C_t is today's closing price,

H_n is the highest price of the most recent n days (the default is five days) and

L_n is the lowest price of the most recent n days

The second line, %D, is simply a three-period moving average of %K (%K,3)

Because this basic “fast” stochastic calculation is very volatile, an additionally smoothed version of the indicator, where the original %D line becomes the new “slow” %K line and a three-period average of this line becomes the new “slow” %D line, is more commonly used.

Figure 1 is a 15-minute bar chart with a 14-bar stochastic. Besides watching for penetration of the overbought and oversold levels (here set to 80 and 20, respectively), traders use crossovers of the %K and %D lines (especially when the lines are in overbought or oversold territory) to help identify entry points. (Editor's note: For more information on stochastics, read “Indicator Insight,” p. 82)

FIGURE 1 INTRADAY STOCHASTIC

Stochastics is a momentum oscillator that highlights shorter-term swing points. Here, the overbought and oversold levels are set to 80 and 20, respectively.



Source: QCharts by Quote.com



LINDA BRADFORD RASCHKE:

The rituals of trading



© Clay Wieland

Linda Bradford Raschke's career has spanned the stock, options and futures markets, ranging from the trading floor to the office of her money management firm. Her recipe for success after 20 years in the game? Hard work, preparation and sticking to the basics.

BY MARK ETZKORN

Those who have been lucky enough to attend one of Linda Bradford Raschke's infrequent speaking engagements know she is a rare breed: a professional trader who can explain practical trading concepts in plain English. Her peers simply know her as one of the hardest working and most dedicated traders in the business.

Her trading career has encompassed the stock, options and futures markets, both as a private trader and a money manager. She has been profiled in Jack Schwager's *The New Market Wizards*, CNBC anchor Sue Herera's *Women of the Street*, and any number of magazine and newspaper articles. She also is co-author of *Street Smarts*, a popular book on short-term trading strategies.

Raschke started out as a floor trader in the early 1980s, spending a total of six years trading options at the Pacific Stock Exchange and the Philadelphia Stock Exchange, before making a successful transition to "upstairs" trading — no mean feat, considering the high failure rate of floor traders who try making a living away from the pits. She began managing money in 1993, while continuing to aggressively trade her own account. She trades a variety of markets, but concentrates on short-term trading in the S&P futures.

Raschke still devotes long hours to analyzing the markets and preparing for each day, even though she's been trading professionally for 20 years. She is a strong believer in daily rituals and disciplines that keep her trading focused, even if they don't immediately impact her trading decisions. And she practices simplicity, bypassing complex indicators in favor of price-based techniques that identify (for example) pauses or pullbacks within trends.

She took a break from her evening analysis routine to discuss the lessons every trader needs to learn and how she approaches the markets.

" Sometimes a failed signal can have even greater forecasting value than the original signal. "



AT: Would you categorize yourself as a systematic or discretionary trader?

LBR: Discretionary — I pretty much always have been. I came from the trading floor, and in that environment you learn to become a kind of tape reader, in a way. But I also spent years testing trading concepts, much of it with Steve Moore [of Moore Research Center]. We tested a million patterns and tendencies, and did a lot of modeling.

I've come up with some great systems, but I use them as indicators, with



discretion, because I need to have that control (*laughing*). The systems have forecasting value — they give me an idea of the probabilities of the market continuing in a certain direction. That doesn't necessarily mean I get in where the system would, or manage the trade the way the system would. If a particular system is signaling a buy or a sell, I might look to scalp in the direction of that system's signal.

Also, sometimes a failed signal can have even greater forecasting value than the original signal. I'll give you a classic example. Let's use the "holy grail" pat-

tern (one described in her book "Street Smarts") — buying a pullback to a moving average, looking for a move back up. I might think, "That's a normally high-probability trade; let me see if I can make a system for when that system *fails*."

AT: Do you routinely reverse positions?

LBR: I don't stop and reverse at all. But I will look for failed signals because very often they can result in strong moves in the opposite direction. They just don't happen as often, so your trade frequency is lower. But if you have something that works, say 70 to 80 percent of the time, there's a pretty darn good reason

have to price (use *limit*) orders.

If I'm trading in a good volume, trending market, I can take my time and sell at the market when I want to get out. But in a trading range market, I have to be working an offer ahead of time: If I buy the S&Ps at 1,420, I need to have an offer out there at 1,424. Because if it runs up and pops through 1,425 and I try to sell at the market, I might be selling at 1,422.

You know, there are so many misconceptions about short-term trading. Even as a floor trader, I could have a position on with a directional bias lasting two to three months and I would continue to

“When a market breaks out and there's some momentum, there are usually three pushes up. On an hourly chart, those may develop over a two- or three-day period.”

why it doesn't work those times it fails. You actually learn more from the signals that *don't* work.

So let's say I make a system based on a failed holy grail buy trade — one that fails to hold the moving average. First, if a grail buy trade fails, I know I'm not going to look to buy pullbacks in that market. Second, because there must be a good enough reason the system went short, perhaps it has forecasting value of a downside move of *x* number of bars or days. Therefore, I'm going to look to trade from the short side.

AT: Do you think your trading style is a natural outgrowth of your experience as a floor trader?

LBR: Well, understanding order flow is helpful, but it's probably more helpful to understand the type of environment you're trading in these days. In a high-volume market, in a trending market — for Pete's sake, use market orders. If you're in a sloppy, choppy environment like we are right now (mid-May) where the volume is contracting as a seasonal function — people are exhausted after the first four months — you have to be careful about using market orders. In a trading range environment, your initial trade location is far more critical, so you

trade a stock or market leaning to one side.

What you do is supplement those longer-term positions with lots of scalping.

That's pretty much what I do now. I'll sit with positions much longer than people might think, but I can still scalp S&Ps for five minutes at a time.

A general rule of thumb is that the more volatility a market has, or the longer the length of the intraday line — the S&Ps are a good example — the shorter the time frame you can scalp on.

AT: What do you mean by the "intraday line?"

LBR: It's how much ground a market's intraday swings cover during the day. Say the S&Ps rally six points, sell off 10 points, then rally another four points. They're unchanged at the end of the day, but they've moved a total of 20 points when all is said and done.

For a short-term trading style, you really need that activity back and forth during the day, and there aren't that many that have it. Even the T-bonds don't have that much.

AT: How long is your average short-term trade?

LBR: In the S&Ps, my average holding time is around 10 minutes. But I position trade the Nasdaq futures. I've stayed with Nasdaq positions two weeks or so. They trend more than the S&Ps, but the bid-ask spread is very wide — around \$1,000 — and there's a lot of noise.

AT: *Do you use limit or market orders for these trades?*

LBR: I trade at the market on 90 percent of my trades.

AT: *You once said that you believed in forecasting price direction but not magnitude. How do you manage your positions and take profits?*

LBR: Let's say I go long and the market starts to show some upside impulse. First, you want to see some price and volume in that direction. I monitor everything by whether short-term continuation patterns set up.

If I'm in a long trade and it starts to break out to the upside, I want to see continuation patterns on an hourly chart — little bull flags, triangles and so on. When a market breaks out and there's some momentum, there are usually three pushes up. On an hourly chart, those may develop over a two- or three-day period. The market should continue to hold its gains. The minute you see it give back more than it should, you get out on the first reaction or pause.

your risk point. When you average a position, what happens is you'll always average the losers but you'll never put more on to your winning trades when they start to go up.

Averaging is a really bad habit — unless you're in a very volatile market and you've already planned on putting the position on in two parts. But I've found averaging does more harm than good most of the time.

As far as getting out of trades, if the market reaches a price objective and you're really not sure if it's going to continue, you have to at least take half the position off.



“ If the market reaches a price objective, and you're really not sure if it's going to continue, you have to at least take half the position off. ”

AT: *Do you scale out of positions?*

LBR: I usually do my trades in two pieces. I try to stay with a position as long as I can and take half off. I usually don't average into trades; I usually go in all at once. I try to find the best entry I can — somewhere I can easily manage risk. Once you see that spot, you might as well get in and put your whole position on.

If you put the entire position on at once, that's the closest you can get to

AT: *Is your trading based more on direct price action or on the indicators or systems you mentioned earlier?*

LBR: Ninety percent of what I do is price-based. Indicators are just derivatives of price. So the actual price action is always going to be one step ahead of any indicator.

The best things indicators do is tell you when there are either new momentum highs or lows, which signals contin-

uation. It doesn't matter what you use — an oscillator, stochastics, an average true range function. I use pure rate of change — there are a million ways you can do it.

At least you can quantify indicators. It's difficult to back-test pure price patterns. So, for assessing market tendencies and modeling purposes, indicators are useful. But when I'm actually trading, I'm looking at price and thinking, “Okay, this market was down in the morning, now it's starting to make new highs on the day.” Or, “We opened below yesterday's low, and now we've rallied back to unchanged.” I do a lot more with price levels and pivots: Can we test the Globex high? Can we test the two-day high? Can we pull back to the moving average. That's what I do.

AT: *What time frame charts do you watch during the day?*

LBR: To watch the market intraday, I have 30-, 60- and 120-minute for each market I'm watching. That gives a pretty good road map. If you can't see something with that, then there's really nothing going on. On one of those time frames you'll always see either a retracement pattern, like a bear flag or a bull flag, or you'll see a test of a key support or resistance level. The market's either retracing or testing — that's about all there is to it.

AT: *What else are you monitoring during the day for your shorter-term trades?*

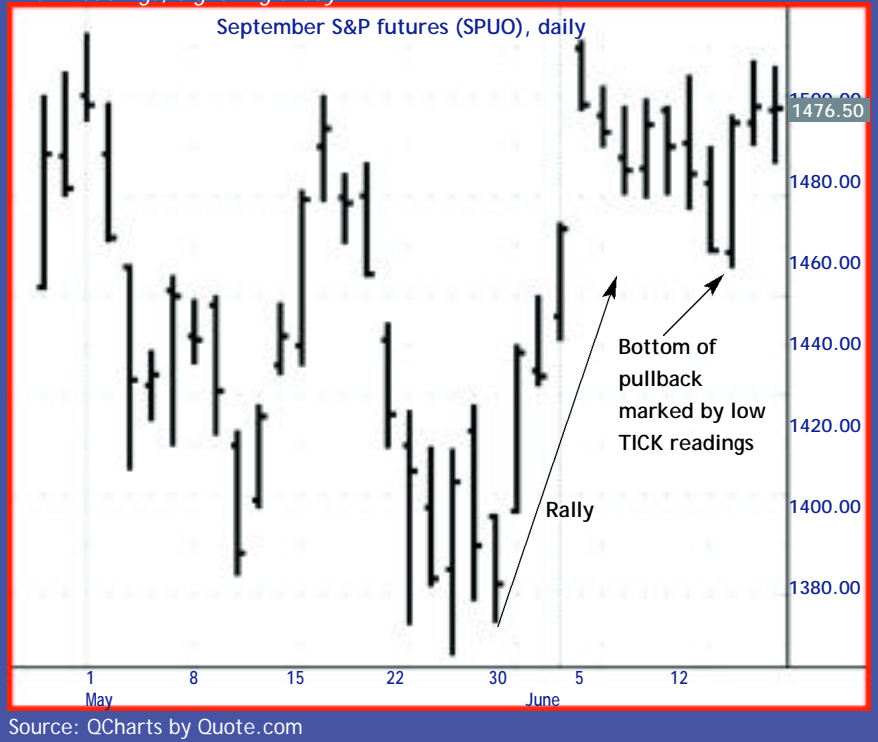
LBR: For intraday trades, I'm usually just watching the tape, so to speak. Sometimes I'll watch a one- or five-minute chart, but I'm usually watching the levels intraday, and the TICKs (the difference between up-ticking NYSE stocks and down-ticking NYSE stocks) and the TRIN (an indicator that compares advancing issues/declining issues to the up volume/down volume ratio).

AT: *What specifically are you looking for?*

LBR: I use the TICKs like a momentum oscillator: If the TICKs are making new highs, I'll look to buy the pullbacks. For example, recently there was a rally up in the S&Ps for about two weeks, followed by roughly a five-day correction. The TICKs hit -400, -500 yesterday and this morning (June 13), and it was the first time they corrected in a week and a half — that was a buy signal (see Figure 1).

FIGURE 1 CATCHING A PULLBACK

A typical short-term trade: A pullback in the S&Ps is accompanied by low TICK readings, signaling a buy.



It's similar to when an oscillator rallies and becomes extremely overbought and pulls back a little bit. The TICKs behave almost exactly the same way. But I use them to confirm a trend as well. For example, this afternoon the ticks kept making new highs, which confirms the move to the upside.

The TICKs behave differently to the upside than they do to the downside. The bottoms of sell-offs will be accompanied by negative TICK extremes, like -1,000, for example. Tops are characterized much more by complacency, with a lack of TICK readings. It's similar to the VIX (the Chicago Board Options Exchange volatility index) dropping down very low, reflecting low implied volatility levels. I watch the VIX, too.

AT: How many trades do you make a day?

LBR: Anywhere from two to six trades in the S&Ps and three trades in other markets.

AT: Do you trade stocks as well as futures?

LBR: Yes. Trading stocks keeps me fresh, but you can't trade with the same leverage you can in the index futures. With the futures, you can bang them out and

you don't have to worry about the short side. Unfortunately, I can honestly say I've never bought a stock and had it rally 50 points — I've missed out on the Internet game (*laughs*).

AT: How do you decide how much you'll risk on a trade or where you'll place your stops?

LBR: You need to have some kind of initial risk point. In just about any market, except for coffee or S&Ps, I risk \$500 per contract. That makes it really easy. That gives the positions (in the markets I

trade) enough room to work or not work.

You have to think in terms of getting into a market and having a general window so if your timing is off a little, you still have some time to see how the trade should be managed. But you need that initial insurance or risk point. So even though I usually start out with \$500, there are times when I don't want to risk

that much.

After you've put on the position and established your initial risk, you manage the trade, which consists of getting out if it's not working or tightening the stop. In the S&Ps, if the trade is just a quick scalp where I'm trying to grab two to four points, I'll risk three points. For a longer position trade, I'll risk up to 10 points.

But it also depends on volatility. If the market is really swinging around, you have to give the trade a little room. I'll use a 100-point stop in the Nasdaq futures. That's big — \$10,000 per contract, but I trade them on a longer time frame, so I don't mind doing that.

AT: How long did it take you to develop your current trading style?

LBR: I've always been price-sensitive and I've always been a tape reader. But in the 1980s I was much more countertrend than I am now. When I started managing money in 1993, my trading style really changed.

First, I made it a policy to never average a trade, whereas in the '80s, when I was just trading my own money, I used to scale into trades all the time. You have a lot of sleepless nights. My account had five times the volatility it has now.

I also started using much less leverage. And I started looking for more trades that constituted pullbacks within trends rather than trying to guess when a market had gone too far.

AT: What are some of the basic principles you think traders should follow?

LBR: I try to break trading down into four areas, each of which is important to your bottom line.

The first one, which is the one every-

“ Indicators are just derivatives of price. The actual price action is always going to be one step ahead of any indicator. ”

one wants to concentrate on, is the initial trade methodology — setups, indicators, patterns — that determine whether to buy or sell, at what level and when.

The second is execution. This is probably the most overlooked area of trading. Your execution skills account for at least 50 percent of your bottom line. When do you buy at the market? When



“ Execution skills account for at least 50 percent of your bottom line and are probably the most overlooked area of trading. ”

do you work a bid? If you use a limit order, sometimes you'll miss a trade — it's a shame to price yourself out of a 10-point move because you're trying to get an extra quarter-point. But on the other hand, you don't want to pay up at the market all the time, because you can give away too much, especially in a thin, trading-range environment.

Also, how do you exit your trades? How do you work your stops? Do you know how to bracket a trade? Say there's a position you want to get in — you work a bid underneath as well as a buy stop above the market, so you're at least guaranteed of getting in.

There's very little literature on this subject, but I see more money lost because of poor execution. People can lose money even when they're right on the market. For example, they're trying to exit a trade with a limit order and the market misses it by two ticks and then goes 10 points against them.

I could go on and on. It's one of those things you can give people tips and direction on, but it's only going to improve with practice. You have to get

in there and make the trades and get a feel for how things work. That's where you get confidence, too. If you feel confident you're buying and selling in the right manner, you'll probably make three times as many trades.

There's no right or wrong. I probably trade with 90 percent market orders, but I have a friend who will never use a market order. It depends on the type of trade you're trying to execute and how good your general timing is.

The third element is money management. There are a lot of factors that fall into this category — it's so much more than how much you risk or where you place your stop. It's about how much leverage you use and when you use it. Do you have correlation in your portfolio? What are you going to do when your account draws down 10 percent? Do you step up your trading or do you cut back?

Finally, there's psychology. It's not about “Oh, I can't pull the trigger,” or “I over-trade.” It's about things like staying motivated and not burning out. Trading can be a wearing, stressful profession. Let's say you've been a trader for 15 years. How do you push yourself to get to the next level? How do challenge yourself? How do you keep yourself in a groove where you're not thinking about the markets too much?

Also, are you analyzing your tendencies? For example, many people tend to make money in the morning and give it back in the last hour of the day.

You could add a minor fifth category: Organization and structure. How do you structure your business and working environment. Do you keep worksheets? Do you log market numbers? Do you keep records of trades and analyze what you're doing?

AT: Are you talking about analyzing your trade performance?

LBR: Yes. But the record keeping is more of a ritual for me. I actually log lots of numbers — without ever really looking at them later. But the simple practice of writing them down somehow sends the information to somewhere in my brain where I can access it later.

I have a fax service I put out every night. The work I have to put into that is great preparation for the next trading day. I go over game plans in around 20 markets, even though I might only act on a couple of the scenarios. If I'm mon-

itoring my account, my positions and the prices I'm entering them at, I'll do twice as good as if I hadn't. The routine and ritual are wonderful tools for managing anxiety and stress.

AT: Do you actually experience much stress from trading?

LBR: I tend to feel the effects of stress at the end of the year, the end of the quarter and the end of the month. So this year, I put in my business plan that I would close out all positions at the end of the quarter.

AT: Will you back away from trading on a bad day, or for a certain amount of time, if you've hit a certain drawdown level?

LBR: I never walk away when I'm down. Never. It's important for me to get that money back. It makes me angry that I lost that money in the first place. If I walked out of the office, I couldn't relax. I'm so involved in this I don't even like taking vacations. If I were on a beach on an island somewhere, I wouldn't know what to do with myself.

But I have my horses, so I can go out riding after the close. I spend time with the horses every day. It takes my mind completely off the markets. After that, I can do my analysis at night with a fresh eye. You have to have something that allows you to walk out of the office and leave trading completely behind. Other than that, the only time I really “walk away” is when I speak at trading conferences.

AT: What do you tell people who want to become better traders?

LBR: Get a good, basic foundation in technical analysis. By that I mean study basic chart patterns. Do yourself a favor and ignore all the oscillators and neural nets and the fancy little indicators and [instead] fully understand things like gap theory, trendlines and continuation patterns. Murphy's book, Schabacker's book, Edward & Magee are good sources (see “Raschke's reading list,” opposite). Understand the definition of a trend and the principles of confirmation and non-confirmation Dow put forth. Learn chart patterns, Schabacker's and Wyckoff's books, to understand what goes on in distribution and accumulation areas, things like springs and upthrusts (see “Trading springs and upthrusts”), and volume tendencies.

FIGURE 2 CONTINUATION PATTERNS: BULL FLAGS

Continuation patterns such as the bull flags shown here offer "the best risk-reward ratios of any technique out there," according to Raschke.



Source: QCharts by Quote.com

These are really good principles that will hold up in any market, in any time frame. Understanding simple trendlines and chart patterns, and when to trade continuation patterns vs. when you're in a trading range, testing environment is probably the best thing you can do.

It's interesting. These people wrote

"The minute the market gives back more than it should, you get out on the first reaction or pause."

about the markets when there were no computers, so everything they wrote about was really price-based. And you also discover these people spent 80, 100 hours per week studying the markets. It makes you appreciate how much time it takes to really understand price behavior and the markets. For me, it's a life-long journey. I've been doing this for 20 years, and I learned a lot this past year.

New traders seem to spend the first three years trying out different things and finding out they don't work. You have to test lots of different styles and markets until you find what works for

you. And you might find out that you're a two-minute S&P trader, or that you like volatility breakouts, or something else. But you need patience, because it takes time to find what fits your personality. And you'll learn something from everything you look at in that investigative process.

AT: Given what you said about understanding basic chart analysis, do you think simpler trading ideas work better than complex ones?

LBR: Oh, absolutely. Listen, all you need to do is understand bull or bear flags (see Figure 2). If you can recognize those on a chart and understand that those points have the best risk-reward ratios of any technique out there — where you can get the most bang for your buck in the least amount of time and use the most leverage — you don't need anything else. 📌

Raschke reading list

Here are a few trading books mentioned by Linda Raschke throughout the course of the interview, as well as a couple of extras she recommends.

- *Technical Analysis and Stock Market Profits*, by Richard Schabacker and Donald Mack:

Raschke on the book:

"He [Schabacker] was actually the true father of technical analysis as a science. He was the one who classified many of the chart patterns — rounding tops and head-and-shoulder patterns, rising wedge, different kinds of gaps.

*"In fact, his nephew was Robert Edwards (co-author of *Technical Analysis of Stock Trends*; see below). So Edwards & Magee's material was really Schabacker's stuff, but drier. Schabacker's book included lots of interesting insights on trading and human nature."*

Other books:

- *Technical Analysis of Stock Trends*, by Robert D. Edwards and John Magee;
- *Profits in the Stock Market*, by H.M. Gartley (an "old classic");
- *Technical Analysis of the Financial Markets*, by John Murphy;
- *How I Trade and Invest in Stocks and Bonds*, by Richard D. Wyckoff; and
- *The Amazing Life of Jesse Livermore*, by Richard Smitten ("a good read, for fun").



After very profitable winning streaks, there is a natural tendency for traders to become complacent because of an accommodating market.

But “comfort” is the archenemy of the trader. Why? Because proper trading is one of the most unnatural activities an individual can undertake. If something is psychologically pleasing, in most cases it is wrong.

On the other hand, if a particular trading strategy or approach is psychologically and emotionally difficult to pull off, the odds of it being right are very great. This is why feelings of complacency or contentment are usually a sign that you are doing something wrong. The right thing to do is not always the easy thing to do, and that which is wrong is often accompanied by an enticing sense of ease.

Needless to say, it is this paradox that makes the art of trading so difficult to master. Unfortunately, it is the one great disadvantage of having human emotions.

No pain, no gain

However, for the enduring trader, this condition — this war between what is right and what is easy — does not remain in place forever.

Through vigilance and the constant effort to do what is right and difficult in the face of what is wrong and easy, a trader will find himself slowly becoming “inhuman.” Myriad experiences of pain and joy, triumph and failure, will begin to train his internal system to feel in reverse. Through experience, new neurological paths will be established, which will set up new thought processes, responses and feelings.

Inhuman TRADING

Good trading requires rewiring some of our natural responses to pleasure and pain. The authors of a new book on short-term trading address the conflict between doing what is comfortable and wrong, and what is difficult and right.

BY OLIVER L. VELEZ AND GREG CAPRA

Eventually, what is actually the right thing to do will also start to feel right. Once this transformation has occurred, the wrong action — even a wrong thought — will send a message of pain and discomfort to a trader’s central nervous system, acting as an automatic internal alarm.

In other words, through a process of continual growth, traders begin to change their entire network of psychological and emotional responses. Ever so slowly, they move from being Pavlovian models who salivate at the sound of a bell to conscious, thinking individuals who find that the easy thing to do is also the right thing to do. In short, traders who have reached a certain level of achievement reverse the natural process to become almost inhuman.

Do the right thing

Psychiatrists tell us that ever since the beginning of human history, man has found the right course of action to be the most difficult course of action, and the wrong action to be the easiest action. This is because we have been conditioned to seek the joys of pleasure and avoid the discomfort of pain. But the truth is, pain often accompanies what is right, while temporary comfort often attends the wrong course of action.

Consider the following scenario. A trader who finds himself with a steep loss after buying a stock incorrectly, struggles with the question, “Should I sell, hold or buy more?”

He knows in his heart that buying more is not the real answer, because that would be like adding more fuel to a fire that needs to be put out.

The trader also knows that holding on is not the correct course of action,


because that would be an exercise in the dangerous game of hope, and hope has no place in the world of sound trading.

This leaves him with only one option, which is to sell. Intellectually, the trader fully realizes that selling is the only intelligent option. He reasons that the trade was wrong from the start, and trying to correct it any other way besides killing it and moving on could result in exaggerating the loss.

But despite the prompting from his intellect, his psychological self violently struggles against the notion of selling. Why? Because selling would make the loss seem more real by locking it in forever. It would send an acute message of failure, causing psychological and even physical pain.

As a result, the trader opts for temporary comfort instead. Instead of acting, he decides to hold off, sit tight and do nothing. Although holding on is not the correct action, doing so delivers a sense of hope, which in turn delivers a sense of comfort. The battle to do the right thing in the face of the easy thing has been lost.

We can often judge our own progress as traders by judging how we feel about each action we know intellectually to be right. When the right thing to do (that is, what has always seemed the hard thing to do) starts to feel right, and the wrong thing (the formerly easiest course of action) is what brings pain and discomfort, we know that we are making that all-important transformation from the human to the inhuman.

And in trading, inhuman is better. 

Taken from “Tools and Tactics for the Master Trader,” by Oliver L. Velez and Greg Capra. Reprinted with permission, McGraw-Hill Publishers, (c) 2000.



Balancing EMOTIONAL DISCIPLINE and trading flexibility



The immediate gratification of online trading can hurt traders who lack discipline. A new book on trading psychology discusses the balance between the ability to react immediately to market information and the need to control greed and fear.

BY STEVEN J. HENDLIN, PH.D.

When trading coaches talk about having a plan and following it, their intention is partly to eliminate strong emotions from trading by automatically following steps designed to deal with a particular situation. The more mental control we exercise in dealing with changing conditions, the less greed and fear will enter into our decision-making.

While it is desirable to control strong emotions, some feelings associated with our thinking process can be useful in helping make trading decisions. For many traders, intuition based on previous experience is a valuable part of the decision-making process. This is where the creativity of the trader is required in knowing how to take the action the moment calls for, without being overly rigid in our thinking or overly emotional.

The goal is not to turn into robots, unable to assess each new trading situation and afraid to take reasonable risks when called for. The idea is to control fear and greed, so they don't dictate trading decisions, as they are wont to do.

Belief and perception

Market psychology is based on belief (what we think is true) and perception (how something appears to us), which are influenced by changing emotions and are always exaggerated in the short-run, both positively and negatively.

Why belief and perception are influenced by emotion in the stock market has to do with the speediness of the market and the need to react very quickly to news. Because of this, traders don't have the luxury to sit and carefully consider all trading options before taking a position. What traders think is true and how the market looks to them are often largely colored by passing emotions as they react to changing conditions, and is not the product of care-

fully considered, rational thought.

So, the simple equation appears to be: The shorter the gap between perception of change and the belief that we must immediately react, the more likely we are to react from emotion.

Conversely, the longer the gap between perception of change and the belief we must react, the more rational thought may enter and shape the decision, and the less we will rely on emotion.

The whole nature of the speedy market begs for us to react more from emotion than clear, rational thought. That is why those who can "think on their feet" are less apt to get caught in the emotion of the moment and more likely to have a larger amount of clear thinking enter their decisions.

The ease of online trading also contributes to the problem. It used to be that we were forced to call a broker, discuss a stock with him, let him do some research, then call us back and tell us what he thought. If he liked it and we wanted to go ahead, he'd place an order. The process itself gave us time to consider what we were doing and removed us completely from the process of actually placing the trade.

Now traders can instantly buy stock with a few clicks of the mouse. The process might be as swift as scanning short- and long-term charts, comparing the stock to others in the sector, and consulting an earnings report and perhaps a few online analyst reports. Very quickly we can know a great deal about a stock; we don't need to dig for information.

This is actually a fair amount of research compared to those who trade stocks based on a tip or a message board comment, jumping in when they have absolutely no idea what a company actually does. Such people put more consideration into the color of their new car than into the risks they are taking when placing a trade.

The easy in, easy out dilemma

The point is that having this instant information at our fingertips encourages us to jump into trades rather than take time to think about what we're doing and plan trades accordingly. And because of this, many traders find themselves in positions they'll soon be wondering how they got into.

Because there is no logical explanation for this lack of consideration before making a trade, a psychological one should be seriously considered. That would be the uncomfortable feeling of being unsure of ourselves if we spend too much time researching a stock. While many people might think they would feel more comfortable with more information, for some this just isn't true. They actually get more anxious with more information because the information only serves to confuse them and create uncertainty.

Like other decisions in life that make us uncomfortable, it is easier to simply take a leap rather than tolerate the discomfort of not knowing. It is easier to jump into something with limited information than tolerate the anxiety of having to slowly learn something new and then make a decision, even though we may be unsure about the correctness of that decision.

The other part of this phenomenon is that it's just as easy to change our minds and get out if a trade doesn't pan out, and it doesn't cost much to do it. This "easy-in, easy-out" mentality is the delight of online discount brokerages. The goal of becoming more disciplined traders is simply to counter the ease with which we may get carried away by emotion on the one hand, and inconsistent, haphazard decision-making on the other. 🗨

This article is adapted from "The Disciplined Online Investor," by Steven J. Hendlin, Ph.D. Reprinted with permission, McGraw-Hill Publishers, (c) 2000.



PLAYING IT SAFE

BY CHUCK LEBEAU AND TERENCE TAN, PH.D.



You can never be too careful when it comes to preserving your trading capital. Two seasoned trader-analysts will show you how they adapt their protective stops to the recent market action.

Many successful traders often advise less experienced traders to spend more time learning how to exit their trades, rather than obsessing about entry points. After all, your exits determine the success and profitability of your trades. A good exit can salvage a bad entry and a poor exit can easily turn a winning trade into a loss.

There are many types of useful exit techniques, but the simplest and most critical exit is the money-management exit — the classic “stop-loss” that protects your trading capital and prevents ruin. If you hope to be successful over the long run, nothing is more important than the preservation of your trading capital.

Stock market investors using a “buy-and-hold” strategy may be able to survive without protective exits (if they pick the right stocks), but short-term traders

— especially those who trade futures and other leveraged instruments — who forego money-management stops are setting themselves up for certain ruin.

Many money managers and traders have lost hundreds of millions of dollars by disregarding prudent money-management techniques. In *The Education of a Speculator*, well-known trader and author Victor Niederhoffer wrote: “I have never used stops, even to bail myself out. Somehow, having a fixed rule to exit provides my adversaries too

The **first priority** in trading must always be to **preserve trading capital** from the risk of **catastrophic ruin**.
Everything else is **secondary to this objective**.

FIGURE 1 LUCENT TECHNOLOGIES (LU)

Large one-day declines in the stock market may pose a hazard to your financial health but money management stops can prevent severe losses. In this example a protective stop placed at a recent low protected a losing trade from turning into a catastrophic loss.



great an advantage.” Soon after Niederhoffer went on to lose tens of millions of dollars of his client’s money in the 1997 Thai baht crisis.

Although Niederhoffer and other professionals may prefer to avoid fixed stop orders in the markets because of their unusually large positions, many large

For the beginner or part-time trader, intraday monitoring may not be feasible, making the placement of resting stop orders in the markets a vital necessity. For the beginning trader the first priority in trading must always be to preserve trading capital from the risk of catastrophic ruin; everything else is secondary.

easily avoided by always using a simple money-management stop.

Good traders actually need money-management stops more than bad traders do. The truth is that bad traders are going to fail very quickly whether they use money-management stops or not, while good traders will survive and prosper indefinitely. The better you trade, the longer you will trade and the more likely it becomes that you eventually will encounter a potentially catastrophic event. When that event happens, your stops had better be in place.

In addition to the dollars involved, there are also psychological advantages to using stops. A money-management stop establishes a pre-defined loss point that allows you to exit a losing trade unemotionally. Traders who use money-management stops know from the outset they will accept only a limited amount of adverse price action on each trade; after that point is reached they will cut their losses. Having a well-defined strategy for handling the losing trades eliminates the real-time stress of dealing with losing positions. The trader using money-management stops will never experience the agony of having to watch a huge loss grow larger day after day.

Disciplined use of money-management stops provides a psychological advantage before putting on a risky

A good exit can salvage a **bad entry** and a **poor exit** can easily turn a **winning trade** into a **loss**.

money managers do keep close track of specific stop points on their positions without actually placing these orders in the markets. (To Niederhoffer’s credit, he lasted much longer than was generally expected.) When these stop points are reached, all positions are promptly liquidated at the market, just like a regular stop order. This alternative to placing large resting stop orders in the market requires tremendous mental discipline and also very close intraday monitoring of the market.

Please note carefully that the preceding statement says the goal is to *preserve trading capital from the risk of catastrophic ruin*, not to eliminate or reduce the risk of loss. Reasonable losses are an integral part of the trading process and good traders accept losses as a cost of doing business. In fact, it is not uncommon for the best traders to take more losses than bad traders do. The critical issue in this discussion is the size of the losses that are taken. Catastrophic losses must be avoided at all costs. And such losses are

trade. Suppose your entry strategy calls for you to take a trade in a highly volatile market. The high volatility presents the opportunity for large profits but also virtually unlimited loss. No knowledgeable trader should be willing to enter such a trade. However, if you have a reasonable money-management stop that defines exactly what your worst loss will be, it is psychologically much easier to confidently enter the trade. You also will be psychologically prepared to quickly and decisively accept the loss

should it occur, and as a result you will have the confidence to enter high risk-high reward trades.

A better stop approach

The simplest money-management stop is a stop-loss order placed a fixed dollar amount from the entry price. Such “dollar stops” are easy to implement, but there are correct and incorrect ways to use a dollar stop in your strategy.

The incorrect way to use dollar stops is to calculate the maximum amount you can “afford” to lose in the trade and set your dollar stop accordingly. There are

every trade.

The correct way to set dollar stops is to use market characteristics and your trading experience (or historical testing data) to determine the best stop placement level. For instance, dollar stops should not be placed too close to the entry price because random price movement will stop the trade out prematurely (the dreaded “whipsaw” effect). Neither should dollar stops be placed too far away from the market, because that would mean taking a much larger loss than is actually necessary. Figure 1 (above) shows a good example of how

volatility of the market. The goal is to keep your stop outside the range of the random or natural price movements of the market while still maintaining your goal of capital preservation. For example, if the average daily range of a market is \$1,000, the dollar stop on that market should be at least \$1,000. It must be emphasized again that adequate system testing and analysis should precede the implementation of any dollar stop to find the appropriate level. Stops should not be picked “out of the air.”

It’s also important to understand the volatility characteristics of each market

Reasonable losses are an integral part of the trading process and good traders accept losses as a cost of doing business.

two problems with this approach: First, the market does not base its adverse price movements on how much money you can afford to lose, and second, there is no point in risking the “maximum” on

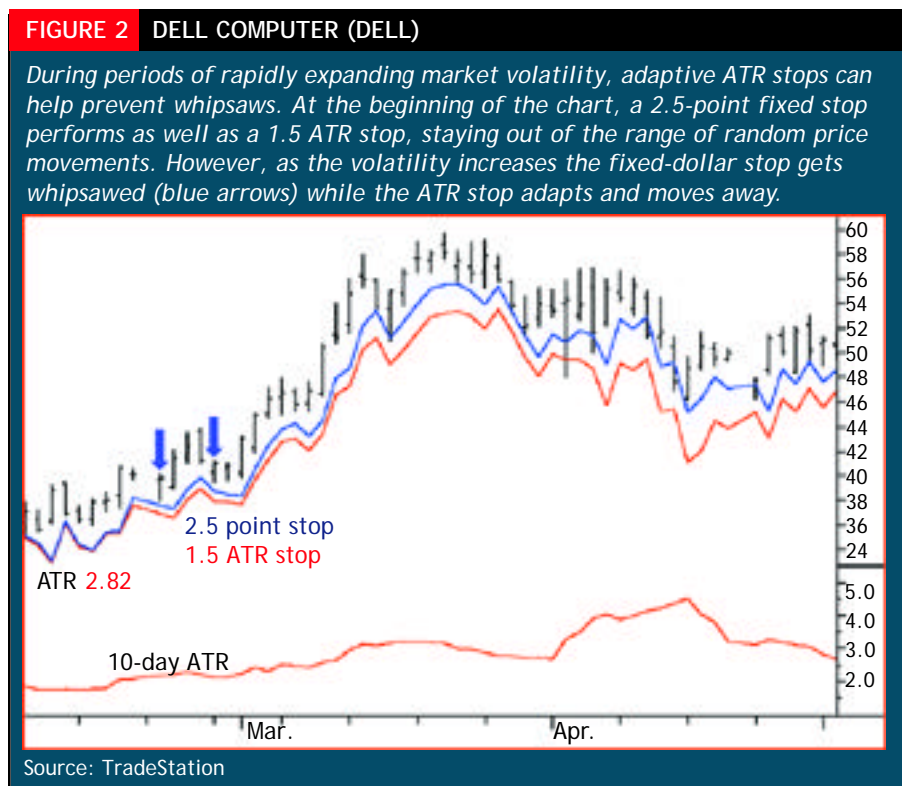
the latest market bottom can work as a support level suitable for a stop that will help you avoid any catastrophic events.

Another way to place dollar stops is to use some measure of the current

you trade and not to blindly use the same fixed dollar stop for all markets (or even for the same market, if its volatility characteristics are changing). The challenge is to develop money-management stops that adapt to current market conditions based on some simple measure of market volatility.

One method to adjust the stop to the current market volatility is to look at the average true range (ATR) or the standard deviation of prices over a certain period of time and multiply these measurements by a certain factor to determine how far away the stop should be placed from the entry price. (The ATR is the difference between today’s high and low, or the difference between yesterday’s close and today’s high or low, whichever is the largest.)

When using the ATR method, be careful to place the stop more than one ATR from the entry price to avoid being stopped out by random price movement. The advantage of using a stop determined by ATR is that it is highly adaptive to current market conditions. The distance from your entry point to the stop would increase in periods of high market volatility and decrease in periods of lower volatility. In Figure 2 (lower left), the blue arrows show how a fixed dollar-based stop would have



stopped you out twice in the middle of a nice bull run, while a 1.5 ATR stop would have let you stay in the trade for almost the entire move.

In practice, the downside of using an ATR stop is that the short-term ATR sometimes becomes unusually small and the resulting tight stop gets whipsawed. To avoid this, you can calculate both a short-term ATR (e.g., three to four days) and a longer-term ATR (e.g., 15 to 20 days) and always set your stops using whichever of the two ATRs is the largest. This procedure allows the stops to move away quickly but prevents them from moving in too close after just a few unusually quiet days.

Perfection is not possible

There's no such thing as a perfect stop point, even using an adaptive technique. Most traders who use money-management stops find that the stops are either too close (subject to frequent whipsaws) or too far away (subject to large losses).

Extensive testing has shown that most traders would benefit from using relatively large money-management stops. At first thought it would appear that using tighter stops (keeping losses small) would lower the expected drawdown. However, this seemingly logical assumption doesn't hold up in testing. In almost all cases, wider stops result in a higher winning percentage and a lower drawdown. Smaller stops are psychologically attractive, but limiting losses too much can actually deteriorate system performance because of frequent whipsaws caused by random and insignificant price movements.

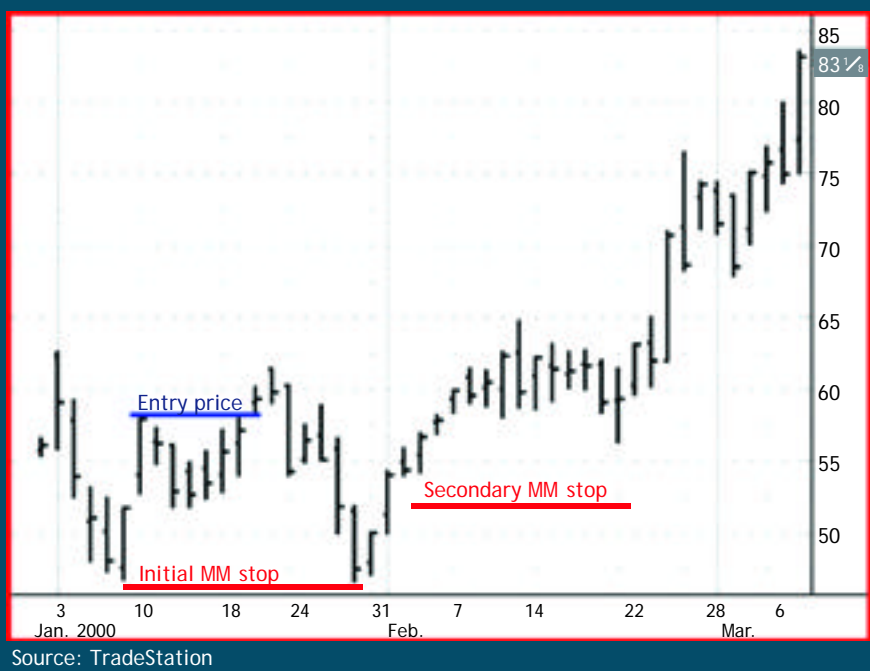
By contrast, wider stops are activated less frequently, and systems with large stops generally tend to demonstrate a higher percentage of winning trades. The downside is that large stops force you to occasionally suffer uncomfortably large losses, which, although infrequent, can be psychologically difficult to accept. Is there a compromise solution to this problem? There might just be.

Finding the middle ground

An interesting phenomenon connected to using a *good* entry technique is that it is often possible to tighten a money-management stop after giving a trade a certain amount of initial latitude after the entry. The better the entry technique, the larger

FIGURE 3 ORACLE CORPORATION (ORCL)

Testing has shown that after the trade is underway for a few days, the money management stop can be changed to reduce the risk. In this chart, the money management stop is reduced by 50 percent 10 days after the entry.



the money-management stop you can use during the first few bars of a trade. However, after a specific number of bars the money-management stop can often be reduced to a much smaller amount.

For example, if you use a \$5,000 stop upon entering a trade in the S&P 500 futures, and this represents an uncomfortably large loss, it may be possible to leave the \$5,000 stop in place only for the first few days and then tighten the stop to \$2,500 for the remainder of the trade. The chances of being stopped out late in the trade with a \$5,000 loss have been eliminated.

The exact stop amounts and the time of implementation would have to be determined by computer research and statistical analysis of your strategy's characteristics. Research has shown that some trend-following strategies can benefit substantially by implementing a larger stop in the beginning of a trade, and then reducing the original stop by as much as 50 percent or more once the trade is underway. Starting off a trade with a large money-management stop allows the trade sufficient opportunity to begin moving in the right direction when there is a high level of confidence in the entry indication. As the trade moves out

into the future and the confidence of the entry indication declines, tightening the stop reflects the decreasing confidence in the trade. Figure 3 (left) shows such a strategy implemented on a long position in Oracle (ORCL) earlier this year.

Other possibilities for dealing with the problem of large stops also exist. Break-even stops or profit-protection (trailing) stops that override the money-management stop can easily be implemented in later stages of the trade. Once these stops are activated, the possibility of taking the large original stop loss is substantially reduced or eliminated.

Proper understanding and implementation of the money-management stop is vital to trading survival. A stop effectively limits the maximum loss on a trade, which in turn contributes to the primary goal of capital preservation. Trading without a money-management stop exposes you to the risk of catastrophic loss.

The importance of the money-management stop is aptly summed up by Jack Schwager with this statement from his book, *The New Market Wizards*: "If you can't take a small loss, sooner or later you will take the mother of all losses." 📌



What are the ODDS?

A good way to get a feel for your trading strategy is to know its average trade value and profit factor.

However, more of a good thing isn't necessarily the best solution.

Here's why.

BY THOMAS STRIDSMAN

W

hether you're a systematic, rule-based trader 100 percent of the time or you prefer

to use discretion; whether you're new to the game or a seasoned pro, it is paramount to know the odds you're up against every time you put on a trade.

For the rule-based trader this is easy enough. All you need to do is to "back-test" your trading strategy, using one of several software packages that allow you to simulate trades on historical price data. Back-testing, if done properly, will give you the results of a particular trading system, thus providing a barometer for how much you might make (or lose) in the future.

But if your trading is more discretionary, figuring out your odds can become a bit more complex. First, you need an actual track record of trades — preferably profitable ones (but since you're reading this article, you're still in the game).

Also, keep in mind that discretionary traders still generally follow specific sets of guidelines — they are just not as rigid as systematic traders. This means that as a discretionary trader you still should be

able to do the same types of calculations as mechanical traders, except that you cannot work with fictitious trades — you must rely on your own track record and your ability to trade consistently in the future.

Finally, you also need to be careful to only consider previous trades consistent with your current style of trading. If you change your trading style, you cannot use any prior trades to determine your future odds of success.

Knowing your average

Once you have a significant number of actual or hypothetical trades, you can begin to determine how likely it is for an

drug, for example) nearly 1,000 samples are required to deem the resulting conclusions reliable; there is no reason to treat your money any less seriously.

To calculate your average trade value, simply divide the net dollar profit (loss) of all your trades by the number of trades. For example, if you have five trades that produce profits (losses) of 1.5, -1, -.75, 2, -.5, your average profit per trade will be .25 (1.25/5).

Obviously, the greater the (positive) number, the better. However, depending on what market you're trading (or if you trade several different markets), you're sometimes better off looking at the net percentage value rather than the net dol-

It is paramount to know the odds you're up against every time you put on a trade.

individual trade to end up as a winner, or how much you can expect to make per trade in the future. Among statisticians, "significant" usually means more than 21 "samples," but the number can vary greatly depending on whom you ask. Some say more than 30, others say at least 100 or even several thousand. In the medical field (when testing a new

lar value, especially if the markets you're trading are prone to trend. In such situations, the size of the dollar-based moves will contract and expand with the dollar value of the market (increasing as the market rises and decreasing as it falls), while the percentage-based moves will stay approximately the same. The same holds true for all

other types of profit or loss calculations, such as the value of your average winner and loser, and largest loser or maximum drawdown. For simplicity's sake, however, we'll stay with the dollar-based calculations for now.

In the example above, another way to reach the same conclusion is to:

1. Calculate the likelihood of each trade being a winner or loser;
2. Multiply these respective probabilities by the average winning and losing trade values; and
3. Add the results.

For example, in this case there are two winning trades and three losing trades. The likelihood of a winning trade is 40 percent (2 out of 5), while the likelihood of a losing trade is 60 percent (3 out of 5). The average winning trade in our sample is 1.75 ($3.5/2$) and the average loser is -0.75 ($-2.25/3$). Multiplying the probabilities of winning and losing trades by the respective average winning and losing trades, and adding these values together gives up a result of .25 $[(.4*1.75) + (.6*-0.75)]$, which can be referred to as the "mathematical expectation" of the trading strategy.

Knowing how to perform calculations like these also enables you to estimate how many trades it should take to get you out of the red when you're in a drawdown. For example, if you know your strategy will lose three out of five times for a total loss of 2.25, there might be instances where you will lose six trades in a row for a total loss of 4.50 (e.g., you lose three trades at the back end of one five-trade sequence, then immediately lose three trades at the front of the next sequence).

With an expected average profit of .25 it will take you, on average, 18 winning trades to get back to even ($4.5/0.25$). Suppose each trade lasts for an average of three days. If you're always in the market, it will take 54 trading days before you will see a new equity high in your trading account (whether or not this information will help you sleep better at night is for you to decide).

Factoring profits

Another way to get a feel for the proba-

bilities of your trading approach is to calculate the "profit factor", which is simply the total profit divided by the absolute value of the total loss. For instance, using the numbers above, the profit factor for this strategy comes out to 1.56 ($3.5/2.25$), which means you can expect to make \$1.56 for every dollar you lose.

When back-testing and building a mechanical trading strategy, there will always be a certain degree of "curve fitting" involved. This means that, with the

least, after a few more trades, realized that this was nothing but a once-in-a-lifetime occurrence. In fact, the reason why some system vendors advocate such high historical profit factors is probably because they don't know how to build a robust and reliable trading strategy in the first place.

That may seem like a harsh statement, but consider this: The higher the historical profit factor, the more curve-fit the system is; the more curve-fit the system, the less likely it will work in the future,

A system's value is not necessarily directly related to how high or low its average trade value is.

benefit of hindsight, the trading strategy or model will be "fitted" to the data. As a result, the strategy is unlikely to perform as well when applied to future "unseen" data. For this reason, most strategy developers and system vendors suggest you should not trade a system with a historically back-tested profit factor of less than 2 (some even say 3). In other words, a trading system rarely performs as well in real trading as it does in historical testing.

However, while it may seem important to trade a system with a high profit factor, recommending a system with a profit factor of 3 is ridiculous. A profit factor of 3 means that you will make \$3 for every dollar you lose. Suppose you have a system with a 50/50 chance to produce a winner; suppose further that you are willing to risk \$1 per trade. If you begin with \$2, make one losing trade and one winning trade, you end up with a total of \$4, equal to a 100 percent return on initial equity. Ask yourself how likely it is that you will be able to double your capital every other trade, on average, in a consistent manner.

Perhaps you've done it once and thought you've found the holy grail, only to burn yourself severely the next time you try the same strategy; or, at

in real trading.

In fact, when it comes to mechanical trading strategies, you probably will be better off looking for a profit factor as low as possible, as long as it stays above one and is high enough to make up for slippage and commission. At least you will know the degree of curve-fitting is very low and, therefore, the system is more likely to produce profitable results in the future, if only marginally so. Similarly, a trading strategy that performs in a consistent manner over a wide variety of markets is more reliable than one that does not.

Adding it up

A system's value is not necessarily directly related to how high or low its average trade value is. Ideally, the average trade value should be as high as possible, but the overall profitability also depends on how often the system signals a trade. The more often you get to trade a profitable system — even if it's only marginally so — the sooner you get to use your profits to increase your stake.

And, the more you can trade, the more you will make — especially if the profit factor suggests that the system is equally likely to perform as well in the future as it did in the past. 📌



Indicator INSIGHT: Stochastics

The stochastic indicator is an **oscillator**, which is a technical analysis tool designed to highlight shorter-term momentum and **overbought** and **oversold** levels (points at which a price move has at least temporarily exhausted itself and is ripe for a correction or reversal).

The stochastic indicator ranges from 0 to 100 and is typically plotted below the price series as shown in Figures 1 through 4.

Calculation

The stochastic oscillator consists of two lines: %K and a moving average of %K called %D. The basic stochastic calculation compares the most recent close to the price range (the high of the range minus the low of the range) over a particular period.

For example, a 10-day stochastic calculation (%K) would be the difference between today's close and the lowest low of the last 10 days divided by the difference between the highest high and the lowest low of the last 10 days; the result is multiplied by 100. Here's the formula:

$$\%K = 100 * \{(C_t - L_n) / (H_n - L_n)\}$$

where

C_t is today's closing price

H_n is the highest price of the most recent n days (the default value is five days)

L_n is the lowest price of the most recent n days

The second line, %D, is usually a three-period moving average of %K.

The formula above is sometimes referred to as "fast" stochastics. Because it is very volatile, an additionally smoothed version of the indicator, where the original %D line becomes a new %K line and a three-period average of this line becomes the new %D line, is more commonly used (and referred to as "slow" stochastics, or simply stochastics). Any of the parameters — either the number of periods used in the basic calculation or the length of the moving averages used to smooth the %K and %D lines — can be adjusted to make the indicator more or less sensitive to price action.

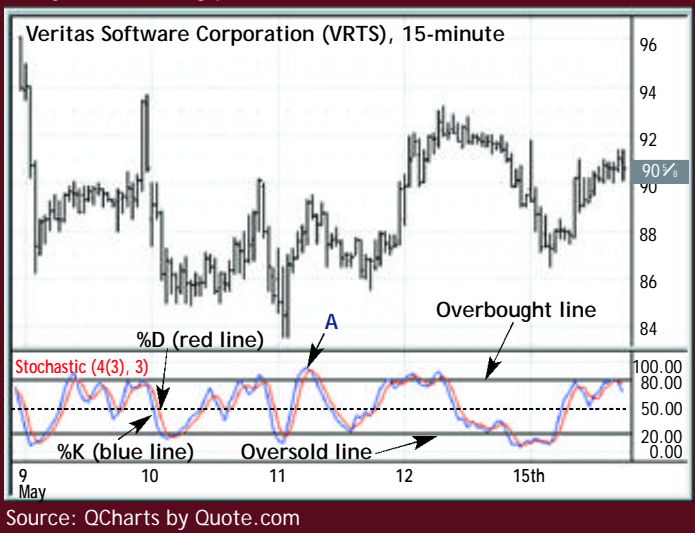
Horizontal lines are used to mark overbought and oversold stochastic readings. These levels are discretionary; readings of 80 and 20 or 70 and 30 are common, but different market con-

ditions will dictate different levels, as discussed later in the article.

The stochastic can be used on any time period — intraday, daily, weekly, etc. Figure 1 shows a four-period stochastic calculated using 15-minute bars. Overbought and oversold levels are set at 80 and 20, respectively.

FIGURE 1 INTRADAY SWINGS

Stochastics is a momentum oscillator that highlights short-term highs and lows. Here, a four-bar stochastic captures many of the swing points on a 15-minute bar chart.

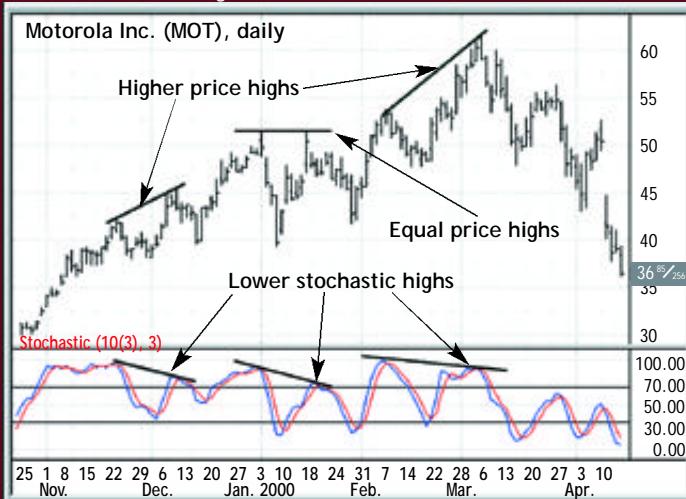


Applications

The stochastic indicator is most useful in identifying shorter-term swing points, primarily in non-trending (trading range) markets. Reading above 50 means the market has closed higher than the midpoint of the trading range the indicator is calculated on; a reading below 50 means the opposite. When stochastics are above 50 and rising, prices are accelerating to the upside; when stochastics are below 50 and falling, prices are accelerating to the downside. Extremely high or low readings reflect

FIGURE 2 DIVERGENCE

Reversals can also be identified by divergences between stochastics and price. Here, price makes higher (or equal) highs, but the stochastic makes lower highs, suggesting these price moves are occurring on weaker momentum.



Source: QCharts by Quote.com

gences between price and the indicator. A bullish divergence occurs when price makes a lower low and stochastics makes a higher low, suggesting the market is moving lower with less momentum and may reverse to the upside. A bearish divergence occurs when price makes a higher high and stochastics makes a lower high, suggesting the market is moving higher with less momentum, and may correct to the downside. This technique is used mostly to help identify potential longer-term reversals. Figure 2 shows examples of bearish divergences on a 10-day stochastic on a daily chart: The stock makes higher highs while the indicator makes lower highs.

Key points

The stochastic is much more useful in trading ranges than trending markets. A problem with oscillators such as stochastics is the number of false signals they generate in trending markets. In an uptrend, for example, the stochastic may generate many overbought signals but few (if any) oversold signals — exactly the opposite of what is desirable.

Very high or low (or prolonged high or low) stochastic readings often, in fact, accompany strong trends or price thrusts — signaling the potential for follow-through rather than a reversal. Figure 3 shows how, in a strong uptrend, stochastics can remain in overbought territory for extended periods of time. A trader who interpreted the high stochastic reading as a signal to sell would have found himself with a short position in a market determined to move higher. (Also, Figure 2 shows how multiple “false” divergences can develop

potential overbought or oversold conditions and potential reversal points.

In Figure 1, notice that most of the overbought or oversold readings in the stochastic correspond to price swings in the stock: Overbought readings presented selling opportunities and oversold readings offered buying opportunities (at least to the naked eye).

Buys and sells can be triggered with stochastics several ways. First, a trade can be signaled when the indicator moves into, or out of, the overbought or oversold zones. For example, at point A on Figure 1, the %K line first moved above 80, followed by the %D line, signaling an overbought condition. Technically, you could sell as soon as the indicator first moved above the overbought level, an approach that has the most potential reward but also the most risk (in the event a reversal does not occur).

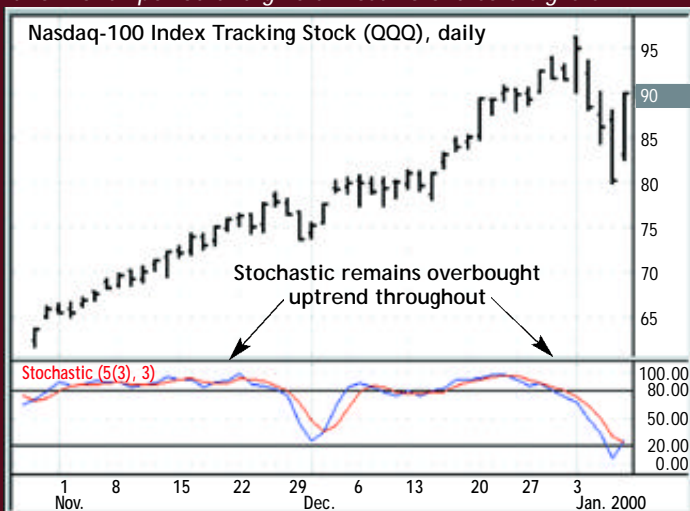
A few bars later, the %K and %D lines moved back below the overbought line, marking a second, more conservative, selling opportunity: The indicator, by moving back below the overbought line, is confirming price is moving down. However, waiting until this point to sell will also delay entry, raising the possibility you may miss all or part of the price move.

Another choice to trigger a trade is to use a crossover of the %K and %D lines (usually when both lines are in either the overbought or oversold zone). At point A, after %K and %D move above the overbought line, but before they drop back below it, the %K line crosses below the %D line, signaling the shorter-term momentum is turning down. Selling on this signal offers a compromise between the two previously described entry methods.

Another application of stochastics is to look for diver-

FIGURE 3 COMPARING TIME FRAMES

Stochastics, like other oscillators, is prone to “false” signals in trending markets. In this strong uptrend, a five-day stochastic stays above the overbought line for most of the two-month period and give almost no oversold signals.



Source: QCharts by Quote.com

throughout the course of a trend, each indicating a potential trend reversal that never or only partially materializes.)

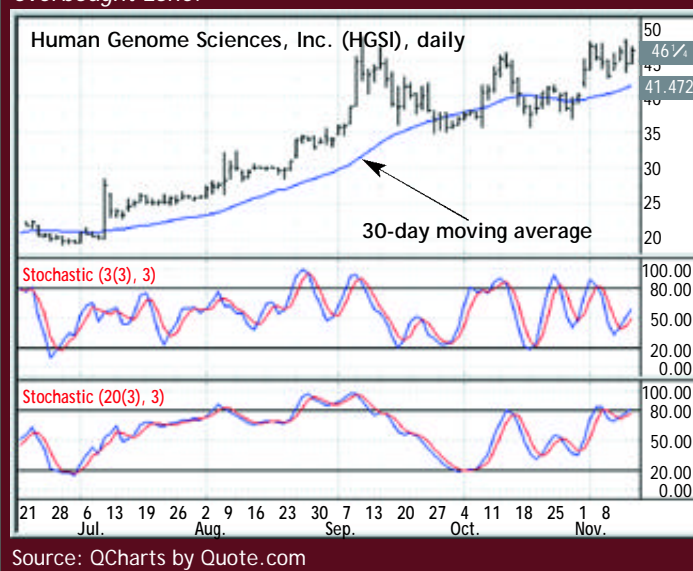
One way to compensate for the effect of trend is to raise the overbought and oversold levels in strong uptrends and lower them in strong downtrends. A second technique is to only take stochastic signals in the direction of the prevailing longer-term trend — i.e., only acting on overbought signals when the market is in a confirmed downtrend and only acting on oversold signals when the market is in an uptrend. (Although, as illustrated in Figure 3, such signals may be difficult to come by). Another option is to avoid using oscillators in trending markets. Unfortunately, it's impossible to predict when a market will switch from trending to non-trending mode.

The fewer the number of days used in the stochastic calculation, the shorter the price swings the indicator will reflect. Increasing the number of days in the calculation will highlight the longer-term trend, which, for short-term traders, runs counter to the indicator's purpose. The longer the stochastic you use, the more likely it will remain overbought or oversold for extended periods in trending markets, and the less likely it will generate signals in the direction of the trend. Figure 4 compares 3-day and 20-day stochastics, highlighting the uptrend. While the 3-day indicator doesn't quite reach the oversold line during the July-September uptrend, it still makes more of a move against the trend than the 20-day indicator.

Because of the factors outlined above, some traders use the stochastic indicator and other oscillators as "alerts" to potential price developments, but then use different (often price-based) signals to actually trigger trades. The indicator warns of a potential price move; a trade is actually executed when the move materializes.

FIGURE 4 THE TREND FACTOR

A three-day stochastic (middle) highlights more of the stock's shorter-term swings, while a 20-day stochastic (bottom) reflects the prevailing uptrend and remains in or near the overbought zone.



Bottom line

The stochastic indicator is very similar to other oscillators, such as the relative strength index (RSI), commodity channel index (CCI) and indicators like rate-of-change and the price oscillator. It is most useful in highlighting shorter-term swing points in non-trending markets. It provides a quick snapshot of the direction and strength of short-term momentum.

Because of false signals that can occur, especially in trending markets, it is prudent to use filters like the moving average described in the previous section or specific price patterns to confirm overbought-oversold or divergence signals. 📌



Practical decisions



What kind of “trading business” are you?

In the second installment of a three-part series, we look at different kinds of traders and which businesses best address their particular needs and circumstances.

BY TED TESSER, CPA

Before you choose a particular business structure for trading, you need to evaluate a number of personal and financial circumstances. The decision is not merely one of whether or not to incorporate; rather it is a much more complex decision requiring consideration of all available legal options.

In “To Inc. or not to Inc.” (*Active Trader*, July, p. 90), we outlined several possible entities through which trading can be conducted. To determine the appropriate form of business, a thorough analysis must be performed — first, of the trader and his or her personal, family and financial circumstances, and second, of his or her short-, medium- and long-term objectives.

This is the second installment of a three-part series:

- I To Inc. or not to Inc. —**
Look at the different options traders have for establishing a trading business.
- II Practical decisions —**
Weighing the factors involved in forming an entity.
- III Added value —**
Specific tax advantages of entity structuring and programs available through such setups.

Step one: trader analysis

All traders are not created equal. As a result, no particular type of business entity is right for every trader. A trader's unique trading style, profitability, net worth, non-trading income, personal characteristics, and family and household composition will immediately eliminate certain business options or point in the direction of others.

For example, let's assume a 40-year-old single trader has a full-time job that pays \$100,000 annually. He has a \$10,000 trading account, engages in 10 transactions per month and has short-term trading profits of \$20,000 per year. These circumstances might eliminate a sole proprietorship or family limited partnership from consideration. Conversely, an S-corporation might be appropriate.

Why? First, the number of trades and level of profitability (compared to his wages) might be considered too low to claim trader status as a sole proprietor

All traders are not

created equal.

As a result, no particular

form of business

is right for every trader.

(and thus negate submitting Schedule C — profit or loss from business — come tax time). Second, the absence of partners makes the execution of a limited partnership more complex.

On the other hand, the establishment of an S-corporation would create a legally separate entity distinct from the trader. While \$20,000 in trading gains is only 17 percent of the trader's total income, it would become 100 percent of the corporation's income. Since he has a full-time job, the IRS may question whether he devotes sufficient time to trading to qualify as a sole proprietor, whereas no one can say how much time a corporation is required to devote to its business activities.

Now consider a slight variation. Let's assume that same trader has a 16-year-old child. In such a case we might consider establishing a family limited partnership in which the trader "gifts" to the child a partnership interest in the

\$10,000 trading account. Such gifting does not require any cash to be given to the child (nor does it give the child any control over the money) but does require the child to pay the tax on the \$20,000 in trading profits.

Trading businesses

A brief summary of some of the "entities" traders can establish. (For more information, read "To Inc. or not to Inc.," *Active Trader*, July, p. 90.)

A sole proprietorship is the easiest designation to establish, maintain and control.

Most self-employed individual traders are sole proprietors. The big problem with sole proprietorship is that all income is considered a capital gain (or loss) and is not self-employment income.

A general partnership (GP) consists of two or more people who come together to form a common business enterprise. Like sole proprietorships, they are easy to form (a handshake will do), and fairly easy to maintain.

One of the main disadvantages of general partnerships is that each partner has joint liability for the debts and claims against the partnership; therefore, an unaware partner with deep pockets can be held fully liable for financial decisions made by other partners.

A limited partnership is comprised of one or limited partners whose liability is confined to the amount of their initial investment, and a general partner who assumes unlimited liability.

A variation of limited partnerships known as **family limited partnerships (FLP)** is allowed when the entire partnership is comprised of family members. FLPs have some tremendous benefits for tax planning, retirement planning and estate planning.

Limited liability company (LLC) is a hybrid between a corporation and a limited partnership. The liability of LLC members is limited to the amount of their original investments.

While there are some circumstances in which an LLC is appropriate, limited partnerships are generally preferred because there is much more legal precedent concerning their use.

C-corporations receive the most beneficial tax deductions of any business entity. For example, they have far more flexibility in establishing 419(b) trusts, VEBAs and retirement plans.

The most frequently cited disadvantage of C-corps is the double taxation issue although there are ways to overcome this problem. The income of a corporation is subject to taxation at the corporate level and then is taxed again at the individual level when paid as dividends (although dividends are not always paid).

An **S-corporation** is taxed on the individual's tax return. The flow-through nature of this entity makes it one of the best vehicle for trading. S-corporations also provide great asset protection.

Case 1: The lone-wolf micro-trader

There are multiple factors that go into entity-structuring decisions, so we can only begin to scratch the surface here. But analyzing a few case studies will give shape to the evaluation and analysis process. The following examples ("The lone-wolf micro-trader," below, and "The family man," opposite page) are not intended to represent definitive answers to the various questions surrounding structuring a trading business. Rather, they are meant to illustrate the decision-making process that should go into choosing which business structure is best for a given situation. Keep in mind, the wise man is not the one who has all the answers, but the one who asks the right questions.

L.W. is a 29-year-old single micro-trader living in New York City. He trades full-time at a Manhattan trading firm and makes about 2,000 trades a month. Trading is the only work he has ever done, except for a few odd jobs (following college) from which he never received any benefits nor established any retirement plans. Over the past three years he has become increasingly profitable, and last year posted \$300,000 in short-term trading profits.

He has nominal trading expenses totaling about \$15,000 a year. His personal living expenses are about \$6,000 monthly, which includes \$2,000 rent, \$600 for medical insurance, \$1,000 for food and \$400 for transportation. L.W. hopes to get married within the next five years, "retire" from trading and purchase a home on Long Island. He is in a 39.6 percent federal tax bracket, pays 6.85 percent New York State and 3.83 percent New York City taxes. He paid a total of \$107,575 in federal, state and city taxes.

L.W. had attempted to reduce his 1999 tax liability by making a \$24,000 contribution to a SEP (Simplified Employee Pension), but was disappointed to learn that his tax liability was only reduced by \$11,203. L.W. realized that after deducting taxes, the SEP contribution and his living expenses from his \$300,000 income, he will only be able to save \$81,425 a year toward his goal of retiring and buying a house in five years; at that rate his dream may not come true. He wants to know what can be done.

Upon evaluating L.W.'s situation, it quickly becomes apparent that taxes are by far the largest expense of his trading business. Because he does not currently own a home, he doesn't receive an interest and tax deduction, and since he is filing a Schedule C to report his expenses he has no miscellaneous itemized expenses (see the April, May and June "Business of Trading" articles for more information). Thus, he has no need to file a Schedule A, and he

is therefore limited to taking the standard deduction of \$4,300.

But his situation is actually worse than he thought: Because his only source of income is capital gains, *he is not eligible for the SEP contribution*. That must be added back into his taxable income, resulting in an additional \$11,203 in taxes!

The primary objectives in structuring L.W.'s trading business are: 1) increase tax deductions; 2) reduce or eliminate his New York State and New York City tax liability; 3) formulate a method for him to establish a retirement account.

Business structure: Given these circumstances and objectives, L.W. would be best suited to a multi-entity structure consisting of a limited partnership with a C-corporation (established in Nevada or another tax-free state) as the general partner. He should also establish an S-corporation in New York. His trading account would be transferred to the limited partnership, which would have a management agreement with the general partner under which the general partner would be paid 60 percent of the trading profits for managing the limited partnership.

The effect at this stage is that 40 percent (\$120,000) of the \$300,000 trading profits would flow through to him and be taxed on his personal tax return. The remaining \$180,000 would flow to the general partner (the C-corporation). By establishing the C-corporation in a state without a state income tax, L.W. is able to avoid the New York State and City income tax on this money. Since L.W. conducts his trading activities from a physical location in New York, the C-corporation will contract with the New York S-corporation to conduct the trading at a cost of \$20,000 per year. The S-corporation will pay the \$15,000 in trading expenses, for which it will receive a deduction.

Benefits: By placing the trading account in the limited partnership, L.W. has shielded his assets from liability

claims. Because the limited partnership is required to pay more than half the earnings to the general partner, he has the ability to shift income off of his personal tax return. The \$120,000 that flows to him personally retains its characterization as capital gains and is exempt from the 15.3 percent self-employment tax.

Through the C-corporation, L.W. can draw a salary and consequently be eligible to establish more than eight types of retirement plans. (An annual salary of \$6,000, which could be entirely contributed to a Simple IRA, would be appropriate.) The corporation could establish a medical/dental reimbursement plan under which he could be reimbursed the \$7,200 annually he pays in medical insurance. These expenses are deductible to the company (they would not have been without the entity structure). Also, the company can establish a VEBA (a tax-avoiding trust) or Section 419 plan under which L.W. can save an unlimited amount of money for retirement with tax-deductible dollars.

Tax impact: The S-corporation, having received \$20,000 in income and deducting \$15,000 in trading expenses, will pass \$5,000 to L.W. to be taxed on his personal return. Because this money is taken as a shareholder distribution, there is no self-employment or social security tax. The \$120,000 he receives from the limited partnership also is free of self-employment tax. The social security tax on his \$6,000 in wages is \$459.

L.W.'s total income from all sources on his individual tax return is \$131,000 from which he will take the standard deduction of \$4,300 and deduct his \$6,000 Simple IRA contribution. He has a taxable income of \$120,700. At this level his federal tax rate drops from 39.6 percent to 31 percent. L.W.'s total federal, state and city tax bill will be \$44,565. His net disposable income will be \$80,435, which is more than enough to meet his \$72,000 annual living expenses. And don't forget, he also has an addi-

Case 1 *continued*

tional \$7,200 in tax-free money he received as reimbursement for his medical insurance payments.

The C-corporation has \$180,000 in income and deductions of \$6,000 for salary, \$459 for social security contributions and \$7,200 for medical reimbursement, leaving \$166,341. As previously stated, L.W.'s dream is to retire in five years get married and buy a house. To assist L.W. in his plans, the corporation establishes a VEBA or Section 419 plan into which it makes a \$116,341 tax-deductible contribution on his behalf. This money will be invested and grow on a tax-deferred basis. The company is left with a taxable income of \$50,000 on which it will only pay federal taxes at a 15 percent rate for a total tax liability of \$7,500.

The result: Here's the bottom line result of L.W.'s entity structure:

He has \$15,635 more than he needs to meet his annual living expenses.

He has established a simple retirement account with \$6,000, which he can self-direct and trade on a tax-deferred basis. This amount contributed annually for only five years will grow to \$847,209 by the time LW reaches retirement age of 60.

There is a VEBA established for his benefit with \$116,341, which will be invested and grow on a tax-deferred basis. He can begin accessing this money on a tax-preferred basis when he is ready to buy his dream home.

The VEBA will grow to \$900,915, which he can begin to access in five years. If no withdrawals are taken, at age 60 he will have more than \$15,814,659 available.

His C-corporation has \$42,500, which is available for further investments. This amount contributed for five years will grow to \$327,111. Upon his retirement in five years this account will generate sufficient income to provide L.W. with an annual salary of \$49,000 for the rest of his life.

His total tax payments have been reduced from \$118,778 to \$52,983. That's a total of \$65,795 more money in his pockets.

(All growth calculations assume current tax rates and a 15-percent annual rate of return, and are adjusted for inflation at a 3-percent annual rate. Calculations were conducted on either a taxable or tax-deferred basis as appropriate.)

Those profits, when added to the trader's wages from employment, would shift him from a 28 percent federal tax bracket to a 31 percent bracket, resulting in \$6,200 more in federal taxes. On the other hand, by shifting the tax burden to the child, who is in a 15 percent tax bracket and is eligible for a \$4,300 standard deduction, the tax bite would only be \$2,355 — a \$3,845 savings.

Step two: analyzing objectives

The next thing you must consider is what you hope to achieve from entity structuring. The primary objective for most traders is to reduce their tax burden. Proper structuring not only helps reduce income taxes, but can also reduce or eliminate estate taxes and protect assets from liability claims. Other objectives include establishing retirement plans, providing life and medical insurance for the family, establishing educational and childcare plans for children, and others.

Because different forms of businesses

Properly **structuring your trading business** will not only **help reduce income taxes**, but can also **reduce or eliminate estate taxes** and **protect assets** from liability claims.

provide different benefits, sometimes it's necessary to establish more than one business to achieve the desired results. While a limited partnership may be great for protecting assets, it is not suitable for establishing retirement, medical and educational plans (except in very limited circumstances). While an S-cor-

Case 2: The family man

Our second case study is a trader who has a family and also receives W-2 wages from a full-time job.

F.M. and his wife are both 45 years old. The couple has three children — ages 5, 9 and 14. They have combined wages of \$200,000, own their home and have annual living expenses of \$120,000 which includes \$15,000 in mortgage interest, \$20,000 in trading expenses, \$3,600 in uninsured medical expenses and \$6,000 for life insurance.

F.M. and his wife each contribute \$5,000 annually to their 401(k) plans. Their net worth is \$550,000, which includes \$300,000 in the 401(k) and \$80,000 in IRA accounts. F.M. has just started trading, but so far he is very profitable. He has a taxable trading account of \$100,000 and last year earned \$150,000, which exceeded his expectations. In the future he anticipates a 40 percent annual return on his trading account and a 15 percent return on his retirement accounts. He and his wife both intend to work until age 62, by which time all of the children will be out of the house, and then move into a small condo.

F.M.'s primary concerns are securing enough savings to support himself and his wife following their early retirement, and being able to put the children through college.

Business structure: F.M.'s situation presents a great number of planning opportunities through a simple structure consisting of a family limited partnership with a C-corporation general partner, both established in Texas. Although Texas does have a corporate income tax, this will be avoided by paying out all corporate income in tax-deductible expenses that will directly benefit F.M. and his family.

Similar to L.W.'s structure, the trading account will be placed in the family limited partnership, which by contract will pay 60 percent of the trading profits to the general partner.

poration can protect assets and be used to establish retirement plans, it is ill-suited for providing medical and life insurance plans.

It's also important to place your objectives in some sort of hierarchy. Keep in mind there is no such thing as a "perfect" entity structure — each has

Because **different forms**
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benefits as well as drawbacks and limitations. You must decide which objectives are most important to you and then use the entity structure that best helps you achieve them.

In conclusion

Proper entity structure can provide traders with a host of both tax and non-tax benefits. The case studies here are only the tip of the iceberg. However, before you structure a trading business entity, it is essential you have a firm grasp of your circumstances and objectives so that the proper structure and results are achieved.

Also keep in mind that structuring alone does not achieve results. Rather, it is the implementation of the available benefit plans and development of an operational strategy that yields the results. The structure is merely a shell within which the planning occurs.

In next month's final installment of this series, we will take a closer look at the available benefit plans of entity structuring, including a thorough review of the VEBA, a tax-avoiding trust that is the greatest wealth-building vehicle available today. 📌

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Case 2 *continued*

This structure takes into account the fact that, through the limited partnership, F.M. and his wife can gift part of the trading account to the children to take advantage of their lower tax brackets. The absence of a personal income tax in Texas eliminates the need to move income out of the state. Also, since the C-corporation is established in Texas, there is no need for an S-corporation to serve as the trading entity. Although an S-corporation could be used as the general partner to avoid any potential state and federal corporate taxes, there are several benefit plans which F.M.'s family needs that cannot be provided through an S-corporation.

To meet F.M.'s long-term objectives, the following strategy will be implemented:

For the first 10 years F.M. will gift \$10,000 per year to each child.

As each child reaches the age of 14, their share of the capital gains will be taxed at their individual tax rates.

F.M. and his wife will make a tax-deductible contribution of \$500 per year to an educational IRA account for each of the three children through the age of 21.

The corporation will employ F.M., his wife and each of the three children through age 21. The children's jobs will be commensurate with their age and maturity, with each receiving an average of \$10,000 per year. (The youngest child's employment will commence at age 7).

During their employment, each child will contribute \$2,000 to a traditional IRA account and \$4,000 per year to a Simple IRA account.

The corporation will establish an educational assistance plan that will pay \$5,250 per year toward their college expenses.

The corporation will establish a medical reimbursement plan to reimburse F.M. for the family's out-of-pocket medical expenses.

The corporation will establish a VEBA or Section 419 plan for F.M. and his wife. In addition to providing money for retirement and educational expenses, these plans will replace their current life insurance policies with tax-deductible ones.

The result: Assuming all factors remain constant, F.M.'s current (non-corporate) strategy will yield the following results (projections are carried out over 17 years, at which time F.M. will be 62 and the youngest child will have completed college):

- Retirement savings will be \$3,879,130.
- Total federal, social security and Medicare taxes paid will be \$7,304,248.
- F.M.'s net worth (excluding retirement accounts) after paying for the children's education will be \$6,167,803. (The estimated future cost for providing all three children with a four-year college education will be \$501,006.)

However, forming a family partnership and a C-corp has a dramatic impact. Here are some of the highlights:

- Total taxes paid will be reduced to \$1,745,017.
- F.M.'s retirement account savings will grow to \$4,529,881 — \$650,751 more than had he not formed a family limited partnership.
- The children will have combined IRA accounts of \$321,260.
- The trading account will have a value of \$2,356,177, of which \$2,084,269 will be in the name of the three children (although F.M. will remain in full control).
- F.M. will have a VEBA worth \$6,603,530, which will continue to grow on a tax-deferred basis and can be accessed tax-free.

• The entire family's net worth (excluding F.M.'s retirement accounts) after paying for the children's college will be \$9,280,967, an increase of \$3,113,164.

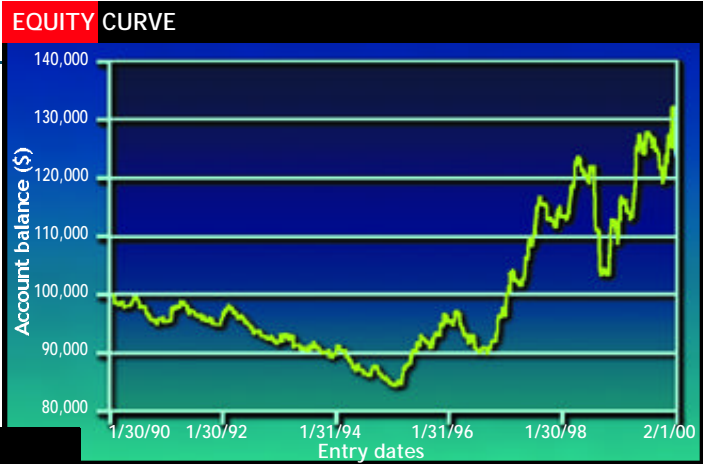
Benefits. In addition to the above tax benefits, F.M. has established a sound estate plan. The assets held by the children in the family limited partnership and IRA accounts, as well as the VEBA, are excluded from estate taxation. Without planning, his entire estate of \$10,046,933 is subject to taxation. Under his new entity strategy, only \$4,801,789 is subject to estate taxes. Also, his family's assets are safely protected from the claims of creditors. Furthermore, his VEBA can continue to grow tax-free indefinitely. It can also be accessed tax-free or at a reduced tax rate at any time. Unlike retirement plans, there are no minimum or maximum distribution ages; nor are there premature distribution penalties.



Basic Moving Average Crossover

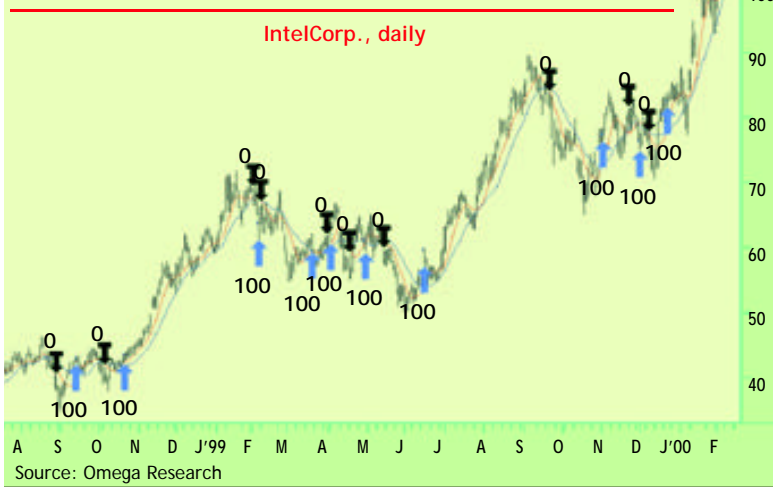
Market: Stocks, index shares (SPDRs, DIAs, QQQs) and stock index futures.

System logic: The moving average crossover approach is probably one of the oldest technical analysis trading techniques. This system uses two standard (non-weighted) moving averages of different lengths. When the short (e.g., nine-day) aver-



SYSTEMS SIGNALS

The basic moving average crossover system captures trending moves (e.g., June - Sep. 1999) but takes many small losses in non-trending periods (e.g., Feb. - May 1999). It is also slow to respond to quick corrections and trend shifts.



winners not big enough to cover slippage and commissions) and too many smaller losers.

Most moving average techniques will not let you capture any market tops or bottoms, which is virtually a prerequisite for profitably trading a short- to intermediate-term model that uses only daily data.

Suggested improvements: There are several ways to attempt to improve this model: 1) Work with one moving average only, allowing the signals to be triggered as soon as price crosses the average, or use one moving average length to trigger entries and another to trigger exits. 2) Use weighted or exponential moving averages (which generally respond more quickly to price action) to decrease lag at market turning points. 3) Make the system respond even quicker by substituting the closing price in the moving average calculations with (for instance) the low price for buy signals and the high price for sell or long-exit signals.

age crosses above the long (e.g., 18-day) average, it indicates a short- to intermediate-term uptrend and, consequently, a buy signal. The opposite conditions trigger a sell signal (or, in the case of long-only traders, a signal to exit long positions and stay out of the market until the next buy signal).

The moving average crossover is a trend-following strategy in which the length of the trend can be adjusted by increasing or decreasing the number of days in the moving averages, or by applying the averages to different time frames (e.g., 15-minute or hourly price bars vs. daily or weekly bars, etc.)

Rules:

1. Enter on the close when a nine-day moving average crosses above the 18-day moving average.
2. Exit on the close when the nine-day moving average crosses below the 18-day moving average.

For this test, we traded only long signals with a fixed lot size of 100 shares per trade.

Test period: February 1990 to February 2000

Test data: Daily closing prices for all stocks comprising the Dow Jones Industrial Average (DJIA)

Starting equity: \$100,000 (nominal)

System drawbacks: As is the case with most moving average models, this system looks much better when viewed on a chart than it actually is. It reacts much too slowly to sudden corrections or trend shifts, resulting in too few profitable trades (or

SYSTEM SUMMARY

Profitability		Trade statistics	
End equity (\$):	122,905	No. trades:	2,365
Total (%):	23	Avg. trade (\$):	10
Year (%):	2.08	Tr./Mark./Year:	7.88
Profit factor:	1.11	Tr./Month:	19.7
Risk measurers		Time statistics	
Max DD (%):	-16.33	Longest flat (m):	87.05
Largest loss (\$):	-2,521	TIM (%):	99.54* 55.77**
Winners (%):	38.52	Avg. days:	19.00

*For the entire portfolio. **Average per market.

Source: CSI, Unfair Advantage

LEGEND — End equity: equity at end of test period • Total (%): total percentage return over test period • Year (%): annualized average return per year • Profit factor: gross profit/gross loss • No. trades: number of trades • Avg. trade: dollar amount of average trade • Tr./mark./year: trades per market per year • Tr./Month: trades per month • Max DD (%): maximum drawdown (equity loss) • Largest loss: biggest losing trade • Winners (%): percentage of winning trades • Longest flat (m): longest period spent between two equity highs, in months • TIM (%): amount of time system is in the market • Avg. days: average trade length

Disclaimer: The Trading System Lab is intended for educational purposes only to provide a perspective on different market concepts. It is not meant to recommend or promote any trading system or approach. Traders are advised to do their own research and testing to determine the validity of a trading idea. Past performance does not guarantee future results; historical testing may not reflect a system's behavior in real-time trading.