

Chapter 2

Momentum Models

Let's start with the models that have succeeded best over the past decade: ones that capture momentum stocks.

First, it's important to understand that momentum stocks are hard to value by traditional means. To determine the right price to pay for shares of a company's equity, traditional analysis calls for investors to review the quality and value of a firm's current earnings and cash-flow streams and to estimate the growth of those streams in the future. (I'll talk about how to follow this method of analysis a lot more in Part III.)

One reason that many smart people who run mutual funds underperform the broad-market averages, however, is that they do not seem to have a good strategy for dealing with stocks that rise seemingly for no fundamental reason. Stocks that go up because, well, they're going up. Stocks that defy the textbook logic of market behavior. Stocks that the pundits like to deride as being in the thrall of *retail* investors or worse yet, *momentum* investors.

Yet these stocks are often responsible for the bulk of the gains of most stock indexes' advances in any individual year—and they're often precisely the stocks that growth-oriented private investors should want to own. The pundits would have you believe that there is something morally wrong with owning stocks that go up a lot if they can't understand exactly why they're going up. They can't abide stocks whose prices respond to demand-and-supply disequilibrium more than to fundamental value. I'll never forget the smug look on a traditional growth-fund manager's face, back in January 1998, when he told me that "only yahoos would buy Yahoo!"

I'm not going to debate whether Yahoo! was fundamentally worth a \$3-billion market capitalization then or a \$40-billion market cap a year later. But it's common sense that investors in the traditional manager's funds would have preferred the 615% gain of Yahoo!

that year over their manager's valuation ideology. The cost of his smugness? Millions of dollars of lost opportunity to own one of the great growth stories of the decade. In this case, and many others, price action preceded news. Our momentum model caught this Internet stock in January 1998 and held it for at least the next two years. In the face of fundamental analysts' skepticism, Yahoo! registered a 940% gain over 18 months. Only in mid-1999, *after* its largest gains under the sponsorship of early momentum buyers, did Yahoo! gain the status of Internet blue chip and a place in mainstream mutual funds.

In this chapter, I'll show *you* how to build great momentum-stock portfolios online that are likely to defy the conventional wisdom. Historical testing shows that my best model gained 70.1% per year on average since 1986, turning \$10,000 into \$11.3 million by the middle of 1999. The same amount in an S&P 500 Index fund would have netted only \$66,378 over the same period. In real-life testing at MSN MoneyCentral, an early version of that model pulled in a return of 139% in 1998 and 53% in the first half of 1999—five and four times the broad market, respectively.

Understanding Momentum Stocks

So how should you value ordinary growth stocks that have caught momentum fever? First, take the exercise out of the Finance 101 classroom. Don't even try to use traditional, fundamental yardsticks. They'll only drive you crazy.

Instead, think of a restaurant. When you go into a fine dining establishment, do you try to determine the price-to-book ratio of the fresh scallops in white-wine sauce before determining whether to try them? Of course not: you accept the price on the menu. You don't care that the cost is substantially inflated over the dish's asset value. By convention, the restaurateur has the right to name his price based on the scarcity of the item (if you don't buy it now, someone else will) and your desire for the item (you came here for the fabulous scallops, didn't you?).

Now what if you and the person at the next table simultaneously want the same dish, and only one portion is left in the kitchen? It wouldn't be too cool, but theoretically the maitre d' could make you two bid for it—with the scallops going to the top offer. Now let's go one step further and say that just as you were about to dig into your winnings—knife and fork poised—another diner suddenly decides he must have the last portion of scallops and offers 10% more than what you paid. You might reluctantly agree that the money was worth more than the dish and hand the meal over.

Finally, one last metric: let's say that you walked into the restaurant with no knowledge of its specialty. By looking at the menu, you could easily guess that the high price associated with the scallops meant that the owner believed that item was his scarcest and

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most precious. And if you watched the scene above unfold and fancied a fine dinner, you could reasonably conclude that if you paid the high price for any scrap of scallop left in the kitchen, you'd be satisfied with your choice. Surely three gourmands and the restaurateur couldn't all be out of their minds! Seven times out of ten, you'd be right.

The movement of stocks in the thrall of momentum buyers is similar. There are never enough shares to go around, they advance sharply on high and emotional demand, and their prices often bear little resemblance to their true value. Yet they continue to advance, often by leaps instead of steps. Outside observers who don't have the same appetite for these stocks will never understand their appeal. But the skeptics are missing one key concept. If enough people jump into the bidding with enough fervor over a long enough period of time, the correct prices for most stocks generally emerge.

That's a long way of saying the market is *usually* right. Yet it's not a contradiction to add that the market can also be wildly, amazingly wrong sometimes. It can be insanely overoptimistic on a stock when things seem to be going well and far too pessimistic when things seem to be going poorly. These extremes of greed and fear cause investors, operating as a herd, to overshoot the "right" price of stocks on both the high and the low side during any individual day, week, or month. Ultimately they determine their folly and bring prices back to beam. So if you wish to initiate a new position in a momentum stock, you need to look for those moments when utter excess has been wrung out of it and it's just *very* expensive rather than *incredibly, stupidly* expensive.

Finding the Best Momentum Stocks

Luckily for us, it is not too hard to find good momentum stocks—and determine the right moment to buy them during pullbacks amid their advances—in an Investment Finder screen.

First though, a couple of observations from the halls of academe.

- I won't bore you with the citations, but studies have shown that the long-term stock-price appreciation patterns shown by great momentum stocks tend to persist into the future, while short-term share-price appreciation patterns tend to reverse.
- These two stock-price tendencies—persistence for the long-term, reversal for the short-term—tend to occur without regard to the way you define long- and short-term. If you wish to trade on these tendencies during the day, for instance, the long term might be two hours; the intermediate term, 30 minutes; and the short term, 10 minutes. If you wish to trade on these tendencies from a broader perspective, the long-term should be seen as 12 months; the intermediate term, as 3 months; and the short-term, as 1 month.

My momentum-stock screen capitalizes on these observations by attempting to buy high-flying stocks during a period of short-term price reversal, or consolidation. To be sure, this is counterintuitive. Why would you want to buy hot stocks that appear to have suddenly turned cold, and how can you call them “momentum” stocks if they’re actually falling or moving sideways at the time of the purchase?

The answer is that intuition is wrong. A stock-research team at Ford Investor Services in Del Mar, California, discovered that this pattern plays out again and again in the market’s best stocks. Not only that, but you can capture the pattern in a mathematical formula to apply against any stock at any time.

I stumbled upon Ford’s technique in 1997 when I was seeking a screen that would help me mechanically, unemotionally buy high-momentum stocks like Yahoo!. Like many investors with a fairly early understanding of the likely pace of growth of media on the Internet, I instinctively believed that Yahoo! and Amazon.com would be worth a lot to investors in the future, but I could not wrap my brain around their valuations. I decided I needed to find or create a valuation method that did not rely on the traditional stock-measurement gauges, which compare prices to revenue or earnings growth. A mathematical formula that pinpointed moments when the purchase of high-momentum stocks held the most promise appealed to my need for a rational—if radically different—solution.

At the time, Ford was using its momentum formula as the last of a three-part screen to purchase cheap stocks. I turned that concept on its head by applying the formula all by itself to determine the right time to purchase *expensive* stocks.

The Original Flare-Out Growth Model

After obtaining permission from Ford, I borrowed the formula for my first momentum-stocks model in January 1998. I named the model Flare-Out Growth because the stocks’ chart pattern resembles the “flare-out” play in sandlot football. In this play, a wide receiver runs straight downfield, then suddenly swerves to the side, slows and turns around, catches the ball, and resumes his fast run to the goalposts.

The original Flare-Out screen on which the model is based begins by seeking stocks with \$1 billion market values. Then it seeks stocks that have advanced the most in the last 12 months but which have swerved sideways in the most recent three-month and one-month periods. This lets us find the stocks that have gained the most in the past year (the momentum part of our search) but have then consolidated, or taken a breather, as investors step back, take profits, and assess their next moves.

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Mathematician regression methods have gone straight after going sideways (chart, this pattern weeks) or a week



Figure 2-1.

The stock of Web.com started in March 8, and then exploded upward another flag until find stocks that are which such stocks

For years, investors had to flip hand or received stocks that best such as Investme

Mean Regression—or “Bull Flag”

Mathematicians and technical analysts, who have a jargon all their own, call this a *mean-regression* methodology of seeking stocks. The trajectory along which the Flare-Out stocks have gone straight up is considered their *mean*. The path they take back to that trajectory after going sideways, or consolidating, is considered their *regression*. When viewed on a chart, this pattern is called either a *bull flag* (if the consolidation takes just a few days or weeks) or a *wedge* (if it takes longer). (See Figure 2-1.)

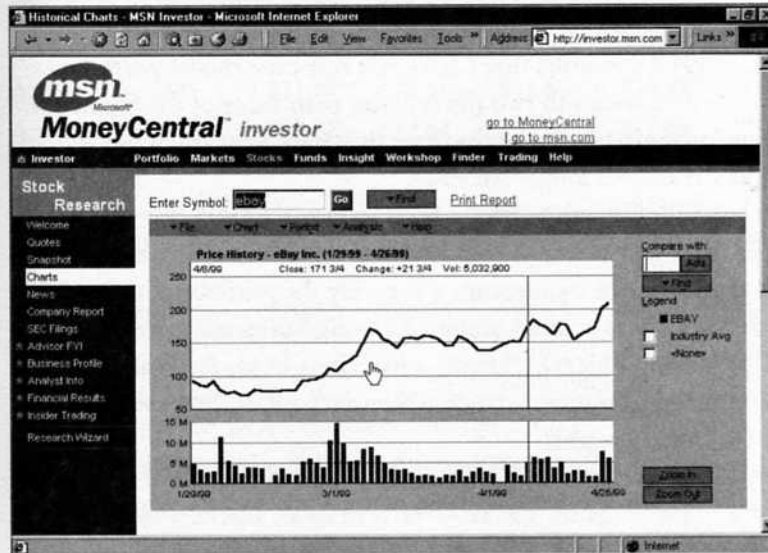


Figure 2-1.

April 29, 1999

The stock of Web auction house eBay made two bull flags from February to April of 1999. The first flagpole started in mid-February with the stock at \$70. The stock subsequently ran up to \$171 by March 8, and then it backed off and slid up and down in a narrow range until April 7. The stock then exploded upward again (back toward its mean) on April 8 and April 9 before backing off and making another flag until another explosion upward on April 23. The Flare-Out Growth screen attempts to find stocks that are in the middle of one of those “backing-off” periods because of the frequency with which such stocks ultimately bound much higher.

For years, investors who wished to find stocks that traced out these explosive patterns had to flip through hundreds and hundreds of charts that they either crafted by hand or received by mail from a subscription service. But now we can find the 3, 5, or 10 stocks that best fit this pattern in seconds, at any time, via online stock-screening engines such as Investment Finder.

1998 and 1999 Flare-Out Growth Portfolios

So how exactly do you find these names? If you can't wait to see the screen recipe, skip ahead to page 26. But if you're patient, here's a little more background.

My first Flare-Out Growth screen was strictly based on the formula handed down by Ford Investor Services. According to Ford analyst Tim Alward, a portfolio managed under the 10-stock strategy advanced at an annualized clip of 22.8%, including dividends, from 1976 to 1996. That compared with a 14.6% advance in the S&P 500 Index.

The portfolios I built from that screen did a whole lot better than Alward's estimate in 1998 and the first half of 1999, however. They posted the gains of 139% and 53% I mentioned above. Indeed, in the 18 months that I have run real-time model portfolios with the screen, their worst results were still two times better than those of the broad market over any stretch of time longer than six months. And they have regularly done as much as four to eight times better over longer stretches.

Take a look at the Flare-Out Growth portfolio built in January 1998, for instance. As shown in Table 2-1, the Flare-Out screen netted stocks in a mix of industrial sectors. Although you might have imagined that momentum was purely the province of technology stocks, you can see that the picks were actually scattered among businesses in technology (Dell Computer, ASM Lithography), media (Yahoo!), retail (Best Buy), medical devices (Arterial Vascular), biotechnology (Immunex), trucks (Navistar), oil drilling (Varco International), and air freight (Airborne Freight).

If you look at the sixth column of the chart, you'll see that almost all of the stocks ended the first quarter of 1998 with gains that resembled those of Internet stocks. This shows that momentum investing doesn't play by any rules except price and volume. It is *sector agnostic*. That means you don't have to wrack your brain to determine the right industries in which to invest at any given time. The market decides, and you just need to follow.

If you look at the columns showing the 12-month and 18-month changes, you can see that, for the most part, the stocks continued their upward bias. Yahoo! started 1998 with a modest 39% gain in the first quarter and went on to record a 615% gain for the year. Even electronics department store Best Buy, not exactly a sexy name, expanded its incredible first-quarter success of 81% by posting a 233% gain over 12 months. Investors who held the portfolio for one year—which I believe is the best duration—ended 1998 with a 138.6% gain. Not bad for a strategy that takes less than 30 minutes to execute and requires no extra news-following, TV-watching, broker-calling, or chart-reading. Buy once a year and you're done.

Yahoo!
Dell Computer
Best Buy
Immunex
Arterial Vascular
Airborne Freight
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ASM Lithography
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Table 2-1. 1998 Flare-Out Growth Portfolio

The 1998 Flare-Out Growth portfolio gained 39% from January 2 to March 31, 1998. Through December 31, 1998, the one-year portfolio rose 139%—five times better than the S&P 500 Index.

	1/2/98 Close	3/31/98 Close	12/31/98 Close	6/30/99 Close	3-Mo. Chg.	12-Mo. Chg.	18-Mo. Chg.
Yahoo!	\$16.56	\$23.11	\$118.47	\$172.25	39.5%	615.4%	940.2%
Dell Computer	\$10.72	\$16.94	\$36.59	\$37.00	58.0%	241.4%	245.1%
Best Buy	\$9.23	\$16.67	\$30.69	\$67.50	80.6%	232.5%	631.3%
Immunex	\$27.19	\$33.69	\$62.91	\$127.44	23.9%	131.4%	368.7%
Arterial Vascular*	\$31.82	\$38.56	\$52.88	\$58.38	21.2%	66.2%	83.5%
Airborne Freight	\$30.78	\$37.63	\$36.06	\$27.69	22.2%	17.2%	-10.0%
Navistar	\$24.44	\$35.00	\$28.50	\$50.00	43.2%	16.6%	104.6%
ASM Lithography	\$34.00	\$46.22	\$30.50	\$59.38	35.9%	-10.3%	74.6%
Varco International	\$20.63	\$25.75	\$7.75	\$10.81	24.8%	-62.4%	-47.6%
			Total		38.8%	138.6%	265.6%
			S&P 500		13.0%	28.0%	43.0%

*Merged with Medtronic; last price was January 28, 1999.

Portfolios purchased on the first day of subsequent quarters in 1998 did equally well. A Flare-Out Growth portfolio bought on April 1 was up 86% over the next 12 months. A portfolio bought on July 1 was up 168% over the next 12 months, and a portfolio bought on October 1 was up 98.6% over the next 9 months. See Appendix B for details.

A Flare portfolio purchased on the first trading day of 1999 also started off strong, as shown in Table 2-2. The screen, in this case, picked five Internet companies (CMGI, Yahoo!, MindSpring, Amazon.com, and Earthlink); four technology companies (EMC, Dell Computer, Apple Computer, and New Era of Networks); and a telecommunications company (Metromedia Fiber Networks). These 10 stocks beat the market by a whopping margin over the first three and six months of the year, despite some extreme turbulence in the second quarter.

Table 2-2. 1999 First Quarter

The Q1 '99 Flare-Out Growth portfolio gained 48.5% from January 4 to March 31. Through June 30, 1999, the portfolio rose 53%—four times the broad market.

	1/4/99 Close	3/31/99 Close	6/30/99 Close	3-Mo. Chg.	6-Mo. Chg.
CMGI	\$28.63	\$91.53	\$114.06	219.8%	298.5%
Metromedia Fiber Network	\$17.25	\$25.91	\$35.94	50.2%	108.3%
Yahoo!	\$124.00	\$168.38	\$172.25	35.8%	38.9%
MindSpring Enterprises	\$33.00	\$43.03	\$44.31	30.4%	34.3%
EMC	\$43.50	\$63.88	\$55.00	46.8%	26.4%
Apple Computer	\$41.25	\$35.94	\$46.31	-12.9%	12.3%
New Era of Networks	\$41.50	\$67.75	\$43.94	63.3%	5.9%
Amazon.com	\$118.31	\$172.19	\$125.13	45.5%	5.8%
Dell Computer	\$37.09	\$40.88	\$37.00	10.2%	-0.3%
EarthLink Network	\$62.44	\$60.00	\$61.44	-3.9%	-1.6%
			Total	48.5%	52.8%
			S&P 500	5.0%	12.0%

These stocks absolutely flew into the middle of January as if drawn by a powerful magnet. They were collectively up 33% only two weeks into the year. But the magnet turned out to be merely the earnings-release date of Yahoo!. The day before it released its earnings, Yahoo! actually had an intraday move of \$51 before settling with a gain of \$35. The company disappointed investors by announcing merely a 2:1 split rather than a 3:1 split, though, and its stock subsequently fell from a split-adjusted high of \$222.5 to a low of \$124 over the next 28 trading days. Many of the rest of the stocks in the portfolio followed in sympathy, with Amazon.com sinking from a high of \$199 on January 11 to an intraday low of \$92 just 10 days later.

But guess what? They all came back—with a vengeance. Performing just the way we expect these momentum stocks to act, the stocks rose about half as fast as they plunged, but they did rise. By the end of the quarter on March 31, they had registered a 48.5% gain in three months, which was nine times better than the broad market. A week later, they had advanced briskly enough for a 71% year-to-date gain, though they all slumped sharply after that by the end of the second quarter. Despite the turbulence, the portfolio was still ahead 53% after the first six months of the year, which was four times better than the broad market.

New Flare

Clearly, the Flare-Out Growth portfolio of 1998. But how did it perform and will it work again?

I built the portfolio in 1998. I thought it was the best I could do. The stocks were great: a mix of growth and value with a 58% return. A \$10,000 investment in the fund would have returned \$15,800.

But portfolio performance is more than its return. It's also about higher the number of stocks. In my definition, the portfolio returned by no means the time. Thus, the portfolio rarely goes into the red.

I have worked on many projects to prove the origin of the Flare-Out and quantitative research. This research led to a better—and stronger—definition of the Flare-Out.

- **Quality.** I believe that the quality of the companies is a minimum requirement for an investor to invest in any profit.

- **Size.** The size of the company is usually a small- to medium-sized company. They tend to be larger ones.

- **Liquidity.** The market trades the stocks it loves most. Stocks with the highest trading volumes tend to be the most loved. Sometimes that's good; sometimes it isn't. By itself, volume means less than when paired with the two criteria above. Generally, I prefer stocks that are in the top 300 to 500 most actively traded issues over the past month. (In mid-1999, that meant about 800,000 shares daily.)
- **Relative strength.** Stocks that have performed the best in the past tend to continue to perform the best, all other things being equal. I use the Flare-Out Growth formula to rank all stocks netted with the criteria above. To ensure a stock has decent momentum at the moment of purchase, historical testing suggests it's best to require positive returns in the last month and quarter.
- **Selection.** Testing shows emphatically that the fewer high-ranked stocks you pick from a screen, the better. Every good screen will beat the market, no matter how many stocks you pick from the top, but fewer is definitely finer. Most mutual funds have to own at least 25 stocks, but you need only 3, 5, or 10. Most momentum screens that I have tested have the best risk/reward balance with three to five top-ranked stocks. That's also the number of momentum stocks that most of my readers have said they'd prefer to buy for this portion of their overall portfolios.
- **Time.** Most momentum portfolios do best when purchased in November, December, January, or February and held for one year. Most do poorly when purchased in August, September, or October. Rebalancing monthly or quarterly also works, but that is more labor-intensive and less tax-advantaged.

Creating the Screen in Investment Finder

Creating the Flare-Out Growth screen in Investment Finder, as shown in Figure 2-2, is easy. You can find detailed instructions on using the Finder in Appendix A and more concise instructions in the previous chapter. Now here's the recipe that would potentially have made you a multimillionaire if you'd started with \$10,000 on January 1, 1986, and stuck with this plan. Enter these criteria into Investment Finder:

1. Market capitalization of at least \$1 billion. (In Investment Finder, choose *Company Basics / Market Capitalization* \geq \$1 billion.) The market of the 1990s prefers larger cap, highly liquid stocks for reasons I'll discuss further in the next chapter.
2. Revenue of at least \$50 million in the past 12 months. (In Investment Finder, choose *Current Financials / 12-Month Revenue* \geq \$50 million.) Companies that have figured out how to wrest \$50 million from customers in a year probably have real businesses.

3. Return on turn / Ret earned me ty. A 1999 turn on es stock.
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5. Current p Stock Price be bought
6. Average d Finder, ch ket moves with com



Figure 2-2
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Investment Finder in the

3. Return on equity greater than 0.1%. (In Investment Finder, choose *Investment Return / Return on Equity > 0.1%*.) Companies with any return on equity at all have earned money in the past 12 months, which is a sign of quality and potential stability. A 1999 survey of institutional investors by Merrill Lynch showed that a high return on equity was the primary criterion sought by the market's biggest buyers of stock.
4. Current price greater than the price three months ago. (In Investment Finder, choose *Stock Price History / % Price Change Last Qtr. >= 0.*) Momentum stocks should be bought above their prices of three months ago.
5. Current price greater than the price one month ago. (In Investment Finder, choose *Stock Price History / % Price Change Last Month >= 0.*) Momentum stocks should be bought above their prices of one month ago.
6. Average daily volume over past month greater than 800,000 shares. (In Investment Finder, choose *Trading & Volume / Avg. Daily Vol. Last Mo. >= 800,000.*) No market moves are valid without strong volume, because volume shows buyers are acting with conviction.

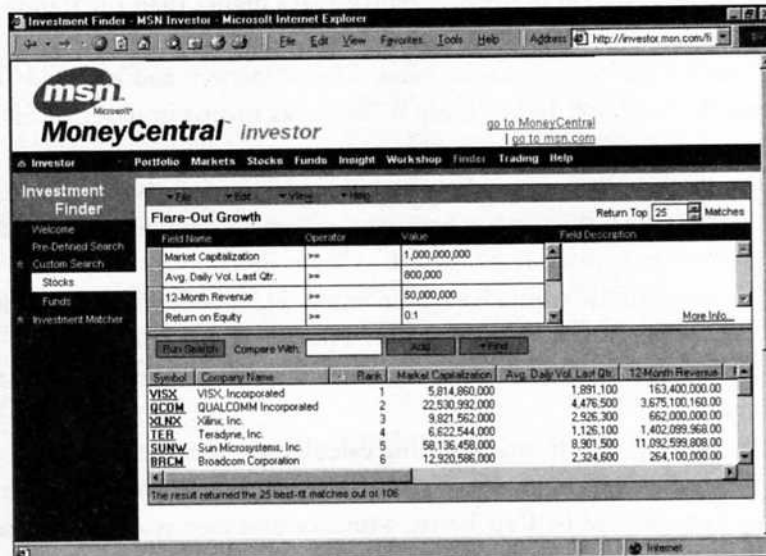


Figure 2-2.

July 15, 1999

You can create and run the Flare-Out Growth screen in MSN MoneyCentral's Investment Finder in less than 30 seconds. This list shows the top stocks on July 15, 1999.

7. Rank these stocks by the Flare-Out Growth Index. (In Investment Finder, choose *Stock Price History* / % Price Change Last Year - % Price Change Last Qtr. - 3 * % Price Change Last Month. Choose High As Possible as the operator.) The Flare-Out Growth Index, or FOG Index for short, is the momentum formula that mathematically replicates technicians' bull-flag chart pattern.
8. Run the search. The stocks will be ranked in descending order by the FOG Index.
9. Buy the top three, five, or seven stocks listed. You should buy the stocks in equal dollar amounts, and the number of stocks you buy should depend on your risk tolerance. Fewer stocks means higher potential reward (and risk).
10. That wasn't so hard, was it? Start a portfolio near the beginning of the year—any time from November 1 to January 15—and hold it for one year. Repeat the screen the following year. This will be your "core," or main, momentum-stocks portfolio. If you find it impossibly boring to buy stocks just once a year, you can create a separate portfolio the same way and trade the top-ranked stocks each month.

Historical testing suggests that portfolios bought using the improved Flare-Out Growth screen would have returned 70.1% on average annually from 1986 through mid-1999 with a standard deviation of 46%. A return that's higher than the standard deviation indicates that the model would be relatively easy to hold. Testing suggests the model would have suffered no losing years over that 13-year period, and it would never have underperformed the S&P 500 Index. Only three stocks turned in negative full-year performances.

The results show that \$10,000 invested on January 1, 1986, in the stocks turned up by the model every year through 1998 would have turned into \$5.4 million. The three stocks that were turned up on January 1, 1999, rose 110% collectively in the first six months of the year, so the portfolio would have been worth \$11.3 million by the middle of 1999. Table 2-3 lists the stocks that would have been purchased over that period. (Only one stock met the criteria in January 1988, but two more would have been netted in February of that year.)

A note about the testing: All historical-testing calculations were performed in Q-Analytics' Q-Investor software. The results were confirmed by Camelback Research Alliance, a consulting firm directed by Carr Bettis, a finance professor at Arizona State University. The results were also confirmed by researchers at Ford Investor Services and Logical Information Machines of Austin, Texas. No historical database or back-testing software is perfect, however. Results from testing in other databases may vary, and there are no guarantees that past results will be repeated.

Table 2-3. Fla

Historical testing
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1999

CMGI

MindSpring Ente

Dell Computer

1998

Best Buy

Schering-Plough

Costco Compani

1997

PeopleSoft

BMC Software

Global Marine

1996

Global Marine

Ascend Communi

Maxim Integrated

1995

StrataCom

Micron Technolog

Armel

1994

Tellabs

EMC

DSC Communica

Table 2-3. Flare-Out Growth, 1986–1998

Historical testing suggests that the three-stock Flare-Out Growth model would have turned \$10,000 into \$11.3 million between January 1986 and July 1999. In this table, purchases are made on the last day of the first trading week of the year. The sales occur on the previous day (except for 1999, when the sell date is June 30).

	Buy	Sell	% Return
1999			
CMGI	\$28.63	\$114.06	298.50%
MindSpring Enterprises	\$33.00	\$44.31	34.30%
Dell Computer	\$37.09	\$37.00	-0.30%
1998			
Best Buy	\$9.09	\$30.69	237.50%
Schering-Plough	\$31.22	\$55.25	77.00%
Costco Companies	\$44.00	\$72.19	64.10%
1997			
PeopleSoft	\$24.50	\$37.88	54.60%
BMC Software	\$22.19	\$32.47	46.30%
Global Marine	\$19.88	\$24.19	21.70%
1996			
Global Marine	\$8.50	\$19.88	133.80%
Ascend Communications	\$35.13	\$59.69	69.90%
Maxim Integrated Products	\$18.38	\$22.19	20.70%
1995			
StrataCom	\$17.13	\$33.25	94.20%
Micron Technology	\$21.69	\$39.13	80.40%
Atmel	\$16.63	\$22.00	32.30%
1994			
Tellabs	\$3.08	\$6.72	118.30%
EMC	\$9.38	\$10.75	14.70%
DSC Communications	\$33.13	\$34.63	4.50%

(continued)

Table 2-3. (continued)

	Buy	Sell	% Return
1993			
Newbridge Networks	\$10.31	\$27.38	165.50%
Informix	\$9.06	\$10.63	17.20%
International Game Tech.	\$25.44	\$29.50	16.00%
1992			
International Game Tech.	\$11.22	\$25.44	126.70%
First Health Group	\$19.13	\$15.00	-21.60%
Ivax	\$38.38	\$29.25	-23.80%
1991			
Amgen	\$5.00	\$18.69	273.80%
Novell	\$8.22	\$30.44	270.30%
Chiquita Brands Int'l	\$31.50	\$39.25	24.60%
1990			
Home Depot	\$2.79	\$4.17	49.40%
Barrick Gold	\$8.50	\$10.38	22.10%
American Greetings	\$17.88	\$16.56	-7.30%
1989			
Fannie Mae	\$4.34	\$9.00	107.60%
MCI Communications	\$11.50	\$20.19	75.50%
Albertson's	\$9.56	\$14.25	49.00%
1988			
GPU	\$14.19	\$19.00	33.90%
1987			
Amdahl	\$11.81	\$17.63	49.20%
Walt Disney	\$3.74	\$4.94	31.90%
Digital Equipment	\$105.75	\$135.00	27.70%
1986			
Liz Claiborne	\$12.13	\$21.75	79.40%
Limited	\$10.38	\$16.50	59.00%
Kellogg	\$8.66	\$13.19	52.30%

The aggregate annual results, shown in Table 2-4, show that 1998 and 1999 stand out among the top years in the past 13 for this strategy. However, 1991 (coming out of the 1990 recession) was the very best.

Table 2-4. F

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Year

1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999**

Avg. Ret.
Std. Dev.

* Portfolio start date

** 1999 return is

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Table 2-4. Flare-Out Growth 1986–1999 Annual Returns *

Steady application of the three-stock Flare-Out Growth strategy since 1986 would have turned \$10,000 into \$11.3 million by July 1999, according to historical testing. Compounding in final years ramps the final amount.

Year	% Return	Pct. Pts. Over S&P 500	Portfolio Value**
1986	63.6%	46.7	\$16,360
1987	36.3%	36.0	\$22,299
1988	33.9%	21.5	\$29,858
1989	77.4%	51.9	\$52,968
1990	21.4%	30.2	\$64,303
1991	189.6%	158.9	\$186,222
1992	27.1%	23.2	\$236,688
1993	66.2%	59.2	\$393,375
1994	45.8%	47.8	\$573,541
1995	69.0%	35.1	\$969,285
1996	74.8%	53.5	\$1,694,310
1997	40.9%	10.5	\$2,387,282
1998	126.2%	100.1	\$5,400,033
1999**	110.0%	98.0	\$11,340,069
Avg. Ret.		70.1%	
Std. Dev.		45.8%	

* Portfolio starts January 1, 1986, with \$10,000.

** 1999 return through June 30.

Could you live with returns like this? These stocks can be yours any year you wish to try them by clicking a few buttons on the Web. No need for any newsletters, TV financial-talk shows, or even prowling the Internet looking for ideas. This is all because the Internet and a few smart software developers and program managers made it possible to bring the tools and data that the top pros have been using for years down to your desktop.

Now let's learn to find a much tamer brand of security in the next chapter: great growth stocks.