7

Diamonds

Valentine's day is tomorrow and I think it a strange coincidence that I am writing about diamonds. Both the stone and the chart pattern are rare, but I think the chart pattern leads the gems. Of the two breakout directions, I am only writing about one of them: downward breakouts. Why? Because I was only able to locate 106 patterns with upward breakouts. That is just not enough on which to perform a statistical analysis. Downward breakouts were not much better. I found 184 of them but combined both diamond tops (154) and bottoms (30) to achieve that number.

In case you are unfamiliar with a diamond top or diamond bottom, I define a top as when prices enter the chart pattern from the bottom; diamond bottoms have prices entering from the top. The thinking behind the arbitrary designations is that there are performance differences. For this study, I only worried about the breakout direction, not whether it was a top or a bottom.

THE TYPICAL PATTERN

You can probably guess what a diamond top looks like. It looks like, well, a diamond. Think of a diamond as back-to-back symmetrical triangles, a broadening top followed by a symmetrical triangle, or a complex head-and-shoulders top. Whatever your description, the chart pattern should look something like that shown in Figure 7.1.

As prices climb, they form higher peaks and lower troughs until the process reverses and the range narrows; the peaks are not quite as tall and the minor lows

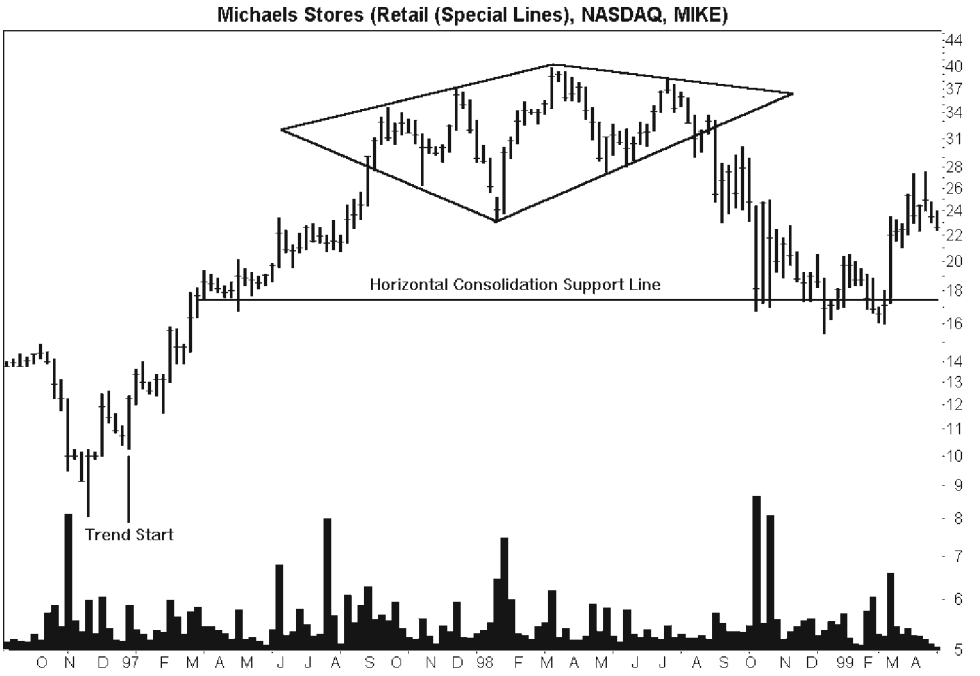

Figure 7.1 A diamond top. Shown on the weekly scale, the large diamond top sees prices break out downward and fall to a support region at 17.63.

are not quite as deep. Eventually, prices drop out of the pattern in a downward breakout, then sometimes pull back to the diamond trendline boundary before slipping away again. If the rise leading to the diamond was unusually quick, the decline after the diamond completes will usually retrace all the gains, leaving investors no better off.

If you are prospecting for diamonds, you might try this trick: Look for the quick rise. Many times that is where you will find a diamond. More about the quick rise later. For now, though, do not expect your diamond to be perfectly symmetrical or diamond shaped. As in Figure 7.1, the trendlines often skew one way or three others, as my dad would say. Watch for a diamond that is really a head-and-shoulders top or a complex head-and-shoulders top. There will be fewer traverses between the trendlines, forming a shoulder, then a higher head, and, finally, a lower right shoulder. Many times, the neckline is the key. If the neckline appears flat, then you have a head-and-shoulders top. Regardless of what you call it, a downward breakout is bad news if you hold the stock. A quick sale is usually best. If you want to short the stock, that is fine, too, just be sure you know what you are doing.

TREND START

Can we make anything of the price trend leading to the diamond top? Yes, and the first set of statistics appears in Table 7.1. Before I discuss the results, let me describe the logic behind the numbers. In my research, I discovered that *when* the trend starts is important to the performance of chart patterns. Most investors define a bull or bear market by a 20% price change, so I decided to apply that rule to the start of a trend.

To find the trend start, move backward in time from the formation start, following prices lower. Make note of each new low and find where prices rise (still moving backward in time!) by 20% or more from the lowest low to the close. When that occurs, the lowest low marks the trend start.

For example, imagine that you have a toboggan about to slide down a large hill. Only a 20% rise will stop the toboggan's downhill run. In Figure 7.1, you climb aboard the toboggan in mid-September 1997 at a price of 31.50 (at the formation start) and begin sliding down, to the left, backward in time. Speed picks up quickly as prices drop away sharply, but soon levels out as prices reach a consolidation zone just below the lowest part of the diamond, at about 21. Prices drop again, plane out, then drop more into late December 1996. You reach bottom at a price of 10.25. Since a minimum 20% rise is the only thing that will stop you (besides a tree—this I know from experience—but I digress), the toboggan starts climbing the next hill, slows, and 3 weeks earlier, at a daily closing price of 12.63, the toboggan stops. Prices continue rising then drop to the November lows, but we have already reached a 20% price change. Thus, the late December low marks the trend start.

Most times, you do not need a calculator to find the trend start, your eyes will usually do. In rare situations like Figure 7.1, the trend appears to start in late November, not December. Whether you use your eyes or a computer to find the trend start in this example, the problem is irrelevant because the trend is long term no matter how you determine its start.

Table 7.1
Average Performance of Diamonds Sorted by Price Trend Leading to the Pattern

Trend Start to Formation Start	Downward Breakouts	Score
Short term (0 to 3 months)	–25% (97)	+1
Intermediate term (3 to 6 months)	–20% (43)	–1
Long term (over 6 months)	–18% (35)	–1

Note: The number of samples appears in parentheses.

The trend start is a key determination as Table 7.1 shows. Diamonds with long-term rises leading to the pattern result in declines averaging 18% after the formation ends. A short-term rise, by comparison, results in a 25% average decline.

I discuss scoring later in this chapter, so just ignore the scores for now.

HORIZONTAL CONSOLIDATION REGIONS

Table 7.2 shows diamond performance when a horizontal consolidation region (HCR) interferes with the price decline. Before I discuss the table, what does an HCR look like?

Figure 7.2 shows what an HCR looks like. An HCR typically has a flat top, flat bottom, or both. Do not worry if prices spike outside the horizontal line. What you are looking for is a flat region with prices stopping near the same level. The region should be large enough to be easily noticeable as a support zone (at least a week and usually much longer). In the figure, the region I used is 3 weeks long, counting from August 5 to 26. For statistical purposes, I did not count the region before August 5 (where the flat bottom becomes a flat top going back to late June). However, the flat top is important because it shows additional support points.

Returning to Table 7.2, we see that diamonds in which an HCR appears show average declines of 21%. This compares to a 24% decline when the consolidation region is missing. In other words, an HCR tends to support prices and block a price decline.

The average length of an HCR is 37 days, long enough for easy identification. I include this statistic to show you that the region should be relatively long, not just a few day's pause.

Table 7.2
Average Performance of Diamonds with and Without a Consolidation Region

Description	Downward Breakouts	Score
Consolidation region	–21% (110)	–1
No consolidation region	–24% (71)	+1
Average length (days)	37	
Prices stop within region ±5%	55% (61)	
Prices push through region	36% (40)	
Prices do not reach region	9% (9)	

Note: The number of samples appears in parentheses.

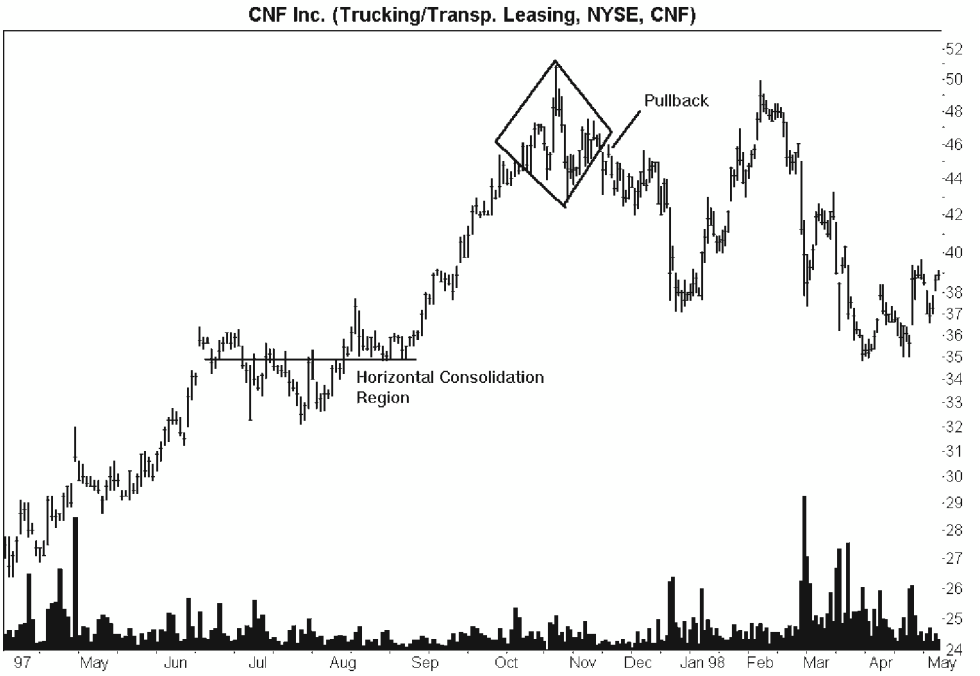

Figure 7.2 An HCR. Look for a price range that has a flat top, flat bottom, or both, between the trend start and the formation low. The area could act as a support zone and stop the decline.

Do prices really stop declining when meeting an HCR? Yes. I added a 5% buffer surrounding the consolidation region to account for those instances when prices fall a bit short or overshoot a smidgen. Fifty-five percent of the time, prices stopped within the consolidation region. In another 36% of the time, prices eventually pushed on through, and the remaining 9% reached their ultimate lows before encountering a consolidation region.

PREFORMATION RISE

Table 7.3 shows statistics for a preformation rise. A more descriptive phrase is *quick rise* because that is what the rise looks like. In a moment, I discuss Figure 7.3 that shows one, but you can see from Table 7.3 that those diamonds with a quick rise leading to the formation decline farther than those without a quick rise, with declines averaging 22.4% and 21.6%, respectively. In an earlier study I conducted, I found that 82% of the time in which a quick rise appears, prices retrace all their gains, sometimes more. Since the numbers are close, the results are not statistically significant, meaning that they could be due to chance.

Table 7.3
Average Performance of Diamonds
with and Without a Preformation Rise

Description	Downward Breakouts
Preformation rise	–22.4% (91)
No preformation rise	–21.6% (90)
Number of times prices retrace all gains	70/85 or 82%

Note: The number of samples appears in parentheses.

Figure 7.3 shows what a preformation rise looks like. The price climb is unusually sharp and short leading to the formation. I would guess that the sharper the climb, the more likely it is that prices will give back all their gains. In the figure, you can see that prices take off from the launch point of about 104, rise to the diamond in about 3 weeks, reverse course, and plunge back to 104 in about the same time.

A quick rise is typical behavior for a diamond. In the 147 diamonds I examined, 85 or 58% showed a quick rise, and of those, 82% retraced all their

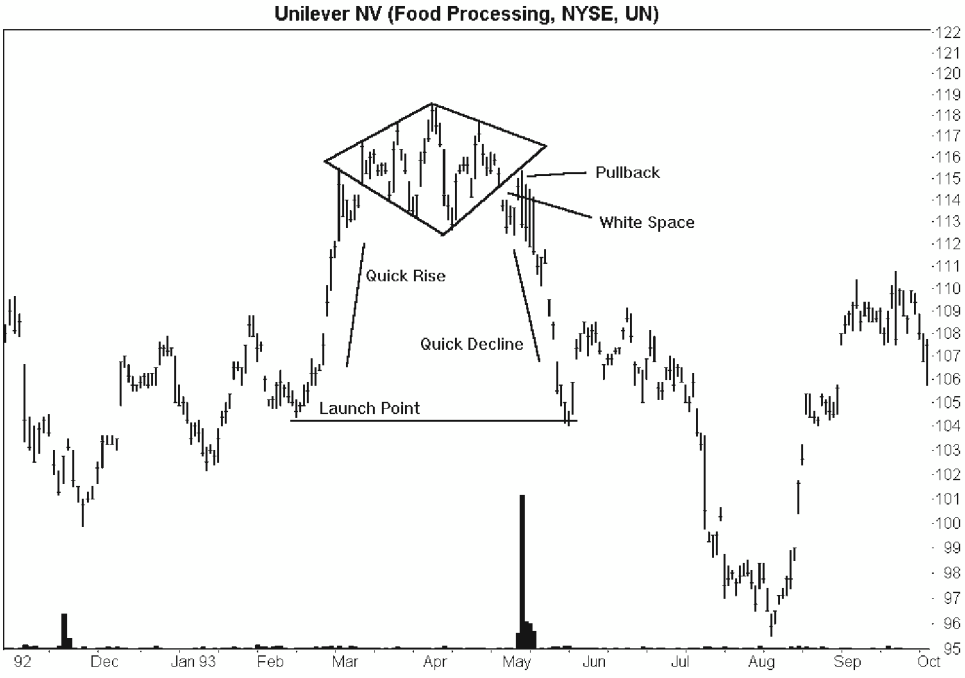

Figure 7.3 A preformation rise. When a quick price rise leads to a diamond, chances are that the decline after the diamond will meet or exceed the preformation rise.

gains. A quick rise can be an identification clue to a diamond formation. If there is a diamond, wait for the downward breakout before selling, or selling short, because the breakout might be upward instead.

INSIDE THE PATTERN

Table 7.4 shows important statistical findings for diamonds. As a rare formation, I only uncovered 184 diamonds in the 700+ stocks I looked at. Still, the number provides enough samples in which to make a valid statistical analysis.

After a downward breakout, prices decline 22%, on average. When you look at all bearish formation types, they sport an average decline of 21%, so diamonds do comparatively well.

I consider the average decline to be a best-case number. Why? Because I measure the rise from the breakout price to the ultimate low, a low that occurs before a 20% rise in prices (signaling a trend change). I have yet to complete a trade that captures both the breakout price and the lowest low at the ultimate low.

Measured from the breakout date to the date of the ultimate low, I found that the S&P 500 Index climbed 3% even as stocks showing diamonds declined 22%. I discuss the influence of the general market later, but the result is interesting. On the surface, the result suggests that the decline from a diamond is powerful enough to swim against the market current.

The median decline is the midrange value such that half the samples are above the median and half are below. To find the median, sort the returns in order and pick the middle one. For diamonds, the median is 21%, very close to the 22% average, suggesting that I found few outliers to distort the average decline.

I am not sure that declines more than 50% are a meaningful measure for bearish formations because it is exceedingly rare for a stock to decline more than 50%. Still, 3% of the diamonds I looked at declined by at least that much.

Table 7.4
Important Statistical Findings

Description	Downward Breakouts
Number of formations	184
Average decline	22%
Standard & Poor's 500 change	+3%
Median decline	21%
Declines more than 50%	6/181 or 3%

FAILURE RATES

Table 7.5 shows the various failure rates for a maximum price decline. For example, 8 or 4% of the diamonds I looked at failed to decline more than 5%. Another 21, for a total of 29 or 16%, declined less than 10%. You can see how the 5% failure rate is deceptively small. The failure rate quadruples to 16% for a price decline of 10%, nearly doubles again to 28%, and again to 47% for price declines of 15% and 20%, respectively. I would like to say that the large percentage increase in failure rates is uncommon, but it appears to be the norm for most chart pattern varieties.

Table 7.6 shows the horizon failure rate. The horizon failure rate is a new concept that compares the breakout price with the price in the future. For example, after 1 week, 8% of the stocks with diamonds had closing prices that climbed above the breakout price, that is, they failed to descend. At the end of the first week, the decline for all diamonds averaged 7%.

You can see in the table that the failure rate stays steady for the first 2 weeks, then begins climbing as more formations have prices rising above the breakout price. At the end of 6 months, over a third are higher than the breakout. Alternatively—and optimistically—64% still show declines.

The average decline marches upward from 7% to 9%, then plateaus at 10%. This trend, how the decline comes quickly, reminds me of the preformation rise. Prices zip up, execute a diamond reversal, then zip back down. It may be that many of the diamonds return to base camp after a month and stay there.

Table 7.5
Maximum Price Decline Versus Failure Rate

Maximum Price Decline (%)	Downward Breakout Failure Rate
5	8 or 4%
10	29 or 16%
15	51 or 28%
20	85 or 47%
25	118 or 65%
30	136 or 75%
35	150 or 83%
50	174 or 96%
75	181 or 100%
100	181 or 100%

Note: The sample count is 181 for each row.

Table 7.6
Horizon Failure Rates and Average Decline

Time Since Breakout	Downward Breakout Failure Rate (%)	Downward Breakout Average Decline (%)
1 week	8	7
2 weeks	8	9
3 weeks	12	9
1 month	15	10
2 months	24	10
3 months	30	10
6 months	36	10

YEARLY PRICE RANGE

Table 7.7 shows the performance after a downward breakout sorted by the breakout price in the yearly price range. Since that may sound confusing, let me explain how I found the results. For each chart pattern, I looked from the breakout date backward 1 year and found the highest high and lowest low over that period. Then I split the high–low price range into thirds and placed the breakout price into one of the three ranges. For each period, I averaged the performance after the breakout and the table shows the results. The best performance comes from those diamonds with breakouts near the yearly low. They declined 29%, but beware of the small sample size (the result may not be accurate). Those diamonds with breakouts in the middle of the yearly price range performed worst, with declines averaging 19%.

The trend, where bearish chart patterns show the best performance near the yearly low, is in agreement with other bearish chart patterns. It suggests you do best when shorting a stock making a new yearly low than when trying to short one making new yearly highs.

Table 7.7
Average Performance Sorted by Breakout Price According to Prior 12-Month Range

Yearly Price Range	Downward Breakouts	Score
Highest third	–20% (87)	–1
Middle third	–19% (45)	–1
Lowest third	–29% (23)	+1

Note: The number of samples appears in parentheses.

Table 7.8
Performance of Short and Tall Diamonds

Description	Result	Score
Tall (above the median)	–27% (91)	+1
Short (below the median)	–18% (90)	–1
Median percentage of breakout price	12.95%	

Note: The number of samples appears in parentheses.

TALL AND SHORT PATTERNS

Table 7.8 never ceases to amaze me because of the wide performance difference for most of the popular chart patterns. Usually, tall patterns handily outperform short ones. To find the result, I measured the height of each diamond as a percentage of the breakout price, sorted the results, and chose the median value as the cutoff between short and tall.

Let me give you an example of how I did this. Look back at Figure 7.3. The highest high in the formation is at 118.50, and the lowest low is 112.63, with a breakout price of 114. The height 5.87 (that is, 118.50 – 112.63) as a percentage of the breakout price is 5%, or 5.87/114. Thus, the diamond is a short one. Prices declined 16% on their way to the ultimate low.

VOLUME TREND

Table 7.9 shows the results of a volume trend study. I used linear regression (the trend function in many spreadsheets) to determine the slope of the line from the formation start to its end on the volume data. When volume was trending upward, diamonds declined by an average 23% after the breakout. This result compares to a 22% decline when the volume was trending downward. Since the numbers are so close, the differences are not statistically significant.

Table 7.9
Linear Regression Volume Trend and Performance

Description	Result
Rising volume trend	–23% (55)
Falling volume trend	–22% (126)

Note: The number of samples appears in parentheses.

Table 7.10
Breakout Volume and Performance

Description	Result
Average decline on above-average breakout volume	21% (29)
Average decline on average or below-average breakout volume	22% (152)

Note: The number of samples appears in parentheses.

BREAKOUT VOLUME

Table 7.10 shows the results for those chart patterns having a heavy volume breakout compared to an average or below-average volume breakout. Diamonds with heavy breakout volume declined an average of 21%. This result compares to a 22% decline when the breakout volume was average or below average. I would expect a high volume breakout to propel prices down further, but this does not occur, leading me to wonder about the statistics. Since the numbers are so close and with the low sample counts, the differences are not statistically significant.

PULLBACKS

Are there peculiarities to diamonds that occur after the breakout? Yes, and Table 7.11 shows the effects of a pullback.

A pullback is just like a throwback only it occurs after a downward breakout instead of an upward one. By my definition, after a downward breakout, prices return to the breakout price within 30 days, completing the pullback. The 30-day limit is an arbitrary one but one that is commonly recognized. Any return to the breakout price after that is simply normal price action and not the result of a pullback.

To consider a pullback valid, prices must decline low enough to show white space between the breakout price and the daily price range. Take a look at Figure 7.3, and you will see what I mean. The price gaps downward out of the formation on the breakout day, curls around, and closes the gap. Prices return to the breakout price (and continue somewhat higher in the example) with white space between the breakout price and the curling price action. Figure 7.2 shows another example of a pullback, but it is less clear.

Pullbacks are comparatively frequent, occurring 54% of the time in the diamonds I looked at.

I base the score on pullback performance, discussed in a moment.

Table 7.11
Pullback Statistics

Description	Result
Pullbacks	100/184 or 54%
Score if pullback predicted	–1
Score if pullback not predicted	+1
Ultimate low before pullback	25 or 17%
Average decline on above-average breakout volume with pullbacks	20%
Average decline on above-average breakout volume and no pullbacks	22%
Average decline on average or below-average breakout volume and pullbacks	19%
Average decline on average or below-average breakout volume and no pullbacks	26%
Number of pullbacks after a high or very high volume breakout	12/29 or 41%
Number of pullbacks after an average, low, or very low volume breakout	88/155 or 57%
Number of pullbacks that stopped less than 5% from the breakout price	81 or 81%
Number of pullbacks that stopped between the breakout price and diamond top	5 or 5%
Number of pullbacks that stopped above the diamond top	12 or 12%

How often does the ultimate low occur before a pullback completes? In 25 cases, or 17% of the time, prices reach the ultimate low then pull back and continue up. This statistic suggests that it might be wise to cover your short if you detect prices rising on their way to pulling back. After the pullback completes and prices start back down, you can always short the stock again.

Does a pullback influence how far prices will decline? Yes. As you can see from Table 7.11 in the average decline section, when a pullback occurs after a high volume breakout, the average decline from a diamond top is 20%. After a high volume breakout but no pullback, the average decline measures 22%.

The trend is also the same after an average or below-average volume breakout. The average decline from a diamond top showing a pullback with an average or below-average volume breakout is 19%; without a pullback, the loss measures 26%. In other words, a pullback is detrimental to performance, regardless of the breakout volume.

To avoid a pullback, look for a high volume downward breakout, one that has no support zones near the breakout price. The support zones may appear as a consolidation region or prior minor lows or highs.

Are pullbacks more likely to occur after a high or low volume breakout? For diamonds, prices seem to pull back more often after an average or below

average volume breakout (41% pull back after a high-volume breakout and 57% after an average or below-average volume breakout). This follows a trend I have seen with other chart patterns. Prices are more likely to *throw back* after an *upward*, high volume, breakout, but pullbacks occur more often after a low volume breakout. I think the reason for this concerns momentum. Technical analysts say that rising prices need comparatively high, sustained volume to push higher, but downward breakouts can fall because of their own weight. A downward breakout on high volume may push prices down too far to recover with a pullback.

The behavior is a lot like spitting. If you spit *with* the wind, your spit travels farther than if you spit against the wind, in which case, you get a face full (I persuaded a friend to test this hypothesis and told him I needed 30 samples!).

After a pullback, where do prices stop? Almost all the time (81%), prices return to within 5% of the breakout price. Another 5% of the time, prices rise to between the breakout price and the diamond top. The remainder of the time, 12%, prices soared above the diamond top. Note that there was no overlap between the three regions.

What these results suggest is that you should place a stop-loss order more than 5% above the breakout price, preferably above a nearby minor low or other resistance area**.** On average, the stop will be hit once every five trades.

BEAR TRAPS

Table 7.12 shows bear trap frequency. A bear trap occurs when prices drop less than 10%, then climb above the formation top. If investors were to short the stock after the breakout, there is a chance they would be *trapped* in a losing position as prices climbed. The table shows that a bear trap occurs 16% of the time. That result is quite small but not zero, so a bear trap is something you need to be aware of and avoid, if possible.

What does a bear trap look like? Figure 7.4 shows a good example. Prices broke out downward at a price of 15.13, dropped to a low of 13.88—for a decline of 8%—then found support and recovered their losses. Prices pulled back to the breakout price and kept moving upward, finally reaching a high of 16.63, comfortably above the diamond top.

Table 7.12
Bear Traps

Description	Downward Breakouts
Bear trap frequency	29/184 or 16%
Score if trap predicted	–1
Score if trap not predicted	+1

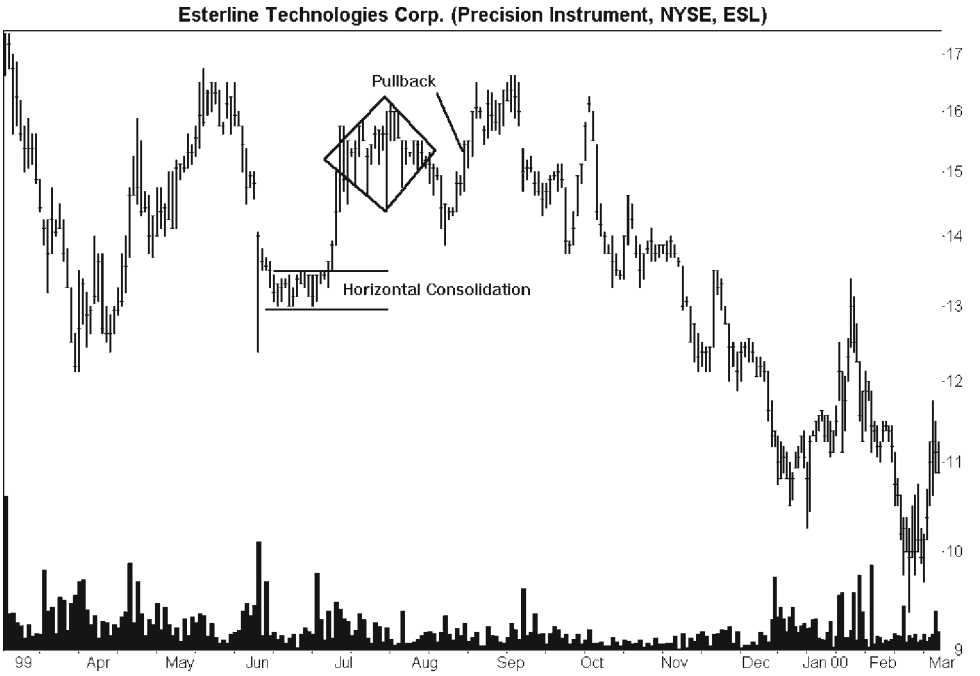

Figure 7.4 A bear trap. Avoid a bear trap by looking for a support region below the breakout price. In this case, an HCR acted as a support zone and prevented prices from descending far, causing a bear trap.

To avoid a bear trap, look for nearby support zones. Sometimes the zone will be an HCR as mentioned in the Table 7.2 discussion, and sometimes prices will hang up on a minor high or low. If you do not see any support zones, and with a trap frequency of just 16%, you should be fine.

GAPS

The results of gap analysis surprise me. Before I explain, look back at the breakout in Figure 7.3. Prices gapped lower, meaning that the daily high price on the breakout day was below the prior day's low, leaving a visible price gap. Four days later, the gap closed when prices climbed and completely covered the gap.

In Table 7.13, we find that only 33 diamonds showed a price gap on the breakout day. When a gap occurred, prices declined an average 18% before reaching the ultimate low and rebounding. This statistic compares to a 23% decline for all diamonds without gaps. Usually, a gap signals enthusiasm and prices decline further, but not in this case. My guess is that the comparatively low sample count is the reason for the unusual results, but it may be that diamonds and gaps just do not get along. In this case, gaps impede performance.

Table 7.13
Gaps and Performance

Description	Result	Score
Average decline after price gap on breakout	18% (33)	–1
Average decline with no price gap on breakout	23% (148)	+1

Note: The number of samples appears in parentheses.

MARKET TREND

Table 7.14 shows the influence of a rising or falling market on diamond performance. During creation of the diamond top (FS to FE), if the market was rising, then prices tended to fall further after the breakout, by 24%, than if the market was falling over the same period (showing a 19% average decline after the breakout). This result is almost opposite the performance from the formation end to the ultimate low. There, a rising tide that usually lifts all boats seems to lift the falling stocks also: They declined by only 20%. When the general market was falling during the breakout to the ultimate low, then those stocks showing diamonds also scored better by declining an average of 23%.

Incidentally, I base the scores on the formation start to end period (FS to FE) because you cannot tell ahead of time how the general market will behave after the breakout.

MARKET CAPITALIZATION

Table 7.15 shows how much better small caps perform than do large caps. I computed the market capitalization of a stock by multiplying the number of shares outstanding times the breakout price. Then, I grouped the associated diamonds into their appropriate capitalization category. Small caps declined farthest, 27%, while mid and large caps declined less—23% and 19%, respectively. If you intend to short a stock, pick a small cap. If you own a stock and it

Table 7.14
Average Price Performance of Diamonds
During a Rising and Falling Market

Market Trend	FS to FE	Score	FE to UL
Rising S&P 500, down breakout	–24% (125)	+1	–20% (64)
Falling S&P 500, down breakout	–19% (56)	–1	–23% (117)

Note: FS = formation start, FE = formation end, UL = ultimate low. The number of samples appears in parentheses.

Table 7.15
Average Price Performance of
Diamonds by Market Capitalization

Capitalization	Down Breakouts	Score
Small cap (up to $1 billion)	–27% (55)	+1
Mid cap ($1 to $5 billion)	–23% (76)	+1
Large cap (over $5 billion)	–19% (48)	–1

Note: The number of samples appears in parentheses.

shows a diamond top, either sell it outright or pray that the stock is a large cap. They hold up best.

SCORES

How do you use the scoring system to improve your trading performance? The case studies that follow give examples of how to score your chart pattern. Generally, you evaluate your diamond according to each table showing a score. Add the scores together. Scores above zero tend to beat the median decline, whereas those below zero usually perform worse than the median.

Table 7.16 shows the statistics for the scoring system. When the scores total above zero, the diamonds with downward breakouts showed losses averaging 28%. This result compares with a 13% loss when the scores were below zero. That is not to say that the system is perfect. The system correctly signaled a sell short candidate 68% of the time. That statistic means the score was above zero and the resulting performance beat the median decline. The system correctly said avoid shorting a stock 83% of the time. That statistic means the score was below zero and the resulting decline was less than the median.

Table 7.16
Formation Performance by Score

Score	Down Breakouts
Average decline of chart patterns with scores above zero	28%
Average decline of chart patterns with scores below zero	13%
Median decline used	20.04%
Percentage with scores above zero beating median decline	68/100 or 68%
Percentage with scores below zero doing worse than median decline	45/54 or 83%

CASE STUDY 1

Throughout this chapter, various tables show scores to assist in the ranking of chart patterns. This case study and Case Study 2 show you how to use those scores.

Consider the diamond top shown in Figure 7.5. At first glance, the diamond may appear oddly placed as it occurs during an upward retrace in a downtrend. Another view shows that the diamond forms at the top of a corrective phase of a measured move down. The first leg is from point A to the trend start; the corrective phase runs from the trend start to the diamond top, and the second leg down starts at the diamond top and finishes at the ultimate low. The theory behind measured moves (either up or down), is that the second leg will approximate the size of the first leg. In this case, the first leg decline measures 11.07 while the second leg measures 7.38. On a percentage basis, the declines are closer: 41% for the first leg and 37% for the second. The corrective phase of the measured move down also looks proportional to the size of the first leg. It reminds me of the three bears story: not too large, not too small.

Finally, look at the short, quick price rise leading to the diamond. In just over 2 weeks the stock climbed 25% from about 16 to 20. It is reasonable to

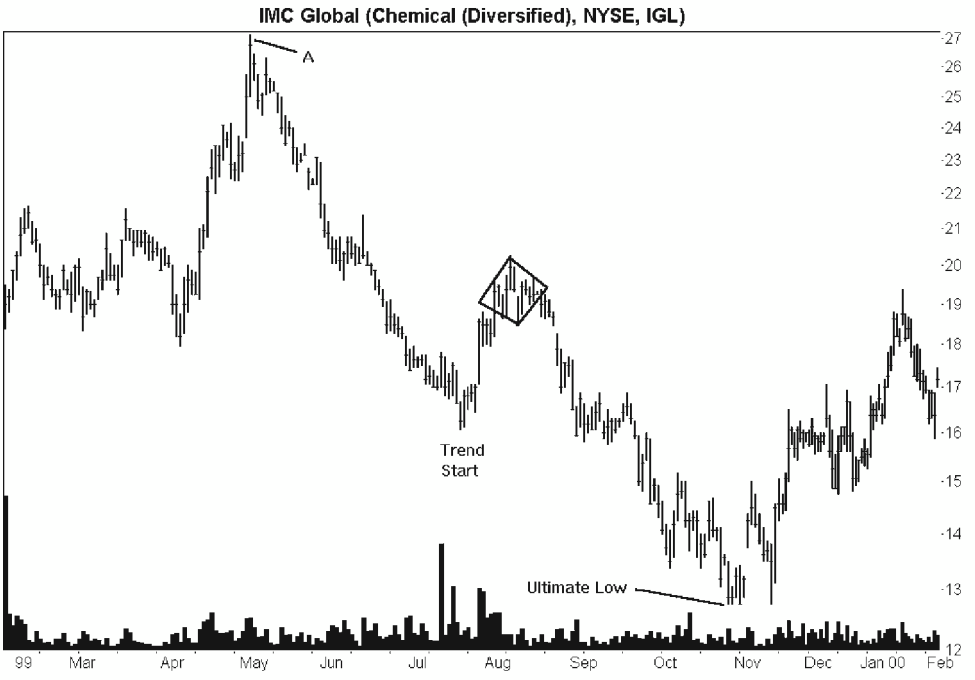

Figure 7.5 A small diamond top with downward breakout. This diamond appears at the top of the corrective phase of a measured move down formation that runs from point A to the ultimate low.

expect that those quick gains would be lost after a downward breakout, and, indeed, they were.

Now, to the scores. Table 7.1 showed the resulting performance of diamonds sorted by the price trend leading to the formation. In Figure 7.5, clearly the trend starts in mid-July, as marked on the figure. Before that low, prices climbed more than 20% (as measured from the lowest low to the close), signaling a trend change. The time from the trend start to the formation start is less than 3 months, placing it in the short-term category, for a +1 score.

Table 7.2 discusses an HCR. From the trend start to the lowest low in the diamond, there is no consolidation region where prices would likely pause. No support beneath the diamond suggests good performance, for a +1 score. Running total: +2.

Skipping to the next table with a score, Table 7.7, we see the diamond performance sorted by the yearly price range. The yearly high, looking backward from the breakout date, is at 27.31, shown as point A. The yearly low, 16.06, occurs at the trend start. The breakout, at 18.81, is within a third of the yearly low. That scores +1 according to Table 7.7. Running total: +3

Is the diamond a tall one? You can probably guess that it is a shorty, but check to be sure. The highest high in the diamond is at 20.13 and the low is at 18.50 with an 18.81 breakout price. The height, 1.63 (or 20.13 – 18.50), expressed as a percentage of the breakout, measures 9% (that is, 1.63/18.81). This result is shorter than the median 12.95% cutoff from Table 7.8. The diamond is short, scoring –1. Running total: +2.

Table 7.11 lists the performance of diamonds and pullbacks. Without a support zone beneath the diamond, and coupled with the quick rise, I consider a pullback unlikely. Since prices stopped declining at 16.06 on the way to the trend start, that price would be the first area in which the stock may find support. A climb back to the breakout point would mean a rise of 21% in less than 30 days. That is not unheard of, but it certainly is unlikely, especially when a pullback only occurs about half the time (54%). Score: +1. Running total: +3.

For the very same reasons that a pullback would not occur, a bear trap is unlikely (see Table 7.12). Recall that a bear trap is a decline of less than 10% followed by a rise above the formation top. Since a sharp decline after the breakout often follows a preformation rise and since a support zone is not nearby, a bear trap would be unlikely. Score: +1. Running total: +4.

The breakout day is the day prices closed outside the diamond trendline. On that day, prices did not gap downward, so Table 7.11 scores that a +1. Running total of +5.

How did the general market perform from the formation start to the end? During that time, the Standard & Poor's 500 Index climbed. A rising market during FS to FE, according to Table 7.14, suggests good performance for a score of +1 and a running total of +6. Let me add that the S&P also declined from the formation end to the ultimate low, but there was no way of predicting that.

The last table, Table 7.15, shows performance sorted by market capitalization. With a breakout price of 18.81, the stock falls into the mid cap category for a score of +1. The final total is +7.

How did the stock perform? From the breakout price of 18.81, you can see that prices quickly dropped to the price of the trend start, then moved sideways for 3 weeks. The decline resumed, reaching a new multiyear low of 12.75 in late October. The decline measured 32%, well beyond the 20.04% median, as predicted.

Let me caution you that sometimes the results of the scoring system are not this clean. On rare occasions, I have seen a perfect score result in below-average performance. Just because the scoring system says the stock is a buy candidate is no reason to throw caution to the wind and mortgage the farm (or to invest some of those millions from your dot.com winnings, to bring the analogy up to date).

CASE STUDY 2

Take a look at Figure 7.6, a diamond hidden in the rough. I did not mention it in this chapter so far, but when a flat base appears, a stock is likely to stop

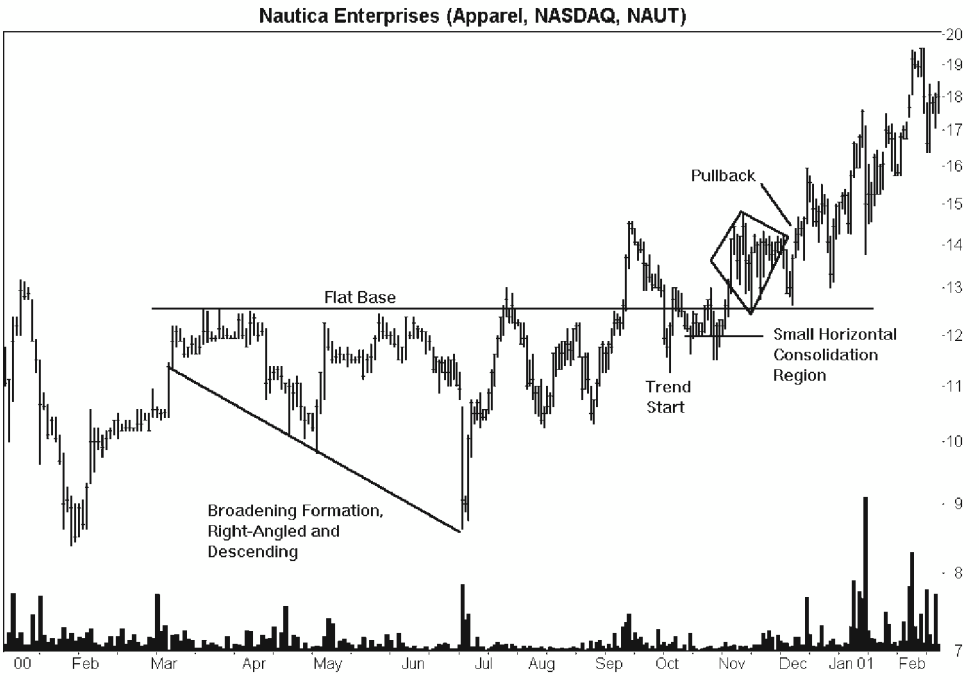

Figure 7.6 A diamond top hidden in a choppy price environment. A partial decline from a broadening formation, right-angled and descending, predicted higher prices. A flat base lent support to prices after the breakout.

declining at that point. Those diamonds springing from a flat base showed declines averaging 19% compared to a 23% average decline without a flat base.

To me, a flat base is a lot like an HCR, where prices either have flat tops, flat bottoms, or both. With a flat base, the consolidation lasts much longer, usually months, with prices touching the same level multiple times. Such is the case in the figure. Prices climbed repeatedly to 12.50 then stalled. The March to mid-June price pattern is a right-angled, descending, broadening formation, one with lower lows, forming the flat base as its top. The twin minor lows in August did not approach the depth of the June low or the down-sloping broadening formation trendline—signaling a partial decline—and suggesting an upward breakout.

What about scoring the diamond top? Running quickly through the tables we find the following.

Table 7.1: Trend start. The trend started in early October, placing the rise in the short-term category for a +1 score.

Table 7.2: Horizontal consolidation region. From the trend start, there are several touches at a price of 12 that are obscured by a few downward spikes. On my charts, I called it an HCR. Certainly the flat base at 12.50 sets up a support zone, one that would make a sustained downward price move less likely. Score: –1. Running total: 0.

Table 7.7: Yearly price range. The yearly high is at 14.75, the yearly low is at 8.38, and the breakout is priced at 14.19. Thus, the breakout is near the yearly high for a –1 score. Running total: –1.

Table 7.8: Tall or short. The formation high is at 14.75, the bottom at 12.50, for a height as a percentage of the breakout of 15.86%. That rates it a tall diamond. Score: +1. Running total: 0.

Table 7.11: Pullback. Is a pullback predicted? Yes. With prices trending higher from the June low, coupled with the small HCR and the longer flat base, there was ample reason to expect a pullback to the breakout price. Score: –1. Running total: –1.

Table 7.12: Bear traps. Knowing that a flat base—a support zone—was at 12.50, I would consider it likely that prices would stop near that level. Factoring in the upward price trend since June, that might be enough to take prices above the diamond top, completing a bear trap. Score: –1 for a running total of –2.

Table 7.13: Gaps. There was no breakout gap. Score: +1 for a running total of –1.

Table 7.14: Market trend. During creation of the formation, the market was falling, giving a score of –1. Running total: –2.

Table 7.15: Market capitalization. The stock is a small cap. Score: +1 for a final total of –1.

Scores above zero mean good performance; below zero mean poor performance. When the score totals zero exactly, the system sounds a note of caution. The closer to zero the score is, the weaker the signal.

How did the stock do? After the breakout at 14.19, prices dropped to a low of 12.63, pulled back and continued higher. On a percentage basis, the decline measured 11%, well below the median 20.04% decline.