

A different BREED of SCALLOP

Inverted ascending scallop patterns with U-shaped volume patterns perform better than other varieties. Read on to find out more about this unusual chart pattern.

BY THOMAS N. BULKOWSKI

With all the chart patterns and indicators out there, who needs another one? While there is a lot of similarity between many well-known patterns, continued research and study can reveal nuances or previously overlooked relationships that offer improved trade possibilities. And, after all, if there was a chance to find a chart pattern or indicator that worked better than anything else you knew about, wouldn't you want to look into it?

That's the impetus behind the search for "new" chart patterns, including a variation of the ascending scallop pattern called the inverted ascending scallop. It most often functions as a continuation pattern, but it can also take the form of a reversal. This new scallop pattern holds promise as a good chart formation, and along the way it also reveals a few surprises.

Identifying the pattern

Identifying new chart patterns is a fuzzy process because there are no recognition guidelines steering you. You first notice a pattern and then look for others that appear similar, changing the identification guidelines along the way as you become more familiar with the pattern, and reviewing your examples to see which patterns still satisfy the revamped

requirements. Table 1 (below) lists the guidelines used in this study of the inverted ascending scallop.

Although this study used patterns found on daily charts, larger, longer-term patterns also appear on weekly charts. Price should be trending upward as it leads into the pattern; if a downtrend is in effect, the pattern must confirm. These patterns do not often appear in downtrends, except when they act as reversals.

The inverted ascending scallop takes the shape of a backward, upside-down

The most common retracement of the patterns in this study was about half the up move. Finally, price must close above the highest high in the pattern to confirm the pattern.

In Figure 1, price is climbing before the pattern forms. It then gaps up and trades sharply higher (the stem of the "J") before beginning to round over. The retracement of the rounding portion of the pattern can never be 100 percent, but it can come close — six patterns (out of a few hundred) retraced over 90 percent.

TABLE 1 IDENTIFICATION CRITERIA FOR THE INVERTED ASCENDING SCALLOP

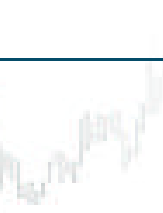
Criterion	Guideline
Time frame	Daily
Preceding price action	Price must be trending up
Shape	An inverted, backward J-shape
Retracement	Less than 100 percent, and usually about 50 percent of the prior up move
Confirmation	Price must close above the highest high before the pattern becomes valid

"J," similar to the right half of an umbrella. The long stem of the J comes first, followed by a rounding turn at the top of the pattern (see Figure 1, opposite page). The rounding turn is usually smooth for small patterns ("jagged" ones were not included in the study), but for larger patterns, a graceful turn of minor highs with gaps between them is fine. The retracement of the "J" up move, when price curls over and heads back down, must not exceed the pattern's low.

The average retracement is approximately 50 percent. From there, price resumes its upward climb and confirms the pattern when it closes above the highest high of the rounding portion (the breakout level).

The volume component

Figure 2 (opposite page) shows another example of an inverted scallop, this one accompanied by a dome-shaped volume trend. The post-breakout performance of



inverted scallops with these dome-shaped volume trends is not as promising as patterns with different volume patterns. For example, Figure 3 (p. 34) shows a U-shaped volume trend.

If you ignore the shape of the volume trend and use linear regression on the volume pattern, those with up-sloping volume trends have better post-breakout performance than those with down-sloping volume trends.

Focus on failure

Figure 4 (p. 34) shows an example of what appears to be a large inverted scallop pattern. The volume pattern is U-shaped over the course of the price pattern, and the stock climbs up, rounds over and retraces a portion of the previous up move.

Although price pokes out above the top of the pattern for two days, the pattern nonetheless looks like a large inverted ascending scallop. But it's not.

Look again. After the January 2002 top, price continued to round over, making a low in February. It then rallied into March before turning lower again. In July, price dropped below the pattern's lowest low — without ever having traded above the highest high of the pattern. In other words, the pattern didn't confirm, so it's not a valid scallop.

Hundreds of scallops and none to eat

A study of 447 inverted scallops revealed a great deal about their characteristics. The patterns were separated according to whether they occurred in bull or bear markets. The bull market period

continued on p. 34

FIGURE 1 THE INVERTED ASCENDING SCALLOP

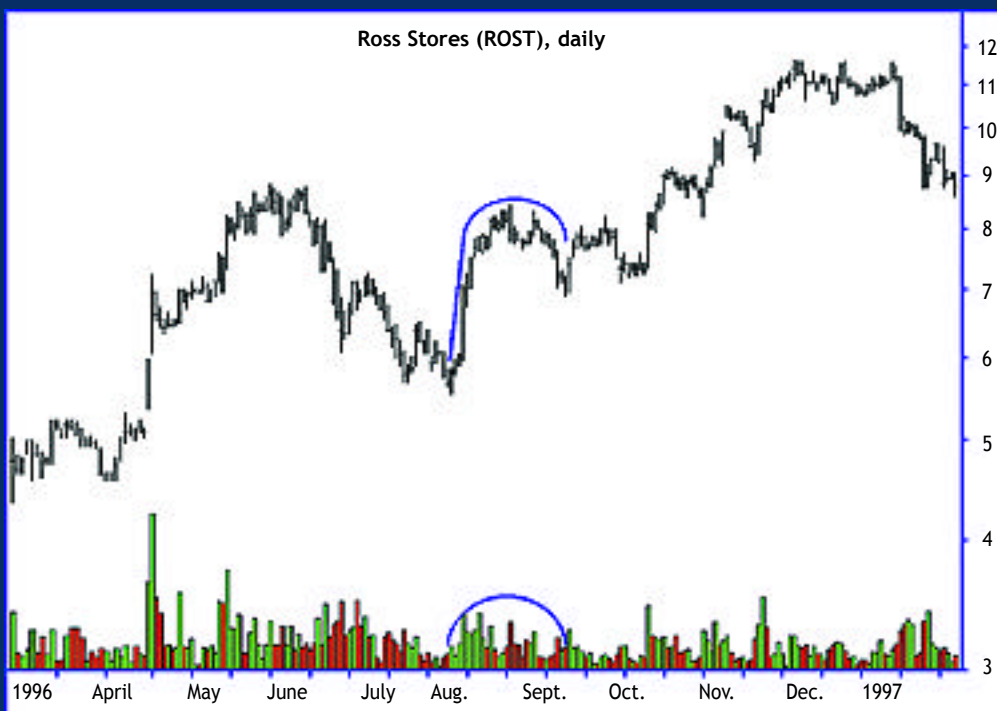
An inverted ascending scallop looks like the right half of an umbrella or an upside down, backward J. When preceded by a rally, scallops are typically followed by continuations of the up move. The pattern is confirmed when price closes above the high of the rounded-top portion of the pattern.



Source: Proprietary software (Thomas Bulkowski)

FIGURE 2 THE VOLUME COMPONENT

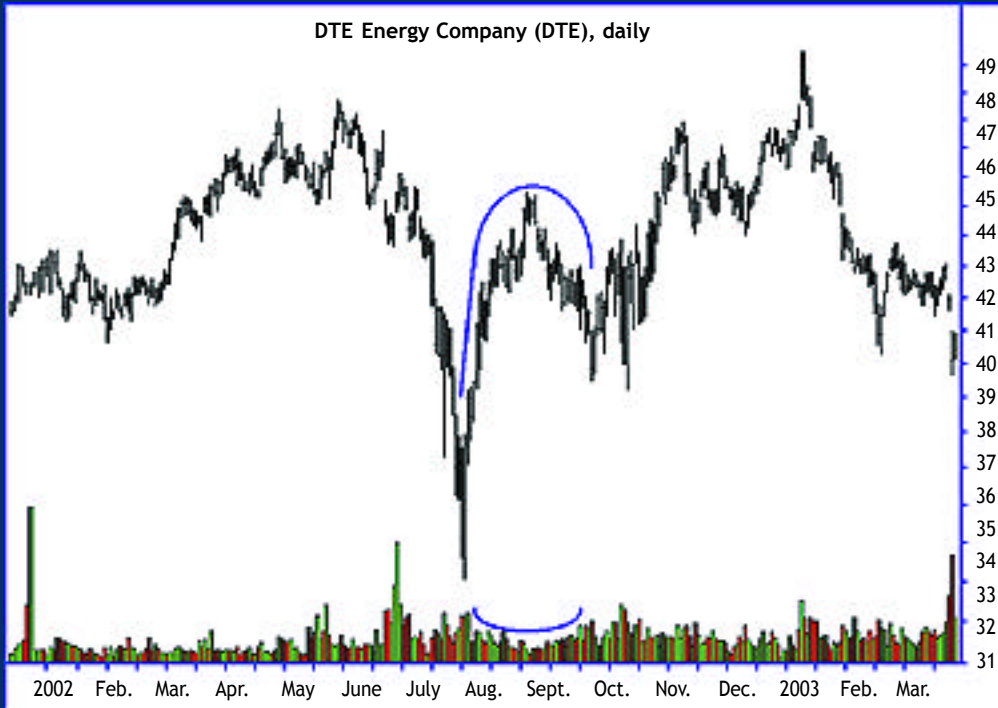
This inverted ascending scallop is accompanied by a dome-shaped volume trend. These inverted scallops tend to perform worse than those accompanied by U-shaped volume patterns, but better than scallops with no discernible volume pattern.



Source: Proprietary software (Thomas Bulkowski)

FIGURE 3 MOST FAVORABLE VOLUME PATTERN

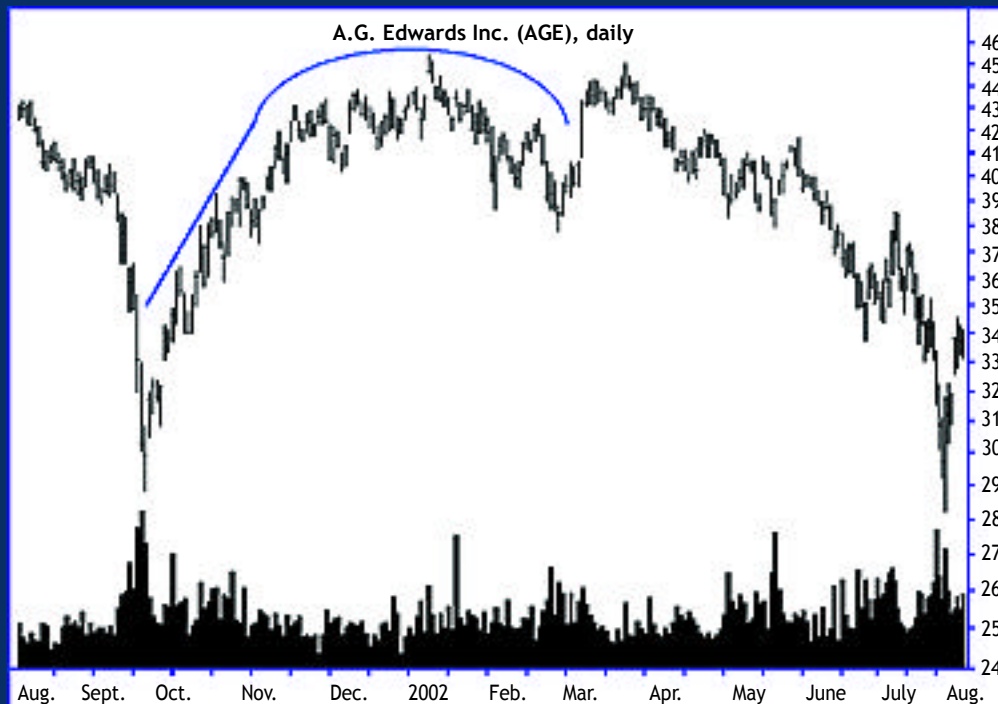
This inverted scallop has a U-shaped volume trend. Although they are rare, scallop patterns with this volume pattern perform best. In general, scallops with up-sloping volume trends perform better than those with down-sloping volume trends.



Source: Proprietary software (Thomas Bulkowski)

FIGURE 4 FALSE PATTERN: FAILURE TO CONFIRM

This might look like an inverted ascending scallop, but it's not. The pattern never confirms (by closing above the pattern's highest high) before price drops below the pattern's low.



Source: Proprietary software (Thomas Bulkowski)

encompassed the three years before March 24, 2000, and the bear market spanned the three years after that date, ending March 12, 2003. The database used about 200 common stocks, with about half the patterns coming from each market segment.

Table 2 (opposite page) shows most of the inverted scallops acted as continuation patterns within a prevailing uptrend, but many (approximately 32 percent) acted as reversals. The reversals occurred at the end of downtrends when the pattern confirmed and price climbed, at least for a little while.

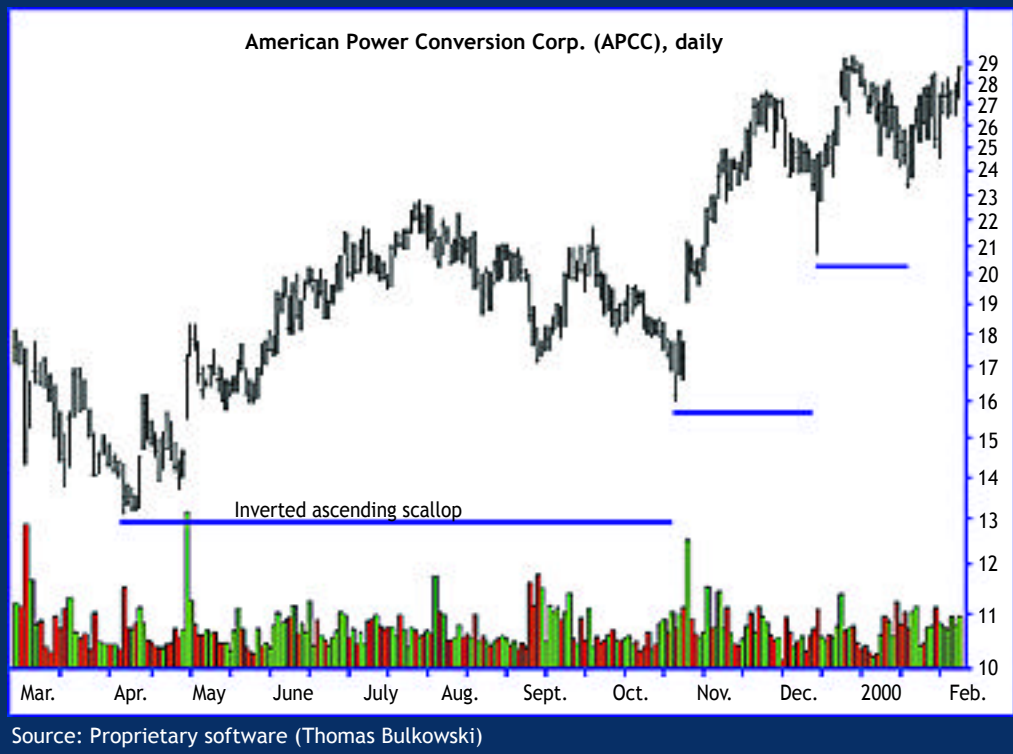
Only four percent of the inverted scallops in bull markets were followed by rallies of less than five percent (the "5-percent failure rate") above the high of the rounding portion of the pattern. Sixteen percent of the scallop patterns failed to produce a 10-percent rally, and 28 percent did not result in up moves of 15 percent. In bear markets, the failure rates had a similar trend.

Approximately 35 percent of the bull market patterns and 21 percent of the bear market patterns climbed more than 45 percent after the breakout. That's worth knowing if you expect a pattern to perform exceedingly well. Note how the bull market performance is nearly double the bear market performance. Patterns in both kinds of market conditions break out to the upside, but the ones in bull markets do much better.

The average rise to the ultimate high (the highest high before price dropped 20 percent, measured from the highest high to the closing price) was 37 percent in bull markets and 26 percent in

FIGURE 5 HINTING AT A TOP

The inverted ascending scallop sometimes becomes increasingly narrow as it reaches its peak, suggesting when the actual top might appear.



bear markets. This suggests the influence of the market type (bull or bear) on an individual stock's performance. After the breakout, it took nearly three months, on average, for price to reach the ultimate high. (Patience can be rewarded.)

The post-breakout performance of inverted scallop reversal patterns was the same as that for inverted scallop continuation patterns — 37 percent in bull markets and 26 percent in bear markets. It is unusual for reversals and continuations to perform similarly, but that's what the study found.

Figure 5 (right) shows an anomaly that also occurs in other types of scallop patterns, particularly the non-inverted ascending scallop.

In a series of multiple inverted ascending scallops in the same rising price trend, the scallops tend to get narrower the higher up in the trend the pattern appears. This happened in 59 percent of the 153 scallops that had at least one other scallop in the same price trend; wider scallops occurred 41 percent of the time. In both bull and bear markets, performance deteriorated the higher up the price chain the scallops appeared.

The inverted ascending scallop *height* was unchanged, meaning that inverted scallops did not get shorter (like their non-inverted counterparts).

Closing position

The inverted ascending scallop is a new pattern that climbs an average of 37 percent in bull markets in less than three months. The pattern's failure rates are low, but climb quickly as the failure threshold increases.

Inverted scallops with dome-shaped or U-shaped volume trends perform better than those with random volume patterns. A series of scallops in a rising price trend tend to get narrower (but not shorter) as the scallop appears higher on the price trend. This suggests that cycles commonly associated with the ebb and flow of price might narrow in a rising price trend. If you see a narrow, inverted, ascending scallop near the top of a long, rising price trend, consider taking appropriate action to protect your investment. 📌

For information on the author see p. 10.

TABLE 2 PERFORMANCE STATISTICS FOR THE INVERTED ASCENDING SCALLOP

Description	Bull	Bear
Number of patterns studied	229	218
Followed by reversal	74	68
Followed by continuation	155	150
5-percent failure rate	4%	6%
10-percent failure rate	16%	13%
15-percent failure rate	28%	28%
Rises over 45 percent	35%	21%
Average rally	37%	26%
Days to ultimate high	89	88
Reversal performance	37%	26%
Continuation performance	37%	26%

Additional reading

Books:

- Encyclopedia of Chart Patterns*
by Thomas Bulkowski
(John Wiley & Sons, 2000)
- Trading Classic Chart Patterns*
by Thomas Bulkowski
(John Wiley & Sons, 2002)

Active Trader articles:

- "The three rising valleys pattern," December 2003, p. 28
- "Pipe bottom reversals," November 2003, p. 28
- "Grabbing the bull by the horns," September 2003, p. 46
- "Head-and-shoulders bottoms: More than meets the eye," August 2003, p. 32
- "Tom Bulkowski's scientific approach," September 2002, p. 32

Individual articles can be purchased and downloaded from www.activetradermag.com/purchase_articles.htm.

Article copyright 2011 by Active Trader Magazine. Reprinted from the January 2004 issue with permission from Active Trader Magazine.

The statements and opinions expressed in this article are those of the author. Fidelity Investments cannot guarantee the accuracy or completeness of any statements or data.

601720.2.0