Stochastic Pop and Drop

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The Stochastic Pop was developed by Jake Bernstein and modified by David Steckler, who wrote a corresponding article for Stocks & Commodities Magazine in August 2000. Bernstein's original Stochastic Pop is a trading strategy that identifies price pops when the Stochastic Oscillator surges above 80. Steckler modified this strategy by adding conditional filters using the Average Directional Index (ADX) and the weekly Stochastic Oscillator. This article draws on both methodologies to present another modified version of the Stochastic Pop suited for SharpCharts.

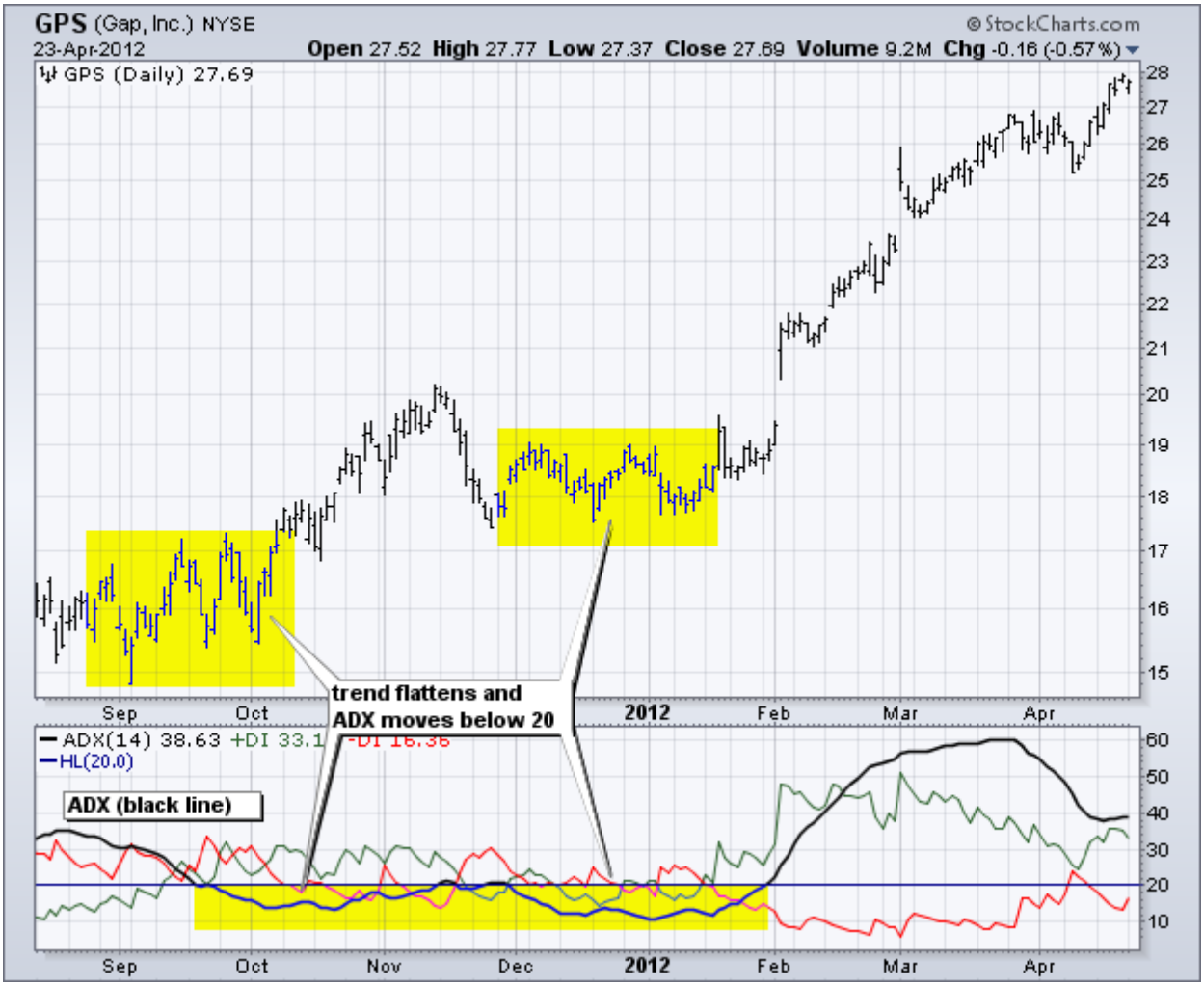
Trading Bias

Establishing a short-term trading bias with a long-term indicator is a recurring theme for trading strategies. Long-term indicators are used to define the path of least resistance, which becomes the trading bias. Traders look for bullish setups when the bias is bullish and bearish setups when the bias is bearish. Trading in the direction of this bias is like riding a bike with the wind at your back. The chances of success are higher when the bigger trend is in your favor.

Steckler used the weekly Stochastic Oscillator to define the trading bias. In particular, the trading bias was deemed bullish when the weekly 14-period Stochastic Oscillator was above 50 and rising. This article will use a 70-period daily Stochastic Oscillator so all indicators can be displayed on the chart. This timeframe is simply five times the 14-day timeframe. The trading bias will be considered bullish when above 50. The chart below shows F5 Networks (FFIV) with the 70-period Stochastic Oscillator defining the bullish and bearish periods.

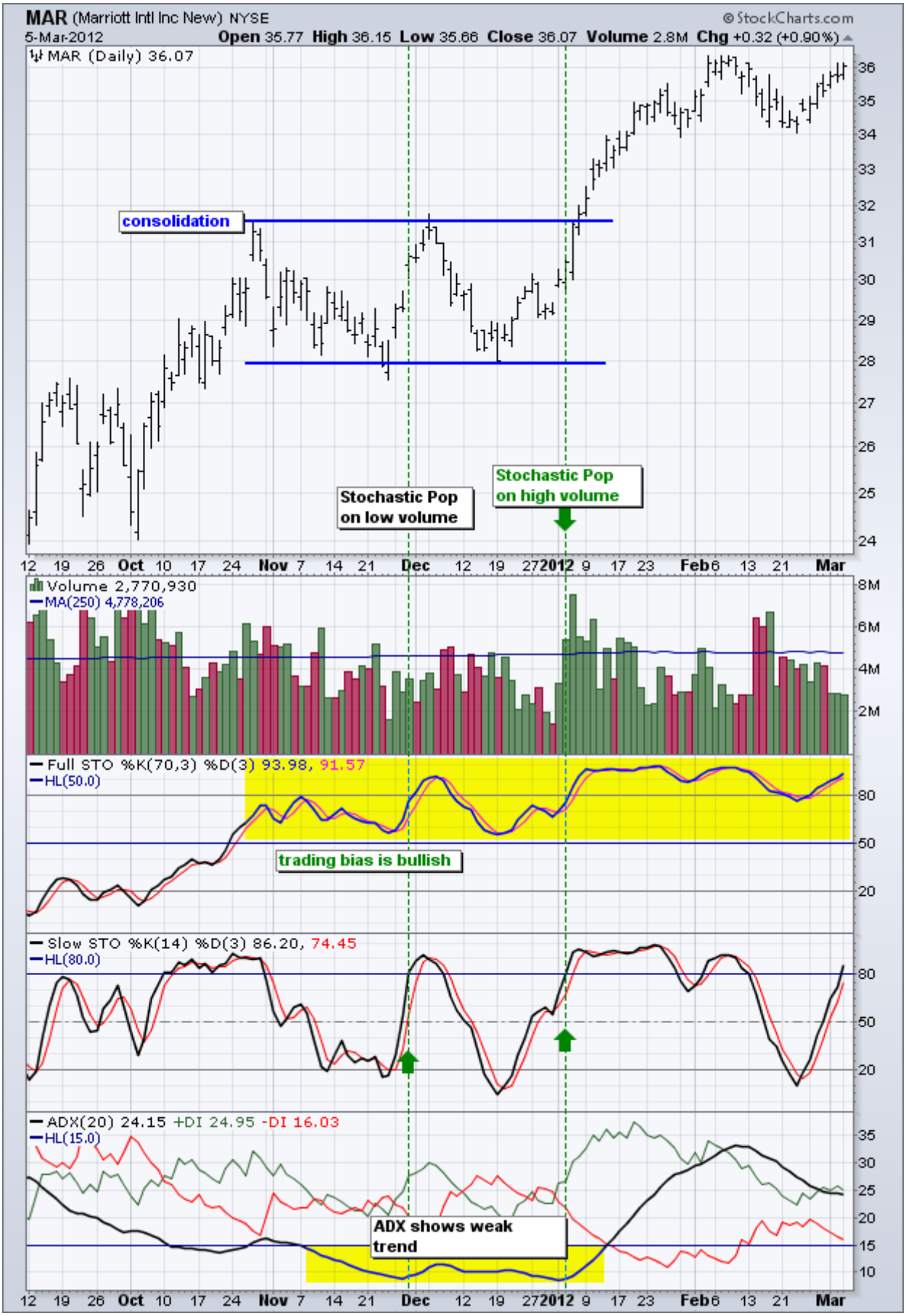
Waiting for a Range

Once the trading bias is established, Steckler used the Average Directional Index (ADX) to define a slowdown in the trend. ADX measures the strength of the trend and a move below 20 signals a weak trend. Steckler preferred ADX below 15, but would use 20 as well. A high and rising ADX signals a strengthening trend, while a low and falling ADX indicates that the trend is weakening. On the chart below, 14-period ADX on the daily chart shows a weak trend when it moves below 20. Notice how Gap (GPS) moved into a trading range as ADX dipped below 20 twice (yellow areas).



Buy Signal

Once the bullish prerequisites are in place, a buy signal triggers when the 14-day Stochastic Oscillator surges above 80 and the stock breaks out on above-average volume. Steckler preferred consolidation breakouts when using this strategy, however, chartists should not ignore high volume signals that do not produce breakouts. Sometimes the initial high-volume surge is a precursor to a breakout. For volume assessment, chartists can compare current volume to the 250-day moving average of volume, which is essentially the one year average. Volume above the one-year average would be deemed strong.



The chart above shows Marriott (MAR) with a bullish Stochastic Pop signal in early January. Notice that this signal occurred before the actual breakout. High volume confirmed the surge off of support and acted as a precursor to the actual breakout. Traders acting on the Stochastic Pop signal would have had a better risk-reward ratio than those acting on the breakout.

Stops and Targets

Once a signal triggers, and preferably before a position is taken, traders need to work out the stop-loss and price target. Plan your trade and trade your plan. Traders must plan for the worst because not all signals will work out profitably. If a consolidation formed, the stop-loss can be set just below consolidation support. Because the Stochastic Pop occurs with an upward surge in prices, there is usually a trough or reaction low just before this surge. A stop-loss can also be placed just below this trough. The chart below shows JB Hunt (JBHT) with two Stochastic Pop signals. The stop-loss for the first signal is based on the low just before Pop 1. The stop-loss for the second signal is based on the low just below Pop 2.

Should prices continue higher, traders can set a trailing stop-loss to lock in profits. The pink line shows the Parabolic SAR being used to set a trailing stop-loss. The 14-day Stochastic Oscillator can also be used to define a stall or downturn in short-term momentum. A move below 50 signals a momentum shift that can also be used to take profits or tighten a stop.

Sell Signal

Astute chartists will realize that this buy signal can easily be reverse engineered to produce sell signals. In fact, we can name the sell version the Stochastic Drop.

- 70-day Stochastic Oscillator is below 50.
- 14-day Average Directional Index (ADX) is below 20
- 14-day Stochastic Oscillator plunges below 20
- Stock declines on high volume and/or breaks consolidation support.

The chart above shows HR Block (HRB) with a Stochastic Drop signal in mid-July 2011. The trading bias was bearish because the 70-day Stochastic Oscillator was below 50 and the Average Directional Index (ADX) was below 20. The Stochastic Drop triggered when

the Stochastic Oscillator plunged below 20. Even though volume did not expand and the stock did not break support, this signal foreshadowed a sharp decline in late July and early August. Volume confirmation is not as important for bear signals.

Indicator Tweaks

While a consolidation does not always form when ADX moves below 20, a move below this level usually coincides with a flattening of the trend. Requiring ADX to move below 15 will improve the chances of catching a consolidation on the price chart. Also note that securities with relatively low volatility, such as utilities, may have relatively low ADX ranges and require a move below 10 to identify consolidations.

The 14-day Stochastic Oscillator is a relatively active momentum indicator that moves from oversold (20) to overbought (80) quite frequently. This means there will be plenty of signals to choose from. Chartists should be careful of signals that occur after short dips in the Stochastic Oscillator. In other words, a surge from 65 to 85 (20 points) is not as potent as a surge from 35 to 85 (50 points).

Conclusions

The Stochastic Pop and Drop signals are designed to catch a continuation move within the bigger trend. While the signals are easy to quantify, chartists should also consult the price chart and look for confirming patterns. A bull flag or falling wedge breakout can be used to confirm a bullish Stochastic Pop, while a bear flag or rising wedge breakdown can be used to confirm a bearish Stochastic Drop. Chartists should also consult the price chart to determine the risk-reward ratio and make sure it is acceptable before taking a position. Keep in mind that this article is designed as a starting point for trading system development. Use these ideas to augment your trading style, risk-reward preferences, and personal judgments. Click here for a chart of the S&P 500 ETF (SPY) with the Stochastic Pop and Drop indicators already set up.

Suggested Scans

Bullish Stochastic Pop

This scan searches for stocks that have just had a Stochastic Pop buy signal.

```
[type = stock]
and [today's sma(20,volume) > 40000]
and [today's sma(60,close) > 20]
and [Slow Stoch %K (70,3) > 50]
and [ADX Line (14) < 20]
and [today's Slow Stoch %K (14,3) x 80]
```

Bearish Stochastic Drop

This scan searches for stocks that have just had a Stochastic Drop sell signal.

```
[type = stock]
and [today's sma(20,volume) > 40000]
and [today's sma(60,close) > 20]
and [Slow Stoch %K (70,3) < 50]
and [ADX Line (14) < 20]
and [20 x today's Slow Stoch %K (14,3)]
```

Further Study

Short Term Trading Strategies that Work
Larry Connors and Cesar Alvarez