

ANALYZING SUPPLY AND DEMAND USING POINT AND FIGURE CHARTS

By Wayne A. Thorp

The usefulness of point and figure charts lies in their ability to filter out short-term price fluctuations that occur during longer, more established trends. They differ from the more conventional charts in that they are only affected by price movements.

One of the basic principles of economics is the law of supply and demand. It states that when there are more buyers than there are sellers of a given good, the price should rise. Likewise, when there are more sellers than buyers, the price should fall. In this technical analysis article, we focus on a type of chart that attempts to capture the battle between supply and demand: the point and figure chart.

Point and figure charts have been in use for over 100 years, yet they exist in relative obscurity compared to bar charts and candlesticks. Their usefulness lies in their ability to filter out market “noise”—short-term price fluctuations that occur during longer, more established trends. They differ from the more conventional charts in that they ignore the passage of time and do not take trading volume into account—they are only affected by price movements.

Figure 1 is an example of a point and figure chart for Cisco Systems, which covers daily price movements for the period from January 4, 1999, through April 31, 1999. Immediately, you should see some significant differences from other charts. First, the chart is made up of columns of X’s and O’s. X’s represent rising prices while O’s represent falling prices. Put another way, X’s represent demand and O’s supply. The movement from columns of X’s to O’s and back again creates patterns that you may use to make buy and sell decisions.

There are two key items you need to address before you can begin creating your own point and figure charts—the box size and reversal amount.

The box size is based on the scale you wish to use for a particular security or index and it represents the value given to each box (X or O) on the chart. It is the minimum price change needed to continue the trend—i.e., to add an X to the top of the column of X’s (or the minimum price decrease needed to add an O to the bottom of a column of O’s). The reason that this is even an issue is because a reversal of \$3 for a \$10 stock is more dramatic, on a different scale, than a \$3 reversal on a \$100 stock. Furthermore, since point and figure charts are used to filter out “noise” in the market, you will want to be sure that you are filtering out just enough to eliminate momentary price reversals, yet at the same time allow enough through so you can identify when a significant reversal is taking place.

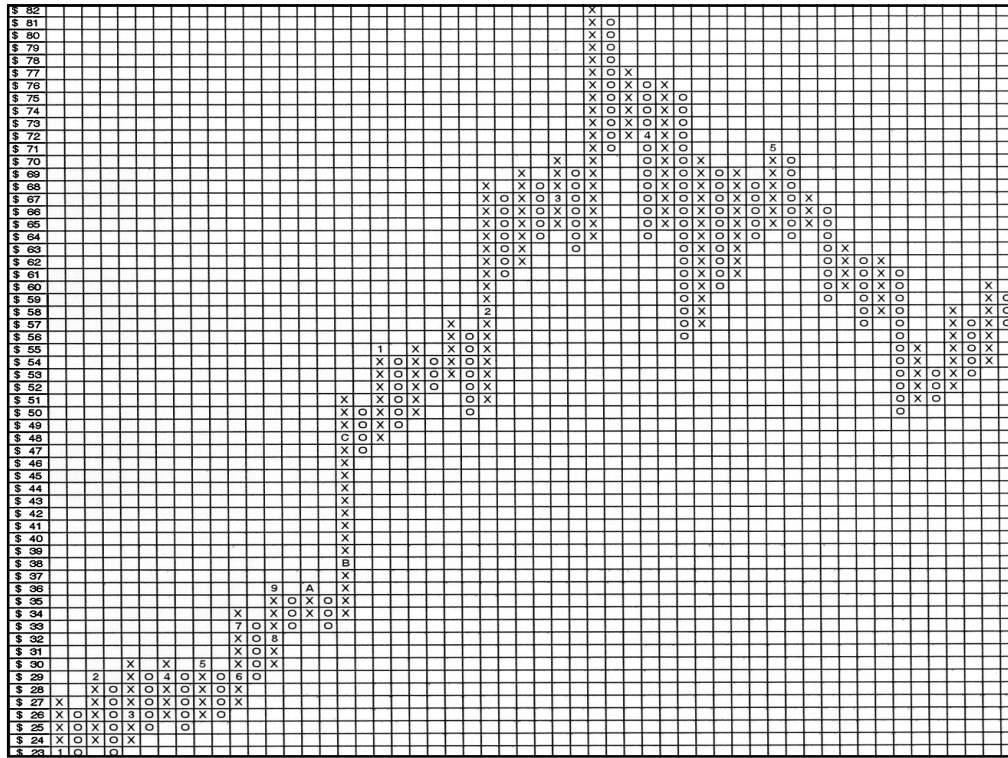
As you use point and figure charts, you may find that different box sizes work better for your trading style or for a particular security. However, box sizes have traditionally been broken down into the following levels:

Share Price	Box Size
Below \$5	\$0.25
Between \$5 and \$20	\$0.50
Between \$20 and \$100	\$1.00
Over \$100	\$2.00

How you move from one column to another is key to your analysis of point and figure charts. The way in which you move to a new column is

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FIGURE 1. POINT AND FIGURE CHART FOR CISCO SYSTEMS (1/4/99 TO 4/31/99)



different results. You may wish to experiment to find the technique that works best for you. A key concept to remember when creating point and figure charts is that you remain in the same column of X's or O's as long as prices continue to rise or fall, respectively. In other words, if the chart was in a column of X's and prices were rising, you would ask yourself each day whether the price rose one full box or more. You would find this out by looking at the high price for the

called the “reversal method.” The reversal amount determines how many boxes the price must reverse course in order to move to a new column and switch from X's to O's or O's to X's. While this can be left to the individual creating the chart, the typical reversal is the “three box” reversal, because it is thought to eliminate spurious price fluctuations and focus on only “significant” price movements.

If a stock were trading below \$5, it would take a price move (up or down) of \$0.75 to generate a three-box reversal. Based on the table on page 25, the box size for such a stock is \$0.25; a three-box reversal would take three \$0.25 price moves to necessitate a shift to a new column of either X's or O's. The same principle applies no matter the box size.

Having established the parameters for the essential elements of a point and figure chart, you must last look at exactly which price(s) you will use to plot your point and figure chart. “Purists” typically use the

high and low prices for the period (day, week, month, etc.), while others may focus strictly on a single price such as the close. Depending on the price(s) you use, you may get

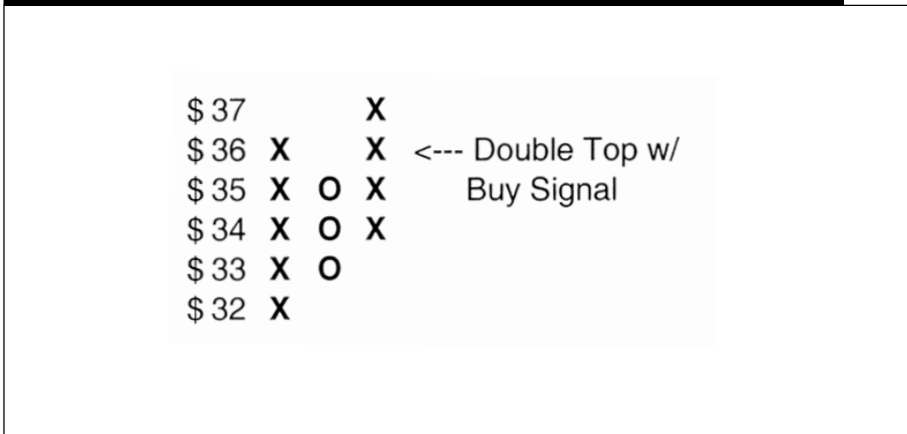
day—again we are only concerned with the high and low prices, not the open or close. If the price did rise at least one box, let's say from \$50 to \$51, you would add an X to

FIGURE 2. CREATING A POINT AND FIGURE CHART

Date	High	Low
6/1/00	61.13	57.88
6/2/00	65.75	63.44
6/5/00	65.06	62.44
6/6/00	63.81	61.13
6/7/00	63.50	61.13
6/8/00	65.00	62.75
6/9/00	65.00	64.00
6/12/00	64.75	62.13
6/13/00	65.00	61.50
6/14/00	66.50	64.13
6/15/00	66.63	64.63
6/16/00	67.94	65.80
6/19/00	69.25	66.25
6/20/00	69.56	66.63
6/21/00	67.75	65.75
6/22/00	67.13	64.44
6/23/00	65.94	62.50
6/26/00	63.63	61.06
6/27/00	65.25	62.13

\$70					
\$69				X	
\$68				X	O
\$67				X	O
\$66				X	O
\$65	X	X	X	O	X
\$64	X	O	X	O	X
\$63	X	O	X	O	X
\$62	X	O		O	
\$61	X				
\$60	X				
\$59	X				
\$58	X				
\$57	O				

FIGURE 4. POINT AND FIGURE CHART DOUBLE-TOP PATTERN



right of this wall, you can begin constructing the bullish resistance line by placing a “+” at the top of the column of X’s, then moving up and over one box, adding another “+” and repeating. The bullish support and resistance lines serve to form a trading channel.

Bearish resistance lines are the reciprocal of bullish support lines. In Figure 3, you can see that you begin drawing the bearish resistance line in the column of X’s prior to the column of O’s that penetrates the bullish support line. Connecting the boxes diagonally downward, you create a line that is parallel to the bullish support line. Stocks trading below the bearish resistance line are viewed as being in a bearish trend and you can expect prices to meet strong resistance as they near this boundary.

Lastly, the bearish support line is the reciprocal of the bullish resistance line. To begin drawing this line, look for the first “wall” of X’s to the left of the bearish resistance line. The line that is formed by placing a “+” at the bottom of the column of X’s and moving diagonally downward can be used as a guide, telling you where to expect downward moving prices to meet resistance. In other words, prices would receive support at or near this line. Similar to the bullish lines, the bearish support and bearish resistance lines form a trading channel

through which the stock can be expected to trade.

TYPICAL PATTERNS

One of the main objectives of technical and chart analysis is to identify trends in price and/or volume that may be used to predict future price movements. Some of the more popular and frequently occurring chart patterns are double tops and bottoms, as well as bullish and bearish triangles.

The double top and double bottom are two of the most common chart patterns that appear in most charts, especially point and figure. Figure 4 shows a double-top formation. Looking at the figure, you can see that this formation contains two columns of X’s separated by a column of O’s. The first column of

X’s was created as buyers bid up the price from \$32 to \$36, at which point demand dried up. The next move is to a column of O’s, as sellers forced the price back down to \$33. Here the price had fallen enough to spur interest once again, providing support at this level. Finally, there is a move to another column of X’s as buyers re-enter the market and again drive the price back to \$36. At this point, several things could happen. First, the price could again meet resistance and reverse course. Alternatively, buyers could continue bidding up the price, pushing the price past \$36. As the figure shows, if the price rises above \$36, this is viewed as a bullish signal and a potential buy.

The double bottom is simply the double top turned upside down, and is shown in Figure 5. Here the formation is made up of two columns of O’s separated by a single column of X’s. In the first column of O’s, there are more sellers than there are buyers and the price falls to the equilibrium point between buyers and sellers. Here, the price falls from \$37 to \$33, at which point the price finds support and reverses to a column of X’s. In the column of X’s, buyers bid up the price to \$36 until their demand was satisfied. The price meets resistance, forms a top, and falls once again. Once the price reaches \$33, again it can take one of two courses—it could either reverse or continue its

FIGURE 5. POINT AND FIGURE CHART DOUBLE-BOTTOM PATTERN

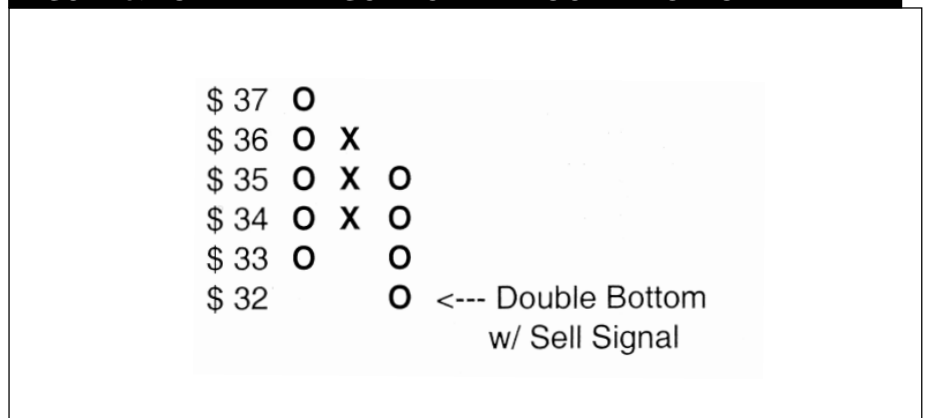
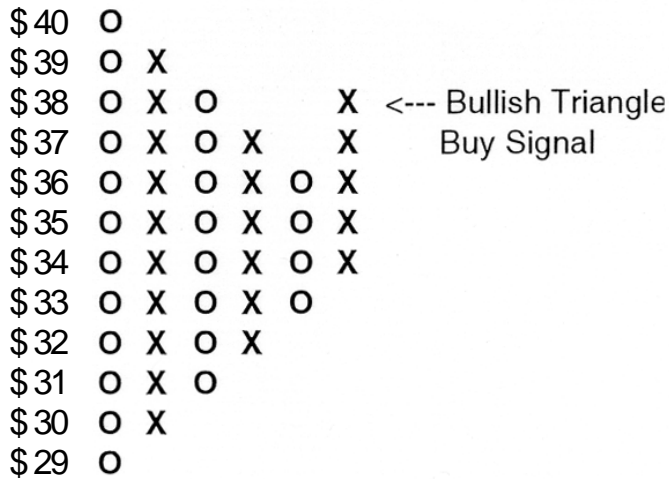


FIGURE 6. POINT AND FIGURE BULLISH TRIANGLE PATTERN



downward trek. If the price falls below \$33, this would be a bearish sell signal.

Another typical point and figure pattern is triangles, both bearish and bullish. The hallmark of any triangle pattern is that, as prices fluctuate, higher lows and lower highs are created. Figure 6 illustrates a bullish triangle pattern. As you can see, as you move to the right, the highs become lower and the lows higher as the height of each column gets smaller and smaller. At this point, you have no idea which way the price may go if it were to break out of the formation, meaning you must wait for the pattern to be confirmed before entering your trade. As it plays out in Figure 6, the bullish triangle forms a double top at \$36 and generates a buy signal when the price crosses above \$36 and breaks out of the triangle pattern. If the price were to reverse itself, however,

you should still pay close attention, because there is the possibility of a double bottom forming—a potential sell signal.

Figure 7 shows a bearish triangle, which looks the same as a bullish triangle except for the fact that the price breaks out to the downside. Here, it is the formation of the double bottom at \$34 that signals the potential formation of a bearish triangle. The signal is confirmed

when the price falls below \$33.

Of course, there are many variations on the patterns shown here.

Overall, the formation of a triangle, with its series of lower lows and higher highs, signals the potential that prices will ‘break out.’ The formation of a double top or double bottom gives an indication of the direction of the breakout.

CONCLUSION

Point and figure charts are an interesting way of examining the basic economic principle of supply and demand. By eliminating the time element from the chart, you are left to focus strictly on price movements. By using reversal methods such as the three-point reversal, you are also able to filter out the market noise that can sometimes generate false information regarding trend reversals.

Taking point and figure analysis one step further, some relatively basic principles, such as trendlines as well as pattern formations such as tops, bottoms, and triangles, can be helpful in gauging buy and sell decisions. F

FIGURE 7. POINT AND FIGURE BEARISH TRIANGLE PATTERN

