POINT & FIGURE CHARTS REVISITED

By Wayne A. Thorp

In the August 2000 issue of the *AAII Journal*, we introduced the seemingly forgotten art of point and figure charting. These charts illustrate the underlying supply and demand for a security while ignoring the passage of time. You can find this article at the AAII Web site (www.aaii.com) using the search tool. Member feedback prompts us to offer this supplement to the article, correcting a few mistakes and more explicitly laying out how the sample point and figure chart was plotted.

CORRECTION

The time period for Figure 1 in the August article is mislabeled. The chart for Cisco is stated as covering the period January 4, 1999, through April 31, 1999. This chart, reproduced here in Figure 1, actually covers the time period January 4, 1999, through May 31, 2000.

The high/low price table in Figure 2 in the August article shows italicized dates corresponding to those dates where a shift in column takes place from X's to O's or O's to X's. June 5 is incorrectly italicized when, instead, June 6 was the date to shift from a column of X's to a column of O's. The explanation below walks you through this shift. One final note on the August article: Figure 6 shows a double-top formation at $37, which we failed to label.

POINT & FIGURE STEP-BY-STEP

To walk through the construction of a point and figure chart, look at Figure 2 here. The table on the left shows high and low prices for Cisco for the period May 31, 2000, through June 27, 2000. On the right side is the point and figure chart constructed using this data, which is a continuation of the chart in Figure 1.

When creating a point and figure chart, it is helpful to determine the "action points" for each day. If a chart is in a column of O's, as was the case at the end of May (the last column in Figure 1), the first action point is the price that is one box lower than the last. If the price falls to this point, we add another O to the existing column. The second action point would be the price at which a three-box reversal occurs. This point is three boxes above the last O. If this point is reached, we would then switch to a new column of X's.

When you are in a column of X's, the first action point is at the price one box above the last X. The point where a three-box reversal takes place is where the price is three boxes below the last X. When this level is reached, we switch to a new column of O's.

In Figure 1, the last box closed in May at 57. Since we are in a column of O's, the first action point is 56, one box below 57. The other action point is 60, which is three boxes above our last box of 57.

Now, let's walk through the plotting of the next several days of data using Figure 2.

June 1: Since we ended May in a column of O's, we must first see if the price fell. Look at the low price for the day: 57.875. When plotting point and figure, it is easier to deal in whole numbers, so the high and low prices for a given day are rounded upward or downward depending on whether you are in a column of X's or O's. When you are in a column of O's, you round the low price up to the next whole number, in this case 58. Since 58 is above our first action point of 56, we do not add another O to our column. We then look at the high price for the day to see if a three-box reversal has taken place. The high of 61.125 must also be rounded, but when dealing with high prices we round down to the next whole number. Comparing 61 to the second action point of 60, we see that a three-box reversal has occurred since the high price is above the second action point. We therefore shift to a new column of X's that begins at 58, one box above the lowest O, and goes up to 61.

June 2: Begin by determining the action points. Since on the prior day we recorded X's up to 61, our first action point—where we would add another X—is 62. The other action point, for a three-box reversal, is at 58 (61 – 3). The high for the day is 65.750, which we round down to 65. Since this is higher than the first action point, we stay in the column of X's and record them up to 65.

June 5: The action points are 66 (one box above the last X at 65) and 62 (three boxes below 65). The high for the day is 65, so we do not plot another X. The low for the day is 63 (62.438 rounded up), not enough for us to move to a new column of O's. Therefore we make no marks for the day.

June 6: Since we did not record anything the prior day, the action points remain at 66 and 62. The high for the day of 63 is below the first action point, so we do not record any additional X's. The low for the day of 62 matches the second action point. Therefore, a three-box reversal has taken place and we shift to a column of O's that begins one box below the highest X in the previous column and continues down to 62.

June 7: The action points for today are 61 and 65. Looking first at the low of 62, we do not add another O

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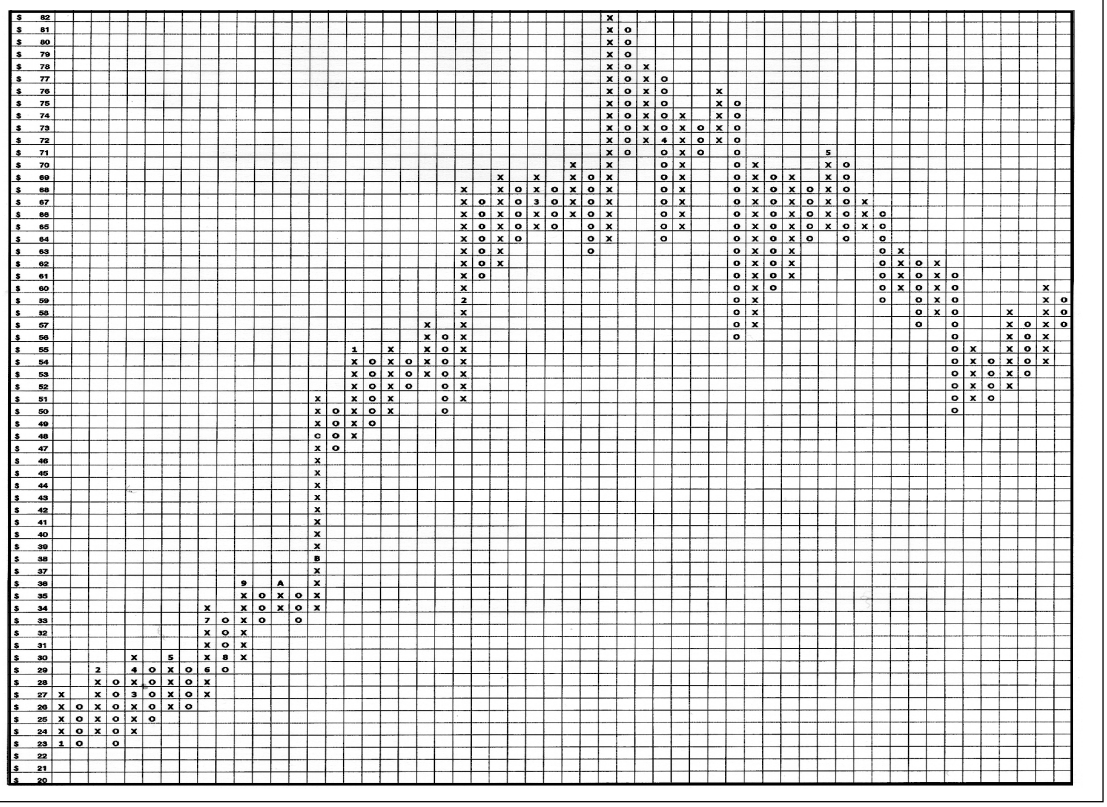
FIGURE 1. POINT AND FIGURE CHART FOR CISCO SYSTEMS (1/4/99 TO 5/31/00)



to the column because it is not low enough to record an O at 61. The high for the day of 63 is not high enough for a three-box reversal. Therefore, nothing is recorded for the day.

June 8: The action points remain the same—61 and 65. The low for the day is 63, so we do not record any O's. The high for the day is 65, which is high enough to result in a three-box reversal. We therefore move to a new column of X's that begins at 63 (one box above the lowest O of the previous column) and goes up to 65.

June 9: The action points for the day are 66 and 62. Looking at the high first (since we are now in a column of X's), we see that it is not high enough to record an X at 66. The low for the day—64—is not at or below the point needed for a three-box reversal, so we make no mark for the day.

June 12: The action points are still 66 and 62. The high of 65 is not high enough for a new X, and the low of 63 is not low enough for a three-box reversal. For the second straight day we record nothing.

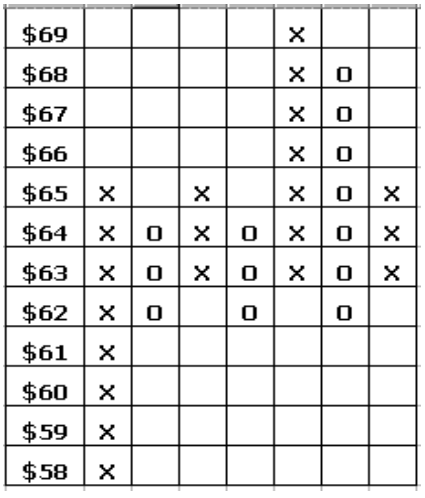
June 13: Again the action points are 66 and 62. The high of 65 is not high enough for a new X, but the low of 62 is low enough for a three-box reversal. Our new column of O's begins at 64 (one box below the highest X of the previous column) and goes down to 62.

June 14: The new action points are 61 (62 – 1) and 65 (62 + 3). The low for the day of 65 is not low enough to add another O. The high for the day—66—is enough for a three-box reversal, so we shift to a new column of X's that begins at 63 and goes up to 66.

June 15: The action points are 67 and 63. The high for the day of 66 is not high enough for another X and the low of 65 is not low enough for a three-box reversal. Nothing is recorded for the

FIGURE 2. CREATING A POINT AND FIGURE CHART

Date	Price High	Price Low	First Action Point	Second Action Point
5/31/00	60.250	56.375		
6/1/00	***61.125***	***57.875***	56	60
6/2/00	65.750	63.438	62	58
6/5/00	65.063	62.438	66	62
6/6/00	***63.813***	***61.125***	66	62
6/7/00	63.500	61.125	61	65
6/8/00	***65.000***	***62.750***	61	65
6/9/00	65.000	64.000	66	62
6/12/00	64.750	62.125	66	62
6/13/00	***65.000***	***61.500***	66	62
6/14/00	***66.500***	***64.125***	61	65
6/15/00	66.625	64.625	67	63
6/16/00	67.938	65.797	67	63
6/19/00	69.250	66.250	68	64
6/20/00	69.563	66.625	70	66
6/21/00	***67.750***	***65.750***	70	66
6/22/00	67.125	64.438	65	69
6/23/00	65.938	62.500	64	68
6/26/00	63.625	61.063	62	66
6/27/00	***65.250***	***62.125***	61	65



day.

June 16: The action points are again 67 and 63. The high is 67, which means we add another X to our column at 67.

June 19: The action points are now 68 and 64. The high of 69 means that we again add X's to the column at 68 and 69.

June 20: The action points are 70 and 66. The high of 69 is not enough to add another X. The low of 67 is not low enough for a three-box reversal. Nothing is recorded for the day.

June 21: The action points remain at 70 and 66. The high for the day is 67, which is not enough to add another X to the column. The low of 66, however, is enough for a three-box reversal, so we shift to a new column of O's that begins at 68 (one box below the highest X from the previous column) and goes down to 66.

June 22: Our action points for the day are 65 and 69. The low for the day of 65 is below our first action point, so we add another O at 65.

June 23: The action points for the day are 64 and 68. The low for the day is 63, meaning we add another two O's to the column at 64 and 63.

June 26: The action points for the day are 62 and 66. The low for the day—62—matches our first action point, so we record an O at 62.

June 27: The action points for the day are 61 and 65. The low for the day is 63, which means we do not record any O's for the day. The high is 65, which matches the second action point. Therefore, we shift to a new column of X's that begins at 63 and goes up to 65.

If you wish to learn more, you may check out the Dorsey Wright Web site—one of the few point and figure sites around (www.dorseywright.com). ✦

AUGUST ARTICLE CORRECTION

SOCIAL SECURITY BENEFITS AT AGE 65: DELAY, OR TAKE THE MONEY AND RUN?

The number of years to breakeven in Table 6 in the article on Social Security benefits was incorrect. The article, which appeared in the August 2000 issue, discussed whether individuals were better off taking Social Security benefits starting at age 65 or delaying them to age 70 to receive higher payments via the delayed retirement credit. In the table, the number of years to breakeven should have been added to age 70, rather than to age 65 as it appeared in the article. The corrected table is printed below.

In the table, breakeven occurs when the total payments from the higher delayed benefits are equal to the total payments that would have been received if Social Security was taken earlier. The assumption in Table 6 is that if benefits begin at age 65, one-third of the monthly benefit will go to income taxes, and the remainder will be invested each month for a term of five years. Thereafter, an amount will be withdrawn from the accumulated fund each month such that, combined with the regular benefit, the total will equal the monthly benefit that would be received had one delayed benefits to age 70. It assumes annual inflation adjustments of 2.4%. Under this scenario, Table 6 shows that the breakeven age is essentially the same as the breakeven age when the benefit is taken at age 65 and spent (scenario one in the article). The risk of delaying the benefit is the same as the risk all workers faced under prior law by not retiring before age 70. Given that risk, and the probability of reaching the breakeven age, one could argue that delaying the benefit could be a viable option.

TABLE 6. BREAKEVEN AGES FOR DELAYED RETIREMENT BENEFITS: FIVE-YEAR WITHDRAWALS

	Net Return on Investments					
	5%	6%	7%	8%	9%	9.29%
Accumulated Fund	$67,813	$69,454	$71,131	$72,847	$74,600	$75,110
Years to Breakeven	10.5	11.4	12.6	14.1	16.1	16.9
Breakeven Age From Age 70	80.5	81.5	82.6	84.1	86.1	86.9
Survival Probability From Age 70	63%	57%	52%	45%	37%	32%