Gann Fans

W. D. Gann (1878-1955) designed several unique techniques for studying price charts. Central to Gann's techniques is the use of geometric angles in conjunction with time and price. Gann believed that specific geometric patterns and angles had unique characteristics that could be used to predict price action.

Gann's techniques require that charts be drawn with equal time and price intervals, so that a rise/run of one price unit for each time unit (called a 1 x 1 trendline or angle) will equal a 45 degree angle anywhere on the chart. Gann believed that the ideal balance between time and price exists when prices rise or fall at a 45 degree angle relative to the time axis.

Gann angles are drawn between a significant bottom and top (or vice versa) at various angles. Deemed the most important by Gann, the 1 x 1 trendline is used as a criteria for both bull and bear markets. Gann felt that a 1 x 1 trendline provides major support during an uptrend; when the trendline is broken, it signifies a major reversal in the trend. A bull market is signified if prices are rising and are above the upward sloping 1 x 1 trendline. Conversely, a bear market is indicated when prices are falling and are below the downward sloping 1 x 1 trendline.
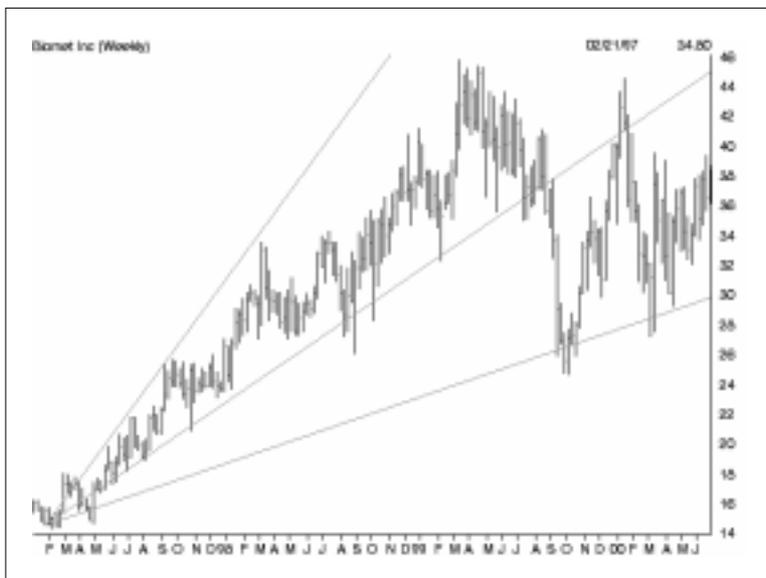
Although the theory relies on certain exact chart angles (Gann identified nine significant angles, with the 1 x 1 being the most important), an exact price/time relationship is not specified. Obviously, a 45 degree angle drawn on a chart is no longer 45 degrees when the price or time scale is changed without a corresponding change in the opposing scale. Therefore, Gann Fans should be used with caution, especially since the price scale on AIQ charts varies from one chart to the next. The technique is probably best suited to longer term studies where major trends can be identified and the width of the price scale is usually greatest.

In addition to the 1 x 1 angle, Gann specifies eight different angles, four greater than 45 degrees and four less than 45 degrees, as lines of significant support and resistance. The AIQ Gann drawing tool creates only two of these lines, the 1 x 2 (63.75 degrees) and the 2 x 1 (26.255 degrees) in addition to the 1 x 1 (45 degrees) line. Gann observed that each of these angles can provide support and resistance depending on the trend. According to Gann, when prices move below the 1 x 1 angled trendline during an uptrend, prices should then be expected to fall to the next trendline (i.e., the 2 x 1 angle). In other words, as one angle is penetrated, expect prices to move and consolidate at the next angle.

To draw Gann Fans

⭧ *To draw a Gann Fan on a chart, do as follows:*

1. Display a chart of the ticker you want to analyze.

2. Click the **Draw** command on the menu bar and from the drop-down menu select **Gann Fans**. The arrow cursor will change to the Gann Fans drawing cursor.

3. Place the cursor at the point on the price chart where you would like the Gann Fan to begin and press the left mouse button. When you release the mouse button, the *Gann Properties* dialog box will appear.

4. The *Vertex* section of the *Gann Properties* dialog box lists the coordinates of the point on the chart where the mouse was located when you clicked the mouse. This where the Gann Fan will originate. You can change these coordinates if you wish.
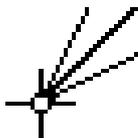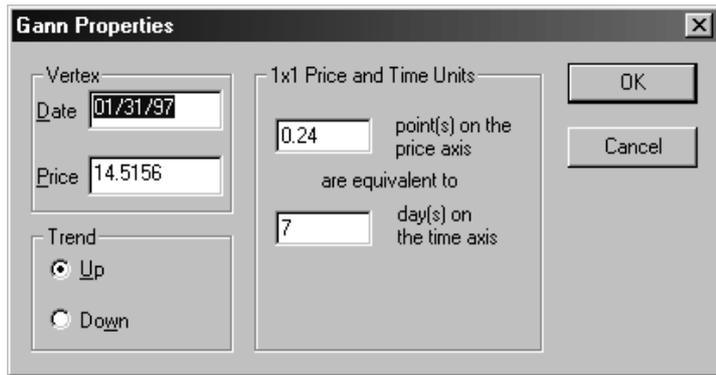
5. The section titled *1x1 Price and Time Units* displays two values, one for each axis. If you were to measure along each axis from the lower left corner of the chart distances equal to these values and then drew a line connecting these points, the resulting line should be a 45 degrees angle on the chart. You can change these values if you wish.

6. The section titled *Trend* displays two options. If the trend of the data you are studying is up, select **Up**. If the trend is down, select **Down**.

7. When you are satisfied with the entries shown, click **OK** and the Gann Fan study will be automatically drawn.

8. To cancel the Gann Fan drawing cursor and return to the normal arrow cursor, press the **Arrow** on the toolbar (to the left of the *Trendlines* toolbar button).

To edit Gann Fans

Gann Fans are edited by changing the price/date coordinate of the point where the study begins. The *Gann Properties* dialog box also allows revision of the price and time units that define a 1x1 angle on the chart.

❡ *You can edit a Gann Fan in one of three ways:*

1. Use the mouse to physically relocate the study on the chart.

   • Use the arrow cursor to select the Gann Fan that you want to edit by clicking anywhere on one of the three fan lines with the left mouse button. A small black square will appear at the point where the three fan lines originate (vertex).

- To edit (relocate) the fan, move the arrow cursor over the vertex point and press the left mouse button. Two lines parallel to the two chart axis will appear. The intersection of these lines indicates the location of the Gann Fan vertex. Hold down the left mouse button while moving the fan to its new location.
- When you release the mouse button, the study will be automatically redrawn.

2. Use the *Properties* function on the right-click menu to enter new coordinates for the Gann Fan vertex.

- With the <u>right</u> mouse button, click on one of the fan lines. This will both select the study and display a menu.
- Select **Individual Properties** from this menu. A dialog box titled *Gann Properties* is displayed.
- The dialog box displays the date for the study. To adjust the study, enter a revised date.
- Click **OK** and the study will be automatically redrawn.

3. Use the *Edit* command on the *Draw* menu to enter new coordinates or new 1x1 price/time angle units for the study.

- Click **Draw** on the menu bar, then **Edit** on the sub-menu. The *Edit Attributes* dialog box that appears lists all studies and other items that have been drawn on the displayed chart.
- Select the Gann study that you want to edit and click the **Edit** command at the bottom.
- The next dialog box, *Gann Properties,* lists the current fan vertex coordinates and the 1x1 angle units for the study. To adjust any of the data for this study, enter revised information.
- Click **OK** to return to *Edit Attributes* and click **OK** again. Based on the revised information, the study will be automatically redrawn.

To delete Gann Fans

To delete a study, selecting the **Delete** command from the right-click menu is the simplest approach.

✝ *To delete a Gann Fan using the right-click menu:*

- With the right mouse button, click anywhere on one of the Gann Fan lines. This will both select the study (small black dots will appear at the fan vertex) and the right-click menu will appear.

- Select **Delete** from this menu. The selected study will be removed from the chart.

Alternative method for deleting a Gann Fan

✝ *To delete a Gann Fan from the Edit Attributes dialog box:*

1. Click **Draw** on the menu bar, then **Edit** on the sub-menu. The *Edit Attributes* dialog box that appears lists all studies and other items that have been drawn on the displayed chart.

2. Select the Gann study that you want to delete and click the **Delete** command at the bottom.

3. When the *Edit Attributes* dialog box reappears, the study will be removed form the list of chart attributes.