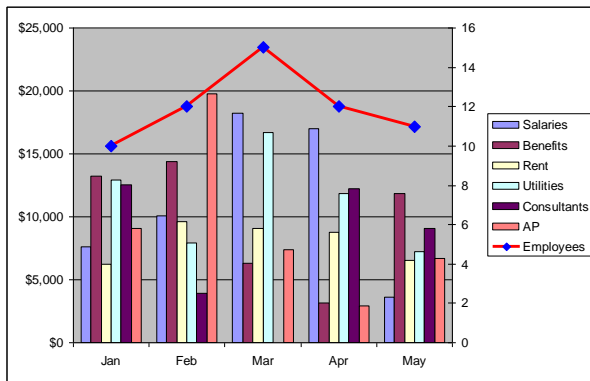


# Combination Chart

I am occasionally asked how to combine to different sets of data on a single chart. This is especially true if you want to show various expenses and compare the trend to the employee numbers as in the chart at the left. A secondary value axis is useful when the average values for different data series vary widely, or when you are plotting different types of data in one chart. For example, to show both the company expenses and the number of employees on the same chart plot the number along one axis and the average price along the second axis.



This chart combines the expense data as bars and the employee data as a data line.

This explanation assumes you have some knowledge of how charts work. If you do not know how to work with Excel charts, you should learn the basics before trying this.

The first spreadsheet shows the number of employees at the end of each month.

	Jan	Feb	Mar	Apr	May
Employees	10	12	15	12	11

The next spreadsheet shows the various expenses over the same 5-month period.

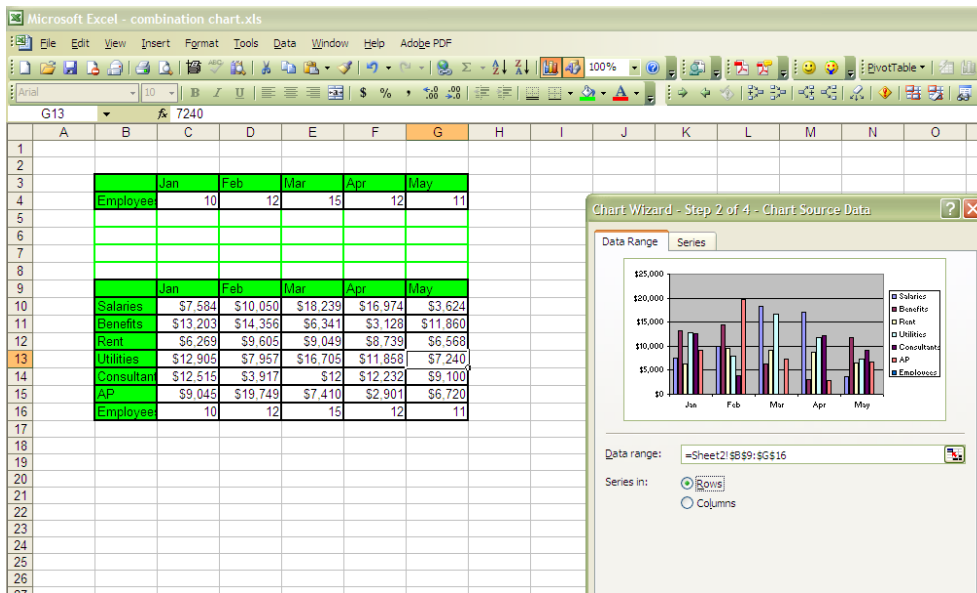
	Jan	Feb	Mar	Apr	May
Salaries	\$7,584	\$10,050	\$18,239	\$16,974	\$3,624
Benefits	\$13,203	\$14,356	\$6,341	\$3,128	\$11,860
Rent	\$6,269	\$9,605	\$9,049	\$8,739	\$6,568
Utilities	\$12,905	\$7,957	\$16,705	\$11,858	\$7,240
Consultants	\$12,515	\$3,917	\$12	\$12,232	\$9,100
AP	\$9,045	\$19,749	\$7,410	\$2,901	\$6,720

To do the combination chart add the employee numbers to the bottom of the spreadsheet with the expenses as shown below.

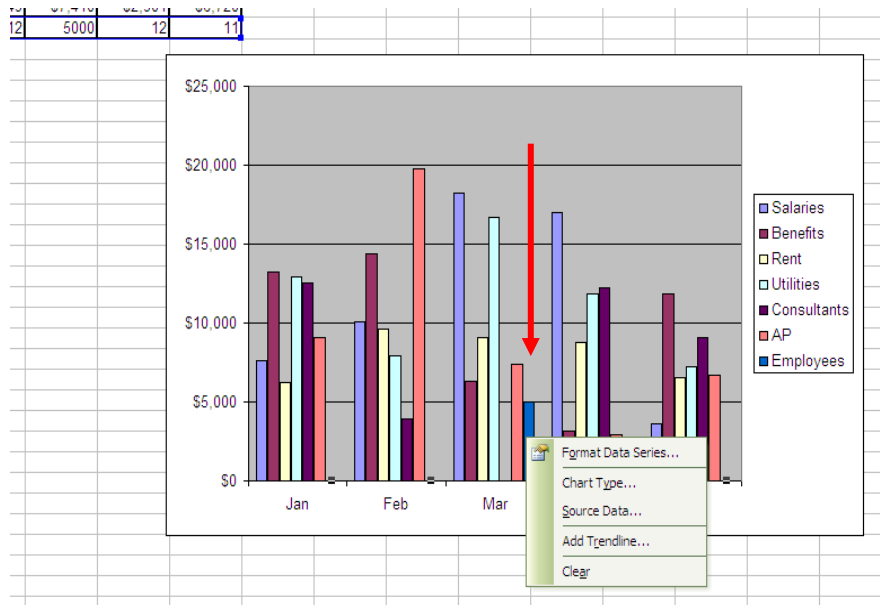
	Jan	Feb	Mar	Apr	May
Salaries	\$7,584	\$10,050	\$18,239	\$16,974	\$3,624
Benefits	\$13,203	\$14,356	\$6,341	\$3,128	\$11,860
Rent	\$6,269	\$9,605	\$9,049	\$8,739	\$6,568
Utilities	\$12,905	\$7,957	\$16,705	\$11,858	\$7,240
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Employees	10	12	15	12	11

Click anywhere in the new data and click the Chart Icon. Select the first bar chart series.

Click next and you will see the screen below. At first, you will notice it has the descriptions across the bottom and the dates in the series box. Click the Rows box to tell the chart to use the top row instead of the first column for the x-axis.



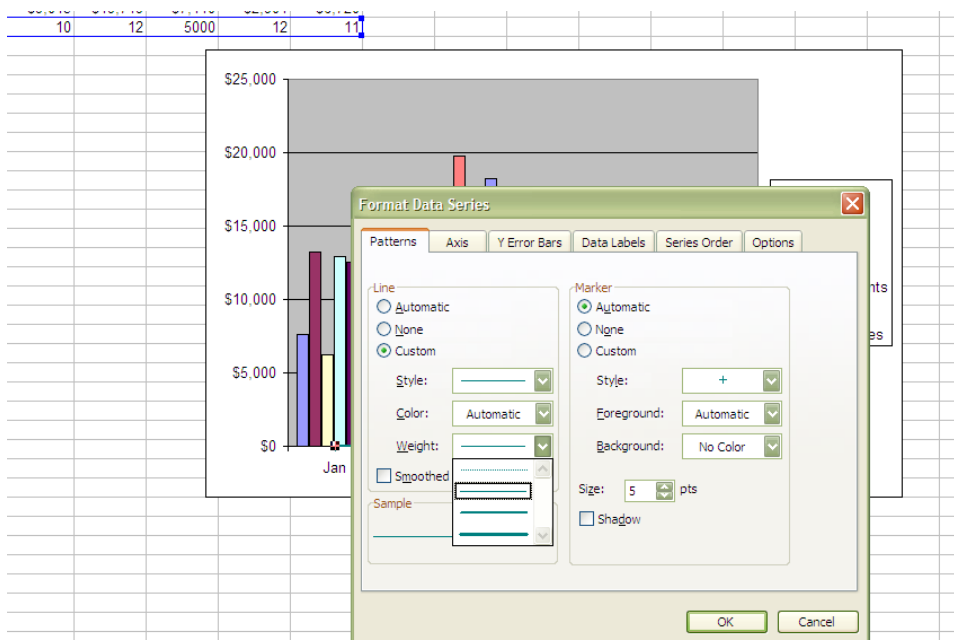
In the above chart, the employee numbers are so low in comparison that they do not show. You need to change the value for Employees in March to 5000 to make it more visible as shown below.



You can now see the employee amount for March as a blue bar as shown above. Right click on the blue bar (color may vary) and choose Chart Type.

Change the chart type for this last data item to a line chart and close this selection.

Next click on the line and choose 'Format Data Series'. First, choose Patterns tab and make the line wider

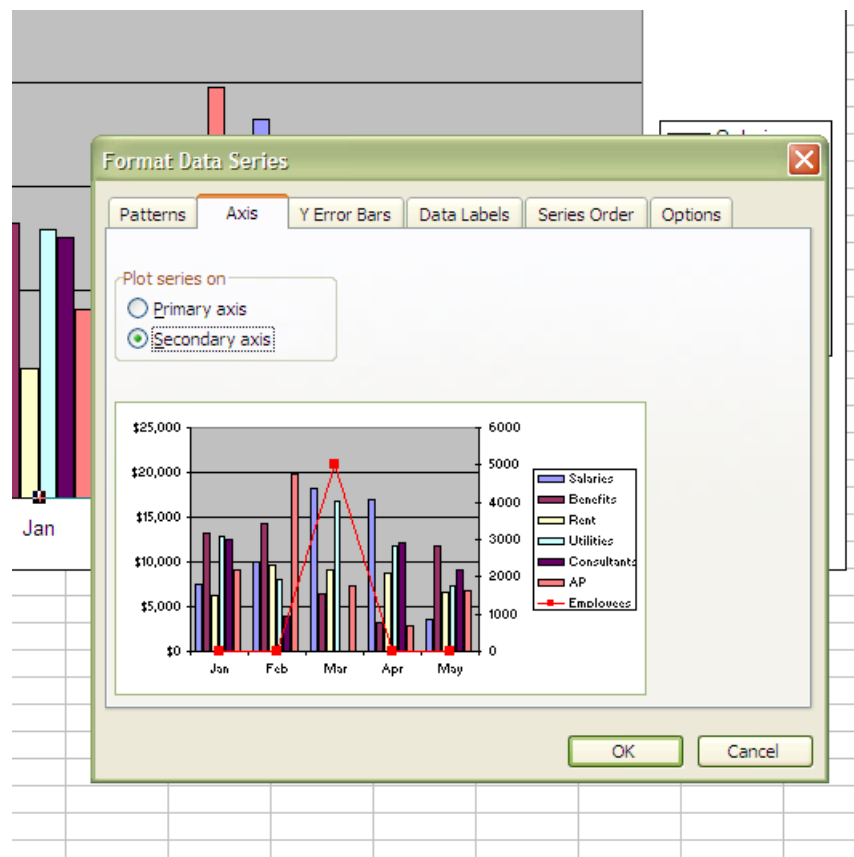


You can also change the color of the plot line here as well as the style and color of the Marker

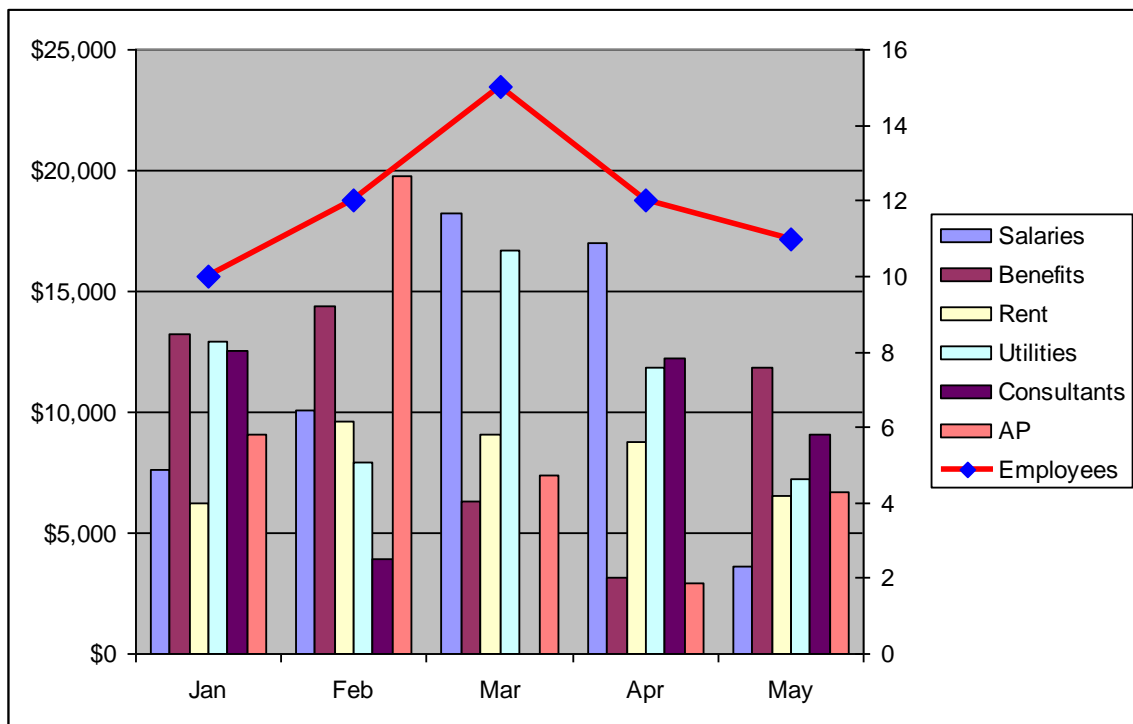
Then choose the Axis tab.

Click the Axis tab and change to a secondary Axis.

By choosing a secondary axis, you can show two different types of data on the same chart. Note that the left hand data axis is in dollars and the right-hand axis is in numbers. Of course the 5,000 needs to be changed.

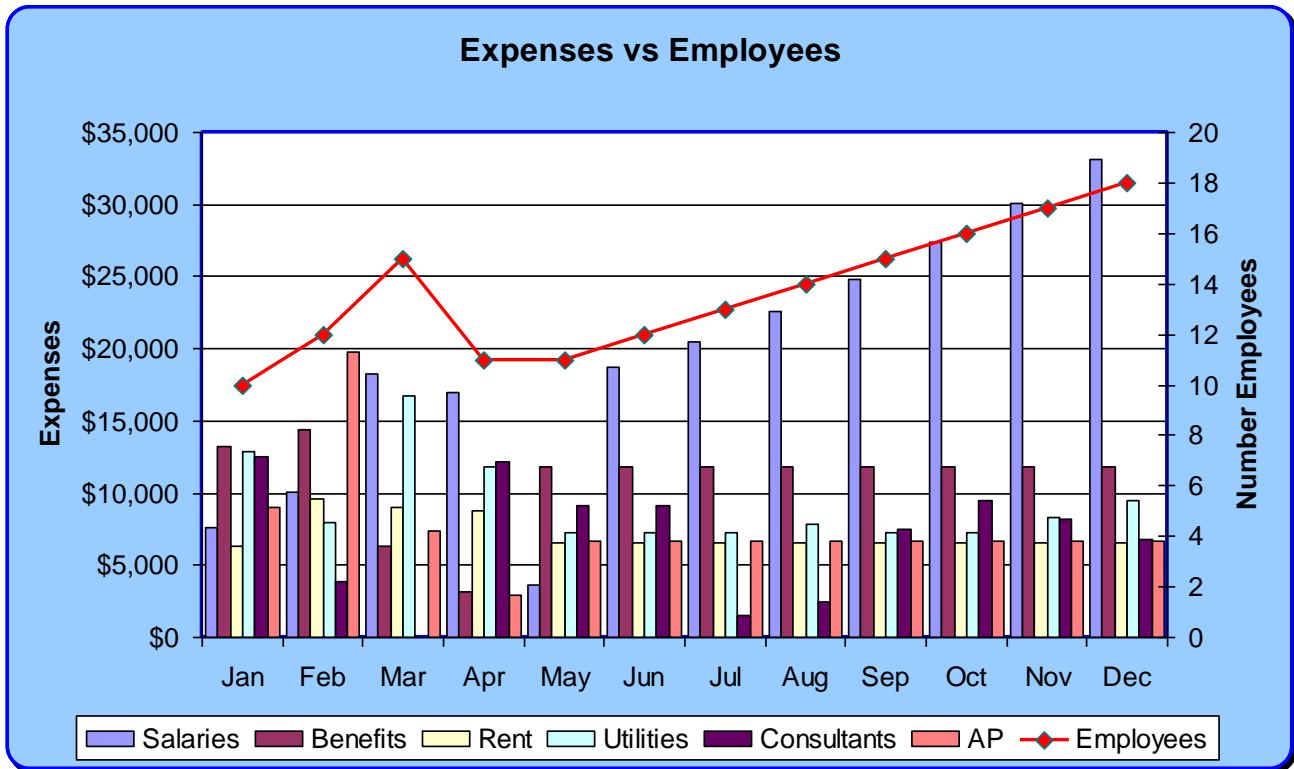


Change the number of employees in March back to 15 and wala you have a combination chart that shows the expenses and the number of employees.



You can use this same technique only put the extra data on the right hand column of the chart.

You can really fancy this up for presentation to the Executives.



Learning Charts and their use can be daunting. One way to get specific help is to have a trainer set-up training classes, on specific subjects, at your Company. Check my website (<http://www.lwmweb.com/>) for upcoming seminars or contact me ([LWM@LWMWEB.COM](mailto:LWM@LWMWEB.COM)) for in-house seminars for your company. On the other hand, you can study the many Excel books currently available.

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