

**Question:** My boss wants to compare actual salaries that we pay our employees to the midpoint of the salary ranges from other organizations. I think that is the wrong comparison. Can you give me some advice on how to set him straight?

**CompDoctor:** You have come to the right source. Not only do we have a proprietary potion to straighten out bosses, but we also have a Web site to which you can direct your boss to find the right answers.

But first, let's explore why your boss thinks that he or she should compare your salaries to the midpoint of the salary ranges of other comparable organizations. We think that he or she may believe that that is where most people are paid (probably a wrong belief), or he or she could think that the midpoint is where they should be paid (partially a correct belief). Thus, by knowing the midpoint, we will know how close to the market your pay really is.

Oh my; we have a lot of explaining to do. So hold on to your handlebars and keep your eyes open, because we are going for a ride that will open your eyes and scare you to death.

Nope, skip the last part. You will just be scared a little bit, and we do believe that you will still be alive and healthy when the trip is completed.

The first thing to know about market data is that it comes in all sorts of strange and varied forms. Your job is to make sure that you are dealing with apples when you want apples, and oranges when you want oranges. Mixing apples and oranges makes a nice tart fruit salad, but may not help you make the best orange juice.

Data will come to you representing a variety of different "effective dates." You need to make sure that you have aged the data to a common period. You can get aging factors from the Economic Cost Index or from WorldatWork, although they will call it something else. Next, you will need to make sure that the data all represent the same metric. This is obvious, but you don't want to compare hourly with monthly or annual salaries. Furthermore, you want to make sure that the data all represents the same number of work hours. In this area you need to make an assumption, (especially if you are comparing monthly or annual salaries, less so if you are comparing hourly rates) that the number of hours worked is about the same. However, because hourly employees in some markets work only seasonally, the rates may be significantly higher. Some organizations have "official" 40-hour workweeks, whereas others have 37.5 or 35. For our comparisons, we assume that the data we obtain represents a work year of at least 1,950 hours for salaried employees. That is equivalent to a 37.5-hour week, and it works well with exempt jobs.

Finally, the data should be adjusted by geographic factors so that it is common to your geographic location. There are several independent sources that can help you with the geographic factors and you should use them, since calculating them yourselves by some unauthorized method

may get you into more trouble than using diesel fuel in your gasoline engine.

Now, once all of the data have been reviewed, corrected and entered into an analysis application such as MS Excel or a statistics program, a check for 'outliers' should be performed to exclude any extreme data figures. Calculating salary figures that are +2.00 or -2.00 standard deviation points from the market trend regression line does this. Standard deviation is a statistical term that represents how far data points are from the trend. If a salary figure is greater than + or - 2.00 standard deviation points from the trend, it means that the job match is poor or other factors that may not be identifiable are affecting this salary. Outliers should be excluded from your analyses.

By now you may have regressed yourself to the point of throwing up your hands in the air and crying "wolf," but don't fall prey to this. Hang in there; it has just begun to get scary.

Once the data has been 'cleaned,' it can then be summarized. This means calculating statistics such as totals, averages and medians of the data. Your organization's pay strategy will determine what statistics from the market you will calculate and compare your data to. Three statistics commonly calculated are unweighted average (a simple average), weighted average (averages weighted by number of incumbents) or median (50th percentile or the middle rate). The most commonly used statistic is the median since it is the middle rate and is not impacted by any high or low rates, which would be reflected in an average.

Now that we have all the data in place, cleaned, scrubbed, messaged and in good shape, what can we do with it? Let us tell you of the magic that waits.

Here is what we do. Comparisons can first be made on a job-by-job basis. A job-by-job basis compares your organization's salary against the market salary for each benchmark job. This should be done on an actual internal average salary to actual market average salary. You will do this on an unweighted average basis or by comparing the median of the actual salaries, if there are enough data points. This comparison tells you what your employees are paid on average with what other employees are paid on average. These are the types of figures that employees will come to you with saying things like "I know Bob over in Spencer does the same job as I do and he makes \$5,000 more and has fewer subordinates." So, you need to know this informa-

tion. What it tells you is what employees are actually paid. What it does not tell you is why or how did they get there. For that, we need do some additional comparisons. Oh, by the way, we would never set a salary schedule up based solely on actual salaries, and neither should you. We would take our analysis further. This comparison, however, does tell us those individual jobs that are above or below market. Jobs whose salaries are +/- 15 percent from the market should be reviewed more carefully. But, you may not want to adjust pay just yet. Jobs that are +/- 15 percent or greater may be the result of unusual turnover, longevity, performance or other reasons that can lead to a variety of different solutions, if any. At this point, just keep these jobs in mind. Also, you should calculate an overall average encompassing all benchmark jobs to get an idea of how your organization compares to the market in general.

Our next analysis uses regression analysis, so that we can smooth out some of the bumps and ripples that we found in the analysis described above. This regression analysis allows us conduct a comparison on a grade-by-grade basis. A grade-by-grade basis compares your salary by grade to market salary by grade. This comparison tells us those grade levels that are above or below market (or how your organization's current structure compares with market), but adding one additional element that we did not have in the above comparisons. In this comparison we have added internal equity issues.

Regression analysis is a "line of best fit" between an independent variable, such as grade, and a dependent variable, such as base salary. The formula produced by regression analysis can be used to predict market pay rates for jobs at various points along this line of best fit, (i.e., internal equity). Thus, for any given grade level, the predicted market pay for that level can be determined. This is useful for determining predicted rates of market pay for jobs that were not benchmarked. It is also very effective for keeping internal equity and market data in line with your pay philosophy.

We can also do this regression analysis on the average minimum of the range and the average maximum of the range from the market data. This tells us how our salary range minimums and maximums compare to the market. Now, if we superimpose the regression of the actual average salaries against our structure and the market structure and the actual average of the market salaries against the same, we can find out where our

employees are paid in relation to our own structure as well as where they would be in a competitive market structure. Confused yet?

We make this simple by having a special software application draw the regression lines on a graph and then adding lines one at a time to the graph until all the lines are on one or two graphs. These graphs make it simple to look at and come to the answers to the following questions:

- Where are we paying employees in relation to the market?
- Where is the market average for these jobs?
- Where in the salary structure are we overpaying, underpaying or paying competitively?
- Which jobs do we need to adjust to be market competitive and in line with our internal equity?
- Are our employees moving through the salary ranges at a market competitive rate?

You will notice that during this whole analysis, we did not once compare actual salaries to the midpoint of the market. That is because that is not the best comparison. You want to compare your actual salaries to the actual average salary of employees in comparable organizations because that is what people actually pay. You also want to compare your structure with the structure of the market. But what you don't want to compare is your actual salaries to the midpoint of the market because that would be comparing real data with salary data that no one is really paid. Your employees do not work for the "average of the market." They work for you. You need to compare the right numbers; otherwise you could be looking at the wrong end of the telescope and end up paying more or less than you should, and for all the wrong reasons.

*The CompDoctor™ is the team of Jim Fox and Bruce Lawson of Fox Lawson & Associates LLC, a compensation and human resources consulting firm that specializes in assisting governments in fixing their compensation and classification systems. They are seriously irreverent about their specialty. You may find them on the Web at [www.foxlawson.com](http://www.foxlawson.com). If you have a question you would like to have them answer, please write to them at [jfox@foxlawson.com](mailto:jfox@foxlawson.com) or [blawson@foxlawson.com](mailto:blawson@foxlawson.com). They will try to include it in the next issue of CompDoctor™. —N*

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