Go Big

The Firm-Size Pay (and Pay-Mix) Effect

Bigger companies pay their employees more than smaller companies.

Newer evidence also indicates that bigger companies have a different mix of pay than smaller companies. Why is that? In February 2011, I wrote in this column about the fact that larger organizations (for-profit firms, nonprofits and labor unions) pay their leaders more than smaller organizations. But, on average, the larger the company, the higher average pay for all of the employees. What explains this firm-size pay effect throughout the organization? And, why is it that big companies not only pay more, they also pay in different ways?

How Much More Do Bigger Companies Pay?

Economists have examined the link between organization size and level of pay for some time. A century ago, Henry L. Moore noted in “Laws of Wages” “… as the size of the establishment increases, the condition of the worker rises in all directions — his wages rise, he is employed a greater number of days in a year, his employment varies less from month to month, and his hours of labor, per day, decrease.”

Using data from the U.S. Bureau of Labor Statistics’ “Employer Costs of Employee Compensation” survey, Figure 1 documents that larger organizations today pay their employees more. The figure clearly shows that compensation costs have been increasing for all sizes of firms quite steadily since 2004. However, most of this gain is just inflation (after adjusting for inflation, the lines are roughly flat). It is also clear that the total compensation costs increase monotonically as companies get larger. So, at the end of 2010, the smallest firms (1 to 49 employees) had average compensation cost per worker per hour of $22.10, firms with 50 to 99 workers had average costs of $25.37 per worker per hour, firms with 100 to 499 employees had average per worker...
per hour costs of $28.36 and the largest firms (with more than 500 employees) had costs of $40.01 per worker per hour. This is not just a U.S. idiosyncrasy. In “Handbook of Labor Economics,” Walter Y. Oi and Todd L. Idson review the literature and outline a wealth of data about how this holds even across many countries including Italy, the United States, Japan, Peru, Zimbabwe and Guatemala (but not in some European countries).

**Why Do They Do It?**

In “Modern Labor Economics: Theory and Public Policy,” Ronald Ehrenberg and Robert Smith reference many statistical studies that provide empirical support for positive and negative characteristics of bigger companies that can drive higher pay.

On the positive side, larger firms have better opportunities to raise worker productivity, which can return to the worker in higher pay. Three such examples of the virtuous cycle of size, productivity and pay are indentified by Ehrenberg and Smith:

1. Larger firms can more cheaply offer training (due to returns to scale), and high-potential workers seek out those kinds of firms.
2. Larger firms are more likely to create career hierarchies and opportunities for workers to grow in experience and therefore productivity.
3. The larger operations of bigger firms allow employers to assign workers to just the right (specialized) tasks at just the right time, making the employees (and the firm) more productive. Smaller firms don’t have this same luxury due to scale and may find themselves assigning workers in jobs not as perfectly matched to their skills and, as a result, have lower productivity.

But size has its downside too. Interestingly, things that could be considered negative workplace characteristics can also result in higher pay for employees in larger firms. Larger firms have more complex operations that depend on all workers in a more interdependent fashion. This means workers can be less “independent” in larger firms and may need to be paid more to compensate for this lack of independence. Larger firms may also find open positions more costly due to this interdependence of employees and pay more as an incentive to keep workers around.

**More Work on the Horizon?**

It turns out that size of the firm is related to the mix as well as the level of compensation. Data from the U.S. Bureau of Labor Statistics’ “Employer Costs of Employee Compensation” survey show that, on average, larger organizations have a smaller fraction of their total compensation costs in wages and salaries and, therefore, have higher nonwage and salary costs. In particular, at the end of 2010, the average wages and salaries as a fraction of total compensation in the smallest organizations (1 to 49 employees) was 74.6 percent. This falls continuously to a ratio of only 66.4 percent for organizations with 500 or more employees. The largest organizations pay more than one-third of their costs in nonwage and salary costs.

The most obvious reason that firms would choose to deliver more compensation in the form of in-kind benefits is that they can enjoy “bulk” discounts on items like employee health insurance. What has not been conclusively studied is if the reasons identified for the firm-size pay effect in wages and salaries hold for the compensation mix effect as well. Why would creating more productive workers result in larger firms paying a greater share of compensation in nonwage/ nonsalary pay? Why would more interdependence of workers in larger firms necessitate a compensation mix that relies more heavily on benefits? Nor do we know enough about whether these mix-of-pay effects have changed notably over time or vary across geographies or between for-profit and not-for-profit organizations. I look forward to investigating this further.

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**Figure 1**

**Compensation Levels**

Total Hourly Compensation by Establishment Size, Quarterly

<table>
<thead>
<tr>
<th>Year</th>
<th>1-49 workers</th>
<th>50-99 workers</th>
<th>100-499 workers</th>
<th>500 or more workers</th>
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<td>27</td>
<td>32</td>
<td>43</td>
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<tr>
<td>2006</td>
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<td>45</td>
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<tr>
<td>2007</td>
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<td>30</td>
<td>36</td>
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