The Compensation Conundrum

Does the Hospitality Industry Shortchange Its Employees—and Itself?

The hospitality industry may well be losing talent to other businesses because its pay levels for high-level jobs don't match up.

BY MICHAEL C. STURMAN

The hospitality industry has long been labeled as one that pays its workers less than do other industries. For instance, data from the 1998 National Compensation Survey show that the total hourly earnings among service workers (including hospitality) were less than for workers in all other job classifications.¹ Information regarding executives' compensation packages also reveals that service in-

dustries provided the lowest average salary, short-term bonuses, and long-term bonuses among all the industries tallied.² Additionally, the 1997 *Economic Census* reports that the average annual payment to employees in the "accommodation and foodservices" category was the lowest of all categories.³

¹The National Compensation Survey (NCS) is a survey of employee salaries, wages, and benefits conducted by the U.S. Department of Labor's Bureau of Labor Statistics, and can be found at <http://stats.bls.gov/comhome.htm>. The survey provides data at local, regional, and national levels. The average pay in the services industry was less than the average pay of any other broad industry classification.

²The *Execucomp* database, published by Standard and Poor's, includes data on the top-five executives' pay for companies in the S&P 500, S&P MidCap 400, and the S&P SmallCap 600. The average top-executive pay for those in services industries was less than the pay in mining and construction, manufacturing, transportation, wholesale and retail trades, and financial industries.

³The *Economic Census*, produced by the U.S. Census Bureau, profiles the U.S. economy every five years from the national to the local level. Of the 18 categorizations of industries (e.g., mining, utilities, construction, education services, arts entertainment, recreation), the "accommodation and foodservices" industry had the lowest average total compensation.

Raw numbers, however, may not tell the entire story. Compared to other industries, the service and hospitality industries employ a greater proportion of low-skill and part-time employees. Those workers generally earn less pay than do skilled or full-time workers. Thus, the hospitality industry's supposed low pay may actually reflect the low-skill nature of much of the work and perhaps mask pockets of highly paid positions. For this reason, I thought it would be informative to compare pay levels of jobs according to the jobs' knowledge, skills, and abilities (KSAs). If the hospitality industry pays less for given levels of KSAs than do other industries, then the hospitality industry justly could be labeled as low-paying. On the other hand, if the hospitality industry pays an amount similar to that of other industries for particular KSAs, one could argue that the perception of the industry's offering relatively low pay is inaccurate.

Moreover, it would be valuable for those wrestling with payroll issues to have a clear understanding of inter-industry differences so as to establish appropriate pay levels. In this paper I explain my analysis that shows that pay in the hospitality industry does indeed vary negatively from other industries' pay levels, based on a comparison of KSAs. This paper also uses the example of initial pay levels of recent graduates of Cornell University's School of Hotel Administration to show the relationship between pay levels and the quality of students pursuing hospitality jobs.

Relating Pay to Human Capital

As I hinted above, it is too simplistic merely to examine pay averages when considering whether one industry's pay levels are not in keeping with those of another business. Such an approach fails to account for what is known as "human capital" (another term for the KSAs required for a particular job), which an employee generates through education, training, and experience. Economic theory suggests that those KSAs can be "rented out" to employers, and that the value of human capital (i.e., one's pay) is derived from how much those KSAs can earn in the labor market.⁴ Organizations can attract and retain

individuals with specific levels of human capital by offering differential pay for particular positions—thus acquiring the desired KSAs. While certain jobs require little human capital and thus appropriately offer little recompense (e.g., dishwasher, copy-machine operator), other jobs require extensive KSAs and thus are highly compensated (e.g., general manager, branch-store manager). My analysis begins with this point. In the following sections, I will compare the human-capital requirements for specific hospitality jobs against those in other industries, and then look at the corresponding rates of pay.

Measuring Human Capital

To assess human-capital requirements, I used the U.S. Department of Labor's *Dictionary of Occupational Titles*.⁵ For over 12,000 jobs, the *Dictionary* provides a brief job description, classifies each job according to its occupation (e.g., clerical and sales occupations, service occupations) and its industry (e.g., hotel and restaurant, amusement and recreation, government service, transportation) and evaluates each job's human-capital requirements.

The human-capital requirements of each job are rated in terms of the specific vocational preparation needed and its attendant general educational development (GED). *Specific vocational preparation* represents "the amount of time required by a typical worker to learn the techniques, acquire the information, and develop the facility needed for average performance in a specific job-worker situation." *General educational development* captures the aspects of education and experience required of workers for satisfactory job performance. The GED scale comprises the following three elements: reasoning development, mathematical development, and language development. *Reasoning development* assesses the extent to which the job requires the employee to apply principles of logical or scientific thinking. Similarly, the *mathematical-* and *language-development* scales rate the extent to which the job requires math and language skills.

The labor department's *Dictionary* is but one way to classify and evaluate jobs. It is a valuable

⁴For a detailed discussion of economic theory and how human capital relates to pay, see: R. G. Ehrenberg and R.S. Smith, *Modern Labor Economics: Theory and Public Policy* (Reading, MA: Addison Wesley, 2000).

⁵U.S. Department of Labor, *Dictionary of Occupational Titles*, 4th Edition (Washington, DC: U.S. Government, 1991).

EXHIBIT 1

Examples of human-capital ratings

Position	Specific vocational preparation	General educational development			Human-capital scale
		Reasoning development	Mathematical development	Language development	
Housekeeping aide (H)	2	1	1	1	0.11
Dishwasher (H)	2	2	1	1	0.31
Copy-machine operator (O)	2	2	1	1	0.31
Bartender (H)	3	3	2	3	1.16
Receptionist (O)	4	3	2	3	1.27
Housekeeping supervisor (H)	6	3	2	3	1.49
Bowling-center manager (O)	5	4	2	3	1.58
Hospital-laundry manager (O)	6	3	3	3	1.69
Pastry chef (H)	8	4	3	3	2.11
Banking-collection clerk (O)	5	4	4	4	2.14
Motel manager (H)	7	4	3	4	2.17
Benefits manager (O)	7	4	4	4	2.37
Executive chef 2 (H)	8	5	4	3	2.51
Waiter, waitress (H)	6	4	2	3	1.69

Note: H = hospitality job; O = other job.

one, however, because it provides comparative evaluations over a large number of jobs and can be used to compare the human-capital requirements of hotel and other hospitality jobs to those in many other industries. Moreover, the *Dictionary* has a long history and has emerged as a proven resource for human-resources decision makers.⁶

Although the *Dictionary's* ratings include the four items I discussed above (i.e., specific vocational preparation, reasoning development, mathematical development, and language development), analyses of the data reveal that these ratings are highly interrelated. Consequently, it is more accurate and certainly simpler to consider the four factors as approximations of a single overall measure. This single measure, roughly

equal to the average of those four factors,⁷ captures over 90 percent of the factors' variance and has a coefficient alpha of 0.96, which is considered a precise measure for analytical purposes.⁸

⁷The four factors each had slightly different scales. Reasoning and mathematical development were each rated from 1 to 6; language development was rated from 1 to 7; and specific vocational preparation (SVP) was rated from 1 to 9. The factor analyses revealed that each factor was of roughly equal importance. Thus, I created a new five-point scale by subtracting one from each score, dividing each new score by its potential maximum, and adding the four scores together. In other words, it equaled [(Reasoning Score - 1)/5 + (Math Score - 1)/5 + (Language Score - 1)/6 + (SVP Score - 1)/9]. This yielded a scale ranging from 0 to 4.

⁸See: J.C. Nunnally and I.H. Bernstein, *Psychometric Theory*, 3rd edition (New York: McGraw Hill, 1994). Coefficient alpha is a statistical metric used to assess the reliability of measures. Ranging from 0 to 1, alpha scores above 0.70 generally are considered satisfactory for research purposes. However, if important decisions are to be made with regard to specific measurement scores, an alpha level exceeding 0.95 is the desired standard.

⁶The *Dictionary of Occupational Titles* was first published in 1939. Since then, it has undergone three major revisions, with a large number of supplements.

Exhibit 1 shows examples of hospitality positions' human-capital ratings and resulting overall measure, as well as those for "other industry" jobs.

The human-capital data support the assertion that hospitality jobs, on average, require individuals with lower levels of human capital than that found in the people hired in other industries. Although human-capital requirements ranged across the scale for both hospitality and non-hospitality jobs (both had jobs rated from around 0.20 to 3.5), the average human-capital level for hospitality jobs was statistically lower than that of the sampling of non-hospitality jobs (1.45 for hospitality jobs; 2.13 for non-hospitality jobs, $p < .0001$). Such differences in the average levels of required human capital could well explain pay differences across various industries. As discussed earlier, however, it would be more accurate to look at the relationship between human capital and pay to determine whether that relationship is different for the hospitality industry than it is for other industries.

Average Pay Levels by Job

With a measure of human capital in hand, the next step is to examine pay levels across jobs. To make an estimate of pay levels, I used data reported by the Economic Research Institute (ERI). ERI collects and analyzes a large volume of compensation and benefits-related data. I drew data from ERI's *Salary Assessor* database, which provides wage data on over 4,000 different position titles, compiled from available published survey sources. The database is intended to address "all manner of questions relating to salary surveys, wage surveys, salary comparisons, cost-of-living, employee group insurance, and executive compensation salary comparisons."⁹

Yes, Hospitality Pay Really Is Lower

I took a sampling of the ERI database to compare pay differences for hospitality and non-hospitality jobs, as follows. First, I went through the entire database to find all possible hospitality jobs. I retained those that also had salary information in the ERI database. These jobs all ended up being classified by the DOT code as (1) Professional, Technical, and Managerial Oc-

cupations, (2) Clerical and Sales Occupations, or (3) Service Occupations. I then selected jobs from those three classifications and cross-referenced these jobs with those in the ERI database. Using this procedure I found 140 matches. The range for hospitality jobs was 0.11 to 2.17, and for non-hospitality jobs the range was 0.23 to 3.14 (see Exhibit 1). I excluded those jobs that lacked *Dictionary of Occupational Titles* codes because they would have required that I cross-reference the ERI and labor-department databases.

I examined the relationship between the measure of human capital and average pay for each job using multiple regression analysis. In this case, I was interested in determining whether jobs in the hospitality industry (1) paid less than other industries and (2) paid less for increases in human capital than other industries.

The regression analyses revealed that there are indeed pay disparities for hospitality-industry positions. In particular, while increases in human capital were associated with increases in average pay for jobs in all industries, the hospitality industry's differential payments for increases in human-capital requirements were lower than those of other industries. Specifically, hospitality jobs pay less overall—roughly \$2,429 less per year on average than other industries after controlling for the effect of human capital. Moreover, a one-point increase in human capital was associated with an average annual pay increase of \$11,285 in other industries, but that same one-point increase garnered only an average increase of \$9,155 in hospitality jobs—nearly a 20-percent difference.

Those figures translate into meaningful practical differences. Pay levels in the two groups were relatively close for low-human-capital jobs (likely due to the floor established by minimum-wage laws). The differences were greater for the high-human-capital jobs. For example, motel manager, pastry chef, and sous chef are positions that scored in the neighborhood of 2.25 out of 4 on the combined scale. Positions with comparable levels of KSAs in other industries paid, on average, roughly \$7,200 more. As I calculate it, the hospitality industry paid about the same as other industries for low-complexity jobs, but hospitality paid about 85 percent of what other industries paid for moderate-complexity jobs and 78 percent for

⁹Economic Research Institute, *Salary Assessor* (Redmond, WA: ERI, 2001).

EXHIBIT 2

Relationship between human capital and pay for hospitality and non-hospitality jobs

high-complexity jobs. Exhibit 2 graphs the relationship between human capital and pay for hospitality and non-hospitality jobs.

Individual Job Offers: The Case of Cornell Hospitality Students

If it's true that mid- and high-level hospitality employees are on the short side of a pay differential, the next question to examine is whether relatively low pay levels really affect the industry's ability to attract and retain high-quality employees. Because the industry should be most concerned about attracting employees with strong KSA levels (and because the data are available to me), I examined job placements of students who graduated from Cornell University's School of Hotel Administration in 2000.

Cornell University's School of Hotel Administration has been consistently rated as providing the top undergraduate education in hotel and restaurant management.¹⁰ Its students have a mean SAT of 1290. Of students taking the SAT nationally who indicated a preference to study hospitality management, 3 percent had an SAT score above 1300, whereas 50 percent of Cornell hotel students were above this mark. Furthermore, Cornell hotel-school students are generally in the top 10 percent of their high-school class. In sum, Cornell University's School of Hotel Administration provides an elite set of students with a strong academic background and training. I thought that it would be interesting to see whether, for this select student group, hospitality jobs were associated with notably different pay, and whether that pay level was associated with differences in the quality of hotel students who pursued such jobs.

Last year 237 students graduated from the Cornell hotel school with a Bachelor of Science degree in hospitality management. Of those, 129 completed a survey detailing the job they took and the pay associated with that job. The starting salary of this sample of hotel-school graduates averaged \$36,773 and ranged from \$20,000 to \$55,000. Including relocation and signing bo-

¹⁰ *The Gourman Report*, published by Random House, ranks undergraduate institutions for a large number of majors. Cornell University has consistently been ranked as the top institution for the major of hospitality and restaurant management. See: J. Gourman, *The Gourman Report*, 10th edition (New York: Random House, 1999).

nuses, the average total compensation was \$41,749, with a range of \$21,000 to \$92,500.

The jobs taken by students could be classified into three categories. Roughly 47 percent of survey respondents went into hospitality-operations positions (e.g., rooms supervisor, assistant banquet manager, assistant front-desk manager). Another 21 percent went into specialized, hospitality-related positions that did not involve operations (e.g., consulting). The remaining graduates took jobs in businesses outside of the hospitality industry.¹¹

I found statistically different pay levels among the three groups. Those in operations jobs reported an average base pay of \$31,314 and an average total compensation package of \$33,606. That was significantly less than the pay of those in the specialty hospitality jobs, who reported an average base pay of \$39,085 and an average total compensation of \$41,711.¹² Both sets of hospitality pay levels were significantly less than the pay of graduates who took non-hospitality jobs. That group reported an average pay of \$42,297 and an average total compensation of \$53,690.¹³

The implications of those pay differences are considerable. Non-hospitality jobs paid on average over \$11,000 more in base pay than did hospitality-operations positions (and more than \$20,000 considering signing bonuses and relocation reimbursements). This sizable pay difference appeared to influence the quality of hotel-school graduates choosing to pursue jobs in each area. In particular, the students with high grade-point averages (GPAs) were more likely to land high-paying jobs, while the students with low GPAs were filling the less-lucrative operations positions. Those entering non-hospitality jobs had the highest GPA of hospitality majors (i.e., a mean of 3.34, or roughly a B+ average). In comparison, those entering specialty hospitality jobs had an average GPA of 3.07, while those entering operations jobs carried a mean GPA of 2.99.

¹¹Note that those jobs listed as being outside of the hospitality industry were with companies that did not specifically perform work in this area. Those businesses include consulting, banking, and real estate, for instance. It is possible, however, that some of those businesses would be involved in some hospitality work, and thus such work may be given to hotel-school graduates.

¹² $p < .01$.

¹³ $p < .0001$.

EXHIBIT 3

Base pay versus GPA of Cornell's Class of 2000

Job type	Percentage of respondents	Mean base pay	Mean total compensation	Mean GPA
Hospitality industry: operations	47%	\$31,314	\$33,606	2.99
Hospitality industry: specialists, consultants	21%	\$39,085	\$41,711	3.07
Non-hospitality positions	32%	\$42,927	\$53,690	3.34

Note: Above figures are based on a survey of 129 graduates of the Cornell University School of Hotel Administration. All graduates had earned a Bachelor of Science degree. The mean base pay is the average starting salary; the mean total compensation is the average starting salary combined with signing bonus and relocation.

Bear in mind that the above statistics involve averages. Some students with high GPAs (approaching 4.0) took operations positions, while others with low GPAs (say, 2.5) took non-hospitality jobs. Nonetheless, the overall results suggest a connection between student achievement and pay levels. More to the point, the finding suggests that hotel positions in general and operations positions in particular are not drawing the best graduates.

Whither the Best and the Brightest?

My analysis supports the long-held anecdotal belief that jobs in the hospitality industry pay less than do comparable jobs in other industries. More important, this paper demonstrates that the disparities in pay expand with the jobs' level of complexity. It seems reasonable to argue that such a gap makes it difficult for the hospitality industry to attract the most-skilled employees. Pay disparities may also increase turnover among mid-level employees (who eventually leave for greener pastures) and affect the success of internal-promotion and employee-development systems.

If recruiters, hotel and restaurant managers, and hospitality-business owners want to attract the top students from high-quality institutions, their job offers must be competitive with those of non-hospitality businesses. Certainly, many

students pursue a degree in hospitality administration because of their desire to work in the hotel or restaurant industry. However, given the notably high cost of a college education,¹⁴ the logical step for a graduate is to accept the job offer that pays the most.

Some might argue that hotels and restaurants simply cannot afford to match other industries' pay rates for operations positions. Moreover, it is possible for organizations to operate successfully with a competitive human-resources strategy based on paying lower-than-market wages. On balance, however, the best way to deliver high-quality services is through high-quality employees—and that requires financial incentives to attract and keep the best employees.

The issue of obtaining top-quality employees is even more critical when one considers the value of developing company leaders through promotion from within. If hotels fail to attract or retain the most talented employees because of low pay, the long-term costs associated with attracting and retaining leaders (or importing talent from other businesses) may far outweigh any short-term benefit associated with payroll savings. To cultivate future leaders, the industry must invest in a long-term strategy to ensure that talented employees in entry-level and middle-management jobs will stay on to become top leaders. ■

¹⁴For the 2001–2002 academic year, the tuition and fees of the School of Hotel Administration will be \$26,062. Cornell University's financial-aid office estimates room and board at \$8,552 for the year, books at \$600, and personal expenses at \$1,220. This totals to an expected budget per student of over \$36,000 for the 2001–2002 academic year.

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