

**EMPLOYEE BENEFITS IN THE HOSPITALITY INDUSTRY:  
INHOSPITABLE FOR EMPLOYEES?**

CHATTERJEE, Swarn\*

LAUDERDALE, Mitzi

GILLIAM, John

---

**Abstract**

This paper uses data from the Panel Study of Income Dynamics (PSID) to examine the likelihood of receiving health insurance coverage and retirement benefits among employees working in the hospitality sector. The results show that, although hospitality sector employees are less likely to receive health insurance coverage and retirement benefits from their employers when compared with respondents employed in other sectors, the likelihood of receiving employee benefits increases with job tenure, income and educational attainment. A discussion on the possible strategic initiatives for increasing employee benefits in this sector is included for industry leaders, policy makers, economists.

Key words: Retirement, Employee Benefits, Health Insurance

JEL: D14, J01, J10

---

**1. Introduction**

The hospitality and tourism industry has grown considerably over the past decade, and is expected to remain one of the high-growth industries through 2014 (Bureau of Labor Statistics, 2008). However, the availability of a skilled pool of labor for this sector has not kept pace, and is likely to remain in short supply in the near future. As a result, the need to retain employees, and improve employee experience within the organization, has become increasingly important. Rogers, et al., (1994) find that increasing employee job satisfaction results in higher levels of customer satisfaction, increased employee productivity and, consequently, an increase in revenue and profits for the employer. Baum, et al., (1997) find that, alongside education and training, employee benefits play a crucial role in attracting and retaining quality personnel in the industry.

While the need to retain employees and reduce turnover within the industry is paramount to revenue generation and market expansion, short-term cost reduction pressures currently force many employers to offer benefits that are less competitive than other industries within this sector. As stated in Bernhardt (1999), only one-third of employees in the services industry have access to employer-sponsored retirement plans, and little more than half enjoy employer-provided health insurance coverage. The goal of this paper is to determine whether a similar trend also exists in the hospitality industry. The Bureau of Labor Statistics combines accommodation and

---

\* Swarn Chatterjee, Assistant Professor, 205 Dawson Hall, University of Georgia, Athens, GA 30602 USA, [swarn@uga.edu](mailto:swarn@uga.edu). Mitzi Lauderdale, [mitzi.lauderdale@ttu.edu](mailto:mitzi.lauderdale@ttu.edu), and John Gilliam, [john.gilliam@ttu.edu](mailto:john.gilliam@ttu.edu), Assistant Professors, Texas Tech University, Lubbock, TX 79409 USA

food services, as well as arts, entertainment, and recreation categories, to comprise leisure and hospitality as a sector (BLS, 2009).

This paper examines the individual-level determinants of receiving employer provided retirement and insurance benefits in the hospitality and leisure industry through an empirical model that includes the various determinants, and discusses the importance of offering benefits as a way to attract and retain quality employees in the business.

## **2. Review of literature**

Recent studies in this area find that availability of employer-provided benefits, such as retirement and insurance plans, helped increase employee job satisfaction and reduce employee turnover in hospitality services companies (Nadiri and Tanova, 2009). Schmitt and Allscheid (1995) find that satisfied employees engaged in better customer service, which led to an increase in customer loyalty, corporate revenues and market share, and led to a reduction in long-term costs for the hospitality services provider (Fields, et al., 2000). Batt (2002) also finds that revenue growth was higher in corporations that provided greater employee benefits and higher pay and involved employees in the decision-making processes of the company. Other studies find that a benefits-based incentive structure increased motivation and commitment among employees (Appelbaum, et al., 2000; MacDuffie, 1995). Delery and Doty (1996) find in their study that employer profit-sharing and benefits were positively associated with higher revenue generation in firms. Batt (2002) concludes that providing greater employee benefits, sharing corporate profits with employees and involving employees in human resource decisions resulted in the retention and accumulation of greater industry-specific human capital in firms. Tanke (1990) recommends that firms in the hospitality industry develop employee compensation programs that helped in retaining employees and increasing employee commitment, especially because the hospitality industry experienced such high employee turnover rates.

Shaw and Williams (1994) find that the degree of compensation in the hospitality industry differs by type of employment. The authors find a shortage of permanent employees in skilled positions, and employers try to retain these employees by offering higher salaries and various retirement benefits. Hoffman and Ingram (1992) underscore the importance of offering adequate compensation to retain these employees and increase their commitment to the organization, due to both shortage of skilled labor and the prevalence of competition among firms seeking strong employees, and due to the level of responsibility these employees have for making critical field-level decisions, which plays a role in the revenue generation process of their employers.

In an early research on employee commitment, Angle and Perry (1981) find that firms offering a greater array of employee compensation lost less revenue through employee absenteeism and turnover, a finding also confirmed in the Decotis and Summers (1987) study. In a very early study on employee benefits, Hrebiniak and

Alutto (1972) find that employees, who were satisfied with employee benefits and compensation were more committed to their respective organizations and were less likely to leave their current employers, even when they expected marginal increases in pay or status.

The unifying elements that emerge from a review of the past literature is that higher employee benefits and compensation increases employee commitment, helps retain skilled and valuable employees, and helps increase long-run corporate revenues as a result of increased employee productivity, lower employee turnover and higher corporate human capital (Nadiri and Tanova, 2009; Batt, 2002; Schmitt and Allscheid, 1995). Bernhardt (1999), however, finds that service-oriented industries such as retail and hospitality lag behind others in employee compensation, benefits and insurance coverage. Bonn and Forbringer (1992) suggest in an earlier study the need for increasing such benefits as a strategy to retain valuable employees in the hospitality industry. We extend the literature in this area by examining whether hospitality industry employees lag behind employees of similar qualification in other industries in receiving employer-provided health benefits and retirement plans, after controlling for a number of other socio-economic, demographic and income-related factors.

### **3. Data and Methods**

For empirical analysis in this study, the data from the Panel Study of Income Dynamics (PSID) is used. The PSID is an ongoing, nationally-representative, longitudinal study of approximately 8,000 families living in the United States. This paper uses the 2005 wave of the dataset. For the purpose of this study, employed heads of households below age 65 are considered, bringing the overall sample to 4,585. The PSID contains detailed information on income and compensation of households by industry sector. The total number of respondents employed in the hospitality sector is 507, approximately 11 percent of the sample.

#### *Variables used in the analysis:*

Employer-provided health insurance and retirement plans are the dependent variables for this study. The PSID data asks retirement plan participation questions to employed respondents 64 or younger. Using variables from the 2005 PSID, three separate analyses are performed to investigate if employees receive employer provided health insurance coverage, defined benefit plans and defined contribution plans. All three of these variables are coded in this study as '1' for employer contribution and '0' otherwise. The next part of this study examines the likelihood of access to employer-sponsored health insurance and retirement plans among hospitality industry employees only. The independent variable of interest in this study is employment in the hospitality industry. This is coded as '1' for hospitality employees and '0' otherwise. Other control variables comprise of demographic, financial and socioeconomic characteristics. Age is included as it is a significant predictor of retirement plan participation (Ameriks and Zeldes, 2000; Bassett and Rodrigues, 1998). Prior research has shown that whites are more likely than minorities to hold high-risk and high-return

assets (Keister, 2000); race is thus included as a control variable in order to control for this demographic difference. Education is included in the model, as past research has shown that educational attainment positively correlates with receiving employer contribution in 401(k) plans (Bassett and Rodrigues, 1998). Education, income, marital status, and gender are also controlled because of their association with retirement plan participation in prior literature (Zagorsky, 2007). Past research finds that income and job tenure are positively associated with defined contribution plans (Poterba, Venti and Wise, 1996). Therefore, log values of income and job tenure are also included as control variables.

#### *Analysis:*

A descriptive statistical analysis is initially performed for examining the demographic composition, educational attainment, income, and investment characteristics of the population and those employed in the hospitality industry. The first part of this study examines the determinants of receiving health insurance coverage, defined benefits plans and defined contribution plans among respondents, and whether hospitality employees differ significantly from those in other industries in receiving employer-sponsored health insurance and retirement plans, after controlling for income, educational attainment and demographic differences, as well as socioeconomic factors. A Probit estimation technique is used for calculating the coefficients of the dependent variables. These estimates are then applied to calculate the predicted probabilities or the marginal effects for the independent variables. The second part of the study investigates the determinants of receiving employer-provided health insurance and retirement plans among hospitality employees only. The probit model is expressed as follows:

$$P_i^* = X_i' \beta_1 + u_i$$

Where  $P_i = 1$  if  $P_i^* > 0$  and

$P_i = 0$  if otherwise for  $i = \{1, 2, \dots, I\}$ .

In this study,  $P_i$  is the binary dependent variable, which is equal to 1 for receiving employee benefits for the  $i^{\text{th}}$  participant and 0 otherwise.  $P_i$  is determined in this case by  $P_i^*$ , which is a latent continuous variable indicating whether the marginal effect of receiving an employee benefit is greater than the marginal cost of having one (Wooldridge, 2006). The error term  $u_i$  is distributed normally with mean 0 and variance 1.  $X_i'$  is the vector of all control variables, including whether the respondent is employed in the hospitality industry.

## **4. Results**

The descriptive statistics in Table 1 show that the average age of respondents employed in the hospitality industry (37) is lower than that of the general population (45).

The respondents reporting to be employed in the hospitality industry also had lower educational attainment, job tenure and median income than the reference group. Additionally, when compared with the general population, a lower percentage of hospitality industry employers offered benefits such as health insurance coverage, defined benefits plans or defined contribution plans to their employees.

Table 1: Descriptive Statistics

| N = 4585               | All      | Hospitality Industry |
|------------------------|----------|----------------------|
| Overall                | 100%     | 6%                   |
| Age                    | 45       | 37                   |
| %Male                  | 70%      | 69%                  |
| %Married               | 53       | 38                   |
| Children               | 0.85     | 0.95                 |
| Race                   |          |                      |
| %White                 | 62       | 52                   |
| %Black                 | 31       | 41                   |
| %Hispanic              | 5        | 5                    |
| %Asian                 | 1        | 1                    |
| %Others                | 1        | 1                    |
| Education              |          |                      |
| %Less than High School | 20       | 30                   |
| %High School Grad      | 23       | 26                   |
| %Some College          | 33       | 27                   |
| %College Graduate      | 14       | 14                   |
| %Graduate Education    | 10       | 3                    |
| Median Income (Annual) | \$46,000 | \$29,900             |
| Mean Job tenure        | 12.98    | 8.84                 |
| Employee Benefits      |          |                      |
| % Health Insurance     | 74%      | 54%                  |
| % Defined Contribution | 15%      | 5%                   |
| % Defined Benefits     | 12%      | 4%                   |

Table 2 shows the three probit estimation models that determine the likelihood of employer contribution to health insurance, defined contribution plans and defined benefit plans. The results suggest that respondents working in the hospitality industry are less likely than others to receive employer-provided health insurance coverage, defined benefits or defined contribution plans through their employers.

Age is a predictor of receiving employer-based retirement plans, as is health insurance coverage. While younger employees are more likely to receive health insurance and defined contribution plans from employers, older employees are more likely to be able

to participate in employer-sponsored defined benefits plans. Men are more likely than women to participate in defined contribution plans, and having children was negatively associated with participation in defined contribution plans. Married respondents were more likely than non-married to have health insurance as well as defined contribution plans from their jobs, and college graduates and those who went to graduate school were more likely to receive defined contribution plans from their employers. Job tenure was also positively associated with receiving employer-sponsored defined contribution retirement plans. Income and full-time employment were significant and positively associated with receiving all three types of employee benefits.

Table 2: Probit of Employee benefits coverage

|                       | Health Insurance |       |        | Defined Contribution |       |        | Defined Benefit |       |        |
|-----------------------|------------------|-------|--------|----------------------|-------|--------|-----------------|-------|--------|
|                       | Coef.            | S.E.  | MFX    | Coef.                | S.E.  | MFX    | Coef.           | S.E.  | MFX    |
| Hospitality           | -0.362*          | 0.177 | -0.076 | 0.142***             | 0.001 | 0.012  | 0.358***        | 0.129 | -0.031 |
| Age                   | 0.205**          | 0.089 | 0.052  | 0.064***             | 0.016 | 0.006  | -0.099***       | 0.015 | 0.011  |
| Age square            | -0.006***        | 0.001 | 0      | -0.004***            | 0     | 0      | .001***         | 0     | 0      |
| Male                  | 0.013            | 0.069 | 0.001  | 0.478***             | 0.086 | 0.009  | -0.123          | 0.081 | -0.006 |
| Married               | 0.256*           | 0.134 | 0.067  | 0.225*               | 0.123 | 0.043  | 0.068           | 0.074 | 0.007  |
| Children              | -0.021           | 0.032 | -0.007 | -0.045*              | 0.023 | -0.005 | -0.031          | 0.023 | -0.003 |
| White                 | 0.253**          | 0.125 | 0.069  | 0.178                | 0.154 | 0.032  | 0.062           | 0.057 | 0.005  |
| College or higher     | 0.022            | 0.231 | 0.006  | 0.349***             | 0.07  | 0.047  | 0.318           | 0.195 | 0.072  |
| Log Job tenure        | 0.02             | 0.002 | 0.002  | 0.126*               | 0.071 | 0.024  | 0.041           | 0.039 | 0.004  |
| Log Income            | 0.301***         | 0.113 | 0.076  | 0.291***             | 0.034 | 0.028  | 0.298***        | 0.031 | 0.033  |
| Work fulltime         | 0.613***         | 0.124 | 0.183  | .897***              | 0.134 | 0.123  | 0.285**         | 0.135 | 0.031  |
| Intercept             | 6.834***         | 2.331 |        | 5.391                | 0.435 |        | -6.12***        | 0.426 |        |
| Pseudo R <sup>2</sup> | 23.5             |       |        | 27.1                 |       |        | 27.96           |       |        |
| LR Chi2               | 410.48           |       | ***    | 501.28               |       | ***    | 489.33          |       | ***    |

\*p < .10, \*\* p < .05, \*\*\*p < .01

Table 3 shows the likelihood of receiving employer-based health insurance, defined benefits plans and defined contribution plans among hospitality employees.

The results show that employers are significantly more likely to offer health insurance and defined benefits plans to older employees, and defined contribution plans to younger employees. Conversely, they are less likely to offer health insurance

and defined benefits plans to younger employees, while older employees are less likely to have defined contribution plans. Attainment of college degree or higher is positively associated with receiving all three employee benefits among hospitality employees. Employee income is a positive predictor of employers offering defined benefits and defined contribution plans, whereas employees working full time—40 hours a week or more—are significantly more likely to have access to employer-based health insurance and defined benefits plans.

Table 3: Probit of employee benefits among hospitality employees

|                       | Health Insurance |       |        | Defined Contribution |       |        | Defined Benefit |       |        |
|-----------------------|------------------|-------|--------|----------------------|-------|--------|-----------------|-------|--------|
|                       | Coef.            | S.E.  | MFx    | Coef.                | S.E.  | MFx    | Coef.           | S.E.  | MFx    |
| Age                   | -2.142**         | 0.072 | -0.149 | 5.283**              | 2.909 | 0.196  | -0.017***       | 0.005 | -0.001 |
| Age square            | 0.021**          | 0.001 | 0.002  | -0.058**             | 0.022 | 0      | 1.787***        | 0.662 | 0.004  |
| Male                  | 0.132            | 0.579 | 0.009  | 0.231                | 0.621 | 0.005  | -1.768**        | 0.798 | -0.027 |
| Married               | 0.489            | 0.503 | 0.038  | 0.946***             | 0.326 | 0.058  | 0.428           | 0.771 | 0.001  |
| Children              | -0.179           | 0.241 | -0.012 | -0.927               | 0.653 | -0.005 | -0.472          | 0.506 | -0.001 |
| White                 | 0.195            | 0.662 | 0.015  | 0.181                | 0.446 | 0.029  | -0.971          | 0.611 | -0.007 |
| College & up          | 1.912**          | 0.782 | 0.397  | 2.001**              | 0.892 | 0.145  | 0.268**         | 0.108 | 0.008  |
| Log job tenure        | 0.091            | 0.241 | 0.006  | 0.564                | 0.569 | 0.036  | 1.039           | 0.548 | 0.001  |
| Log income            | 0.153            | 0.229 | 0.011  | 3.552***             | 1.055 | 0.179  | 0.615*          | 0.286 | 0.012  |
| Work fulltime         | 1.315*           | 0.723 | 0.181  | 1.542                | 1.012 | 0.114  | 0.844***        | 0.142 | 0.031  |
| Intercept             | 4.905***         | 0.387 |        | 5.971***             | 0.537 |        | -5.592***       | 0.426 |        |
| Pseudo R <sup>2</sup> | 41.4             |       |        | 67.4                 |       |        | 52.4            |       |        |
| LR Chi2               | 227              |       | ***    | 223                  |       | ***    | 224             |       | ***    |

\*p < .10, \*\* p < .05, \*\*\*p < .01

## 5. Conclusion

The purpose of this study was to compare the determinants of respondents receiving employee benefits from their employers with a focus on the hospitality industry. The results show that respondents working in the hospitality industry were less likely to receive health insurance benefits or defined contribution or defined benefits types of retirement plans from their employers. The results from Table 2 also show that employers were more likely to offer health insurance coverage and defined contribution benefits to younger employees and defined benefits coverage to older employees. Among hospitality industry employees (Table 3), the analysis finds that employers were more likely to offer defined benefits coverage and health insurance coverage to older employees, and defined contribution benefits to younger employees. The fact that employers were likely to provide defined contribution benefits to younger employees and defined benefits coverage to older employees is not surprising, as the number of defined benefits plans offered in the private sector has declined substantially

over recent years (Bassett and Rodrigues, 1998), and have since been replaced with defined contribution plans as employers seek cost savings.

Among control variables, the results show that income was positively associated with receiving all three benefits in the general population, and was significantly associated with employees receiving defined benefits and defined contribution plans through their employers in the hospitality industry. Additionally, educational attainment of college or higher was also positively associated with receiving all three benefits among hospitality industry employees, and for receiving defined contribution plans among the general population. This is because the employees, who were better educated and received higher income, were likely also better trained and more valuable for their organizations.

These results are consistent with an earlier finding by Shaw and Williams (1994) that highly skilled employees in hospitality services were more likely to be offered higher compensation benefits by their employers. Full-time employment was also positively associated with receiving all three types of benefits in the general population (table 2) and for receiving health insurance and defined benefits plans among only hospitality employees (table 3). These findings are consistent with previous studies which have found job tenure to be a significant predictor of receiving employee benefits (Andrews, 1992). Consistent with previous studies (Springstead and Wilson, 2000), married respondents were more likely to participate in health insurance coverage and defined contribution compensation in the general population and similarly for receiving defined contribution compensation in the hospitality industry.

As the hospitality industry struggles with a shortage of skilled and trained personnel, and faces competition for human capital from other rival industries in the service sector, lack of retirement benefits and health insurance coverage offered through the hospitality industry is likely to aggravate this situation in the near future. Our findings reveal that hospitality employees, on average, are younger, have less job tenure, and have lower income; this may prove to be a factor in the employers offering lower retirement benefits, higher employee turnover and the majority of the jobs offered in this industry offer lower income. Past findings indicate that employers offering health insurance plans experience lower employee turnover and attract newer employees to the firm (Buchmueller and Valetta, 1995; Madrian, 1994).

One possibility, given this scenario, is to offer greater group health insurance coverage to employees. Installing high-deductible group health insurance plans might be less capital-intensive for low-wage employers in the hospitality industry, but it might be a way to attract employees and reduce turnover. One limitation of our study was that the data did not allow us to compare the experiences of those corporations within the hospitality industry that offer greater benefits with the ones that offer less attractive packages. Future research is necessary in examining the costs and benefits of offering greater retirement benefits and health insurance coverage on employee retention, productivity and turnover rates within the hospitality industry in particular, and the service sector in general.

**References**

- Ameriks, J., and Zeldes, S. P. (2000). How do household portfolio shares vary with age? Unpublished manuscript, Columbia University.
- Andrews, E. S. (1992). The growth and distribution of 401 (k) plans. *Trends in Pensions*, 149-176.
- Angle, H.L., and Perry, J.L. (1981). An empirical assessment of organizational commitment. *Administrative Science Quarterly*, 26(1), 1-14.
- Appelbaum, E., Bailey, T, Berg, P., and Kalleberg, A. (2000). *Manufacturing advantage*. Ithaca, NY: ILR Press.
- Bassett, W. F., and Rodrigues, M., J. (1998). How workers use 401 (k) Plans: The participation, contribution and withdrawals. *National Tax Journal*, 51(2), 263-289
- Batt, R. (2002). Managing customer services: human resource practices, quit rates and sales growth. *Academy of Management Journal*, 45(3), 587-597.
- Baum, T., Amoah, V., and Spivack, S. (1997). Policy dimensions of human resource management in the tourism and hospitality industries. *International Journal of Contemporary Hospitality Management*, 9(6), 221-229.
- Bernhardt, A. (1999). The future of low-wage jobs: case studies in the retail industry. *Institute for Education and the Economy Working paper*, 10, 1-41
- Bonn, M.A., and Forbringer, L.R. (1992). Reducing turnover in hospitality industry: An overview of recruitment, selection and retention. *International Journal of Hospitality Management*, 11(1), 47-63.
- Buchmueller, T.C., and Valletta, R.G. (1996). The effect of employer provided health insurance on worker mobility. *Industrial Labor Relations Review*, 3, 439-455.
- Bureau of Labor Statistics (2009). *Career Guide to Industries, 2008-09 Edition*, Hotels and Other Accommodations, on the Internet at <http://www.bls.gov/oco/cg/cgs036.htm> (downloaded November 21, 2009).
- Bureau of Labor Statistics (2009). <http://www.bls.gov/iag/tgs/iag70.htm> (downloaded November 30, 2009).
- Decotis, T.A. and Summers, T.P. (1987). A path analysis of a model of antecedents and consequences of organizational commitment. *Human Relations*, 40(7), 445-470.
- Delery, J., and Doty, H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance. *Academy of Management Journal*, 39, 802-835.

- Fields, D., Pang, M., and Chiu, C. (2000). A comparative field study of the effects of distributive and procedural justice in Hong Kong. *Journal of Organizational Behaviour*, 21(5), 547-562.
- Hrebiniak, L.G., Alutto, J.A. (1972). Personal and role-related factors in the development of organizational commitment, *Administrative Science Quarterly*, 17(4), 555-573.
- Hoffman, K.D. and Ingram, T.M. (1992). Service provider for job satisfaction and customer oriented performance. *Journal of Services Marketing*, 6(2), 68-78.
- Keister, L. A. (2000). Race and wealth inequality: The impact of racial differences in asset ownership on the distribution of household wealth. *Social Science Research*, 29(4), 477-502.
- MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic & flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48, 197-201.
- Madrian, B.C. (1994). Employer based health insurance and job mobility: Is there evidence of job lock? *Quarterly Journal of Economics*, 109(1), 27-54.
- Nadiri, H., and Tanova, C. (2009). An investigation of the role of justice in turnover intentions, job satisfaction, and organizational citizenship behavior in hospitality industry. *International Journal of Hospitality Management*, 29(1), 33-41.
- Poterba, J. M., Venti, S. F., and Wise, D. A. (1996). How retirement saving programs increase saving. *Journal of Economic Perspectives*, 10(4), 91-112.
- Rogers, J.D., Clow, K.E., and Kash, T.J. (1994). Increasing job satisfaction of service personnel. *Journal of Services Marketing*, 8(1), 14-26.
- Schmitt, M.J., and Allscheid, S.P. (1995). Employee attitudes and customer satisfaction: making theoretical and empirical connections. *Personnel Psychology*, 48, 521-532.
- Shaw, G. and Williams, A.M. (1994). *Critical Issues in Tourism: A Geographical Perspective*. Blackwell, Oxford, UK.
- Springstead, G. R., and Wilson, T. M. (2000). Participation in voluntary individual savings accounts: An analysis of IRAs, 401 (k) s, and the TSP. *Social Security Bulletin*, 63(1), 34-39.
- Tanke, M. L. (1990). *Human Resource Management*, Delmar, Albany, NY.
- Wooldridge, J. M. (2006). *Introductory Econometrics: A Modern Approach*. 3e: South-Western/Thomson Learning.
- Zagorsky, J. L. (2007). Do you have to be smart to be rich? The impact of IQ on wealth, income and financial distress. *Intelligence*, 35(5), 489-501.
- Journal published by the EAAEDS: <http://www.usc.es/economet/rses.htm>