New benefits data from the National Compensation Survey

Private establishments with 100 or more workers were much more likely than small establishments to offer medical insurance and retirement benefits in 2003; this information comes from new National Compensation Survey data on employee benefit plan coverage and plan details

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ne of the greatest challenges a statistical agency faces is keeping up to date with developments in the economy and with the evolving information needs of the agency's customers. In addition to resuming a regular program of reports on the incidence and characteristics of employee benefits plans, the 2003 National Compensation Survey (NCS) employee benefits publications introduced a variety of new data tabulations. These new data items range from information on the percentage of establishments offering major types of benefits to their employees and the percentage of total medical premiums paid by employers and employees, to tabulations that link benefit plan coverage to workers' wages, to new details on such topics as the types of bonuses offered employees, employer contributions to cash balance pension plans, and orthodontic coverage for dependents of employees.

The new tabulations stem from several sources. First, employee compensation programs have long been a dynamic part of our economy. Wages and salaries, on the one hand, and employee benefit packages, on the other, evolve in response to a variety of pressures and needs. Employers seek competitive advantage in recruiting and retaining employees, while at the same time trying to control labor costs. Some compensation programs follow trends in collective bargaining; others reflect prevailing practices in an industry or among associated employers. Employee benefit plans are rewritten to meet legal or regulatory mandates. Second, customer requests have impelled the Bureau of Labor Statistics to introduce many new

data tabulations. In some cases, these data focus on new elements of the compensation package; in other cases, the tabulations highlight fresh perspectives on employee compensation. Third, some of the new items result from a central goal of the NCS: to combine in a single place all of the data that were formerly collected and stored in several separate survey programs. This integration of separate programs into one makes possible, for the first time, comparisons that look across the various forms of employee compensation data.

This article (1) briefly describes each of the new benefit data items, (2) reviews the 2003 survey findings, and (3) provides additional information to help place the new data in context. Included are definitions and, in some cases, calculational procedures. Finally, the article discusses limitations that should be considered in using the new data. An appendix at the end offers a glossary of technical terms.

New counts of benefits coverage

Most of the benefits data traditionally produced by the NCS and its predecessor surveys have come in three forms: a dollars-and-cents measure of the cost to employers of providing benefit plans to their employees (cost-level data), changes in employer costs over time (cost-trend data), and a measure of the number or proportion of employees who receive benefit plans (counting data). In response to requests from users, the NCS benefits program offers new counting measures that afford additional perspectives on benefit plan coverage

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beyond those published in earlier surveys. The NCS also provides a new measure of employer cost, described later in the article.

Establishment counts. Traditionally, the NCS has provided counts of employees. In response to customer requests, the 2003 private-industry survey published direct measures of the proportion of establishments that offered major benefit plans to their employees.² The survey found, for example, that 47 percent of establishments offered retirement benefits to their employees, but that offerings differed sharply by the size of establishments.³ For example, 45 percent of small establishments (those with fewer than 100 workers) offered retirement benefits, compared with 88 percent of larger establishments. The figures for health care benefits were similar, with 56 percent of small workplaces offering health insurance, compared with 95 percent of large establishments.⁴ The overall figures are dominated by small establishments, because about 96 percent of private establishments have fewer than 100 employees. The division by employees is more even: small establishments employ about 54 percent of private-sector workers.5

Access and offerings. A second counting mechanism requested by users is a measure of the percentage of employees who are offered (or who have access to) retirement and insurance benefits. 6 Data on offerings and access show the proportion of employees who are offered a benefit, in contrast to the traditional count used in the survey, namely, participation, which indicates the number or percentage of employees covered by a benefit plan. The reason for collecting data on access is that some users—for example, policymakers—are interested in knowing not only how many employees actually have medical insurance, but also how many employers offer, and how many employees are offered, such insurance.7

The two counts (access and participation) can be combined to yield a third measure, the takeup rate, which shows the proportion of workers offered a benefit who participate in that benefit. For example, the 2003 survey showed that 57 percent of workers had access to (or were offered) retirement benefits, and 49 percent were participants in a retirement plan, for a takeup rate of 86 percent (49 divided by 57). In contrast, medical care benefits had a lower takeup rate of 75 percent, with 60 percent of workers having access, but only 45 percent participating.8

New breakouts of benefits coverage data

The new NCS database on benefits features a standard set of breakouts that provides additional information on coverage by both worker and establishment characteristics. Over the next 4 years, the sample devoted to publishing data on benefits coverage will gradually increase from the 2003 figure

of 2,900 establishments to approximately 13,000. As the sample increases, additional breakouts may be published. Exhibit 1 shows the standard presentation of benefits coverage data. This article focuses on those breakouts which are new to the survey.

Establishment characteristics. The 2003 survey presents data for the first time for both metropolitan and nonmetropolitan areas and for the nine Census divisions. About 6 out of 7 employees were located in metropolitan area workplaces,9 which were somewhat more likely to provide the major types of employee benefits than their nonmetropolitan area counterparts were, but the differences were not pronounced.¹⁰

Using the Census Bureau's classification scheme, NCS analysts divided the country, State by State, into nine divisions.¹¹ The divisions varied widely in employment size. The smallest divisions were the New England, East South Central, and Mountain divisions, with about 5 percent or 6 percent apiece of the total employment covered by the survey. The largest division, the East North Central division, had nearly 20 percent of the country's employees. There were some notable differences in benefit offerings and participation among divisions. For example, 76 percent of workers in the Middle Atlantic division participated in a short-term disability benefits plan, double the percentage in any other division. This difference is largely attributable to State laws in New York and New Jersey that require most private employers to provide such coverage to their employees.

Worker characteristics. In addition to classifying employers by various characteristics, the survey classifies employees into several categories, depending upon their occupation, work schedule, and union status. The first category, occupation, is changed in the 2003 survey.

For publication purposes, the survey grouped workers into three broad occupations: white collar, blue collar, and service. This new grouping allows for better comparisons with other NCS survey outputs. Exhibit 2 shows how the new groups compare against the three categories used in earlier private-industry benefit surveys. From this exhibit, it can be seen that the new white-collar group combines two former categories: the "professional, technical, executive, administrative, and management" group and the "clerical and sales" group. In contrast, the new blue-collar and service groups represent a split into two of what was a single occupational group ("blue collar and service") in previous surveys.

In 2003, half of workers were in white-collar occupations, one-third were in blue-collar jobs, and about one-fifth were in service occupations. As regards the major types of benefits studied, white-collar and blue-collar workers generally had similar rates of offerings and incidence, but lower rates applied to service workers. For example, 50 percent of white-

Exhibit 1. Standard breakouts for data on benefits coverage in the National Compensation Survey (NCs), 2003

Worker characteristics

White-collar occupations Blue-collar occupations Service occupations

Part time

Union Nonunion

Average wage less than \$15 per hour Average wage \$15 per hour or higher

Establishment characteristics

Goods-producing industry Service-producing industry

1-99 workers 100 workers or more

Geographic areas

Metropolitan areas Nonmetropolitan areas

New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific

Occupations. The 2003 NCs benefits survey was tabulated with the use of an occupational classification scheme based upon the 1990 Census. In the next few years, data on the incidence of benefits and provisions will be converted to the 2000 Standard Occupational Classification (soc) system.

Industry. The 2003 NCs benefits survey was tabulated with the use of the 1987 Standard Industrial Classification system. In the next few years, the tabulations

will be switched to the North American Industry Classification System (NAICS).

Geography. The 2003 NCs benefits survey was drawn from a sample of geographic areas based upon metropolitan area definitions prescribed by the Office of Management and Budget (OMB) in 1994. In the next few years, the NCS will draw a new sample of areas, based upon omb 2004 definitions.

collar workers and 51 percent of blue-collar workers participated in medical care plans, whereas 22 percent of service workers had such coverage.

These occupational groups, however, will be used only in the near future. Just as the survey's geographic classifications will be changing, the survey's publications will switch to a new occupational system in the next few years. The 2003 survey results have been tallied according to a scheme developed for the 1990 Census: the new system is the 2000 Standard Occupational Classification system. (The survey will also switch from the 1987 Standard Industrial Classification system to the North American Industry Classification System.)12

The NCS also captures information on other worker characteristics, including whether the worker's wages are paid strictly on the basis of time worked or whether the wages include an incentive component that varies directly with the worker's or the worker's group's production. Primarily for wage publication purposes, the survey also classifies workers into detailed occupations, as well as by the level of their job duties and responsibilities, including whether they have a supervisory role. With the exception of a few tallies shown later in the article, the 2003 survey did not publish benefit coverage rates by these characteristics, so they may be an area for research and exploration in the future.

Coverage by wage levels

A data series introduced in the 2003 survey relates the incidence of benefits to the average wage earned by workers. This ability to relate wages to benefits is a consequence of melding separate compensation surveys into a single, unified NCS program. In the past, data on incidence and provisions were stored in databases that were separate from the database on wages and could not be combined.

In the NCS, data are collected for a sample of jobs in each establishment surveyed. Individual wage rates are collected for each worker in each job. (Jobs are classified into detailed occupations and job levels.) In contrast, NCS benefits data are collected and stored only for each selected job overall, rather than for each of the individual workers separately. Thus, information on wages and benefit plans cannot be matched to individual workers.

The survey can, however, relate summary measures of each selected job's wages and benefits coverage. For the 2003 survey, the average wage of all workers employed in the selected job was chosen as the summary measure. The jobs sampled in the survey were divided into two wage categories: those paying an average of less than \$15 an hour and those paying an average of \$15 an hour or more. The \$15 figure was chosen because it was the closest multiple of \$5 to the national median wage in private industry; in the 2003 benefits survey,

Occupational groups used for data on benefits coverage in the National Compensation Survey (NCs), 1990-2003

| Occupational groups | Professional and technical | Manage- ment | Sales | Clerical | Craft | Machine operatives | Trans- portation | Laborer | Service |
|---|----------------------------------|-----------------|-----------------|-----------------|-----------------|--------------------|---------------------|-----------------|-----------------|
| Used in 2003 | | | | | | | | | |
| White collar Blue collar Service | Yes No No | Yes No No | Yes No No | Yes No No | No Yes No | No Yes No | No Yes No | No Yes No | No No Yes |
| Used from 1990 to 2000 | | | | | | | | | |
| Professional, technical, executive, administrative, and managerial Clerical and sales Blue collar and service | Yes No No | Yes No No | No Yes No | No Yes No | No No Yes | No No Yes | No No Yes | No No Yes | No No Yes |

three-fifths of workers were in the lower paid group and twofifths were in the higher paid category.¹³

The 2003 survey revealed that workers in higher paid occupations were much more likely to be offered, and to receive, employee benefits than were their lower paid counterparts. In the higher paid category, 70 percent of employees had a retirement plan and 61 percent had medical coverage. In contrast, 35 percent of workers in lower paid occupations had a retirement plan and 35 percent had medical coverage.

Several cautions apply to the use of the foregoing data. Although data collection procedures generally dictate that a homogeneous group of workers will be included in a job selected for the survey,14 there can still be considerable variability in the wages paid to workers in the selected jobs. To help readers gauge how widely dispersed wage rates within establishment jobs can be, table 1 looks at the jobs selected for the survey in private-industry establishments in 2003. For each establishment job, the percent difference between the highest paid worker and the lowest paid worker was calculated. For example, if the company job of division cost accountant was selected in the survey and hourly wages for incumbents ranged from \$14 to \$30, the spread would be calculated as 114 percent (\$30 divided by \$14 and then translated into a percentage). It is important to note that the table displays information only on the wage ranges found within the establishments surveyed; unlike the other statistics presented in this article, the data are not weighted to represent private industry.¹⁵ In addition, as noted earlier, differences in the incidence of benefits by wage level could be affected by other factors, such as the mix of industries, occupations, unionization, and geographic locations.

Across all of the private-industry jobs selected in the NCS in 2003, about 95 percent of workers were in jobs in which

wage rates varied. (The remaining workers were in jobs with a single incumbent or in which the same wage was paid to all incumbents.) The average difference between the highest and lowest wage rates within establishment jobs was 42 percent. Among the major occupational groups with bluecollar and service jobs, the average differences were in the 30- to 35-percent range. Major occupational groups with white-collar jobs exhibited more variation, ranging from a 40-percent difference in technical occupations to a 96-percent difference in sales occupations. The lower portion of the table shows selected highly populated occupations.

The table also presents wage spreads arrayed by the average wage of incumbents in the establishment job. Higher paid white-collar jobs generally had greater differences than did lower paid jobs. Establishment jobs paying within a dollar per hour of the survey tabulation point of \$15 per hour (the \$14-to-\$16 column of the table) averaged a 36-percent spread. Thus, it is evident that, in many cases, workers paid \$15 or more an hour are in company jobs averaging less than \$15, and vice versa.

Another limitation to bear in mind is that, as noted earlier, the survey does not relate the wages of individual workers to the profile of employee benefit plans that they are offered or receive. (Collecting data that match individual wages to individual benefit profiles would yield the richest database of information, but earlier investigations by the Bureau revealed that the burden on survey respondents would preclude the use of this collection protocol.) Rather, the survey allows only for matching the average wage (or some other summary measure) of the workers in the selected job to the overall benefit profile of the workers in that same job. Exhibit 3, which shows how average employee medical contributions compare against wage rates, illustrates this particular limitation of the survey data. The exhibit

presupposes that a company offers two medical care plans to employees in the two selected jobs: division cost accountant and janitor. Medical Plan A costs employees a monthly premium of \$50 for single coverage, while Plan B costs \$100. Also, 80 percent of the accountants (a job averaging more than \$15 an hour) participate in a medical insurance plan, and the average contribution of the participants is \$93.75 per month. The janitor job (which averages less than \$15 per hour) has a 60percent participation rate and an average participant contribution of \$66.67 per month.

The averages appear to indicate that the higher paid workers are more likely to participate in a medical insurance plan and that they gravitate toward the more costly Plan B. However, because the survey does not record the individual choices of workers, it is unknown which workers chose Plan A and which chose Plan B. For example, it is unknown whether the highest-paid janitor (at \$16 per hour) selected Plan A, selected Plan B, or declined coverage. Similarly, it is unknown what the newly hired cost accountant (at \$14 per hour) decided with regard to medical coverage. Thus, in this example, it is possible that some workers who were paid \$15 or more per hour selected the lower premium plan and that some who were paid less than \$15 per hour chose the higher plan.

New data elements

To stay up to date with developments in employee compensation, and to respond to customer requests, the 2003 survey introduced several new data elements or additional details about existing data elements. This new information included more details on cash bonuses, deductibles and coinsurance rates in medical insurance plans, orthodontic care, cash balance pension plans, savings-and-thrift plans, and money purchase pension plans. In addition, the survey expanded the breakouts published on benefit plan provisions to include more establishment and employee characteristics.

| Major occupational group or selected occupation | Percent of workers in jobs with more than one wage rate | Percent spread by which the highest-paid worker's wage exceeded that of the lowest-paid worker | | | | | | | |
|---|--|--|------------------------------------|------------|----------------------|-----------------|--------------------|--------------------|-------------------|
| | | Mean spread for all workers | Mean hourly wage of the occupation | | | | | | |
| | | | Less than \$7 | \$7 to \$9 | \$9.01 to \$13.99 | \$14 to \$16 | \$16.01 to \$20 | \$20.01 to \$30 | More than \$30 |
| All workers | 95 | 42 | 30 | 35 | 39 | 36 | 36 | 40 | 75 |
| Major occupational | | | | | | | | | |
| group | | | | | | | | | |
| Professional | 98 | 50 | 22 | 37 | 34 | 35 | 34 | 46 | 67 |
| Technical | 93 | 40 | 30 | 27 | 47 | 35 35 | 39 | 37 | 43 |
| Sales | 96 | 96 | 42 | 47 | 70 | 93 | 114 | 129 | 469 |
| Clerical and administrative | 90 | 90 | 42 | 41 | 70 | 93 | 114 | 129 | 409 |
| support | 97 | 36 | 23 | 31 | 37 | 36 | 35 | 31 | 34 |
| Precision production, craft, | | | | | | | | | |
| and repair | 85 | 30 | 34 | 33 | 37 | 35 | 31 | 23 | 23 |
| Machine operators, | | | | | | | | | |
| assemblers, and inspectors | 92 | 29 | 41 | 34 | 34 | 26 | 22 | 20 | 19 |
| Transportation and material | 52 | 23 | 71 | 54 | ٠, | 20 | | | 13 |
| moving | 91 | 35 | 27 | 30 | 31 | 33 | 36 | 41 | 112 |
| Handlers, equipment | 91 | 33 | 21 | 30 | 31 | 33 | 30 | 41 | 112 |
| | | | | | | | | | |
| cleaners, helpers, and | | | | | | | | | |
| laborers | 90 | 34 | 24 | 33 | 39 | 32 | 30 | 27 | 59 |
| Service | 95 | 35 | 28 | 32 | 37 | 33 | 34 | 35 | 68 |
| Selected occupations | | | | | | | | | |
| Accountants and auditors | 93 | 31 | _ | _ | 34 | 24 | 32 | 31 | 31 |
| Assemblers | 96 | 34 | 127 | 35 | 38 | 27 | 22 | 25 | 9 |
| Automobile mechanics | 93 | 87 | _ | 16 | 92 | 52 | 81 | 103 | 206 |
| Bookkeepers, accounting, | | | | | | | | | |
| and auditing clerks | 92 | 28 | _ | 19 | 28 | 31 | 28 | 19 | _ |
| Carpenters | 71 | 31 | | 28 | 36 | 41 | 32 | 18 | 17 |
| Cashiers | 96 | 40 | 31 | 44 | 43 | 33 | 22 | 13 | l <u>''</u> |
| Computer systems analysts | 90 | 40 | 31 | *** | 40 | 33 | | 13 | _ |
| | 00 | 40 | | | 22 | 32 | 37 | 144 | F4 |
| and scientists | 99 | 48 | _ | _ | 23 | 32 | 31 | 44 | 51 |
| lanitors, porters, and | | 00 | 00 | 07 | | 00 | | l | |
| cleaners | 93 | 36 | 33 | 37 | 39 | 33 | 31 | 14 | _ |
| Marketing, advertising, and | | | | | | | | | |
| public relations managers | 82 | 38 | - | _ | 2 | 57 | 39 | 49 | 34 |
| Registered nurses | 99 | 39 | | _ | 26 | 28 | 28 | 41 | 38 |

Dash indicates no employees in category or data did not meet publication standards.

| Company job and number of employees | Hourly wages | Plan A selections (\$50 monthly employee contribution) | Plan B selections (\$100 monthly employee contribution) | Declined coverage | Average monthly employee contribution for those participating in a medical plan |
|---|--|---|---|-----------------------|---|
| Division cost accountant (10) | The average wage is \$23.40; 2 employees are paid the highest wage of \$30, one worker (a new hire) the lowest wage of \$14. | One selects Plan A. | Seven select Plan B. | Two decline coverage. | \$93.75 |
| Janitor (5) | The average wage is \$11.20; 1 employee is paid \$16 at the top of the range, the other employees between \$8 and \$12. | Two select Plan A. | One selects Plan B. | Two decline coverage. | \$66.67 |

Cash bonuses. Previous surveys published information only on the overall incidence of cash bonuses. The 2003 survey expands the information by providing details on the prevalence of bonuses by the type of bonus. This expanded information is an outgrowth of research conducted over the last few years into "variable pay" and other types of pay supplements. The goal of the research was to keep the NCS measures up to date with developments in employee compensation. One of the project's findings was that data users needed more details about the types of cash payments made to employees, in addition to information on the straight-time wages and salaries that was traditionally published in the BLS survey. 16

As a first step in meeting the research goal, the 2003 survey published information on the proportion of employees with access to various types of nonproduction bonuses, defined as cash payments that are not directly geared to individual or group production.¹⁷ The survey findings showed that 49 percent of employees were offered bonuses—a percentage similar to the 48 percent reported in the 2000 survey. About half of white- and blue-collar workers had bonus plans, compared with a third of service workers. Similarly, full-time workers and workers in jobs that averaged \$15 or more an hour were more likely to have plans than were part-time workers or workers in jobs that averaged less than \$15 an hour.

The new data on types of bonuses revealed that the most common bonuses were end-of-year and holiday bonuses, offered to 12 percent and 10 percent of employees, respectively. About 5 percent to 8 percent of employees were offered cash profit-sharing, referral, and employee recognition bonuses; and

less than 5 percent of employees were offered other, separately identified types of bonus plans. Differences, however, were not so pronounced in offering rates among establishments and employees. For example, end-of-year bonuses were offered to 13 percent of white- and blue-collar workers and 8 percent of service workers.

Table 2 provides information on two bonus characteristics tabulated for the first time in this article: whether the establishment was in business for profit or not for profit, and whether employees were paid wages strictly on the basis of hours worked (time-based pay) or had all or a portion of their wages tied to individual or group production (incentive-based pay). About 1 in 10 employees were in nonprofit establishments, and the overall *incidence* of bonuses was essentially the same for profit (49 percent of workers) and nonprofit (47 percent) employers. However, the *types* of bonuses offered to employees differed by profit status. In profit-seeking workplaces, end-of-year and holiday bonuses were the most prevalent types. Among nonprofit employers, employee recognition and referral bonuses occurred most often.

About 5 percent of workers were paid on an incentive basis. Here, too, there was essentially no difference in the overall incidence of bonuses for incentive-paid (51 percent) and time-paid (49 percent) workers. In addition, the incidence of the various types of bonuses differed little between the two types of wage payment plans.¹⁸

It is important to note that these data show the proportion of employees with *access* to bonuses, which is not the actual number of employees *receiving* such bonuses. For example, if an employee in the selected job of chemist worked in an

Table 2. Percent of workers with access to nonproduction bonuses, by type of bonus and selected characteristics, private industry, National Compensation Survey (Ncs), 2003

| Type of bonus | All workers | Profit establishments | Nonprofit establishments | Time-based pay | Incentive- based pay |
|--------------------------------------|-------------|--------------------------|-----------------------------|-------------------|-------------------------|
| Overall access | 49 | 49 | 47 | 49 | 51 |
| Attendance | 3 | 3 | 2 | 3 | 4 |
| Employee recognition | 5 | 4 | 10 | 5 | 1 |
| End of year | 12 | 12 | 7 | 12 | 12 |
| Holiday | 10 | 10 | 7 | 9 | 12 |
| Payment in lieu of other benefits | 4 | 4 | 8 | 4 | 6 |
| Safety | 2 | 2 | (¹) | 1 | 4 |
| Safety | 1 | 1 | | 1 | 6 |
| Hiring | 2 | 2 | 3 | 2 | 2 |
| | 2 | 1 | 2 | 2 | 2 |
| Longevity | 8 | 7 | 13 | 8 | 8 |
| Retention | 1 | 1 | 1 | 1 | (1) |
| Management incentive | 2 | 2 | (¹) | 2 | (1) |
| Cash profit sharing | 5 | 6 | <u> </u> | 5 | 5 |
| Cash profit sharing Union related | (¹) | (¹) | (¹) | (1) | _ |
| Other bonus | 5 | 5 | 3 | 5 | 7 |

¹Less than half of 1 percent.

Note: See appendix for definitions of terms. The overall incidence of bonuses is less than the sum of the individual types of bonuses, because

some employees received more than one type of bonus. Dash indicates no employees in this category or data did not meet publication standards. This table does not show data separately for 0.2 percent of employees in establishments for which the profit or nonprofit classification could not be determined.

establishment that granted a bonus to chemists with perfect attendance for the year, the employee would be counted as having access to an attendance bonus, regardless of whether he or she achieved perfect attendance and received such a bonus in the latest year.

Information on the amounts of the bonuses by type was not published in the 2003 survey. However, data published in the quarterly Employer Costs for Employee Compensation (ECEC) series show that nonproduction bonuses as a whole cost private employers \$0.33 per employee hour worked in March 2003, accounting for 1.5 percent of total compensation. Costs were higher for white-collar workers (\$0.53 per employee hour) than for blue-collar workers (\$0.17) and service workers (\$0.06). In 1986, the first year for which these data were published, bonuses cost private employers \$0.10 per employee hour worked, accounting for 0.7 percent of compensation.

Stock options. With continuing public interest in stock options, the Bureau added them back into the survey in 2003. The former Employee Benefits Survey had tracked the incidence of stock options from 1985 to 1994, but the benefit was dropped from the survey in 1995 because its incidence was low: less than one-half of 1 percent of full-time private-industry employees had a stock option plan in 1993–94. The 2003 results revealed that 8 percent of all employees (10 percent of full-time employees) had access to stock options. White-collar workers (12 percent) were more likely to have a

stock option plan than their blue-collar (6 percent) or service (2 percent) worker counterparts. As with benefit plans generally, workers in occupations averaging \$15 an hour or more were more likely to have stock option plans (13 percent) than were workers in jobs that paid less than \$15 per hour (6 percent). Similarly, workers in establishments with 100 or more employees were more apt to have a stock option plan (14 percent) than were their counterparts in smaller establishments (4 percent).

The 2003 results cannot be compared with a special study that the Bureau conducted of 1999 stock options. The study found that 1.7 percent of employees received a grant that year. ¹⁹ The study was limited to instances in which a stock option was granted during 1999; thus, if employees had a stock option plan, but no grant was awarded in 1999, they would not be counted as receiving a grant. In contrast, the 2003 survey asked whether employees had a stock option plan, regardless of whether an option was granted that year.

Employer-provided personal computers. Since 1980, the benefits survey has asked about the availability of a variety of emerging or "other" benefits and has changed the list of benefits from year to year to follow developments in the field. In 1980, the survey published information on the availability of employee discounts, relocation allowances, in-house infirmaries, subsidized meals, and company-provided automobiles, among other benefits. Twenty years later, the

roster of "other benefits" had changed dramatically, dropping discounts, relocation allowances, infirmaries, subsidized meals, and company automobiles and adding adoption assistance, long-term care insurance, flexible workplaces, and wellness programs. An item added in 2003 was employer-provided home personal computers, to which the survey showed that 2 percent of employees had access that year.

New detailed data on plan provisions

The NCS conducts a detailed analysis of plan provisions for three major employee benefits: health insurance, defined benefit pensions, and defined contribution plans. Because that analysis is voluminous and complex, the survey uses a data collection technique different from the one it employs for the other data elements studied. For the three major employee benefits, BLS field economists collect documents, such as summary plan descriptions, benefit plan brochures, and employee handbooks, that describe plan provisions in detail.20 Whereas the other data elements are updated as of a common reference point—March 2003 in this instance—the plan documents are collected only at the time the sample establishment is first brought into the survey. For the 2003 survey, this data collection period was from December 2001 to April 2003, with an average reference date of 2002. This difference in data collection methods is employed to conserve BLS resources and to reduce the burden imposed on respondents for participating in the survey. For the remainder of this article, tabulations derived from these detailed plan documents are referred to as "2002-03" survey tabulations or estimates.

New data breakouts

The 2002–03 tabulations feature more data breakouts of detailed plan provisions than were attempted in the past, when data were shown only for three broad occupational groups. The new breakouts vary by tabulation. Full details are provided for a few tables that present a general picture of the benefit; limited details are provided for the majority of tables, which present information on a particular feature of a benefit. In the following list, the limited breakouts are printed in italics:

- Occupational group: white collar, blue collar, and service
- Work schedule: full time, part time
- Unionization: union, nonunion
- Average wage: Less than \$15 per hour, \$15 an hour or more²¹
- Industry: goods producing, service producing

- Establishment size: fewer than 100 workers, 100 workers or more
- Geographic areas: metropolitan or nonmetropolitan, nine Census divisions.

The purpose of introducing these new breakouts is to provide more information on segments of the private economy in response to customer requests.

Medical insurance

Depicting how employer-sponsored plans pay for medical services is complicated by broad-scale innovations in medical plan design. Over the years, what were once reasonably clear distinctions among medical plans have been blurred by the creation of hybrid plans—plans which combine features that formerly were mutually exclusive. For example, the survey originally defined health maintenance organizations (HMO's) as plans that provided medical services in return for prepaid fees and that required subscribers to seek services only from health care professionals or institutions belonging to the plan. However, in recent years, many HMO's have offered a "pointof-service" option, which allows subscribers to seek services outside of the plan. The 2002–03 tabulations show that onethird of HMO subscribers were in plans with a point-of-service feature. In recognition of these new types of plans, the NCS benefits survey now calls such plans "prepaid plans" rather than HMO's. (See the appendix for definitions.)

Similarly, some preferred provider organizations (PPO's), while still paying for services outside the network, have required subscribers to apply for services through a primary care physician—a control feature formerly unique to HMO's. In 2002–03, about one-fifth of PPO participants were in such plans. Acknowledging the evolution of these hybrid plans, the NCS benefits survey now calls all forms of PPO's "indemnity in and out of network" plans.

To accommodate these basic changes in medical plan design, the NCs benefits survey introduced a new nomenclature with the 2002–03 tabulations. Exhibit 4 compares the 2000 survey terminology with the new terms.

Incentives to use network providers. To keep pace with developments in medical insurance, the survey introduced several new tabulations focusing on subscriber incentives. Over the last 20 years, with the rise of "indemnity in and out of network" plans, medical insurance plans have evolved to include a variety of incentives to encourage health care subscribers to seek care from designated providers. Among these incentives are various ways of requiring subscribers to pay more for medical services sought from providers who are not designated as part of the plan's network of preferred providers. Because plan payments may vary with whether a network or "out of network"

| Exhibit 4. New National Compensation Survey (NCs) terms for major types of medical care plans | | | | | | |
|---|---|--|--|--|--|--|
| 2000 survey terms | 2003 survey terms | Types of plans included, using 2000 survey terms | | | | |
| Non-health maintenance organizations: | Indemnity plans: | All plans except health maintenance organizations—traditional fee-for-service plans, preferred provider organizations, and exclusive provider organizations: | | | | |
| Preferred provider organizations | Indemnity in and out of network, without primary care physician | Preferred provider organizations that do not require subscribers to seek services through a primary care physician | | | | |
| | Indemnity in and out of network, with primary care physician | Preferred provider organizations with a primary care physician | | | | |
| Traditional fee-for-service plans | Traditional indemnity | Traditional fee-for-service plans | | | | |
| Exclusive provider organizations | Other indemnity | Exclusive provider organizations | | | | |
| Health maintenance organizations | Prepaid plans: | Health maintenance organizations: | | | | |
| | Prepaid in network only Prepaid in and out of network | Without point-of-service features With point-of-service features | | | | |

provider is used, survey tabulations that look solely at provisions applying only inside the network are presenting just a part of the picture. Two new tabulations make it easier to discern differences between inside- and outside-of-network payments.

One new table focuses on comparing how the various types of indemnity plans assess deductibles, depending on whether the participant seeks services inside or outside of the network. The survey data showed that 4 in 10 participants in indemnity in- and out-of-network plans had to pay higher deductibles for out-of-network services. When such a condition was imposed, a difference of \$200–\$399 applied to nearly six-tenths of the participants, with one-third subject to deductibles that were \$400 higher or more if they used out-of-network providers. The average difference in deductibles was \$375.

Similarly, indemnity plans often impose a different coinsurance rate for services sought inside the network than for those sought from providers outside the network. In earlier years, the survey had published data showing the coinsurance rates for inside and outside the network services—for example, 90 percent inside the network and 70 percent outside the network, a difference of 20 percentage points. Because there were numerous variations in rates, however, many medical care plans ended up being tallied in an "other" category wherein the difference in rates could not be ascertained by data users. The new tables directly show the differences in coinsurance amounts and provide information on all the plans studied. For readers who wish to see the coinsurance rates prevailing when services are sought inside the network, the survey continues to publish a table of coinsurance rates.

The new survey tabulations indicate that different coin-

surance rates were more common than different deductibles. More than 8 in 10 participants in indemnity in-and-out-of-network plans were reimbursed a lower coinsurance rate for services sought outside the network. The most common difference was 20 percentage points, applying to about 6 in 10 participants subject to different rates. Differences of greater than 20 percentage points applied to about one-quarter of participants, while 10-percentage-point differences applied to about one-sixth. The average difference was 22 percentage points.

Dental insurance. New survey tabulations on orthodontic care distinguish between coverage for employees and coverage for dependents. (Previous surveys had not made this distinction.) The reason for adding these details is that dental plans sometimes "have lifetime dollar limits for employees that are different from the comparable limits for employee dependents." The current survey revealed that a majority of participants were in plans that covered only dependents. In plans in which both employees and dependents were covered, however, maximum payments were the same for dependents and employees for about 9 out of 10 participants.

Retirement plans

Just as medical care plans have evolved, so have retirement plans changed dramatically over the years examined by the BLS benefits survey. Since the previous benefits survey was established 25 years ago, new types of retirement plans have been created and retirement plan provisions have changed dramatically in response to changes in the law, to broad-based economic and societal changes, and to employer efforts to encourage workers to save toward their retirement. The 2002–03 tabulations bear the marks of many of these changes.

Cash balance plans. First studied by the survey in the late 1980s, cash balance plans have grown in prominence. In 1988, these plans covered 1 percent of full-time workers with defined benefit pension plans in private establishments with 100 or more employees; by 2002–03, about 1 in 5 defined benefit pension participants had a cash balance plan. ²⁴ In a cash balance plan, the employer specifies a contribution and a rate of interest on that contribution which together will provide a predetermined amount at retirement; benefits are computed as a percentage of each employee's account balance. ²⁵ With the rise of these plans, it is now possible to publish, as a regular survey output, information on the details of the employer's contributions.

The survey found that the most common means of setting employer contribution rates was on a sliding scale based upon the employee's age or length of service with the firm (or both); plans such as these applied to slightly more than half of cash balance plan participants. ²⁶ About one-fifth of participants were in plans that set the employer's contribution as a flat percentage of the employee's earnings; another fifth were in plans in which the percentage varied by the level of the employee's earnings. Among flat-percent plans, the average employer contribution was 4 percent.

The survey also examined policies for setting interest rates on account balances. Rates were tied to U.S. Government securities for two-fifths of participants, and a flat percentage was designated for one-third of participants. (Information on interest rates was not available for just under one-quarter of participants.)

Automatic enrollment in savings-and-thrift plans. Savings-and-thrift plans are the most commonly found type of defined contribution plan in private industry. In such plans, employees contribute a predetermined portion of their earnings to a retirement account, and all or some of their contribution is matched by the employer. A frequently observed provision allows employees to contribute up to 15 percent of their earnings, with the employer matching 50 percent of the employee's contribution on the first 6 percent of earnings. Under this kind of provision, for example, an employee who contributes 10 percent of his or her earnings would receive an employer contribution of 3 percent (half of 6 percent).

In recent years, there has been much discussion of the importance of employees providing for their retirement by taking full advantage of employer-provided savings-and-thrift plans. One means advocated for encouraging employee participation is the use of automatic enrollment provisions, wherein employees have to opt out in order not to be covered.²⁷ A new survey table shows that these enrollment features are included in plans for 5

percent of participants in savings-and-thrift plans. Among these plans, the average default contribution was 2 percent.

Employer contributions to money purchase plans. In money purchase pension plans, which covered 1 in 10 defined contribution plan participants in 2002–03, the employer makes a designated contribution, typically a percentage of the employee's earnings, to an individual employee account. Because these plans now cover about 3 million employees in private industry, the NCS survey is able to publish information on how much employers contribute to such plans. Half the participants were in money purchase plans in which the employer contributed a fixed percentage of the worker's earnings. Among fixed-percent plans, the most common employer contribution was in the range from 3 percent to less than 6 percent of earnings.

New data on benefit plan costs and provisions

The survey consolidation that allowed the Bureau to tabulate benefit plan coverage by average wages has also allowed new data series that relate the costs employers incur for benefit plans to plan features. The first of these new series examines the premiums that employers and employees pay for medical care coverage.

Employer-employee share of medical premiums. Researchers and policymakers have expressed much interest in timely information on how employers share medical care costs with employees. In past surveys, however, the information on employer premiums was collected and stored separately from the data on employee contributions.²⁸ With unified data collection and storage, the NCS benefits survey added a tabulation that computes the employer and employee shares of medical care plan premiums. The survey tabulations reveal that employers bear about 80 percent or slightly more of the premiums for single coverage and 70 percent for family coverage.²⁹ In general, little or no differences were noted among the worker and establishment characteristics studied. For example, employers paid 81 percent of the single-coverage premiums for white-collar workers and 83 percent for their blue-collar counterparts; in terms of employment size, small establishments paid 81 percent, and medium and large establishments 82 percent, for single coverage.

In interpreting these data, it is important to understand how the proportions were calculated. First, all medical plan participants were included, so that the percentages reflect both cases where employees do not have to pay anything toward their coverage and cases where they are required to make a contribution. (Other tabulations, described shortly, focus on premiums in plans requiring employee contributions.) Second, the data include all medical plan participants in calculations of both single and family coverage. The calculations are not based upon the actual selection made by employees toward their medical coverage. For example, in an occupation in which there are 5 single employees and 5 married employees participating in a medical plan, the calculations use all 10 employees in both single- and family-coverage computations.³⁰ Third, particularly as regards calculations of the employer and employee premium shares, about half of the data on premiums were not available from the sampled establishments and were imputed. Although the imputations had a small impact on most of the calculations of occupational and establishment characteristics, the relative paucity of directly collected premium data could impart a bias to the tabulations if the premiums for establishments that failed to provide data differed markedly from the premiums for establishments supplying data.

An important conceptual limitation to bear in mind is that the premiums do not translate directly into costs. Rather, the data tabulated in the 2003 NCs benefits survey reflect the premiums that are in effect at the time (during a quarter) that the data were collected. There are many reasons that total annual employer and employee costs differ from "point-in-time" premiums. For one, total costs reflect whether the employee has selected a single or a family option. Secondly, changes within the year also affect total costs. For example, premiums could change during the year, employees could select a different plan if "open season" arrives before the year's end, and employees could choose a different option if their marital or parental status changed within the year. Total employer costs also are affected by employee turnover during the year.³¹ For all these reasons, data users should be cautious in comparing the new NCS data with other,

aggregate measures of employer and employee costs.³² Note that differences among aggregate measures can also stem from differences in survey coverage, in definitions of what is included in health insurance costs, and in the reference period of the data.

Because premiums do not necessarily equal costs, the NCS premiums data described here cannot be directly related to other NCS series that use employer cost data, such as the quarterly Employment Cost Index (ECI) or the ECEC. For example, the March 2003 release of the ECEC revealed that private-industry employers spent an average of \$1.41 per employee hour worked on health insurance. The cost per employee hour worked, as calculated for the ECI and the ECEC, reflects costs for all types of health insurance—medical, dental, vision, and others—whereas the tabulations described in this article are limited to medical insurance. Another difference is that the 2003 ECI and ECEC data are derived from a larger sample of establishments than was used for the 2003 NCS benefits survey.³³ In addition, as noted earlier, the ECI and the ECEC use data on expenditures as well as data on premiums, whereas the tabulations described in this article are restricted to the latter.

Premiums per participant. Another request from data users is that the Bureau publish the cost of employee benefits per participant. Since 1987, through its ECEC series, the Bureau has published information on employer costs per employee hour worked for nearly two dozen major categories of benefits. The information was published annually through 2001 and has come out quarterly since 2002.34 However, it is published on a per employee basis, because that is only way wage and benefit

Average employer monthly premiums for medical care, by survey categories, private industry, National Table 3. Compensation Survey (NCs), 2003

| Category | Highest average premium per participant | Dollar amount | Lowest average premium per participant | Dollar amount | Percent difference between highest and lowest premium |
|------------------------------|---|---------------|--|---------------|--|
| Single coverage ¹ | | | | | |
| Occupation | White collar | \$215.98 | Blue collar | \$206.70 | 4 |
| Work schedule | Full time | 213.92 | Part time | 179.91 | 19 |
| Unionization | Union | 227.29 | Nonunion | 210.30 | 8 |
| Average wage | \$15 or more | 219.75 | Less than \$15 | 204.07 | 8 |
| Industry | Service producing | 214.98 | Goods producing | 205.90 | 4 |
| Establishment size | 1–99 employees | 214.33 | 100 employees or more | 210.78 | 2 |
| | Nonmetropolitan | 224.07 | Metropolitan | 210.44 | 6 |
| Census division | Pacific | 222.32 | Mountain | 194.40 | 14 |
| Family coverage ² | | | | | |
| Occupation | White Collar | 506.84 | Service | 446.76 | 13 |
| | Full time | 501.22 | Part time | 413.03 | 21 |
| Unionization | Union | 507.44 | Nonunion | 495.63 | 2 |
| Average wage | \$15 or more | 513.46 | Less than \$15 | 478.75 | 7 |
| | Goods producing | 520.17 | Service producing | 487.35 | 7 |
| | 100 or more employees | 525.25 | 1–99 employees | 459.96 | 14 |
| | Nonmetropolitan | 510.23 | Metropolitan | 494.91 | 3 |
| Census division | East North Central | 522.46 | Mountain | 461.52 | 13 |

Average premium for all participants = \$212.31.

Note: This table includes workers in all medical insurance plans, both those requiring employee contributions and those paid for entirely by the employer.

Average premium for all participants = \$497.02

Table 4. Employee medical care contributions and employer premiums for plans requiring employee contributions, private industry, National Compensation Survey (Ncs), 2003

| Average employee monthly contribution | Percent of participants | Average employer monthly premium |
|---------------------------------------|---|---|
| Single coverage Total | 100 72 24 19 14 15 28 | \$202 201 213 202 202 182 204 |
| Family coverage | - | - |
| Total | 100 72 19 18 19 16 28 | 482 482 535 575 470 332 482 |

costs can be summed across employees. For a particular benefit, the ECEC calculations thus take into account employees without the benefit as well as employees with the benefit.

Some data users have requested a new calculation that would show employer costs per covered employee (or per participant), thus excluding employees who do not have the benefit plan in question. The melding of the formerly separate compensation programs into the single NCS program is intended to make these and similar survey estimates possible, and the Bureau is currently conducting research toward that end.³⁵ In advance of this research, the 2003 NCS benefits survey combined information on employer premiums for medical insurance with information on employee participation rates to compute an estimate of employer premiums per participant for medical insurance. For all medical plan participants, monthly employer contributions averaged \$212 for single coverage and \$497 for family coverage. Employer premiums were about 25 percent higher for plans in which no employee contribution was required, compared with plans in

which employees were required to help pay for coverage. (Note that these tabulations of premiums per participant have most of the limitations described earlier regarding the data on employer and employee shares of medical premiums.)

Average employer premiums for single and family coverage did not vary markedly by the categories studied in the survey. Table 3 shows the spread between the highest and lowest average premiums for each of the eight establishment and occupational characteristics published in the survey.

The survey also linked employer premiums to the contributions that employees were required to make toward their medical coverage. Employer premiums differed widely by the level of employee contribution. To help discern patterns in the data, Table 4 summarizes the average employer premium for selected employee contribution levels. For plans requiring employee contributions, the table divides medical care participants who pay a flat monthly amount into four similarly sized groups, depending upon the amount of the employee contribution. Viewed from this perspective, employer premiums for single coverage appear to differ little by the level of employee contributions. For family coverage, however, employer premiums tend to be lower in cases where employees are required to make higher contributions toward their coverage. (Note that the data in table 4 are limited to plans that require employees to contribute to their coverage, whereas table 3 includes all medical plans, regardless of employee contribution requirements.)

This article has reviewed a broad array of new data elements and tabulations introduced into the 2003 NCS benefits survey. Planned increases in the survey sample and research into new measures offer the prospect of continued enhancements to NCS survey publications over the next few years.

The Bureau also will bear in mind the importance of retooling the survey to keep up to date with developments in the field of employee benefits and the broader field of employee compensation. As former BLS Commissioner Janet Norwood foresaw in 1988, "To keep pace, survey designers will have to prospect for themselves as well as for data users."

Notes

¹ The former programs were the Employment Cost Index, which includes the series on Employer Costs for Employee Compensation; the Employee Benefits Survey; and the Occupational Compensation Survey Program. For a background on these programs, see William J. Wiatrowski, "The National Compensation Survey: Compensation Statistics for the 21st Century," *Compensation and Working Conditions*, winter 2000, pp. 5–14.

² Using data from 1992–93, the Bureau calculated experimental estimates of health insurance offerings, including estimates of the proportion of establishments making such offerings. (See Michael Bucci and Robert Grant, "Employer-sponsored health insurance: "what's offered; what's chosen," *Monthly Labor Review*, October 1995, pp. 38–44.) This research into offerings was expanded in test surveys of the construction industry in 1998–99, although

establishment counts were not published. (See Robert W. Van Giezen, "Insurance and Retirement Benefits in the Salt Lake City-Ogden, UT, and Toledo, OH, Construction Industries," *Compensation and Working Conditions*, fall 2000, pp. 23–35.)

³ Retirement plans include defined benefit pension plans and defined contribution plans. (See the appendix for definitions thereof.) Because estimates of sample error are not available for the 2003 NCS benefits survey, the comparative statements made in this article could not be subjected to statistical significance testing. For that reason, the comparisons drawn here are generally limited to differences of 10 percentage points or more.

⁴ The term "establishment" is not synonymous with "company" or "firm." In the NCS, an establishment is generally a single physical

location. A company or firm, by contrast, can be composed of many establishments. In examining differences in the incidence of benefits by size of establishment, it is important to note that such differences may be due to factors other than size, such as the mix of occupations, industries, unionization, and geographic locations. For example, occupations with higher rates of benefit coverage may be more prevalent in larger than in smaller establishments. This caution also applies to all other comparisons of the incidence of benefits or characteristics drawn in this article.

- ⁵ For information on establishment counts and employment by size of establishment, see the BLS Quarterly Census of Employment and Wages, on the Internet at http://www.bls.gov/cew/cewsize.htm. The percentages cited in this article are derived from the 2003 NCS Benefits Survey.
- ⁶ In compiling data on access, workers are assumed to have access to a plan even if they are ineligible because of age and service requirements or administrative lag time. This data collection protocol was chosen to reduce respondent burden and increase the yield of reported data. For more detailed information on the definitions of "access" and "participation," see Carl Barsky, "Incidence benefits measures in the National Compensation Survey," this issue, pp. 21-28. For a discussion of the various ways of counting employees to measure benefits coverage in view of data collection practicalities, see William J. Wiatrowski, "Counting the Incidence of Employee Benefits," Compensation and Working Conditions, June 1996, pp. 10-18.
- ⁷ For information on the needs of researchers and policymakers for health insurance data, see William Wiatrowski, Holly Harvey, and Katharine R. Levit, "Employment-Related Health Insurance: Federal Agencies' Roles in Meeting Data Needs," Health Care Financing Review, spring 2002, pp. 115-30.
- ⁸ For a discussion of the factors that may influence takeup rates, see William J. Wiatrowski, "Medical and retirement plan coverage: exploring the decline in recent years," this issue, pp. 29-36. For a more detailed analysis of the data on establishment and employee offerings presented in the current article, see Barsky, "Incidence benefits measures.'
- Employment figures estimated from the survey are not as precise as those developed from other BLS surveys with larger samples and with designs geared toward generating employment estimates. The employment estimates from the benefits survey are presented only to indicate the approximate sizes of various classifications within the entire private economy.
- ¹⁰ The classification of areas into metropolitan and nonmetropolitan categories follows Office of Management and Budget (OMB) metropolitan areas designations as of 1994. In the next few years, the survey will be converted to OMB designations announced in 2003 and amended in 2004.
- 11 The nine divisions are as follows: New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Middle Atlantic-New Jersey, New York, Pennsylvania; East North Central-Illinois, Indiana, Michigan, Ohio, Wisconsin; West North Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; South Atlantic-Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; East South Central—Alabama, Kentucky, Mississippi, Tennessee; West South Central—Arkansas, Louisiana, Oklahoma, Texas; Mountain—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming; Pacific-Alaska, California, Hawaii, Oregon, Washington.
- ¹² For information on the Standard Occupational Classification system. see www.bls.gov/soc/; for information on the North American Industry Classification System, see www.bls.gov/bls/naics.htm.
- ¹³ According to the NCS, the median wage in private industry was \$13.00 in July 2002—the latest data available when the benefits survey was planned. The median for 2003 was \$13.39. (See Supplementary Table 2.1, Supplementary Tables, July 2002, National Compensation Survey; on the Internet at http://www.bls.gov/ncs/ocs/home.htm.)
- ¹⁴ Two procedures are used to ensure worker homogeneity. First, the survey protocol calls for collecting data on workers in jobs recognized as discrete by the employer. Second, data collection procedures require that the jobs which are selected share three common characteristics: workers

- employed in them must have a full-time or part-time work schedule, must possess union or nonunion status, and must be paid on either a time or an incentive basis.
- 15 Applying survey weights tended to show higher levels of wage dispersion. For example, the average difference between the highestand lowest-paid workers within establishment jobs was 52 percent with the use of weighted data, compared with 42 percent with unweighted data.
- ¹⁶ For a summary of one phase of the research on variable pay, see Jeffrey L. Schildkraut, "NCs Reviews the Effectiveness of Variable Pay Collection," Compensation and Working Conditions Online, Apr. 16, 2003. For a review of earlier studies conducted in 1989 and 1990, see Elizabeth Dietz, "Measuring Employee Bonuses: A Review of Test Surveys," Compensation and Working Conditions, May 1994, pp. 13-19.
- ¹⁷ Nonproduction bonuses do not become part of the employee's regular wages or salary. For example, a salary increase granted to an employee after 3 years of service would be classified by the NCS as part of the worker's salary or wage rate. In contrast, a one-time payment in recognition of an employee's having attained 10 years of service would be classified as a bonus.
- ¹⁸ Because incentive workers compose only 5 percent of all workers, survey estimates for incentive workers are likely to be subject to considerable variability.
- ¹⁹ For results of the 1999 study, see Pilot Survey on the Incidence of Stock Options in Private Industry in 1999 (USDL: 00-290, Oct. 11, 2000); on the Internet at http://www.bls.gov/ncs/ocs/sp/ ncnr0001.txt. See also Beth Levin Crimmel and Jeffrey L. Schildkraut, "Stock Option Plans Surveyed by NCS," Compensation and Working Conditions, spring 2001, pp. 3-21.
- ²⁰ For background information on summary plan descriptions, see Allan P. Blostin, "Preventive care provisions, other benefits: are they described in plan documents?" Monthly Labor Review, October 2002, pp. 13-19.
- ²¹ A few of the tables, such as those describing employer and employee premiums for medical care, contain the average wage breakout, in addition to breakouts on the occupational group, unionization, industry, and establishment size categories.
- ²² For background information on how the NCS benefits survey has been revised to reflect this evolution of medical plan design, see Allan P. Blostin and Iris S. Diaz, "Health Insurance Provisions Captured by the EBS and the NCS," Compensation and Working Conditions, spring 1999, pp. 14-18. An earlier examination of how the BLS survey has evolved to keep pace with changes in medical plans is given in John J. Kane, Allan P. Blostin, and Jordan N. Pfuntner, "Changing Survey Strategies in the Evolution of Health Care Plans," *Compensation and* Working Conditions, September 1996, pp. 3-10.
 - ²³ See Blostin and Diaz, p. 16.
- ²⁴ The 2003 figure is for all employees, full time and part time, in all sizes of establishments. Comparable figures for 1988 are not available.
- ²⁵ For a detailed exposition of cash balance plans, see Kenneth R. Elliott and James H. Moore, Jr., "Cash Balance Pension Plans: The New Wave," Compensation and Working Conditions, summer 2000, pp. 3-11.
- ²⁶ For examples of sliding scales, see L. Bernard Green, "Questions and Answers on Cash Balance Pension Plans," Compensation and Working Conditions Online, Sept. 22, 2003.
- ²⁷ For a study of the impact of automatic enrollment provisions at three companies, see James J. Choi, David Laibson, Brigitte Madrian, and Andrew Metrick, "For Better or Worse: Default Effects and 401(k) Savings Behavior," NBER Working Paper Series, Working Paper 8651 (National Bureau of Economic Research, December 2001).
- ²⁸ See Wiatrowski, Harvey, and Levit, "Employment-Related Health
- ²⁹ In cases where no premium was designated for family coverage, an alternative premium was used. The preferred alternative was "single plus two" coverage, followed by "single plus spouse," "single plus child," and "single plus one."

³⁰ The approach described was taken to maximize the amount of directly collected data used in the calculation. See Michael Lettau, "New statistics for health insurance from the National Compensation Survey," this issue, pp. 46–50, for a discussion of alternative measures of employee and employer premiums that do include the employee's choice of a single- or family-coverage option in the calculation.

³¹ These are only a few of the factors that could cause costs to differ from premiums. Among others, employer costs in self-administered plans are affected by administrative costs, and financing arrangements can cause adjustments to employer costs based upon the claims experience of the current or previous year. Finally, within the NCS publications, calculational differences arise that stem from the distinction between premiums and costs. For example, the Employment Cost Index (ECI) and Employer Costs for Employee Compensation (ECEC) series include data on employer expenditures (aggregate payments rather than premium rates) for health care, as well as employer premium payments, whereas only data on premiums were used in the tabulations published in the 2003 NCS benefits survey.

³² For a description of Federal surveys providing aggregate measures

of health insurance costs, see John Buckley and Robert VanGiezen, *Monthly Labor Review*, forthcoming.

³³ The 2003 data on the incidence and provisions of benefits were generated from about 2,900 private-industry establishments that were newly incorporated into the NCs survey. The ECI and ECEC samples, in contrast, include establishments that are new, as well as establishments that previously were in the sample. The March 2003 ECEC sample, for example, included nearly 6,900 private-industry establishments. As noted earlier, the sample used for the NCs tabulations of the incidence and provisions of benefits will gradually increase over the next few years, eventually becoming the same sample that the ECI and ECEC use.

³⁴ Data for 1986 were released by the Bureau in 1997. (See *Employer Costs for Employee Compensation: 1986–1999*; on the Internet at http://www.bls.gov/ncs/ect/sp/ecbl0013.pdf.)

³⁵ See Lettau, "New statistics for health insurance," for an account of research into health insurance costs.

³⁶ Janet L. Norwood, "Measuring the cost and incidence of employee benefits," *Monthly Labor Review*, August 1988, p. 8.

APPENDIX: Glossary of terms

Access. A measure of the proportion or number of employees who are offered a benefit plan.

Attendance bonus. A payment to employees whose work attendance record meets certain standards.

Cash balance plan. A defined benefit pension plan in which an account is maintained for each participant. Employers specify a contribution and a rate of interest on the contribution that will provide a predetermined amount at retirement.

Cash profit-sharing plans. Cash payments made to workers and often determined by a formula based on company profits. Such payments are not intended for retirement, and individual accounts are not established.

Coinsurance. In a health insurance plan, a form of medical cost sharing that requires the insurer to pay a stated percentage of medical expenses after the deductible amount, if any, has been paid by the subscriber.

Deductible. A fixed dollar amount during the benefit period (usually a year) that an insured person pays before the insurer starts to make payments for covered medical expenses.

Defined benefit pension. A retirement plan that uses a specific, predetermined formula to calculate the amount of an employee's future benefit.

Defined contribution plan. A retirement plan in which the employer makes specified contributions, but the amount of the retirement benefit is not specified.

Employee recognition bonus. A payment to employees that rewards their performance or significant events in their worklife. An example is an "employee of the month" award.

End-of-year bonus. A payment to employees near the end of the calendar or fiscal year as a sign of appreciation for working hard throughout the year, often in recognition of the corporation or business unit having attained certain financial goals.

Exclusive provider organization (EPO). A type of preferred provider organization under which employees must use providers from a specified network of physicians and hospitals in order to receive coverage; there is no coverage for care received from a nonnetwork provider, except in an emergency.

For-profit establishment. An establishment in business to generate profits.

Full-time worker. A worker whom the employer considers to be full time. The NCS does not use a standard-hours rule, such as 35 or 40 hours per week.

Health insurance. A broad term referring to all types of health care coverage, including medical, dental, vision, and prescription-drug care.

Health maintenance organization (HMO). See prepaid plans.

Hiring bonus. A payment made by an employer to an employee to induce an individual to accept employment with the employer.

Holiday bonus. A payment made to employees, often near the end of the calendar year, in recognition of the holiday season or a specific public holiday. May be referred to as a Christmas bonus.

In and out of network. A medical care plan provision that designates certain physicians and hospitals as network providers. Services sought from health care providers who do not belong to the network are reimbursed at a lower rate than that applicable to network providers.

Incentive-based pay. General term for a collection of methods of wage payment that relate earnings of workers to their actual production, individually or as part of a group.

Indemnity plan. A type of medical plan that reimburses the patient or provider (or both) as expenses are incurred.

Longevity bonus. A payment made to employees on the basis of their length of service.

Management incentive bonus. A payment to managers rewarding them for their ability to direct the performance of a group of subordinate employees in the attainment of a specified goal.

Medical insurance. A type of health insurance that provides services or payments for services rendered in the hospital or by a physician. (The term does not include plans that provide only dental, vision, or prescription-drug coverage.)

Money purchase pension plan. A defined contribution plan that designates employer contributions, typically a percentage of employee earnings. Contributions are allocated to individual accounts established for each employee.

Nonproduction bonus. A cash payment that is not directly related to the output of either the employee or a group of employees.

Nonprofit establishment. An establishment that qualifies as a nonprofit organization under Internal Revenue Code Section 501.

Orthodontic care. Services for the correction of malpositioned teeth.

Other bonus. Cash payments, awarded to employees, that are different from the other types of nonproduction bonuses listed in

Part-time worker. A worker whom the employer considers to be part time. The NCS does not use a standard-hours rule, such as 35 or 40 hours per week.

Participation. The number or proportion of employees who are enrolled in (covered by) a benefit plan.

Payments in lieu of employee benefits. Payments to employees in lieu of the employer's providing a benefit (such as medical insurance).

Point-of-service (POS) option. An HMO-PPO hybrid; sometimes referred to as an "open-ended" HMO when offered by an HMO. POS plans resemble HMO's with regard to in-network services. Services rendered outside of the network are usually reimbursed in a manner similar to that employed by conventional indemnity plans (for example, provider reimbursement based on a fee schedule or usual, customary, and reasonable charges).

Preferred provider organization (PPO). An indemnity plan under which coverage is provided to participants through a network of selected health care providers (such as hospitals and physicians).

The enrollees are permitted to go outside the network, but would incur larger costs in the form of higher deductibles, higher coinsurance rates, or nondiscounted charges from providers. In the NCS, these plans are now called "indemnity inside and outside of network" plans.

Prepaid plans. Health care plans that assume both the financial risks associated with providing comprehensive medical services and the responsibility for health care delivery in a particular geographic area to members, usually in return for a fixed, prepaid fee. The term is a synonym for "health maintenance organizations"

Referral bonus. A payment to employees for recommending a qualified applicant who is hired by the establishment.

Retention bonus. A payment made by an employer to an incumbent employee to retain that individual with the establishment.

Retirement benefits. Benefits accruing under a plan that accumulates savings for, or provides income to, retired workers. Retirement plans are classified as either defined benefit pension plans or defined contribution plans.

Safety bonus. A payment to employees for maintaining a high level of safety in the workplace.

Savings-and-thrift plan. A retirement plan under which employees may contribute a predetermined portion of (usually pretax) earnings to an individual account, all or part of which the employer matches.

Short-term disability benefits. Benefits that provide full, partial, or a combination of full and partial pay to employees who are unable to work because of a non-work-related accident or illness. Benefits are usually paid for a fixed number of weeks, typically 26. The benefit is usually either a percentage of the employee's earnings or a fixed dollar amount per week.

Suggestion bonus. A payment to employees whose innovative suggestions for creating better work processes and improving the establishment's efficiency have been considered or implemented.

Takeup rate. The proportion of workers offered a benefit plan who participate in the plan.

Time-based pay. Pay that is tied to an hourly rate or a salary and that is not tied directly to production.

Traditional fee-for-service plans. Indemnity medical plans that allow the participant the choice of any provider without any effect on reimbursement. These plans reimburse the patient or provider as expenses are incurred.

Union-related bonus. A payment made to employees covered by a collective bargaining agreement upon signing a new labor contract or in lieu of a general wage increase.

Variable pay. Pay which includes a variety of cash or cashequivalent payments that, unlike "base" wages and salaries, vary by factors other than hours worked or the amount of time covered by the pay period.