

Measuring the cost and incidence of employee benefits

Demographic, social, and economic changes and employer cost-cutting efforts are combining to produce new, more flexible, more integrated benefits —which are more difficult to measure

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Employee compensation has changed dramatically in recent years. As inflation has decelerated and industry has undergone restructuring, wage and salary increases have moderated. Increases in the employer cost of benefits also have slowed, but discussion about the range of benefits offered to workers has picked up significantly.¹

The generation of workers born after World War II now accounts for a substantial proportion of the labor force. Like their working parents, these workers are concerned about rising health care costs, job security, and future retirement income. In addition, more women than ever before in our history have entered the labor force, many of them mothers of small children. This development has focused national attention on the interaction of work and the family. The combination of these demographic, social, and economic changes has resulted in a reexamination of employee compensation, which now encompasses a number of emerging benefits.

As a result, the measurement of total compensation to workers has become not only more important but also more difficult. This article discusses some of the problems

in measuring the incidence and employer costs of benefits which are becoming more flexible, increasingly more integrated, and innovative at a time when employer cost-cutting initiatives are gaining momentum.

Two BLS surveys

The Bureau of Labor Statistics measures benefits by (1) obtaining the cost to the employer of providing them and (2) describing the details of the plans.²

BLS measures employer costs through the Employment Cost Index, a quarterly survey of employers that tracks the change in the cost to employers of compensation for their employees. The Employment Cost Index is a base-weighted index which shows the change in the cost to the employer of a market basket of occupations from a base period to the present. In constructing the index, BLS asks its data collectors to gather information on wages and salaries and on about two dozen types of employee benefits. In October 1987, BLS began publishing—in addition to indexes and percent changes—the dollar cost per hour worked of each of these elements of compensation.³ BLS measures employee benefits provisions through an annual Employee Benefits Survey, which provides such details as the prevalence of various health insurance deductibles, pension benefit formulas, and vacation accrual rates.

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Greater benefit plan flexibility

The needs of a changing work force have led to greater interest in flexible benefits plans, which permit workers to choose among different types of benefits and benefits options, depending on their family situation. For example, in a two-earner family, both members may not need health insurance, because one is covered by the other's policy. Instead, the worker may select employer-sponsored child care, additional life insurance, or a tax-deferred savings plan.

While such options accommodate the worker, they make benefit plans more complex for the employer to administer and complicate data collection. Instead of gathering information on a single health insurance plan covering all workers, it may be necessary to collect data for several plans, as well as for options within plans. Surveys like the Employment Cost Index and the Employee Benefits Survey, which measure employer cost or plan details for all the plans that cover workers, require more comprehensive information from the employer than would otherwise be the case.

Employee choice in selecting different types or levels of coverage sharpens the contrast between measures of worker participation and eligibility. In a flexible benefits plan, most employees will be eligible for all plans and options, but no one employee will be able to participate in all of them. Thus, when the plan provisions surveyed differ, as they nearly always do, participant counts will understate the proportion of employees offered a particular benefit provision. If employee choice becomes more prevalent, the gap between the number of eligible and participating employees will widen. For certain needs, such as gauging the number of workers with access to employer-financed health insurance, a count of eligibles may be more important than a count of participants. However, counts of eligible workers will overstate availability if participants cannot choose all benefits. To present the full picture, therefore, surveys of benefit provisions may require information on eligibility as well as participation.

Even in the absence of flexible benefits plans, the rise of alternatives to traditional fee-for-service health plans will continue to increase the options available to employees. As health maintenance organizations and preferred provider organizations proliferate, employees in more and more localities will be given a wider choice of health care plans.

Leave banks are a related development. These plans combine several forms of paid leave—for example, vacations, sick leave, and personal leave—into one overall leave category. By relaxing restrictions on the purposes for which leave may be used, these plans give employees more flexibility in arranging vacations, coping with personal emergencies, and managing other planned or

unplanned needs. But this flexibility makes it difficult or impossible to classify leave by type of plan. For example, questions like how much sick leave is available to cover disabilities due to childbirth are increasingly difficult to answer. One solution is to establish a separate classification for leave banks, but then data users must be warned that the prevalence and level of other types of paid leave are understated.

A similar practice, found primarily in public school districts, is the establishment of sick leave banks. These plans typically call for employees to donate a day or two of sick leave each year into a "bank." The bank can then be drawn upon by employees who have exhausted their sick leave due to lengthy illnesses or incapacitation. For employees under these plans, the regular sick leave provision overstates the accrual rate (because employees donate some leave) but understates the potential benefit. This, of course, adds a degree of complexity to the analysis and interpretation of sick leave data.

Integration of related benefits

Another trend that complicates measurement is the move to integrate benefit plans or programs. For example, to curb health care costs, plan sponsors are looking at programs designed to encourage healthier life styles (wellness programs) or to prevent personal problems from developing into catastrophic emergencies (assistance programs). Some employers are beginning to integrate these programs with their health care plans by linking plan provisions. An example of this is the practice of coordinating health insurance coverage of mental health care with services provided through an employee assistance program. Another example is that of physical examinations provided through an employee wellness program, rather than through health insurance plans. A related practice, for retirement plans, is found in "ad hoc" benefit increases to those on pensions. The increases are, in effect, benefits provided outside the plan.

These interrelationships have important consequences for benefits measures. Health insurance tabulations, for example, will understate both the coverage of physical examinations and the costs for health insurance if wellness programs are not accounted for.

The 1986 Employee Benefits Survey of medium and large firms showed that only 3 percent of pension plan participants were in plans with automatic cost-of-living increases. But 35 percent were in plans that had granted one or more "ad hoc" increases from 1981 to 1985. In this case, examining only provisions for automatic increases within the plan would have substantially underestimated the prevalence of post-retirement increases. To gather this information, however, we must ask our survey respondents additional questions, which increase data collection time and expense.

Continuation of these trends suggests that surveys will increasingly have to integrate data from related plans. Counting procedures also will have to be adapted to these new circumstances. The joint effect of this trend and the movement towards greater flexibility may create very complex data collection and compilation situations. For example, if employees have a choice of several health insurance plans coordinated with a wellness program and an assistance program, a large number of permutations could result. At the Bureau, we may have to rethink our counting methods. A mixture of participation and eligibility counts may be needed to illuminate these potentially complex relationships in the Employee Benefits Survey. In the Employment Cost Index, greater integration will undoubtedly make it difficult to measure benefit costs separately.

Less dramatic, but nonetheless important, issues have been raised by the creativity shown in defined contribution plan design. For a number of reasons, from cost control to fostering employee commitment to corporate goals, employers have mixed and matched savings, stock, and profit-sharing features into a variety of hybrid plans. How does one classify a plan that combines the characteristics of all three plan types with a pretax 401(k) provision? Is it one plan or three plans? If it is one plan, which type is it? Classification issues are not simply a problem for the surveyor of employee benefits; such issues also complicate the user's job in interpreting the data.

Cost control

The pressure on employers to curb rising benefit costs has made the 1980's a fertile period for innovative plan design. Simply keeping up with developments has been one of the greatest challenges in measuring employee benefits. But some of the developments spurred by cost control pose critical questions that will affect benefit measurement over the next few years. These questions range from how we analyze specific types of plans to what is a benefit and what is a form of pay.

Differing rates of reimbursement. The increasing use of cost containment techniques in health insurance plans has significant consequences for the way benefit provisions are analyzed. To encourage the use of certain medical services, while discouraging the use of others, health plans are increasingly applying different rates of reimbursement for medical services. The traditional major medical patterns (for example, 80 percent payment of covered services after satisfaction of a \$100 deductible) are being replaced by finely tuned reimbursement programs. Hospital room and board, physicians' visits, inpatient surgical fees, and outpatient surgical fees may all be reimbursed at different levels. As plan design becomes more finely tuned, so too must the analysis of plan provisions. Rather

than being examined in groups, each type of medical service must be analyzed separately. This movement from a paradigmatic to an atomized view of medical services increases the time and cost of data compilation, as well as the number and complexity of the tabulations required to describe plan provisions.

Contingent pay systems

Employers also have sought to control increasing compensation costs by altering the mix of variable to fixed costs. Boosting the ratio of variable to fixed compensation, in theory, will give employers more flexibility in adapting to changing economic conditions. Contingent pay systems, which make a portion of pay dependent upon such variables as performance or profitability, have decreased the importance of base salary or wages. This, in turn, increases the complexity of the computations used to cost out benefits. Computational procedures that were automatic a few years ago in the Employment Cost Index are no longer routine. As the role of hours worked and the hourly wage has a smaller weight in determining gross pay, an increasing number of customized calculations are required for benefits. This, of course, has implications for our current and future computer systems.

Lump-sum payments. Specific types of contingent pay and benefits raise other issues. Lump-sum payments granted in lieu of wage increases are increasingly common in collective bargaining settlements, while "at risk" pay has received much attention in compensation programs for salaried workers. These practices pose definitional issues. Lump-sum payments, for example, share many of the characteristics of both wages and benefits. In our surveys, we have identified these payments as one of several types to be collected with nonproduction bonuses, which are classified as benefits. The line, too, between profit-sharing plans and the new types of bonuses and pay based on profitability is becoming harder and harder to draw. These developments have caused the Bureau to embark on a thorough review of the concepts of compensation, wages, and benefits.

Stock options. Some forms of contingent compensation pose special measurement problems. Stock options, for example, are usually provided only to executives. While the overall incidence may be low, making it difficult to obtain reliable estimates, the benefit can be a substantial part of compensation to those who receive it. Stock options also pose measurement issues because it is difficult to determine the value of the options before they are exercised. Valuation methods for stock plans are currently under study as part of a comprehensive review of the Employment Cost Index.

Contributory plans. It is unclear whether the more rapid growth of defined contribution plans compared to defined benefit plans is a movement towards variable rather than fixed payments. But some plan sponsors have adopted defined contribution plans as a way of gaining more control, or at least predictability, over costs. Together with the development of salary reduction provisions, the growth of defined contribution plans can be viewed as involving more employee participation in plan funding. This occurs either directly through employee contributions or indirectly by linking employer contributions to profitability.

Salary reduction plans present definitional questions stemming from the employee involvement. Are amounts deferred by employees in 401(k) plans best classified as part of salary or as an employer-funded benefit? At the Bureau, we have considered these amounts to be pay. Flexible spending or reimbursement accounts, another form of salary reduction plan, muddy the waters even further. These accounts, which often accompany flexible benefits plans, are usually funded by both employer money and employee pretax contributions. In these circumstances, it is not only difficult to separate pay from benefits, but it is hard to tell whether money is coming from the employer or from the employee. For example, who pays for additional life insurance coverage if the employee's share of the premium is paid out of a jointly funded reimbursement account?

Contingent employment. There are signs, too, that the employment relationship itself may be becoming more contingent. Workers may be part time, temporary, leased, or based at home.

Benefits data for temporary and leased workers are obtainable from the temporary help service or leasing firm, but many of those who work through temporary help firms work sporadically, and their benefit programs reflect this. Paid leave, for example, may vary by hours worked, rather than by months or years of service. Other benefits may be provided as a monetary allowance for employees to allocate as they choose rather than as employer-sponsored insurance or retirement plans. Also, many workers are registered with more than one firm and therefore may receive benefits from more than one company.⁴

While these practices are not new, they are in sharp contrast to the traditional programs geared to full-time, permanent employees. Our measures of benefits provisions, especially, were designed for these traditional programs. If the contingent work force grows, our measures will have to be redesigned. What can be handled by a judicious footnote or two today may require a thorough overhaul in 1992.

Work at home. Work at home is another potentially expanding employment practice that could require modifying our traditional methods of measuring benefits. This practice is still relatively rare—a BLS survey found that in 1985 fewer than 770,000 wage and salary employees worked exclusively at home.⁵ But continued advances in communications technology suggest that telecommuting, in which employees work out of their homes and communicate electronically with a central site, could increase in future years. If this were to occur, our current concepts of paid leave and other benefits related to time worked may become irrelevant. In the Employment Cost Index, for example, cents per hour worked is the common denominator to which benefit costs are reduced. For telecommuters, however, it might be difficult to determine hours worked in an establishment-based survey. New collection methods or a new denominator for expressing benefit costs may be needed for these employees. Additionally, work at home includes auxiliary benefits, such as in-house family care, flexible work scheduling, and savings in work-related expenses, that are not usually measured in traditional benefits surveys.

New and emerging benefits

New benefits are emerging in response to changing demographic and social patterns. The rise of two-worker and single-parent families has increased the demand for employer-provided or subsidized child care. It has also focused interest on various kinds of parental and other family leave options. Some experts predict that demand for elder care benefits will intensify as the elderly population grows, especially in a society characterized by households where no one is at home to care for children or elderly parents.

Child care. The issues involved in measuring these socially oriented benefits vary. Child care is a benefit that commands much interest but its measured incidence so far is very low.⁶ With the size of our Employee Benefits Survey samples, our strategy is to publish only prevalence data until the benefit is common enough to warrant publication of details of plan provisions. Consequently, the growth of child care benefits will actually make it easier for us to publish reliable measures of plan provisions. The costing out of child care benefits is a different matter when care is provided in the employer's facilities or by employees of the firm. These problems center on valuing the labor, capital, and other inputs required to provide the benefit.

Maternity leave. Maternity leave poses a unique issue of its own—it is extraordinarily difficult to define. This is because it is closely related to other forms of leave, such as sick leave, sickness and accident insurance, vacations, and personal leave. Maternity leave, *per se*, is only part of the

picture, because these other forms of leave are nearly always available to (and in some cases legally mandated for) pregnant employees. Thus, in addition to being hard to separate from other types of leave, it involves many of the issues posed by integrated benefits discussed earlier.

Elder care. Elder care is so new that no definite patterns have emerged. If it grows and takes the form of paid or unpaid leave for employees who must care for their parents, it will involve many of the same issues as maternity leave. If it develops to include day care benefits, it will be similar to child care. And, if it evolves to provide medical care, it may pose some of the issues associated with retiree health insurance.

Retiree benefits. Retiree health insurance is not a new benefit, but the aging of the American population has given it new prominence.⁷ Concern in recent years over the long-term funding of the Medicare program and over the unfunded liabilities of employers for promised benefits has intensified this attention. Some experts assert that the availability of health coverage after retirement can be viewed, like a pension, as a potential benefit to active workers. But retiree benefits pose serious questions, particularly for measures of benefit costs. How should the cost of retiree insurance be allocated to current employees in the Employment Cost Index? Further, how should the costs be determined—as accruals over the active service of current employees, as expenses when paid, or some other approach? Certainly, the deliberations of the Financial Accounting Standards Board on these issues will be important to us in exploring alternatives.

Differing measurement approaches

The key point here is that each of these emerging or newly prominent benefits possesses unique characteristics that pose different measurement issues. In isolation, no one of these issues will significantly complicate survey design. In combination, however, they are bound to complicate a survey process already replete with special situations.

One approach is to augment our traditional employer surveys with other methods of data collection. For example, household surveys are an appropriate source of information on certain kinds of employee benefits. The Bureau has on occasion used supplements to the Current Population Survey—our monthly household survey that measures employment and unemployment—to develop some specific data on benefit coverage of household members. A special survey of displaced workers obtained information on whether workers had been covered by health insurance on the job they lost and whether they were currently covered either through a new job or through the job of a family member.⁸ This sort of

information is best obtained through a household survey, and we plan to use this approach when we can. This year, we are using the household survey to inquire about health insurance coverage for retirees.

Because it is often difficult to adjust ongoing surveys to obtain new information on a timely basis, the Bureau has conducted some quick-response employer surveys on new or emerging issues. One that we recently conducted obtained information specifically on the provision of child care benefits. A combination of mail and computer-assisted telephone interviewing assured a satisfactory response rate, and the procedure was able to elicit more detailed information than had been available to date from the traditional benefit survey.

The challenge ahead

All the signs point towards more complex benefits surveys. Survey designs and measurement methods will have to be reevaluated continuously to ensure that they are appropriate to a rapidly changing environment. Interpreting and understanding the data will be a tougher job for data users. More information, too, will be requested from survey respondents.

The issue of respondent burden is a crucial one in benefits survey design: One must continually balance the need for complete, high-quality data against the time and expertise required of survey respondents. Benefits data are supplied to the Bureau on a strictly voluntary basis. Particularly in larger companies, the same officials are contacted several times a year for compensation data. (Respondents are contacted each quarter for Employment Cost Index information.) If survey response rates fall, the quality of the data suffers. To face the demands of the future, new methods such as probability subsampling of particular types of benefits, benefit plans, occupations, or workers, will have to be developed to ease the burden on respondents.

Communicating the data clearly and accurately will also be a challenge. The more interrelated programs become and the more atomized plan design becomes, the greater will be the responsibility of the surveying organization to educate users on how to interpret the data. New and better ways to present the data will have to be found.

As data collection, compilation, and publication become more complex, quality control in all phases of the survey cycle will become even more important than it is today. Quality management will have to be outwardly, as well as inwardly, directed. When the specifications themselves are in flux, it will not be enough to ensure that the system is working according to specifications. More and more resources will have to be devoted to monitoring developments in the field. Survey measuring instruments and computer systems will have to be frequently retooled

to keep current. To keep pace, survey designers will have to prospect for themselves as well as for data users. □

—FOOTNOTES—

¹See Bradley R. Braden, "Increases in employers' benefit costs dampened dramatically in the 1980's," *Monthly Labor Review*, July 1988, pp. 3-7.

²One can also look at benefits from another aspect, the value to the worker, which does not always coincide with employer cost. This, however, has proved to be extremely difficult because a number of variables must be taken into account, many of them related to particular circumstances of the employee. In the case of employer cost, definition is easier, and accounting records to verify the data collected are at hand. Thus far, the only experience that the Bureau has had with value to the worker is limited to projections of pension replacement rates. See

Donald Schmitt, "Today's pension plans: how much do they pay?" *Monthly Labor Review*, December 1985, pp. 19-25.

³See Felicia Nathan, "Analyzing employers' costs for wages, salaries, and benefits," *Monthly Labor Review*, October 1987, pp. 3-11.

⁴See "BLS Reports on Its First Survey of Pay and Employee Benefits in the Temporary Help Supply Industry," *USD L NEWS*, 88-260, May 24, 1988.

⁵See Francis W. Horvath, "Work at home: new findings from the Current Population Survey," *Monthly Labor Review*, November 1986, p. 31.

⁶See "BLS Reports on Employer Child Care Practices," *USD L NEWS*, 88-7, Jan. 15, 1988.

⁷See "Employer-sponsored health insurance for retirees: the need and the cost," *Monthly Labor Review*, May 1987, p. 38.

⁸See Michael Podgursky and Paul Swaim, "Health insurance loss: the case of the displaced worker," *Monthly Labor Review*, April 1987, pp. 30-33.

Waite and Herriot awarded Shiskin prize

Charles A. Waite and Roger A. Herriot, of the Bureau of the Census, received the ninth annual Julius Shiskin Award for Economic Statistics. Waite, Associate Director for Economic Programs, received the award for "his original and important contributions" to the Bureau of Economic Analysis and the Bureau of the Census. Herriot, Senior Demographic and Housing Analyst, received the honor for "his innovative work in improving income statistics." The presentation was made at the Washington Statistical Society's annual dinner in June, along with an honorarium of \$250. The award is named in honor of the ninth U.S. Commissioner of Labor Statistics.

The award program is designed to honor unusually original and important contributions in the development of economic statistics or in the use of economic statistics in interpreting the economy. Participating organizations in the program are the Bureau of Labor Statistics, Bureau of the Census, Bureau of Economic Analysis, Office of Management and Budget, National Bureau of Economic Research, National Association of Business Economists, and the Washington Statistical Society. The late Commissioner Shiskin was associated with all of these organizations in his long career.
