

*How much an employer pays for employee benefits varies widely and depends on the age of the workforce and the structure of the benefits package offered. In general, costs increase for older workforces. The factors driving the differences in cost by age are the time value of money, employee pay, and rates of health care use, disability, and death. Case studies show how the benefit package varies by age in a large traditional company, a large financial services company, and a medium-sized retail company. An illustration is also provided for retirement benefits from two sample plans to show how the benefits are earned over time.*

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## ***Variation of Employee Benefit Costs by Age***

*by Anna Rappaport\**

### ***Summary***

Health care, pension, and disability plans account for the bulk of employers' benefit costs, as defined in this article. Because those costs tend to rise as employees get older, the age structure of the workforce affects not only employers' costs but ultimately their competitiveness in global markets. How much costs vary depends in large part on the structure of the benefits package provided.

The method a company chooses to finance benefits generally varies with its size. This article focuses primarily on the benefit practices of large, private employers. In the long run, such employers pay the costs associated with the demographics of their workers, whereas small employers can often pool costs with other companies in the community. In addition, small employers often offer fewer benefits, and the costs and financing of those benefits are subject to the insurance markets and state regulations.

The discussion of benefit packages is illustrated by case studies based on benefits that are typical for three types of organizations—a large traditional company such as steel, automobile, and manufacturing; a large financial services company such as a bank or health care organization; and a medium-sized retail organization. The case studies demon-

strate the extent to which the costs of typical packages vary and reveal that employers differ radically in the incentives they offer employees to retire at a specific time. An employer can shift the variation in cost by age by changing the structure of the benefit program.

The major forces that drive age differences in benefit costs are the time value of money (the period of time available to earn investment income and the operation of compound interest) and rates of health care use, disability, and death. Those forces apply universally, in the United States and elsewhere, and they have not changed in recent years. However, the marketplace and the prevalence of various types of benefit programs have changed, and those changes have generally resulted in less cost variation by age and more frequent employer selection of benefit packages that exhibit less variation by age.

### ***Introduction***

A 1984 study on the costs of employing older workers, prepared for the Special Committee on Aging of the U.S. Senate (Rappaport and Morrison 1984), found that substantial benefit costs are associated with age and that those costs vary with the structure of the benefit package. Those findings still hold true today. The forces responsible for the differences in

benefit costs by age—the amount of time available to earn investment income and the operation of compound interest, plus differences in rates of illness and death—have not changed in the past 16 years. However, there has been a change in the prevalence of various types of benefit programs and in market practices, notably:

- A growth in employment in smaller companies, which frequently offer fewer and less generous benefits.
- A shift from traditional defined benefit plans to defined contribution plans and cash balance plans, which have much less variation in cost by age.
- An increase in the use of matched savings programs and in the size of the match. (The costs of those programs do not vary by age.)
- New forms of health benefit plans and new variations in risk sharing between insurer and employer.
- An increase in employee contributions for health plans. (Those contributions do not vary by age, whereas costs do, thus increasing the employer's cost variation.)
- An increase in the use and costs of prescription drugs and a shift from inpatient to outpatient health care.
- Growth of flexible benefit programs, in which employees are allocated credits that they use to buy benefits from a menu.

These changes have generally resulted in less cost variation by age today and more frequent employer selection of benefit packages that exhibit less variation by age.

Employee benefits today include a wide variety of programs. The U.S. Chamber of Commerce performs an annual study of the costs of such programs, and this article uses that study as a basis for determining the magnitude of costs in the U.S. workplace. In its calculation of benefits, the Chamber of Commerce includes pension (retirement and matched savings), medical and dental, disability, and life insurance benefits, as well as all time off and legally required payments such as Social Security and workers' compensation. Under that broad definition, benefits cost 35 percent to 45 percent of pay in 1998, depending on employee group (U.S. Chamber of Commerce 1999).

The analysis in this article defines benefits to exclude time not worked (except for sick time), legally required payments, and miscellaneous benefits, resulting in benefit costs of 16 percent to 22 percent of pay (see Table 1). The Bureau of Labor Statistics calculates the

costs of those benefits as 13 percent to 17 percent of pay, depending on employee group (U.S. Department of Labor 1998).

Most calculations of benefit costs do not disaggregate those costs by age, yet a number of information sources show that variations by age do exist. This article looks at each benefit cost by age. In addition, it considers estimates only for private-sector employers, which tend to have lower pension costs than public employers. (Disability benefits are offered less frequently to public employees; when they are offered, they are sometimes included in pension plans rather than on a stand-alone basis. Pension costs are particularly high for public safety officers, who often have very early retirement ages.)

### Overview of Benefit Packages

Medical and pension benefits are by far the costliest parts of the benefit package, regardless of package design or employee cost sharing. The U.S. Chamber of Commerce (1999) estimates that employers paid \$3,539 per employee, or between 7.7 percent and 12.7 percent of pay, for medical benefits in 1998. That amount is considerably lower than the \$4,097 found by Mercer/Foster Higgins in a 1999 nationwide survey of employer-sponsored health plans. The reasons for these variations are discussed below.

Pension costs averaged \$3,244, or between 5.8 percent and 9.2 percent of pay, in 1998, with major variations in

Table 1.  
Basic employee benefit package, excluding time off (as a percentage of pay)

Benefit	Manufacturing	Other
<i>Salaried employees</i>		
All benefits	16.1	19.0
Retirement and savings <sup>a</sup>	6.0	9.2
Medical and dental	7.7	7.9
Disability <sup>b</sup>	1.9	1.6
Life insurance <sup>a</sup>	0.5	0.3
<i>Hourly employees</i>		
All benefits	22.2	21.0
Retirement and savings <sup>a</sup>	9.2	5.8
Medical and dental	12.1	12.7
Disability <sup>b</sup>	0.7	2.2
Life insurance <sup>a</sup>	0.2	0.3

SOURCE: U.S. Chamber of Commerce (1999), Tables 5 and 6.

a. Employers' share only.

b. Total of disability plus sick time, excluding workers' compensation.

amount and pattern of benefits (U.S. Chamber of Commerce 1999). Most employers who offer retirement plans spend between 2 percent and 15 percent of pay. Individual employer practices vary widely, but large employers, on average, offer much more generous benefits than small employers, as the following table shows:

Employer size	Benefit cost range
Small	0-30
Medium	10-30
Large	15-40

### Health Costs

Medical and dental costs are found in the Chamber of Commerce estimates as both per capita amounts and percentages of pay. When looking at health benefits alone, per capita amounts are better measures of cost, but they need to be translated to percentages of pay if they are to be combined with other benefit costs. The per capita amounts vary substantially by family status and age. Family members covered by employer health plans include spouses, children, and, in some plans, domestic partners; thus, costs for individuals vary by age and by the number of covered dependents. Very young employees have few dependents, but the number increases as they marry and have children. The number of dependents then declines among older employees as children reach maturity and are no longer covered. Costs of medical benefits vary substantially, depending on the health status of the covered group.

**Costs to Consumers.** Although medical and dental benefits are usually the costliest benefits for employers, they can also be costly for employees. Those without health insurance may find it prohibitively expensive to buy coverage in the open market. Benefits are often expensive even for those with coverage, as many plans require employee contributions and cost sharing and generally do not cover all medical costs. Table 2 shows average consumer expenditures for health care by age group. Those expenditures reflect only a small part of the total cost, since most care for persons covered by those programs is paid for by employers, Medicare, and Medicaid.

Overall, out-of-pocket expenses for households headed by persons aged 25 to 34 are only 57 percent as high as expenses for households headed by persons aged 55 to 64. Drugs and medical supplies for the younger group cost just 42 percent of the amount for the older group. Since payments for health insurance are often contributions to an employer's plan, those costs reflect the total share paid by employees. Because employer plans generally do not rate employee contributions by

age, the costs in Table 2 understate the actual costs by age.

On average, it is reasonable to assume that health care benefits for employees aged 55 to 64 will cost more than twice as much as those for employees aged 25 to 34.

**Costs to Employers.** Relatively little information is available on total health care spending by age because it is difficult to capture and interpret such information. Employers and health plans may have data on total plan costs for their employees, but those costs always omit what is not covered by the plan. There is no central source for such data, and many employers do not develop costs by age. Generally, employers focus on what is helpful in managing the plans. Furthermore, for people covered in arrangements such as health maintenance organizations (HMOs), in which health care providers are paid a set amount for each person treated, costs by age are not meaningful and probably are not developed. The impact of a workforce's age structure affects employer cost when the employer's claim experience is considered, when insurance underwriting is based on demographics, or when both sets of factors are considered.

Other complications in understanding health cost patterns arise when the same service is sold to different

Table 2.  
Average consumer expenditures for health care (in dollars and as a multiple of age 45-54 amounts)

Age	Total	Health insurance	Medical services	Drug and medical supplies <sup>a</sup>
<i>In dollars</i>				
Under 25	425	200	128	96
25 - 34	1,236	577	422	236
35 - 44	1,605	748	547	310
45 - 54	1,945	845	658	442
55 - 64	2,187	965	664	558
65 - 74	2,900	1,547	636	717
75 and over	2,799	1,494	475	829
<i>As a multiple of age 45-54 amounts</i>				
Under 25	0.22	0.24	0.19	0.22
25 - 34	0.64	0.68	0.64	0.53
35 - 44	0.83	0.89	0.83	0.70
45 - 54	1.00	1.00	1.00	1.00
55 - 64	1.12	1.14	1.01	1.26
65 - 74	1.49	1.83	0.97	1.62
75 and over	1.44	1.77	0.72	1.88

SOURCE: U.S. Census Bureau (1999).

a. Includes prescription and nonprescription drugs.

purchasers at different prices. For example, a hospital may charge a fee-for-service customer, a health plan with a contract, Medicaid, Medicare, or various HMOs very different prices for the same service. It is easier to focus on the services used; therefore, this article looks at some data on use of services as well as cost.

Data from the National Center for Health Statistics (Centers for Disease Control and Prevention 2000) show that men aged 45 to 64 spent 2.5 times as many days in the hospital in 1996 as men aged 15 to 44; women in the older group spent only about 1.5 times as many days in the hospital as women in the younger group (U.S. Census Bureau 1999, Statistical Abstract, Table 208). The higher rates of hospital use for younger women than for younger men reflect maternity-related hospitalizations. Working-age women have considerably more physician contacts than men, but differences in the number of annual physician contacts by age are smaller (Centers for Disease Control and Prevention, 1996-1997). In 1994, men aged 45 to 64 saw doctors about 1.7 times as often as men aged 15 to 44; older women saw physicians 1.3 times as often as younger women. These data relate to individuals, not family units. They document that use of health care services differs by age, but they do not provide direct information on how health care costs vary by age.

The prevalence of health benefits for retirees is declining, but most very large employers still offer them. The lifetime value of those benefits is much higher for people retiring at the earliest possible age and lower for those retiring later. The reasons are that younger retirees will have benefits for more years and that Medicare pays for much of the medical care of older retirees. Compared with a pension fund, the lifetime value of benefits to be paid later will be relatively small early on (because employees who leave the company before they retire cannot take the right to those benefits with them), but it will grow more rapidly as retirement age is reached. Costs for retiree health in the case studies reflect the change in value of lifetime retiree health benefits by age group.

### **Disability Costs**

Aggregated disability, sick time, and workers' compensation costs amount to 3 percent of pay, a relatively small cost compared with health care and pensions. Considering the impact of lost time on production (indirect costs) as well as the direct costs would raise the figure. Disability rates and periods of disability increase with age, but long-term disability benefits generally end at age 65, except for people who become disabled at a later age. Overall, disability costs vary modestly by age.

### **Pension Costs**

Pensions are the second most costly benefit. Most larger companies help employees save for retirement through a combination of an employer-paid pension plan and a savings plan in which employee savings are often matched. The traditional goals of pension plans were to offer a competitive employment arrangement and to help career employees retire on a financially secure basis. The emphasis was on career employees, with the idea that employees who changed jobs had to fill in the gaps. Today, the emphasis has shifted to meeting the needs of more diverse employment patterns.

There are several different types of pension plans. *Defined benefit plans* include a formula for defining a benefit amount to be paid, and the employer is responsible for making sure there will be adequate funds to pay promised benefits. Costs of defined benefit plans are based on allocating the lifetime value of the benefit over the working lifetime of the employee.

*Defined contribution plans* entail a specified contribution for each employee, and the benefit is whatever can be provided by the contributions along with accumulated investment income. Under defined contribution plans, employers contribute a set percentage of pay and, in some cases, match employee savings up to a certain percentage of pay. Employer costs do not vary by age, except to the extent that the employee pay or employee rate of savings (or both) increases. In defined contribution plans, there is no need to consider the lifetime value of benefits.

Defined benefit plans can take the form of traditional plans or the newer cash balance plans. The most common traditional plan, particularly for salaried employees in larger industrial companies, is one designed to pay an income at retirement (based on the plan's benefit plus Social Security) that would replace preretirement after-tax earnings for a career employee.

**Traditional Defined Benefit Plans.** Under traditional plans, the benefit is usually an annual income defined as a percentage of earnings in the last 5 years of employment. For example, the benefit might be 1 percent of final average earnings per year of service; thus, at age 65 a 35-year employee would get 35 percent of final average earnings. Some plans have liberal early retirement provisions like "30 and out," in which an employee can get 30 percent of final average earnings immediately on retirement rather than waiting until age 65. An employee who completes 30 years at age 50 and then retires gets benefits for 15 years longer. In such cases, the value of the benefits earned increases annually, peaks at 30 years of service, and can then go down, depending on future pay increases. Final average pay plans typically have a value of 3 percent to 5 percent of pay when considered

over an entire career, but the 1-year value of the added benefit earned in a peak year can be 25 percent of pay or more. These plans benefit workers who stay at one job during their career.

**Cash Balance Plans.** In this type of defined benefit plan, benefits are defined as accounts, making them look to employees very much like defined contribution plans. Cash balance plans may have flat costs by age or, more commonly, modestly increasing account credits. In either case, costs vary much less by age than the costs of

traditional plans. Plans with credits that increase with service might have a crediting rate of 2 percent of pay early in a career, rising to 7 percent or 8 percent at the highest level. Most employers offering these plans also offer matched savings or other defined contribution plans.

The trends are away from traditional defined benefit plans to defined contribution plans and cash balance plans. Benefits in the latter plans are much better for employees who change jobs several times over a career but are often not as good for those who stay in one company for their entire career. As discussed above, whether pension costs vary by age depends on the type of plan (as well as the way one looks at cost).

**Traditional vs. Cash Balance Plans.** To illustrate how the costs of defined benefit plans vary by age, this article presents in detail a traditional final average pay plan and a cash balance plan. Both pension plans are based on a male employee, age 30, who has just been hired at a salary of \$30,000 per year. Chart 1 shows the accrual of benefits by age and the lump-sum value of the benefits accrued under each plan. It shows that:

- There is a radically different pattern of benefit buildup under the two plans.
- Benefits under the cash balance plan build up quickly in the early years and much more slowly near retirement age, making these plans more advantageous for employees with multiple jobs over their career.
- Benefits under the traditional final average pay plan build up slowly in the early years and much more quickly near retirement age, making these plans more advantageous for employees who have a long career with one employer and leave after the age of eligibility for full benefits.
- There is a big increase in benefits under the final average pay plan when employees become eligible for early retirement.

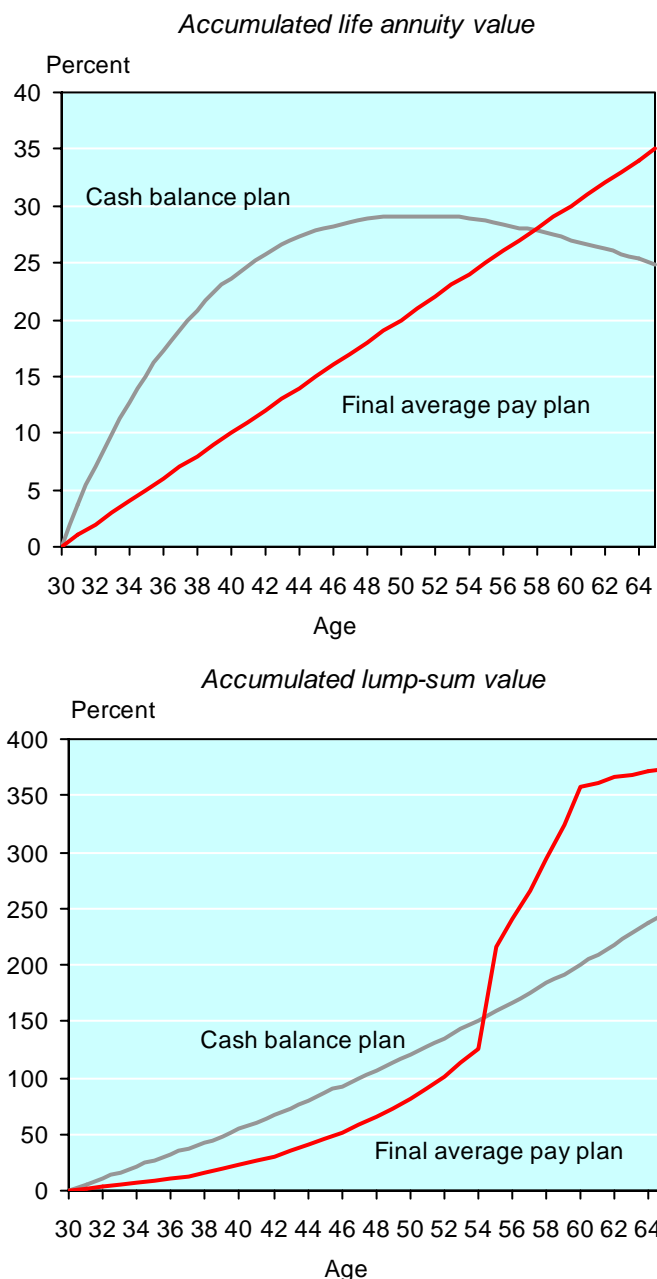
In these examples, the employee who leaves before age 58 gets more under the cash balance plan, and the employee who leaves after age 58 gets more under the traditional plan.

Both pension plans illustrated in the charts are based on a male employee, age 30, who has just been hired at a salary of \$30,000 per year.

Under the cash balance plan:

- 5 percent of pay is credited to the cash balance account each year.
- 6 percent interest is credited to the cash balance account each year.

Chart 1.  
Accumulated life annuity value and lump-sum values of accrued benefits (as a percentage of pay)



NOTE: The two pension plans are based on a male employee, age 30, who has just been hired at a salary of \$30,000 per year.

- There is no integration of the plan with Social Security. (Under pension law, employers are allowed to define benefits in such a way as to provide a higher benefit on the amount of earnings not covered by Social Security.)

Under the final average pay plan:

- Each year, employees receive 1.0 percent of their total pay plus 0.5 percent of pay above the Social Security-covered compensation (the average of the amounts on which Social Security taxes are paid over the employees' career). Tables of covered compensation are defined in federal regulations.
- Benefits are not reduced for early retirement after age 60; benefits for early retirement between ages 55 and 60 are reduced using the actuarial equivalent of the age-60 benefit.
- A lump sum is payable when the employee retires or leaves employment. For termination of employment before age 55, the lump sum is the present value of the benefit, based on payments beginning at age 65. For terminations from age 55 on, the lump sum is the present value of the early retirement benefit, payable immediately.
- Final average pay is calculated from the 5 consecutive years with the highest pay in the last 10 years.

The following actuarial assumptions are used to value benefits:

- The pay of employees covered by the plan increases 4 percent annually.
- The Social Security wage base increases 3.5 percent annually.
- The relationship between the value of an annuity and the lump-sum benefit (the actuarial equivalent) is calculated assuming that the rate of return on invested plan funds is 6 percent and that deaths will occur in accordance with the group annuity mortality table (50 percent male and 50 percent female), which measures how long payments would have been made as a monthly life annuity.
- The annual rate of inflation is 3 percent.
- The normal retirement age is 65.
- The calculations ignore legal limits on the amount of pay that can be included in tax-qualified plans and maximum benefits that can be provided in tax-qualified plans. In a tax-qualified retirement plan, contributions are deductible from corporate income taxes, investment income is not taxed until paid out as benefits, and benefits are taxed as ordinary income when paid.

The top panel of Chart 1 shows the accumulated life annuity as a percentage of pay for the two plans. For

example, the cash balance plan shows 25 percent at age 65. That means that the value of the cash balance plan as a monthly income starting at 65 is an annuity of 25 percent of pay at age 65. (No value is included for any early retirement benefits.) The final average pay plan provides a steadily increasing annuity value, whereas the cash balance plan has a rapid growth in annuity value early and then a decline after age 51. That happens because new contributions are not large enough to provide the amount needed to maintain the annuity at the same percentage of pay at a time when pay is increasing and the period to age 65 is growing shorter. The final average pay plan provides a lower benefit initially and for many subsequent years but a higher benefit at 65. The crossover point is around age 58.

The bottom panel of Chart 1 shows the accumulated lump-sum values of both plans, including the impact of the early retirement features of the final average pay plan. There are two bend points in the values for that plan. The first is at ages 54 to 55, when the lump sum jumps from a value based on an annual income starting at age 65 to the present value of an annual income beginning at the early retirement age. The second bend point is at age 60, after which monthly income benefits are no longer reduced to reflect the longer period of benefit payment. In contrast, the lump-sum value of the cash balance plan grows steadily year by year as new amounts and investment earnings are credited to the account.

Looking at the two panels of Chart 1 together, one can see that the lump sum in the cash balance plan is growing, but since pay is rising also, the growth is not adequate to provide an increasing percentage of pay.

### *Why Benefit Costs Vary*

There are several reasons why benefit costs vary by age, some of which are discussed here. The time value of money is an important factor in the variation of pension costs. Pension benefits cost more for older employees because there is less time for the money to earn investment income before it is needed to pay retirement benefits. Similarly, pension account credits of equal dollar amounts provide more retirement benefits if made earlier because they have more time to earn investment credits. The higher rates of health care use, disability, and death among older workers are also important factors.

The tendency of older employees to earn more than younger ones means that they also get larger amounts of life insurance and disability benefits when those benefits are related to pay. For pensions provided through final average pay plans, the pay in the averaging period is used to calculate benefits for all years of service.

Whether that is seen as causing variations by age depends on what one considers an age-related factor.

Costs can also vary by length of service, whether the structure of the benefit plan reflects service directly or indirectly. An example of a direct effect is a short-term disability plan that provides benefits for more weeks of disability with longer service. The account credits in a cash balance pension plan are often linked to service. While costs for those programs may increase with age because older employees often have longer service, we do not consider that a variation due to age. Another age-related difference not considered here is changes in behavior, such as greater saving with age.

### ***How Large Employers Finance Benefits***

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Employers often pay higher costs for an older workforce, but not always. This section describes benefit financing and the extent to which costs vary by workforce characteristics.

Health and dental benefits can be financed in various ways. In most plans offered by large employers, either the method of setting premium rates is linked directly to the demographics and experience of the employer or the employer is self-insured. In either case, the demographic characteristics are reflected directly. For coverage by a health maintenance organization, community rating might be used, in which case employee demographics do not matter, but that method of pricing is unlikely when a large group is covered. Community rating provides that all covered persons be charged the same price, regardless of age, sex, or other characteristics that change the risk and value of the coverage. With community rating, the age composition of the entire risk pool drives the cost.

The cost of health benefits is often shared through employee contributions, but those contributions are generally not rated by age. Therefore, even if employees are sharing the cost, the employer's share is likely to be considerably larger for older employees.

Life insurance and disability can be self-insured, partially self-insured, or fully insured. The cost is generally stated as an amount per unit of coverage and is not based on age. However, the cost calculation process takes into account the demographics of the group, so employers with an older workforce will pay more. Depending on the plan's structure, some of the variation in cost by age may be passed on to employees. In plans in which the cost of disability and life insurance benefits is shared with employees, the rates for added coverage may be based on age. Employee contributions for life insurance are usually based on age, for example, whereas employee contributions for disability coverage often are not. Practice varies, and employee-pay-all plans and plans with substantial employee contributions are more likely to have age-based contributions.

Pension costs for defined benefit plans can be calculated in various ways. The actuarial cost method defines how the lifetime costs will be allocated over time. Depending on the method chosen, as described above, cost patterns for defined benefit plans will look very different by age and over time. Some methods of spreading defined benefit costs over time look at cost as a level percentage of pay from plan entry age to plan exit, while others look at the value of benefits earned year by year. This article considers the change in value of benefits for each year worked and uses that as a proxy for cost by age. Calculations do not include any cost leveling. A single method of cost allocation is specified for reporting corporate earnings. That method looks at the value of the benefit earned each year and includes in that value the impact of future pay increases. It effectively recognizes cost by age, but it does not consider changes in pay to be age-related.

Defined benefit pensions are self-insured and paid for through a common fund that provides benefits to all employees. Required contributions take into account the demographics of plan participants, but costs are generally stated as a percentage of pay rather than varying by age. For defined contribution plans, costs are based on credits made to each account during each time period. The value of the benefits to participants includes both account credits and investment earnings from the time of contribution to the time benefits are used.

For defined contribution plans, costs are the sum of the current amounts added to each employee's account. The costs of reaching a given percentage of income replacement, whether through a defined benefit or a defined contribution plan, are spread over a number of years. If a fixed percentage of pay is contributed from the point at which saving starts to the point of retirement, the costs will be greater for shorter periods of saving and earlier ages of retirement.

### ***Three Examples of Benefit Packages***

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Individual employers offer very different benefit packages. The following are examples of how three different types of employers—a large traditional company, a large financial services company, and a medium-sized retail company—might put together a package of benefits and how much costs might vary by age. The companies' costs and their relative costs for various ages are shown in Table 3.

#### ***Large Traditional Company***

The large traditional company—typically steel, auto, or heavy manufacturing—offers a traditional final average pay pension plan with unreduced pensions at age 62, retiree health benefits with a substantial subsidy, 100

percent match of savings up to 6 percent of pay, a generous medical plan, and other benefits. The active medical plan (for nonretired employees) is substantially paid for by the employer and uses a point-of-service design, in which reimbursements for care are higher when employees use providers in a particular care network. Costs shown are net of employee contributions (see Table 3).

In such a company, an employee aged 55 to 62, just before full retirement benefits are payable, may cost 40 percent to 60 percent of pay more than an employee between ages 25 and 34. Once the full benefit age for pensions is passed, costs for pensions and retiree health are negative, since the value of the benefits declines year by year as the employee continues to work. Pensions and retiree health are the major drivers of those cost differences.

### ***Large Financial Services Company***

The large financial services company—typically a bank or health care organization—offers a cash balance pension plan, retiree health with a small employer subsidy, matched savings with a 50 percent match of the first 6 percent of pay and a 2-year vesting of the match, a flexible benefit plan (including medical plan), and other benefits. The flexible benefit program’s active medical plan includes significant payments by the employer and managed care options.

An employee aged 55 to 62, just before full retirement benefits are payable, may cost 18 percent to 22 percent of pay more than an employee between the ages of 25 and 34. Once the full benefit age for pensions is passed, costs for retiree health are negative, because the value of the benefits declines as the employee continues to work (see Table 3). The cost differences are much less than for the traditional company, and although active medical costs are the largest single item, costs are spread throughout the benefit package.

Table 3.  
Costs of retirement benefits that vary by age (as a percentage of pay)

Benefit	Average	Ages 25-34	Ages 55-62	Ages 62-65
<i>Large traditional company</i>				
Total	22	12	69	16
Active medical	8	6	14	15
Pensions	4	1	25	-5
Matched savings	5	4	6	6
Retiree health	3	a	20	-5
Life insurance, disability, and sick time	2	1	4	5
<i>Large financial services company</i>				
Total	18	12	32	30
Active medical	8	6	14	15
Pensions	4	3	6	8
Matched savings	3	2	3	3
Retiree health	1	a	5	-1
Life insurance, disability, and sick time	2	1	4	5
<i>Medium-sized retail company</i>				
Total	9	8	17	18
Active medical	6	4	10	11
Pensions	4	4	4	4
Life insurance, disability, and sick time	1	a	3	3

SOURCE: Estimates by the Society of Actuaries’ Committee on Social Security, Retirement, and Disability Income, 2000.

a. Less than one-half of 1 percent.

### ***Medium-Sized Retail Company***

The medium-sized retail company offers a defined contribution plan of 4 percent of pay, no retiree health benefits, a modest medical plan, and other benefits. The medical plan is a preferred provider plan with significant employee contributions. Medical costs are net of employee contributions.

An employee aged 55 to 62 may cost 10 percent to 13 percent of pay more than an employee aged 25 to 34. Health benefits are the primary driver of the differences in costs (see Table 3).

### ***Impact of Costs on Employees***

Although this article generally deals with issues related to employer costs for providing benefits, a note on employee costs is in order. Employer costs are often shared with employees through employee contributions. In addition, economic theory holds that employees get lower wages if they get more benefits and that they thus pay for their benefits in the end.

When developing a benefit program, employers do not offset benefit costs directly from pay. Although they may consider the cost of the total package in setting up elements of the benefit plan,



employers develop each element on its own. It is not known how the costs of benefits affect salary or whether there is a direct impact. To the extent that there is an impact, it is not known whether employers consider costs by age. It is unlikely that there would be a direct impact by age, since most employers have no information on their costs by age.

Employee contributions are set differently for different types of benefits. The following practices are typical:

- *Life insurance.* Employee contributions generally vary by age group.
- *Health and dental benefits.* Employee contributions generally vary by family status and, in some cases, by health plan option chosen. Some employers use separate contribution rates for employee, spouse, and children. Others use contributions for single employees versus families. Age is not considered.
- *Savings plans.* Age is not a consideration in the amount that can be saved. The maximum amount that can be saved as a percentage of pay may be lower for highly compensated employees (as defined by federal law) in order to meet regulatory requirements.

The biggest impact on employees is that benefit costs might be a deterrent to the employment of older workers, but the extent to which that has been a factor in employment policy and decisions is unknown.

### ***Why Are These Costs Important?***

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Benefit costs will influence employment policy in the future. If all employers had similar workforces, the differences in costs would not matter because aging would affect all employers equally. However, employers do have workforces with different demographics, and the differences in costs are reflected in their costs in the marketplace.

All other factors being equal, an employer with older employees would have higher benefit costs and would therefore be less competitive. An extreme example of that is an established auto company with many retirees that is trying to compete with a new operation and plant established by an overseas company. The established company will have much higher costs, and workforce demographics is one of the reasons.

There are many other factors in establishing total labor costs per unit, including direct pay, differences in productivity, impact of turnover, and so on, but this article is concerned with employee benefits only.

### ***Issues for the Future***

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Today, many employees are working beyond traditional retirement ages, often by retiring from one job and then

taking another one. The new job may include health benefits, but in many cases the retiree receives health benefits from the prior employer. One possibility for the future is that employees will work longer in their regular jobs than they did in the past. Costs of medical care, disability, and death benefits can escalate quite rapidly among older workers. Note also that Medicare is secondary to employer-provided medical coverage for nonretired employees. It is unlikely that many of the people working longer will be those with long service in traditional defined benefit plans. If people covered by those plans do work longer, pension costs may actually be reduced, depending on how the benefits are treated.

A number of public policy initiatives have been designed to encourage the employment of older workers. Federal law prohibits discrimination by age and establishes minimum requirements for treatment of benefit plans by age. Patterns of costs are a deterrent to hiring older workers and have encouraged employers to focus on early retirement as a means of implementing reductions in the workforce.

Today, there is a war for talent and a shortage of qualified workers. That situation is projected to grow worse as the baby boom ages. Furthermore, government programs such as Medicare and Social Security are under financial pressures to provide for the elderly. If people work longer, that will help ease pressures on the labor force and on government programs to provide for the elderly. Many people have already chosen to work longer—but rather than simply continuing in their career job, they are phasing out of full-time work through a series of jobs.

Benefit costs are one of the factors employers are likely to consider when they decide whether or not to facilitate phased retirement. At present, pension laws in the United States prevent partial payment of benefits during continued service before normal retirement age. Legislative proposals are being considered to remedy that situation, thus making it easier for employers to structure phased retirement for employees.

### ***Note***

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