
Author/s: Mary Maury

In the mid-1980s, a newly designed pension plan, the cash-balance plan, was introduced to businesses in the United States. Since that time, more than 300 large companies have shifted their pension plans from the traditional defined-benefit version to the new one. At least 17 of the Fortune 100 have made this change in the last year or two, including IBM, Chase, and Bell Atlantic, and more are joining their ranks every day.

Cash-balance pensions are growing more and more popular with employers because they tend to be less costly, attract younger workers, and limit the incentive for workers to stay on the job longer just to build their pensions. However, they are not necessarily favorable to midlife and older workers, whose accounts have less time to grow. Long-time employees are likely to lose substantial benefits when an employer changes from a defined-benefit plan to a cash-balance plan. Workers in their 40s and 50s can see as much as a 30 to 50 percent reduction in their final benefits, with a resulting need to work extra years just to achieve the originally anticipated benefit. This scenario could be even worse for some older workers.

The negative effect on older workers has led to a number of recent legal actions questioning whether these plan conversions are discriminatory. In addition to Congress, four federal agencies--the IRS, the EEOC, the Labor Department, and the GAO--are now investigating the question of age discrimination in converting to the cash-balance plans. Tax deductions may be disallowed if plans are found to discriminate.

Traditional Defined-Benefit Pension Plans

Under defined-benefit plans, the annual pension benefit is generally defined as a percentage of salary for each year of service to the company (usually based on the latest years of employment and thus the highest salary years). Because the benefit amount, paid upon retirement for life, is based on the salary attained and the number of years the employee served, it increases over time. If the employee is vested, the benefit earned to that date is locked in, whether the employee continues working for the company or not. This benefit is then paid when the employee retires.

A typical model of the defined-benefit plan, described in many intermediate accounting texts, is set out below:

Pension benefit for each year of retirement = Percentage set by the firm x
Years of employee's service x Average of five highest salaries

The amount of the firm's obligation at any time is the present value of the benefits that have accumulated for its employees (the Accumulated Benefit Obligation); it is the obligation that must be funded without raising the spectre of underfunding. However, accounting standards governing pensions (SFAS 87) require the employer to estimate the obligation based on the projected salaries of the employees at the time of retirement, since the computed benefit will be based on the highest salaries achieved (the Projected Benefit Obligation, or PBO). The increase to the PBO as employees complete each year of eligible service is a major part of the pension expense that must be accrued annually by the employer.

A person who has been employed for 21 years at a company with such defined pension plan benefits at 1.5 percent can reliably calculate the benefit he has earned to date. If the average of his five highest salaries is $90,000, then he has already earned a benefit of $28,350 for every year of his retirement. If the benefit is vested (most firms have a 5-10 year vesting period), and if he leaves the company, the firm will still be obliged to pay him the $28,350 each year after he retires. If he continues employment with the company, then not only will he earn additional service years but his salary will presumably increase. Firms are required to disclose the average salary progression rate (rate of annual increase), from which the employee can estimate his future salary. If his current salary is $100,000 and the salary progression rate is 5 percent, the employee can project that if he retires in five years his annual retirement benefit will be $39,120.

One of the usual downsides of a defined benefit plan is the vesting period. If an employee leaves the company before the benefit has become vested, he will receive nothing. Moreover, the plans are not portable from one company to another, so the vesting period and the number of years of service always start over if the employee moves to a new company. However, if the benefit is vested, it will be paid regardless of subsequent employment.

Cash-Balance Pension Plans

A cash-balance plan can be seen as a defined benefit plan that looks like a defined-contribution accumulating fund to the participants. However, it actually fits in the middle of a continuum between the two. It can also be seen as a defined contribution plan with the investment risk transferred from the individual participant to the collective group. These hybrid plans describe their benefits in terms of "account balances" but still preserve the essential characteristics of a defined benefit plan. Investment risk is borne by the employer, and employees receive certain benefit "guarantees.

For cash-balance plans, a defined percentage of the employee's salary is contributed to the plan assets account each year. The earnings on the amount contributed on behalf of the employee is specified-usually around 5 percent, based on short-term interest rates-regardless of the actual earnings when the company invests the pool of assets. (The difference accrues to the company.) When a vested employee leaves the company, benefits are usually paid in a lump sum, which can be rolled over into an individual retirement account or otherwise invested. As with traditional plans, there is usually a vesting period, but it is generally only around five years.

Consider an employee whose current salary is $100,000 and whose salary progression rate is 5 percent. If his annual increases approximated the firm's 5 percent progression rate, his salary at the time of hire would have been $35,900. If his company had had a cash-balance plan at that time, instead of
the defined-benefit plan, and if the company's contribution rate was 6 percent and the interest rate was 5 percent, after 21 years of employment the employee would have accrued $190,653 in his cash-balance plan. If he were to leave the company, this amount could be rolled over into a new plan or invested by the employee. The balance would provide the fund for his future pension payments, but the amount he would be able to withdraw each year of retirement would depend on such variables as future interest rates and the number of years of retirement he experienced. If he were to continue working at the company and retire in five years, he would have accrued $273,623 in his plan, and that amount would be his retirement fund.

Cash-balance plans do not offer a guaranteed level of benefits during retirement as do traditional pensions, but they have the portability of a 401K account. Also, while workers accrue the bulk of their benefits in the last five to ten years of service in the traditional plans, the credits in a cash-balance account accrue at a steady and generally lower rate, year after year. However, since the contribution is a percentage of salary, the balance will also rise more rapidly as the salary rises, even though the rate remains the same.

The Political Furor Caused by IBM's Plan Conversion

On May 3, 1999, when IBM announced that it planned to convert its traditional defined-benefit plan to a cash-balance plan on July 1, there was no indication of what kind of furor had been unleashed. Within two weeks, employees had launched a Web site on Yahoo!, which had recorded about 1.7 million page views by September 20. The site was developed to allow employees to compare notes and gripe. As they received their personal profiles on the new plan, many long-time employees realized they would be adversely affected. So workers began to organize in July, forming the IBM Employee Benefits Action Coalition. They contacted agencies they felt would be helpful in addressing their concerns, reaching out to the EEOC, the IRS, and Congress. Moreover, the controversy has been used by the Communication Workers of America (CWA) to launch an organizing drive at various IBM facilities. Another site, www.cashpensions.com, set up by an employee in Austin, Texas, is packed with information for employees of any company to use to calculate their pensions and contact their politicians. A new Yahoo! site is also encouraging IBM employees to channel their frustration into the unionization drive.

A Senate hearing was held by the Health, Education, Labor, and Pensions Committee in September 1999, chaired by Republican Senator James Jeffords of Vermont, to review the legality of cash-balance pension plans. Critics alleged that such plans discriminated against older employees. The AARP submitted a written statement to the panel indicating that it believed such discrimination existed, stating: “The recent avalanche of conversion to cash-balance plans has been done without regulatory guidance and only limited notice to employees” (Schultz and Burkins 1999). Stuart Brown, chief counsel of the IRS, an IBM human resource official, a Treasury representative, a CWA representative, and a representative of the benefits consulting firm Towers Perrin all testified, as well as a group representing IBM employees. There was also testimony from witnesses in favor of the plans who wanted to warn the committee to beware of restrictive legislation they felt could reduce the flexibility businesses need to meet changing circumstances. Such witnesses included representatives of the Association of Private Pension and Welfare Plans and the American Academy of Actuaries. Hearings such as this continued through 2000.

Representative Bernard Sanders, an independent from Vermont, is sponsoring legislation in the House that would greatly restrict the ability of employers to switch workers into cash-balance plans. The bills would eliminate the so-called
"wearaway" or "pension plateaus" feature of many cash-balance conversions. "Wearaway" can occur because, in converting plans, the present value of the earned benefits under the old traditional plan is initially credited to the employee's cash-balance account. If the present value of the earned benefit exceeds the amount that would have been accrued in the cash balance if it had been used from the beginning of the employee's tenure, then no contributions are made by the employer until the amount owed under cash balance catches up to the employee's earned benefits. During this period, the employee's service years simply wear away at the difference and he accrues no additional retirement benefits. Firms are reluctant to avoid this feature because they can save money during the period of five to ten years when older workers cannot earn a benefit. Besides eliminating the wearaway period from conversions, the bill is also designed to ensure that employees are given the opportunity to choose when the plans are to be converted. This bill followed a similar one introduced in the Senate by Senators Tom Harkin (D-Ia.) and Edward Kennedy (D-Mass.).

Separately, a team of experts from the EEOC examined the legality of cash-balance plans. As Chairwoman Ida Castro predicted, the review did not lead to sweeping changes; rather, individual companies were asked to respond to complaints received from employees. Castro also invited the IRS and the Labor Department to join in the review. The IRS's chief counsel is reportedly disinclined to find the cash-balance plans discriminatory, but is reviewing them on three key issues: rates of accrual, whether firms that switch to the plans properly protect benefits already accrued by workers, and whether the plans illegally reduce benefit accruals because of age. The IRS originally put a moratorium on the approval of cash-balance plans until it sorted out the complex issues. Congressman Sanders is working to force a continuation of the moratorium.

The issue of whether the cash-balance plans can pass muster with the IRS has been cropping up at the district levels. The first case was Aull v. Cavalcade Pension Plan (1996), brought against Furr's/Bishop's Cafeterias Inc., one of the first companies to convert to a cash-balance plan in 1987. The IRS began an audit of that plan and forced the employer to settle the case in March 1999. A broader case, certified as a class action under the age discrimination and pension laws, was brought against Onan Corporation, a subsidiary of Cummins Engine, by its employees in 1999. The IRS sided with the employees and asked the court to disqualify Onan's plan. However, a federal judge ruled in early 2000 that the plan was not discriminatory and issued a partial summary judgment for Onan. The lawsuit remains alive because of unresolved claims based on the Employee Retirement Income Security Act (ERISA).

Another development in the controversy was the disclosure of a brochure entitled "Aging Diagnostic," used by benefits consultant Watson Wyatt Worldwide to help employers evaluate pension costs. Schultz (1999a) reports:

According to the firm's brochure, this tool is intended to help employers figure out how much their aging work forces cost, so that the employers can take steps—such as pension cuts—to address those costs. Employers can "combat the cost spiral of changing demographics" by paying "close attention to retirement packages." [The brochure states:] "For every baby boomer turning 50 every eight seconds for the next ten years, the economic issues of an aging work force could be a major issue for your company."

Employees at IBM view this brochure as fostering age discrimination, but Watson Wyatt defends itself by saying the brochure was meant to be descriptive rather than prescriptive. Moreover, Watson Wyatt claims that when it released the brochure, there appeared to be more than enough workers to
replace the older ones, whereas now it appears that there will be a scarcity of younger workers. The firm acknowledges that companies may have to rethink their strategies and recognize that older workers will likely become more important to them in the future. Meanwhile, industry groups are lobbying to discourage legislation that would require greater disclosure.

IBM’s response to all this commotion was to backtrack somewhat on September 17, when it announced it would significantly revise its plan. Reported Schultz, Auerbach, and Burkins (1999), “IBM said its retreat was entirely driven by the employees, who barraged the company with emails and other correspondence, and used the Internet to stoke their collective anger.” Under the revised plan, anyone who is at least 40 years old and has ten years of service with the company is allowed to remain in the old plan. This amendment more than doubles the number of employees who have a choice.

IBM’s need to backtrack has caused some consternation among firms that have switched or are proposing to switch to cash-balance plans. Niagara Mohawk Power has revamped its plan in the face of employee resistance. Employees of AT&T, who have brought suit against the company, may have had their hand strengthened.

Other companies aware of the negative publicity have gone out of their way to provide greater choice to their employees. Northern States Utility, which gave every employee a choice to stay in the traditional plan or opt out for the cash-balance one, had no difficulty. Newer, younger employees were happy to enroll in the new plan, while 36 percent of employees, mostly those within 15 years of retirement, opted to stay in the traditional defined benefit plan.

Like other companies that have adopted the cash-balance plans, IBM maintained that its only motive in making the change was to remain competitive and offer an enhanced benefit to an increasingly mobile work force. However, this argument is inconsistent with recent Bureau of Labor statistics, which show that the work force is actually less mobile because workers are aging. And a Labor Department survey found that mobility is no greater for aging workers than it ever was.

How Does a Plan Conversion Discriminate Against Older Workers?

The most obvious penalty to long-time workers is the wearaway feature of conversions, discussed earlier. The question of discrimination is heightened by the fact that the value of the earned benefits is subject to employer control because the present value is calculated using an assumed discount rate. The magnitude of difference caused by the choice of a discount rate for an employee who has already earned an annual retirement benefit of $28,350 can be phenomenal. Without changing the assumptions that the benefit will be paid for 15 years of retirement and that retirement will occur in five years, merely changing the discount rate from 6 to 10 percent changes the present value of the earned benefit from $205,752 to $133,890.

In addition to the wearaway feature, there are other decrements to the benefits of a longtime employee that are less evident because of the lack of comparability of the plans and the reliance on numerous assumptions that the firm may not reveal. An examination of the effects of IBM’s conversion from a defined-benefit plan to a cash-balance plan, based on the materials IBM gave employees to help them make the choice, will be used here to illustrate the effect of conversion on long-timers. We will consider the decision to be made by Jim, who was 46 years old when IBM adopted its cash-balance plan on July 1, 1999. Jim had worked for IBM since June 1, 1978—a bout 21 years as of July 1999. He would be eligible to retire in nine years, when he would be 55 years.
Under IBM’s new plan, each employee has a Personal Pension Account, which is to be initially credited with the present value of the employee’s accumulated benefit (benefits already earned, as described above) under the old defined-benefit plan. IBM used a discount rate of 6 percent in making these computations. The account is then credited monthly by IBM’s contributions, which consist of:

1. pay credits, equal to 5 percent of pay;
2. transition credits, an addition ranging from 1-4 percent of pay, given to certain employees over age 40 or for whom the sum of their age and years of service exceeds 50; and
3. interest credits, at the Treasury bill rate plus 1 percent. All employees participate in the plan, and the account is vested after five years of service.

Originally, IBM’s provision was that the only employees who could elect to retain the prior defined-benefit plan rather than changing to the cash-balance plan were those within five years of eligibility for retirement under the old plan. This requirement was modified in September 1999 to allow those who qualified for transition credits to stay with the old plan if they chose. Because the sum of his age and years of service exceeded 50, Jim qualified for transition credits equal to 4 percent of pay. Under the September amendment, he could elect to retain the old plan. The difficulty in making this choice is that the difference in benefits is not very clear to employees, partly because of the computational difficulty but also because both plans rely on numerous actuarial assumptions and unknown future rates. To make his decision, Jim would have to make a number of assumptions in order to compare his expected benefits under the two plans.

The personal profile issued to Jim by IBM specified that the annual benefit he had accrued by July 1, 1999 (based on his 21 years of service and a five-year average salary of $110,580) was $33,940 per year. Using this information, Jim’s current salary of $110,000 and IBM’s reported salary progression rate of 5 percent, it is possible to project the expected pension benefit he will have earned when he reaches retirement.

Estimated benefits for expected retirement at ages 55, 62, and 65 are shown in Table 1, Panel A. It is possible that Jim will not attain the average 5 percent salary progression set out in IBM’s annual report. If he achieves annual increases of only 3 percent, the estimated benefits will be lower, as shown in Panel B. Clearly, the rate of salary progression makes a big difference in expected benefits. However, because the salary level is the only variable in this plan used in determining Jim’s annual pension benefit, Jim can reliably predict his benefit based on his salary and expected retirement date. If he were to receive no further salary increases, he would still receive $48,485 per year if he retired at 55 and $64,308 annually if he retired at 65 (Table 1, Panel C). In projecting future benefits under the defined-benefit plan, no assumptions need to be made other than the salary level, unless IBM were to change the percentage applied. However, IBM is legally entitled to change the provisions of the defined-benefit plan at its own discretion; changes were instituted in 1995 that significantly reduced benefits.

When IBM calculated Jim’s beginning balance for the new plan, it was $117,129 (the present value of the accumulated benefit under the old plan). Because the amount that would have accrued if the new plan had been used throughout Jim’s employment was $117,300, Jim does not suffer from the...
wearaway feature of the conversion. After that, IBM does not offer employees a
direct comparison of the two plans. So we must extend certain projections for
each plan by (1) comparing the cash balance at the retirement date to the
present value of the expected benefits at the retirement date, or (2) comparing
the estimated annual benefits to be received for each year of retirement.

The first method compares the present value of the accumulated benefits at
Jim's projected retirement date under the defined-benefit plan to the estimated
value of the accrued cash balance then. These would be comparable amounts
equivalent to the fund from which Jim's benefits would be paid. Using IBM's
assumptions of a 6 percent discount rate and a 15-year annuity for retirement
at age 65, the present value of benefits under the old plan and the accrued
cash balance under the new plan at ages 55, 62, and 65 are shown in Table 2
for salary progression rates of 5 percent (Panel A), 3 percent (Panel B), and no
further salary increases (Panel C).

At almost every level, the cash balance is considerably less (by 50-70 percent)
than the accumulated benefit; it only approaches the same level when no
salary increases are anticipated and retirement is deferred. The convergence
of benefits (where the plans benefit the retiree equally) does not occur unless
retirement is deferred to age 70.

Another way to compare the two plans is to estimate the amount of annual
retirement benefit that would be available to Jim under the cash-balance plan
and compare it to the estimated benefit he would have earned under the old
one. If we continue to use IBM's assumptions of a 6 percent discount rate and
a 15-year annuity for retirement at age 65, the estimated annual retirement
benefits under the old plan are compared with the estimated annual
withdrawals under the new one in Table 3 for salary progression rates of 5
percent (Panel A), 3 percent (Panel B), and no further salary increases (Panel
C).

The cash payout from the personal pension account is considerably less (only
37 percent in one case) than the retirement benefit Jim would earn under the
current defined-benefit plan. The difference is smaller if his salary increases
are zero or 3 percent rather than 5 percent, or if retirement is deferred.

The literature from IBM indicated that Jim has a number of choices in selecting
a payout option with the cash-balance plan. If he chooses one such as that
described above, which parallels the defined-benefit plan in providing equal
benefits, he can receive benefits for life. However, they cease when he dies.
So instead of owning the balance, he gives it up to accept an annuity, which
IBM is willing to increase under certain circumstances. He could also elect a
lump-sum cash payment and invest it himself, probably earning a higher return.

A recent publication issued to Jim from IBM indicated that he could attain a
higher annual benefit at retirement by making his own contribution of 8 percent
of his salary to the cash balance fund. This suggestion indicates a changing
stance toward retirement responsibility. Presumably, if employees want to
retain a certain level of benefits at retirement, they can do so by making their
own contributions; in this way, they share the retirement expense with the
employer.

Advantages to the Company

The history of the development of the cash-balance pension plan is an
indication of the advantages it brings to companies that adopt it. Inspired by the
pension plan termination of the Great Atlantic and Pacific Tea Company in
1981, a number of companies discovered the advantage of terminating their
own plans and recapturing the assets. The cash-balance plan was an alternative to such termination. Benefit consultants promoted it because the employer could still recapture the assets, while the employees were better off than with termination—and might even be convinced that they were just as well off, or even better off, with a cash-balance plan than with the traditional one. At a benefits conference in 1984, consultants assured various firms that they could reduce pension costs 25-40 percent by converting to a cash-balance plan.

Companies converting to these plans no longer build up future pension liabilities because the current funding is all they are required to contribute. If a company has a large pension surplus from a defined-benefit plan—a condition often encountered because of the success of the stock market in recent years—it may not have to contribute to the pension plan at all for the foreseeable future. It then has an opportunity to take a credit on its income statements when the return on plan assets exceeds the (usually rather low) percentage stipulated in the plan. By decreasing benefit obligations through the conversion of a traditional defined-benefit plan to a cash-balance plan, the company can reduce its liabilities and add to its surplus, thereby boosting earnings.

In IBM's case, it did have an overfunded pension plan. In 1998, these surpluses provided approximately $450 million in credit to earnings, an amount that was expected to become a $650 million credit after conversion. Company spokesman John Bukovinsky reported that because the company was anticipating a boost to its income statement from the pension conversion, it had spent about $200 million to increase compensation and expand a stock option program. The cost of the concession it announced on September 17, 1999, which allowed more employees to remain in the traditional plan, has not been quantified. Bukovinsky describes it as "not insignificant," according to Schultz et al. (1999).

Schultz et al. also discuss a study done by Pat McConnell, an accounting expert at Bear Stearns, in which McConnell found that pension income accounted for 3 percent of 1998 operating income at the companies in the Standard & Poor's 500 stock index. This was an increase from 2 percent the year before. While much of that 3 percent is offset by retiree health costs, she found the impact of the pension earnings to be significant. Her concern in this area is that the pension income is being reported as part of operating income, which she believes is inappropriate. In looking at some well-known companies, she discovered that operating income would have declined by 15 percent or more if the pension income were deducted. Northrup Grumman benefited by a 43 percent boost to earnings. In total, the study found that 75 companies in the S&P 500 had "income from operations overstated by 5 percent or more" in 1998.

McConnell's analysis focuses on firms reporting large amounts of pension income as a result of recent conversions to cash-balance plans and the recapturing of overfunding. But it is possible for established cash-balance plans to generate revenue on an ongoing basis, as employees accumulate larger cash balances. Because the amount deposited on behalf of employees is generally around 5 percent of their current salary and the amount credited to their balances as the annual interest credit is generally fairly low (either specified in relation to the T-bill rate or stated as 5-6 percent), the firm's pension expense could easily be surpassed by the actual return on plan assets, in a good market. In Jim's situation, IBM would incur expenses of $16,928 for the first year of the plan, including the transition credit. If the actual return on his initial balance of $117,129 was over 14.5 percent, IBM would realize income for the year. Without transition credits, the company would only have to earn a 10.7 percent actual return to realize a profit, because of the magnitude of the cash balance.
New employees who do not have cash balances will always generate pension expense. An employee hired today at $40,000 will generate $2,000 of expense in the first year. However, after ten years, if his projected salary becomes $68,414 (assuming the same 5 percent salary progression rate) and his cash balance grows to $39,688 (based on a 5 percent pay credit and a 6 percent interest credit), the actual return on his cash balance need only be 14.6 percent to result in income for the corporation. As the balance grows, the actual return required to generate income for the firm from the plan will decrease.

Many features of the cash-balance pension plan resonate with today’s changing workplace. The demise of lifetime employment with one firm makes its portability an especially important feature, and younger workers just entering the work force will see no diminution of expected future benefits. Moreover, the reduction of pension costs is important to firms that want to remain competitive in dynamic markets with many new entrants.

The problem with adopting a cash-balance plan is that it will usually result in decreased benefits to long-time workers. Midlife employees may see as much as a 30 to 50 percent reduction in their final benefits. Can firms that convert to these plans properly protect benefits already accrued by workers? And will these plans reduce further benefit accruals because of age and thus be deemed discriminatory? Battles are being waged over the wearaway or pension plateaus experienced by older workers at the time of conversion, when they have to work without accruing any additional benefits until the amount owed under cash balance catches up to the present value of their earned benefits under the old plan.

One way to protect long-time workers is to offer them a choice of remaining with the old traditional plan or converting to the new one. Because IBM was pressured into extending this option to include more workers, other firms may follow suit. As we have seen, the lack of comparability of the two types of plans and the reliance on numerous assumptions that the employer may not reveal make this choice difficult and risky. Nevertheless, the option to remain with the old plan is the best protection against reduced benefits for long-time employees.

In the supposed balance of employer and employee benefits from adopting cash-balance plans, the employee benefit for long-timers is doubtful. On the other hand, the employer benefit is clearly secure, as the plans are decidedly less costly to employers than defined-benefit plans --and can even result in pension revenue for the firm. However, the practice of recording income from a pension plan is ethically questionable and may, at a minimum, be misleading to investors if included in operating income.

Mary Maury is an associate professor and Victoria Shoaf an assistant professor of accounting and taxation, both at St. John's University in Jamaica. New York.

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Value of Jim's Expected Fund at Retirement Under IBM's Defined-Benefit and Cash-Balance Plans

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<tbody>
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<td>25</td>
<td>$653,549</td>
<td>$314,091</td>
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<td>2017</td>
<td>65</td>
<td>15</td>
<td>662,052</td>
<td>644,815</td>
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</table>

http://www.findarticles.com/cf_dls/m1038/2_44/73001019/print.jhtml 10/17/2001
(".") Assumes the use of a 6% discount rate and a 15-year annuity for retirement at age 65.

(+) Assumes a 5% contribution by IBM, an additional 4% transition credit for the ten years ending at age 56, and 6% interest on the annual average balance.

<table>
<thead>
<tr>
<th>Year</th>
<th>Panel A: WITH 5% SALARY PROGRESSION [*]</th>
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<td>2007</td>
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<td>$68,028</td>
<td>$25,188</td>
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<tr>
<td>2014</td>
<td>62 18</td>
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<td>2017</td>
<td>65 15</td>
<td>147,747</td>
<td>74,725</td>
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<table>
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<th>Panel B: WITH 3% SALARY PROGRESSION [*]</th>
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<tr>
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<td>2017</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Panel C: WITH NO FURTHER SALARY INCREASES [*]</th>
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<td>2017</td>
<td>65 15</td>
<td>64,308</td>
<td>62,634</td>
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</tbody>
</table>

(*.) Assumes the use of a 6% discount rate and a 15-year annuity for retirement at age 65.

(+) Assumes a 5% contribution by IBM, an additional 4% transition credit for the ten years ending at age 56, and 6% interest on the annual average balance.