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## How Demographic Change Will Drive Benefits Design

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## How Demographic Change Will Drive Benefits Design

### Disciplines

Economics

### Comments

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## Chapter 3

# **How Demographic Change Will Drive Benefits Design**

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Marjorie Honig and Irena Dushi

This is a time of profound change in the American labor force. The workforce is older than ever before. Growing awareness of increased life expectancy is focusing attention on the financial demands of longer lifetimes and may induce delayed retirement. This financial motivation is reinforced by the rising age of eligibility for full Social Security benefits, pension conversions to age-neutral wealth accrual profiles, and increasingly, employer cut-backs in retiree health insurance benefits (see Lofgren, Nyce, and Schieber this volume). Women comprise an increasing share of the labor force at all ages, drawing greater attention to their need to balance family and work responsibilities. Finally, the racial and ethnic composition of the population is changing, altering the mix of cultural attitudes toward family and work (Riche this volume).

This chapter examines how the aging of the labor force and its changing composition will influence the future demand for employer-sponsored benefits. We investigate the age, sex, racial, and ethnic patterns of demand for employer-sponsored 401(k) plans, health and disability insurance, and family-oriented benefits, and evaluate their implications for the desired mix of benefits in the future. We focus here on benefits that tend to be discretionary for the employee; that is, we exclude benefits such as pensions and paid vacations that, if offered, are provided to all covered employees at a workplace (Mitchell this volume). We also focus our analysis on benefits that impose an explicit cost to the employee in terms of contributions, deferred compensation, or foregone alternative benefits. This is so that we can separately identify demand for these benefits from the demand for other characteristics of the job, to the extent possible.

### **Employer-Sponsored Saving: 401(k) Plans**

Plans such as 401(k)s in the private sector (and 403(b) plans in the public and nonprofit sectors) are voluntary individual savings accounts, to which

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employers and employees may contribute. These are a form of defined contribution plan and permit tax deferral of employee contributions.<sup>1</sup> Taxable income is reduced by employee contributions up to a limit of \$11,000 in 2002 (gradually increasing to \$15,000 by 2006), and the allowable total of employee and employer contributions will rise from 50 percent of the employee's salary in 2002 to 100 percent in 2011 and thereafter.<sup>2</sup> Investment returns are tax-free and withdrawals are taxed as income. Withdrawals prior to age 59½ incur a 10 percent tax penalty if they are not rolled over into another qualified account. Employers who contribute into these accounts may make either a fixed contribution, or they can match part or all of employee contributions.

To determine how an aging labor force might alter the demand for employer-provided savings mechanisms such as 401(k) plans, we ask whether age per se appears to influence the decision to participate in such plans, after controlling for other economic and demographic factors that might influence these decisions. An economic life cycle model of saving behavior would predict that workers borrow against future earnings early in their work lives, to finance family formation and the purchase of homes. During middle age, they start to consume less than they earn, permitting them to pay off debts and begin accumulating assets. These assets accrue interest, to be reclaimed and consumed later, when workers' abilities or tastes for work are diminished. Tax considerations also play a role, since the value of tax-deferred saving rises with income. For this reason older persons may continue to save even beyond retirement. A desire to leave a bequest, along with increased longevity, may also extend the saving period among older persons.

In the United States, 401(k) plans are discretionary for employees in the sense that decisions regarding participation and current contributions are not directly tied to the employment decision (unlike automatic enrollment in defined benefit and non-401(k) defined contribution plans). To analyze how age influences the demand for 401(k) plans, we undertake statistical analysis of pension participation by age. Specifically, we ask whether employees offered plans are enrolled (have a nonzero balance), and, conditional on having an account, whether they expect to contribute to accounts during the year. Since employees may enroll in plans at any time, and those with previously established plans can opt to cash out account balances (usually with a penalty) or decide not to make further contributions to an account, their participation at any given age reflects current interest in this form of saving.

We analyze the employee decision to participate in a 401(k) plan as a function of plan features, firm characteristics, and characteristics of the individual reflecting his or her life cycle stage, liquidity position, and time preference. In addition to age, we include a number of demographic characteristics expected to influence the saving decision including sex, race, ethnicity, marital status, and education. We are particularly interested in

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whether the decision to participate in a 401(k) differs by sex because of the increasing proportion of women in the older labor force. Measures of income and wealth (earnings, spouse earnings if married, and home ownership) are included because higher income is likely to be associated with lower liquidity constraints and with larger benefits from tax deferral of income.

Further factors influencing plan participation include an indicator of whether the employer contributes to employee accounts in the form of a fixed contribution or a match to employee contributions. Plans with employer contributions increase the initial return on employee savings and thus provide an incentive to employees to participate. Because many workers offered a 401(k) plan in our data responded that they do not know if their employer contributes to accounts, we control for employee knowledge of employer contributions.<sup>3</sup> We also include a variable indicating whether a worker is covered by a defined benefit or non-401(k) defined contribution retirement plan. The predicted effect of these pensions is theoretically ambiguous. They may indicate stronger preferences for saving, in which case their availability would have a positive influence on enrollment in 401(k) plans, or they may allow retirement saving goals to be attained in the absence of additional saving through a 401(k) plan.<sup>4</sup>

This analysis examines 2,532 male and 2,070 female full-time workers aged 16–64 employed in firms offering 401(k) plans, drawn from the 1993 Employee Benefits Supplement to the April Current Population Survey (CPS).<sup>5</sup> Men and women are examined separately, because of our interest in examining the implications of the increasing share of women in the labor force, and because saving decisions at each age may differ by gender and marital status may affect such decisions differentially by gender.

### 401(k) Participation Results

Figure 1 depicts influences on the probability of participation in a 401(k) plan for full-time male and female workers offered plans by their employers. Age, race, and ethnicity are examined, as well as marital status and the employment status of spouses of married workers. Bars indicate the difference in the likelihood of participation of a particular group, ages 16–24, for example, relative to a reference age group (ages 35–44), calculated as a percentage of the mean participation rate.<sup>6</sup> An asterisk above or below the bar indicates that this difference is statistically significant at the 5 percent level or higher.

This figure indicates that older male employees are equally likely to participate in a 401(k) plan as are middle-aged workers (ages 35–44, the base group), after holding constant other demographic characteristics and a number of economic factors predicted to affect saving in a tax-deferred

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employer-sponsored plan. By contrast, middle-aged female employees ages 45–54 (55–64) are 13 (30) percent more likely to enroll in a 401(k) plan relative to the base age group. This suggests that life cycle motivations to save differ by sex, perhaps due to differential concerns about financing longer lifetimes, by the enhanced benefits of tax-deferral among higher-wage workers, by diverse bequest motives, or by the length of time spent in the labor force. The results also show that younger workers save less, as predicted by the life cycle model. Males ages 16–24 are 27 percent, and females 28 percent, less likely to have a positive balance in a 401(k) plan.

The likelihood of participation in 401(k) plans does not vary significantly by race: non-Hispanic black employees and those of other races (primarily Asian) enroll at the same rates as non-Hispanic white employees. Men of Hispanic origin, however, are significantly less likely (19 percent) to enroll relative to their non-Hispanic counterparts.

Married women with nonworking spouses are 24 percent less likely to participate in a 401(k) plan than are single women, but women with working spouses are no more likely to participate than single women.<sup>7</sup> Neither marriage nor the working status of a spouse influences the participation decisions of men, however. No other influences on this decision, including control variables not shown in Figure 1, are statistically different between men and women.<sup>8</sup>

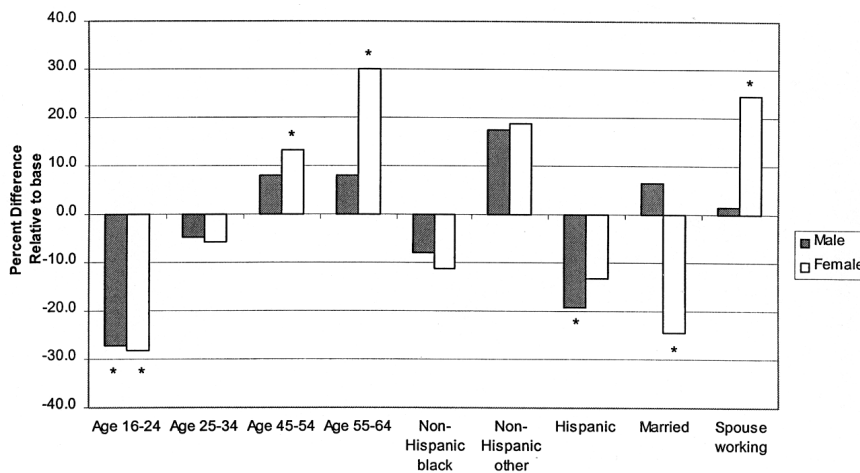


Figure 1. 401(k) plan participation by age, race/ethnicity, and sex: percent difference, full-time workers offered plans. Source: authors' calculations. Percent change represents marginal effect on 401(k) participation relative to the sample mean. \* denotes significance at 5 percent level or higher.

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### 401(k) Contribution Results

Holding a current balance in a 401(k) account may reflect a previous saving decision that, because of employee inertia, remains in place. In this case, a more contemporaneous measure of employee saving in 401(k) plans may therefore be provided by examining whether employees are currently contributing to their accounts. Figure 2 shows how groups differ relative to a reference group in their probability of making a contribution during the current year. The groups examined are employees with positive account balances by age, race, ethnicity, and by whether the employer provides matching contributions, the effect of which differs significantly by sex.<sup>9</sup>

Here age plays no special role for men or women: younger and older employees are no less or more likely to make a contribution to an existing 401(k) account than are their age 35–44 counterparts. Non-Hispanic black men and women are, however, 27 and 23 percent, respectively, less likely to contribute to their accounts than their non-Hispanic white counterparts. Also, Hispanic women are 33 percent less likely to contribute than non-Hispanic women. Interestingly, among Hispanics, men are less likely to have a 401(k) account (Figure 1) and women with accounts are less likely to contribute to them, relative to non-Hispanics. Having an employer who matches

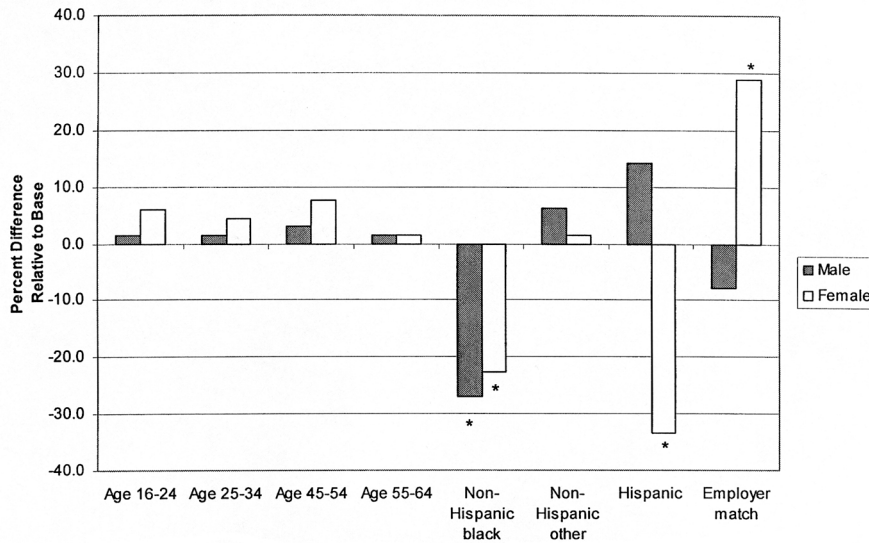


Figure 2. Current contributions to 401(k) accounts by age, race/ethnicity, and sex: percent difference, full-time workers with accounts. Source: authors' calculations. Percent change represents marginal effect on 401(k) participation relative to the sample mean. \* denotes significance at 5 percent level or higher.

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contributions increases the probability that women contribute by 29 percent, but has no effect on whether men contribute.<sup>10</sup>

#### Results for 401(k) Participation and Contributions for Employees in New Jobs

To provide another measure of decision making regarding 401(k) plans, we next examine the participation and contribution decisions of full-time workers with less than five years of tenure on their jobs. Among older workers, new jobs may represent “bridge” jobs after retirement from long-term career jobs, which are increasing in importance as older workers extend their working lives, or they may reflect the impact of unanticipated job changing resulting from the increased incidence of downsizing among older workers in recent years (Siegel et al. 2001). On leaving an employer, a worker must make an explicit decision to cash out a 401(k) account or to roll it over into a new 401(k) account with the new employer, if this option is available, or into an IRA. Thus, the decision to participate in 401(k) plans in new jobs offering the option reflects current or recent demand for this savings vehicle.

To evaluate this, Figure 3 shows differences in the probability of participation in a 401(k) plan just for employees with fewer than five years employment in jobs offering plans.<sup>11</sup> Age and race/ethnicity patterns differ from those in Figure 1: men ages 16–24 on new jobs are no less likely to

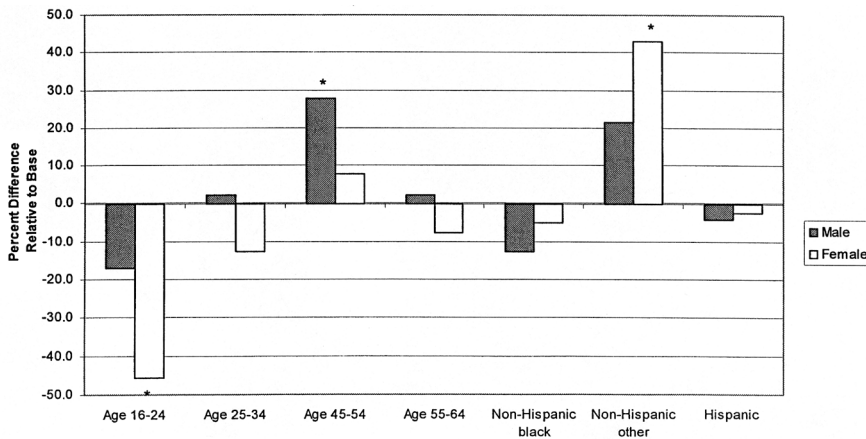


Figure 3. 401(k) plan participation by age, race/ethnicity, and sex: percent difference, full-time workers with tenure less than five years offered plans. Source: authors' calculations. Percent change represents marginal effect on 401(k) participation relative to the sample mean. \* denotes significance at 5 percent level or higher.



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participate in 401(k) plans than their counterparts of ages 35–44; however, older men (45–54) are 28 percent more likely to participate than middle-aged employees. For women the opposite pattern operates: young women (16–24) are 46 percent less likely to enroll, but older women are no more likely to enroll than middle-aged women.

Non-Hispanic women of “other” races in new jobs are 43 percent more likely to participate than their non-Hispanic white counterparts, whereas there is no significant difference between these two racial groups in Figure 1. Hispanic men at all tenure levels (Figure 1) were less likely to participate than non-Hispanic men; in new jobs, however, there are no differences in participation between these two groups.<sup>12</sup> There are no observed age differences in the likelihood of contributing to existing 401(k) accounts in new jobs among either women or men, and only one racial difference: Non-Hispanic black women are 46 percent less likely to contribute than non-Hispanic white women.<sup>13</sup> We thus do not provide a corresponding figure for contributions into accounts on new jobs.

In summary, these age patterns suggest that workers in their 50s and 60s are at least as likely to hold balances in 401(k) plans as workers in their late 30s and early 40s, other things equal. Furthermore, women ages 45–64 and new male hires ages 45–54 are more likely to participate in 401(k) plans. On these grounds, we infer that demand for such plans will remain strong, as the representation of older workers in the labor force increases. Moreover these patterns suggest that a rising share of women in an aging labor force will also add to demand for this form of saving. This is because 401(k) participation rates are higher among women ages 45–64 compared to middle-aged women, than are the rates of older men relative to middle-aged men. Our findings also suggest that an increasing proportion of workers of Hispanic origin in the labor force may increase participation in 401(k) plans.

### **Employer-Sponsored Health Insurance**

It is likely that the future demand for job-based health insurance will also rise, for several reasons. Health care needs increase with age, boosting demand for coverage and shifting demand toward medical services most pertinent to older workers’ health problems. However, the costs of providing employer-sponsored insurance may also grow: older workers are likely to require more expensive medical services per health care incident than will younger employees, and they may also have a higher incidence of medical care interventions. Health insurance will become more costly as employers pass on increased health insurance costs rather than reduce other employee benefits or wages. Price increases can be reflected directly through increases in employee contributions, co-payments, and deductibles, or indirectly through reductions in covered services and frequency of services.

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Price increases would be expected to reduce the demand for health insurance by some older workers (after controlling for health needs), and since employers cannot offer differential health packages to younger and older employees (Reno and Eichener 2000), this will likely curtail younger workers' demand as well.

An increasing share of women among younger full-time workers might be expected to expand demand for employer-provided health insurance toward those related to reproductive services, and away from services directed toward younger men. The extent of this shift, and the consequent burst in employer costs, will depend on the relative expenses of these services and the net increase in demand for insurance. The latter will vary depending on the extent to which demand for these services by women is already being met by coverage under husbands' insurance, and the extent to which increased labor market activity by women further reduces the number of children per household. The effect on demand for medical services, and thus employers' insurance costs, arising from the increased proportion of women in the older labor force, depends on whether older women require fewer or more medical services than older men, or less or more expensive services, and the extent to which these services are currently covered under family coverage.

Finally, the extent to which the changing racial and ethnic composition of the population changes the demand for employer-based health insurance depends on the differential health needs of the populations concerned and their relative attitudes toward risk. Wide disparities in health status and insurance coverage have been found across racial and ethnic groups. Among adults ages 18–64, Hispanics and blacks are more likely than whites to be in fair or poor health and less likely to be in excellent health (Weigers and Drilea 1996). Furthermore, lack of insurance is far more common among Hispanics (35 percent) than among either blacks (25 percent) or whites (15 percent). Racial and ethnic minorities, particularly Hispanics, are both more likely to lack access to job-based coverage and to turn it down when it is available (Cooper and Schone 1997).<sup>14</sup>

Only 39 percent of full-time workers in the private sector offered health insurance are offered coverage for themselves fully paid by their employers; only 22 percent are offered family coverage fully paid by their employers (McDonnell and Fronstin 1999). Thus, participation in an employer-sponsored insurance plan is a discretionary decision involving costs to the majority of workers that must be weighed against competing claims on the household budget. We posit that the demand for job-related health insurance is a function of current and projected individual and family health needs, the relative price of employer-sponsored insurance, and individual and family preferences regarding risk. In the absence of a direct measure of workers' health status, we posit that health needs are negatively correlated with education, income, and wealth, and positively correlated with

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age. Since lower income and wealth may be associated with greater liquidity constraints that may inhibit households from purchasing insurance, however, we are unable to predict a priori the effect of income and wealth, measured here by family earnings and home ownership, on the demand for health insurance. Family health needs are measured by the presence of a spouse and/or minor children. The relative price of own-employer insurance is a function of its price, and the prices of medical services purchased directly in the market, quality-equivalent individual insurance purchased in the market, and, for married workers, coverage under a spouse's plan. Lacking good data on such prices, we include coverage under another health insurance plan and, for married workers, coverage under a spouse's plan. We also control for whether the employer offers workers the opportunity to obtain coverage at a group rate after retirement. We include sex, race, and ethnicity to reflect individual and cultural differences in risk preferences.

To assess the impact of age and labor force diversity on the probability of participation in an employer-sponsored health insurance plan, we use a sample of 11,441 full-time workers in the 1993 Employee Benefits Supplement to the April CPS who reported that they were offered and eligible to participate in a plan offered by their employer.<sup>15</sup> This sample is split by sex and marital status because the health needs of men and women may differ over the life cycle and family coverage may be available through spouses' plans.<sup>16</sup> Because information on whether the employer offers retiree insurance is provided only for workers aged 45 and above, we interact a dummy variable for the availability of retiree insurance with the age categories of 45–54 and 55–64. This interaction term indicates the additional effect of retiree insurance coverage on the probability of participating in an employer's health insurance plan.<sup>17</sup> The effect of the age variable alone indicates the probability of participation, relative to the omitted age group, for workers not offered this option.

Figure 4 shows how the probability of participating in an employer's health insurance plan varies by age, race, and ethnicity for married full-time male and female workers offered and eligible for coverage, vis-à-vis a baseline group. Three additional influences on the participation decision — the availability of retiree insurance, education, and the presence of children — are also included because their effects differ by sex.<sup>18</sup> Participation rates are very high for both groups: .94 for men and .82 for women (see Appendix Table 4). Figure 4 indicates that there are statistically important age differences in the likelihood of enrolling in an employer's health insurance plan, although the magnitudes of these variations are not large. Among younger employees, married women ages 16–24 are 9 percent less likely, and men ages 25–34 are 3 percent less likely, to enroll than employees ages 35–44, the reference group.

The availability of retiree health insurance is a strong influence on the demand for health insurance among older workers. Among employees in

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firms not offering retiree insurance, men ages 45–54 are more likely (by 5 percent) to enroll than men ages 35–44, whereas there is no difference among women between these two age groups (this difference by sex is statistically significant). By contrast, both women and men ages 45–64 in firms offering retiree insurance are more likely to participate, by six to 14 percent more.<sup>19</sup>

There are also significant racial differences in participation in employer health insurance. Non-Hispanic black men and women are more likely to participate (by 4 and 6 percent, respectively) than non-Hispanic white employees. Non-Hispanic men of other races are also more likely to enroll (6 percent more).<sup>20</sup> Interestingly, a high school diploma or above increases enrollment in health insurance by men (from 5 to 8 percent depending on level of education), but not by women. The presence of children decreases participation by women by four percent, but does not affect the decisions of men.<sup>21</sup> Participation in employer-sponsored health insurance among single employees does not exhibit the strong age and racial differences observed for married employees and we therefore do not include a figure with results for this group. The only important age-related effect is higher participation (by 6 percent) by men ages 45–54 who are offered retiree health insurance (Appendix Table 3, cols. 3 and 4).<sup>22</sup>

What are the implications of these findings for a changing labor force? The most striking result is that older workers' demand for health plans that include the option of retiree insurance is very strong. Enrollment rates of older married employees in these plans are significantly higher than in plans not including this option, and thus likely to increase as the labor force ages. Delayed retirement may attenuate this change, but on net, it is likely

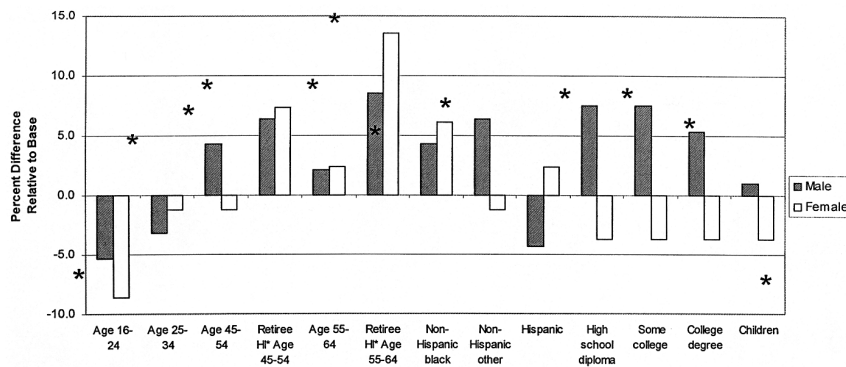


Figure 4. Probability of participation in health insurance plan by age, race/ethnicity, and sex: percent difference, full-time married workers offered and eligible for coverage. Source: authors' calculations. Percent change represents marginal effect on health insurance.

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that an older workforce will exert increased pressure on employers to provide retiree insurance. Employer provision of retiree insurance has declined over time in response to its higher cost, however.<sup>23</sup> Thus a reversal of the trend of the past decade will undoubtedly involve shifting more of the costs to retirees, constricting some of the expected increase in demand.

Participation in plans with provision for retiree insurance is strikingly high among older married men and women. If the insurance policy does not include this option, demand is weaker among women than men, however. Thus, the effect of an increasing share of women in an older labor force may be to reduce demand for employer-sponsored health insurance overall. By contrast, more non-Hispanic non-white employees would be expected to increase demand for health insurance benefits.

### **Employer-Sponsored Disability Insurance**

An aging labor force may also influence the demand for job-based disability insurance, which provides partial wage replacement in the case of temporary or permanent inability to work.<sup>24</sup> For one, older workers are more likely to be disabled, boosting demand for this type of insurance. The price of this insurance would be anticipated to rise if more claimants comprise a larger share of an employer's workforce. This increase in price, whether direct or through benefit reductions, would be likely to decrease demand by younger workers. The cost of short-term disability insurance is usually paid by employers. However, disability insurance is often included as one of the competing options in a firm's cafeteria health plan so selection of this type of benefit may preclude the selection of an alternative benefit. Employers providing long-term disability coverage often offer a base wage replacement rate (40 percent is common) at no or low cost to the employee but provide higher replacement rates with pro-rated employee contributions.

To examine the empirical link between demand for job-related disability insurance and workforce mix, we again turn to the 1993 Employee Benefits Supplement of the April CPS. These data do not report workers' health or disability status so we again must posit that good health and the absence of disability are positively correlated with income, education, and wealth (measured here by family earnings and home ownership), and negatively correlated with age. We include sex, race, and ethnicity variables to reflect individual and cultural differences in disability status and risk preferences.

As above, we examine only full-time workers offered and eligible for employer-provided health insurance, and who knew whether their employers provided short-term/long-term disability insurance.<sup>25</sup> Unfortunately, survey respondents were not asked whether they were offered this form of insurance. Rather, they were asked only if they would receive benefits if they became disabled, that is, whether they opted for this type of insurance when offered. Because we are unable to identify all employees offered disability

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coverage, we use as our sample employees offered *health* insurance on the assumption that this group is most likely among full-time workers to have been offered short- and long-term disability insurance.<sup>26</sup> Our findings therefore provide only rough estimates of differences in take-up rates by age, sex, race, and ethnicity.<sup>27</sup>

Figure 5 depicts patterns in the decision to elect short-term disability insurance among full-time employees by age, race and ethnicity, and two additional factors whose effects differ by sex — earnings and health insurance coverage.<sup>28</sup> There is only one significant age difference and the magnitude is small: men ages 45–54 are 4 percent more likely to elect coverage for short-term disability than employees ages 35–44, the reference group. There are also racial and ethnic differences, although once again the magnitudes are small. Non-Hispanic black men and women are 6 and 5 percent, respectively, more likely to elect coverage than non-Hispanic white employees. Non-Hispanic women of other races, however, are 8 percent less likely to opt for this coverage.

Among both men and women, earnings have small, but statistically important effects on participation in short-term disability insurance. Interestingly, the direction of the effect differs and this difference is statistically significant. A 10 percent increase in weekly earnings is associated with a lower likelihood of enrolling among men, but a higher likelihood among women (resulting in changes of about 1 percent in participation). Participating in the employer's health plan, treated as jointly determined with

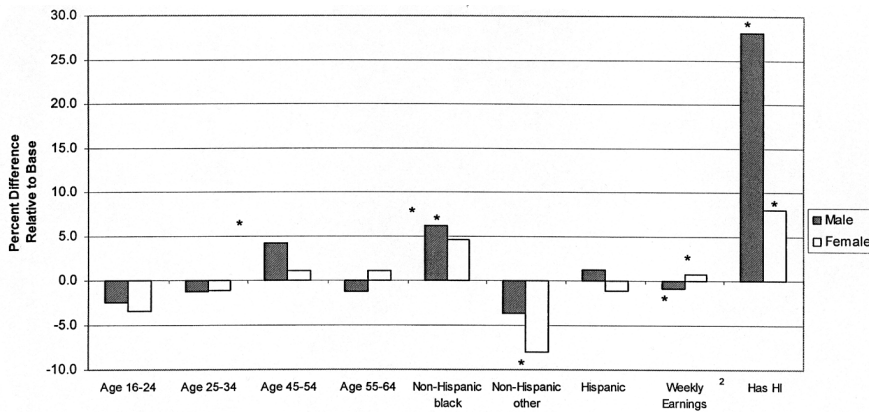


Figure 5. Short-term disability insurance participation by age, race/ethnicity, and sex: percent difference, full-time workers offered health insurance. Source: authors' calculations. Percent change represents marginal effect on short-term disability insurance participation relative to the sample mean. Weekly earnings indicates change resulting from 10 percent increase in monthly earnings. \* denotes significance at 5 percent level or higher.

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disability insurance to account for unobserved risk aversion, is associated with higher enrollment rates for both men and women, but the magnitude of the effect is significantly larger for men than for women (an increase of 28 percent among men compared to 8 percent for women).<sup>29</sup>

Age differences are more striking for participation in long-term disability insurance than for short-term insurance (Figure 6).<sup>30</sup> The youngest women (ages 16–24) are 23 percent more likely to enroll in coverage for long-term disability compared to middle-aged women, and women ages 25–34 are 8 percent more likely. Enrollment for disability coverage among women during their reproductive years is not unexpected, although it is somewhat surprising that this pattern is not reflected in short-term disability coverage as well. Older men (ages 55–64), by contrast, are 13 percent less likely to opt for long-term disability coverage. The latter finding suggests that older men may have met saving goals so that the loss of earnings does not jeopardize retirement living standards to the extent that it may for middle-aged employees.<sup>31</sup>

There are also strong differences by race and ethnicity in participation in long-term disability insurance, and the pattern varies from that observed in Figure 5 for short-term disability. Non-Hispanic black men are 10 percent more likely to opt for long-term disability coverage than non-Hispanic white men, but non-Hispanic men of other races are 21 percent less likely

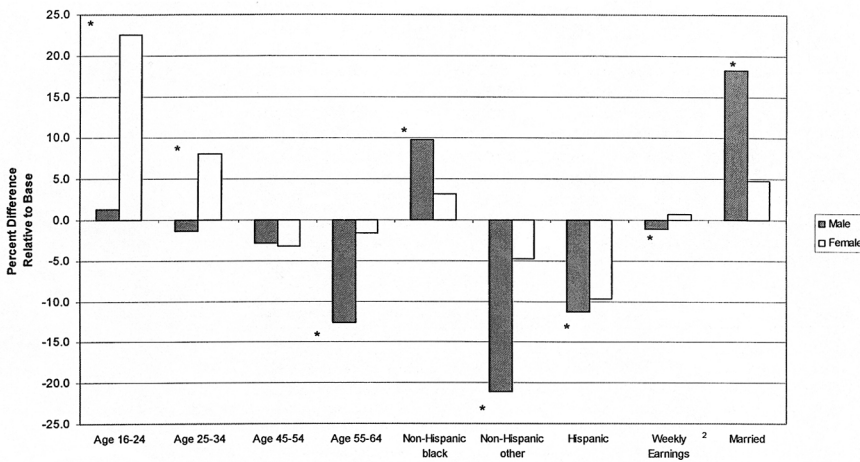


Figure 6. Long-term disability insurance participation by age, race/ethnicity, and sex: percent difference, full-time workers offered health insurance. Source: authors' calculations. Percent change represents marginal effect on short-term disability insurance participation relative to the sample mean. Weekly earnings indicates change resulting from 10 percent increase in monthly earnings. \* denotes significance at 5 percent level or higher.

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to elect coverage. Hispanic men are 11 percent less likely to enroll than their non-Hispanic counterparts. By contrast, there are no differences by either race or ethnicity among women.

The effects of earnings on participation are identical to those observed for short-term disability. Ten percent higher earnings are associated with a decline in the likelihood of participation among men but an increase among women. Both effects are small, about a 1 percent change in participation, but the difference between men and women is significant. The effect of being married also differs by sex: marriage increases the likelihood that men will opt for this coverage by 18 percent but does not influence enrollment rates among women.<sup>32</sup>

These findings suggest that the increasing participation of women of childbearing age in full-time jobs is likely to increase demand for long-term disability insurance, but that an aging labor force is likely to offset this change. The relatively higher demand among older men for temporary earnings replacement would be expected to increase participation in short-term disability insurance, as those of ages 45–54 are going to comprise a higher proportion of the labor force of the future.

### Employer-Sponsored Family Benefits

Over the last two decades, employee compensation packages have become considerably more complex, due in large part to the addition of a number of family-oriented benefits — family leave, flexible work schedules, unpaid time off, and child and elder care assistance. Interest in these benefits has grown because there are more married women in the labor force and because increases in the divorce rate and in childbearing outside marriage have increased the number of single parents in the labor market. These trends have set the stage for a national debate on how to balance the competing interests of work and family. Polls indicate that the public believes it is important for employers to provide more “family-friendly policies.”<sup>33</sup> Family benefits are appearing at the bargaining table between employers and unions; the newest products of collective bargaining include round-the-clock childcare, health and wellness programs, and access to continuing education. The evidence presented below suggests that companies are offering more extensive work/life policies and programs to help workers balance work and family responsibilities. Anecdotal evidence indicates that firms are also turning to alternative forms of compensation such as allowing parents to bring infants to work and providing childcare, recreation programs for teenagers, and book clubs for retirees (Belluck 2000; Greenhouse 2000).

Although the development of family-related policies has focused primarily on childcare, eldercare assistance has been on the agenda for at least a decade. The proportion of the elderly requiring help with daily activities



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increased from 35 percent in 1984 to nearly 43 percent ten years later (Tracey 2000). Middle-aged and older workers are thus more likely to face greater demands on their time from elderly parents and relatives, and interest in work arrangements such as flexible scheduling and assistance with arranging elder care is likely to increase in the future.<sup>34</sup>

In this section, we examine trends over time in the proportion of employees offered family-related benefits. We use published data for 1989–97 from the Employee Benefits Surveys (EBS) in Medium and Large Firms of the Bureau of Labor Statistics. We also use published data for 1995 and 2000 from the Family and Medical Leave Act (FMLA) Establishment Surveys and the related Employee Surveys commissioned by the Department of Labor.<sup>35</sup>

Changes over time in the proportion of full-time employees in medium and large firms offered various types of family benefits are shown in Table 1. The proportions of full-time workers offered family benefits such as childcare, adoption assistance, and long-term care insurance increased slightly over time, but eldercare assistance increased substantially between 1989 and 1993, the only years for which data are available. Flexible benefits plans and reimbursement accounts allow employees to pay for expenses such as childcare, eldercare, and medical care deductibles not covered by other plans on a salary reduction basis.<sup>36</sup> The proportions of employees offered these plans increased from 13 percent in 1988 to 54 percent in 1995, but then decreased to 45 percent in 1997. Coverage for medical benefits such as well-baby care and immunization increased substantially from 31 and 29 percent, respectively, in 1988, to 66 and 52 percent in 1997. This evidence suggests that in recent years an increasing proportion of employees in medium and large firms have been offered family-related benefits.

While there was little change between 1988 and 1997 in the percentage of employees offered *paid* time off, the proportion offered *unpaid* leave increased considerably during this period. The proportion of employees offered unpaid maternity leave increased from 33 to 60 percent, and the proportion offered unpaid paternity leave increased from 16 to 53 percent. Following the introduction of FMLA in 1993, which requires employers to provide unpaid leave but does not address the issue of paid leave, the proportion of full-time employees offered unpaid family leave (both maternity and paternity leave) increased from 84 percent in 1995 to 93 percent in 1998.<sup>37</sup>

The FMLA Establishment Surveys of 1995 and 2000 provide information on the proportion of firms offering family-related benefits. While only 11 percent of establishments are covered by the FMLA, they represent 58 percent of all employees (Cantor et al. 2001). Among firms covered by the FMLA, 84 percent offered all five types of benefits mandated by FMLA in 2000, whereas only 34 percent of noncovered establishments offered these benefits. The gap, moreover, had narrowed since 1995, when 88 percent of covered establishments offered benefits, compared to 21 percent of

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noncovered establishments. It appears that uncovered establishments were increasingly providing family benefits in order to compete with covered establishments in a tight labor market. However, the majority of uncovered establishments do not provide all benefits mandated by the FMLA, and many grant family and medical leave “depending on the circumstances,” and not always to all employees all of the time (Cantor et al. 2001).

We now turn to the FMLA Employee Surveys of 1995 and 2000 to examine the characteristics of employees exercising family benefit leave options provided under FMLA. The proportion of workers taking leave remained fairly constant (about 16 percent) between 1995 and 2000 (Table 2). In

TABLE 1. Family Benefits: Percentage of Full-Time Employees Offered Coverage

	1988	1989	1991	1993	1995	1997
<i>Medical benefits</i>						
Well-baby care	31	34	36	48	60	66
Immunization and innoculation	29	28	30	37	47	52
<i>Family benefits</i>						
Child care	4	5	8	7	8	10
Adoption	5	5	8	7	11	10
Elderly care	na	3	9	31	na	na
Long-term care insurance	na	3	4	6	6	7
Flexible benefit plans and/or reimbursement accounts	13	24	37	53	54	45
Employee assistance programs	43	49	56	62	58	61
<i>Family time-off benefits</i>						
Paid						
Personal leave	24	22	21	21	22	20
Maternity leave	2	3	2	3	na	na
Paternity leave	1	1	1	1	na	na
Family leave	na	na	na	na	2	2
Unpaid						
Maternity leave	33	37	37	60	na	na
Paternity leave	16	18	26	53	na	na
Family leave <sup>1</sup>	na	na	na	na	84	93

Source: Author's tabulations from EBS in Medium and Large Firms, U.S. BLS (selected years).

\* After passage of the FMLA in 1993, maternity and paternity leave are included in the broader category of family leave. Family leave includes paid and unpaid leave for maternity, adoption, care of a newborn child, and family illness. Also included is short-term leave, which is paid time off from work for reasons such as childrens' medical appointments and parent-teacher conferences.

na = not available.

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both years, the most common reasons for the longest leave were the employee's own health, care for a newborn or newly adopted child, and care for an ill parent. Between 1995 and 2000, the incidence of leave-taking for own health decreased from 61 to 47 percent. At the same time, the incidence of leave-taking to care for an ill parent increased from 8 to 11 percent, and for an ill spouse, from 4 to 6 percent. Leave-takers in both years were more likely to be female and middle-aged (35–49). Over the five-year period, the proportion of leave-takers ages 50–64 increased by one-third (from 15 to 20 percent).

We might have expected that, with the introduction of FMLA in 1993, the proportion of employees taking leave would have increased more than indicated in Table 2. There are many reasons, however, why employees may be reluctant to take up this option — concerns shown in the bottom panel of Table 2. More than half of all employees reported that they worried about not having enough money to pay bills, and about one-quarter worried either that their job might be lost or that a leave would hurt advancement.<sup>38</sup>

TABLE 2. Employees Taking Leaves from Work: Reason for Leave by Demographic Characteristics

<i>Leave-takers as percentage of employees</i>	1995	2000
<i>Reason for taking the longest leave</i>		
Own health*	61	47
Maternity-disability*	5	8
Care for a newborn, newly adopted, or placed foster child	14	18
Care for ill child	9	10
Care for ill spouse*	4	6
Care for ill parent*	8	11
<i>Demographic characteristics</i>		
Sex		
Male	44	42
Female	56	58
Age		
18–24	11	10
25–34	30	28
35–49	41	40
50–64*	15	20
65+	3	2
<i>Concerns about leave</i>		
Job might be lost		27
Leave might hurt job advancement		26
Seniority would be lost		13
Not having enough money for bills		54
Other reasons		13

Source: Derived from Cantor et al. (2001).

\* Denotes significant change between 1995 and 2000 surveys.

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We now examine the distribution of reasons for leave by age and sex in 1995 and 2000 (Table 3). For both men and women, the largest change over this period is the shift from leave-taking for one's own health reasons to leave-taking for family concerns. In 2000, both men and women were more likely to take leave to care for an elderly parent and men were more likely to take leave to care for a newborn or older child than in 1995. Men and women of all ages, and particularly employees age 35 and older, were much more likely to take a leave in 2000 to care for parents than five years previously. We expect this trend to continue as the baby boom generation ages and experiences increased care-giving demands from parents. Younger leave-takers (ages 18–34) were more likely to take maternity disability leave and to care for a newborn, adopted, or foster child.

Respondents in the 2000 FMLA Survey of Employees were asked whether their employers provided benefits other than those covered under FMLA. A high proportion (45 percent) reported that they were offered flextime; 43 percent reported they were offered employee assistance; and 25 percent reported they were offered job sharing (Figure 7). These proportions match quite closely the proportions of employees rating the respective benefits as important (the largest discrepancy is unmet demand for flextime) and suggest that employers are responding to the needs of their workforces.

In summary, the evidence confirms that family-oriented benefits have become an important part of the employee compensation package. Increasingly, firms are providing benefits that accommodate the work-and-family pressures felt by an increasing share of employees. As the workforce ages and

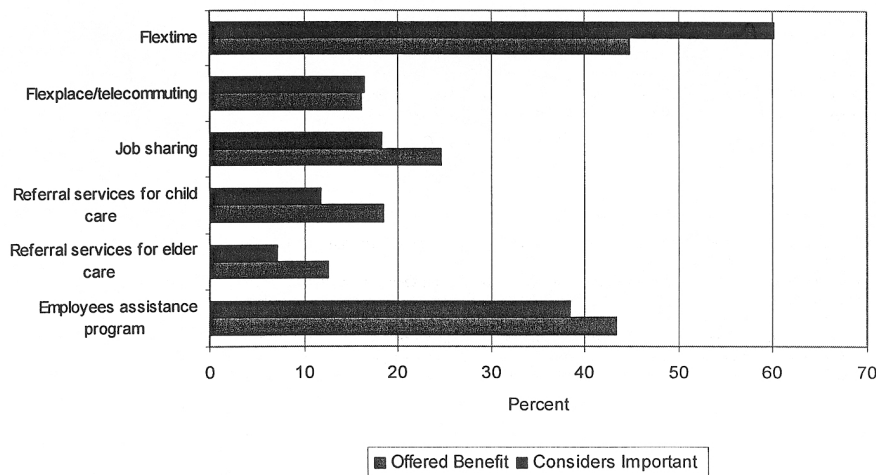


Figure 7. Employees offered benefits not covered under Family and Medical Leave Act and perceiving benefits as important. Source: Cantor et al. (2001).

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TABLE 3. Leave-Takers by Reason for the Longest Unpaid Leave, by Age and Gender (percent)

Year	Own health		Maternity-disability		Care for newborn, adopted, or foster child		Care for children		Care for spouse		Care for parents	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Sex												
Male	67	52	—	—	15	22	7	9	6	7	6	10
Female	57	44	8	13	14	15	10	10	2	5	9	12
Age												
18–24	59	49	10	24	18	19	8	—	—	—	—	—
25–34	43	29	9	13	28	39	12	9	3	3	5	7
35–49	67	49	2	4	9	10	8	16	4	6	11	16
50 +	83	66	—	—	—	—	—	4	7	11	6	13

Source: Derived from Cantor et al. (2001).

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the share of women continues to increase, we expect that family benefits will become an even larger part of employee compensation. An enhanced benefit package, however, is likely to come at a cost to the employee in terms of lower wage growth. As a result, wage compensation can be expected to comprise a smaller share of total compensation (Gruber 1998).

### Conclusions

An aging labor force, with increasing shares of women and minorities, is likely to change the mix of nonwage compensation offered by employers and desired by employees. There is little evidence that older workers have any lesser interest in saving through 401(k) plans than workers in their 30s. Indeed, older women at all tenure levels are more likely to maintain 401(k) accounts, as are older men in new jobs. The frequency of contributions into these accounts, moreover, does not diminish with age. Not surprisingly, demand for health insurance is greater among older employees, especially if it includes the option of coverage after retirement at group rates. We predict that demand for short-term disability insurance will increase, but demand for long-term disability will decrease, because earnings replacement for older workers is more critical in the short run than over an extended period that may approach, or exceed, the expected remaining work life.

Finally, we foresee an increased demand for a wide range of family-related benefits due to the increasing family-and-work needs of women with children and of middle-aged and older workers of both genders with elderly parents. Changes in the provision of these benefits in the last few decades suggest that employers appear to be responding to these needs and that the compensation package for future workers may be more benefits intensive than its current configuration.

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APPENDIX TABLE 1. Probability of Participation and Contribution in 401(k) Plan: Full-Time Workers Offered Plans (robust standard errors in parentheses)

	All tenure levels				Tenure less than five years			
	Participation		Contribution		Participation		Contribution	
	Male	Female	Male	Female	Male	Female	Male	Female
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Age 16-24	-.17** (.06)	-.15** (.06)	.01 (.07)	.04 (.07)	-.08 (.07)	-.18** (.06)	-.11 (.10)	.01 (.10)
Age 25-34	-.03 (.03)	-.03 (.03)	.01 (.03)	.03 (.04)	.01 (.05)	-.04 (.05)	.04 (.06)	.07 (.07)
Age 45-54	.05 (.03)	.07* (.03)	.02 (.03)	.05 (.04)	.13* (.07)	.03 (.06)	-.02 (.08)	.06 (.08)
Age 55-64	.05 (.04)	.16** (.05)	.01 (.04)	.01 (.05)	.01 (.11)	-.03 (.12)	.04 (.11)	.01 (.15)
Non-Hispanic black	-.05 (.05)	-.06 (.04)	-.17** (.06)	-.15** (.06)	-.06 (.08)	-.02 (.07)	-.09 (.10)	-.29** (.11)
Non-Hispanic other	.11 (.06)	.10 (.06)	.04 (.06)	.01 (.07)	.10 (.10)	.17* (.09)	-.01 (.11)	-.08 (.12)
Hispanic	-.12* (.06)	-.07 (.06)	.09 (.06)	-.22** (.08)	-.07 (.08)	-.02 (.08)	.14 (.11)	-.13 (.12)
High school diploma	.05 (.05)	.07 (.07)	.07 (.06)	.09 (.10)	-.02 (.09)	.03 (.12)	.11 (.12)	.23 (.16)
Some college	.08 (.05)	.07 (.07)	.07 (.06)	.08 (.10)	-.06 (.09)	.06 (.12)	.10 (.12)	.20 (.16)
College degree	.14** (.05)	.06 (.07)	.14* (.06)	.08 (.10)	-.05 (.10)	.02 (.13)	.16 (.13)	.17 (.19)

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Weekly earnings/1000	.22** (.04)	.33** (.06)	.03 (.04)	.08 (.06)	.35** (.07)	.29** (.09)	.02 (.07)	.11 (.11)
Married	.03 (.04)	-.13** (.05)	-.06 (.04)	-.06 (.06)	.13* (.06)	-.07 (.08)	-.16* (.07)	-.01 (.12)
Spouse working	.02 (.03)	.13** (.05)	.08** (.03)	.03 (.06)	-.08 (.05)	.10 (.08)	.15** (.06)	-.01 (.12)
Home ownership	.04 (.03)	.11** (.03)	.03 (.03)	.05 (.04)	-.02 (.04)	.10* (.04)	.03 (.06)	-.03 (.06)
His DB or DC pension <sup>1</sup>	.03 (.02)	.06* (.03)	.04 (.02)	.10** (.03)	.08 (.06)	.09 (.06)	.05 (.07)	.13 (.08)
Employer match <sup>2</sup>	.12** (.04)	.15** (.04)	-.05 (.04)	.19** (.05)	-.06 (.07)	-.02 (.07)	.05 (.08)	.20* (.10)
Mean of dependent variables	0.63	0.53	0.63	0.66	0.47	0.40	0.61	0.64
N observed	2532	2070	1582	1098	903	870	430	360
Pseudo R <sup>2</sup>	.08	.08	.02	.04	.08	.07	.04	.04

Source: Author's calculations using Employee Benefits Supplement to the 1993 April CPS.

The dependent variable equals 1 if the individual participates/contributes to a 401(k) plan. Probit estimates indicate marginal probability effects calculate at the sample means. They measure the marginal effect of a one unit change in a continuous variable on the probability of participation/contribution, and the average difference of the predicted probability of a dummy variable being 0 and 1. Adjusted CPS adult supplement weights are used. Omitted age, racial, and educational categories are age 35-44, non-Hispanic white, and less than high school diploma, respectively. \* and \*\* denote significance at the 5 percent and 1 percent levels, respectively.

<sup>1</sup> Variable treated as endogenous.



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APPENDIX TABLE 2. Sample Means for 401(k) Plan Participation and Contribution Equations: Full-Time Workers Offered Plans (percent)

	All tenure levels				Tenure less than five years			
	Participation		Contribution		Participation		Contribution	
	Male (1)	Female (2)	Male (3)	Female (4)	Male (5)	Female (6)	Male (7)	Female (8)
Age 16-24	6.6	7.8	3.2	4.4	15.7	16.4	8.8	9.7
Age 25-34	28.1	28.9	25.3	25.6	42.1	41.1	41.9	40.8
Age 35-44	32	30.4	33.1	31	27.1	25.0	29.5	28.9
Age 45-54	23.2	24	26.8	27.7	10.9	14.3	14.9	16.9
Age 55-64	10.1	8.8	11.5	11.3	4.1	3.1	4.9	3.6
Non-Hispanic white	85.7	81.5	87.3	83.6	83.1	80.7	84.2	82.2
Non-Hispanic black	5.9	9.2	5.1	7.7	7.5	8.3	6.5	6.7
Non-Hispanic other	3.3	4.2	3.9	4.6	3.6	4.6	5.1	5.6
Hispanic	4.3	4.3	3.3	3.4	5.2	5.9	3.9	5.3
High school drop out	5.8	3.3	4.6	2.4	6.1	4.0	4.9	2.5
High school diploma	27.4	30.6	25.2	29.6	26.4	26.8	25.3	24.7
Some college	28.2	31.0	26.5	29.7	28.9	32.9	24.2	31.4
College degree	38.6	35.0	43.7	38.3	38.6	36.3	45.6	41.4
Weekly earnings (\$)	730	527	802	585	616	459	719	512
(standard deviation)	(373)	(273)	(385)	(296)	(352)	(249)	(385)	(284)
Married	73.3	58.2	77.6	60.2	62.3	55.5	69.3	59.7
Spouse working (married)	67.8	87.1	67.3	88.2	68.9	88.6	66.1	90.7
Home ownership	76.2	71.8	81.0	78.2	59.1	57.6	63.7	64.7
Has DB or DC pension	54.3	52.4	58.8	59.4	32.8	33.1	43.9	43.3
Employer match	28.9	25.1	34.7	32.2	28.5	24.3	38.1	34.4
Mean of dependent variable	0.63	0.53	0.63	0.66	0.47	0.40	0.61	0.64
N observed	2532	2070	1582	1098	903	870	430	360

Source: See Appendix Table 1.

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APPENDIX TABLE 3. Probability of Participation in Employer-Sponsored Health and Disability Insurance: Full-Time Workers Offered and Eligible for Coverage (robust standard errors in parentheses)

	Health insurance							
	Married		Single		Short-term disability		Long-term disability	
	Male (1)	Female (2)	Male (3)	Female (4)	Male (5)	Female (6)	Male (7)	Female (8)
Age 16-24	-.05 (.04)	-.07* (.03)	.01 (.04)	.02 (.03)	-.02 (.03)	-.03 (.03)	.01 (.04)	.14** (.03)
Age 25-34	-.03* (.01)	-.01 (.01)	.02 (.03)	.01 (.02)	-.01 (.01)	-.01 (.02)	-.01 (.02)	.05* (.02)
Age 45-54	.04* (.01)	-.01 (.02)	.01 (.04)	.01 (.03)	.03* (.01)	.01 (.02)	-.02 (.02)	-.02 (.02)
Age 55-64	.02 (.02)	.02 (.02)	.06 (.02)	.05 (.02)	-.01 (.02)	.01 (.02)	-.09** (.03)	-.01 (.03)
Non-Hispanic black	.04* (.02)	.05** (.01)	.04 (.02)	.01 (.02)	.05** (.02)	.04* (.02)	.07* (.03)	.02 (.03)
Non-Hispanic other	.06** (.021)	-.01 (.03)	.03 (.03)	.04 (.02)	-.03 (.03)	-.07* (.04)	-.15** (.05)	-.03 (.05)
Hispanic	-.04 (.02)	.02 (.02)	-.04 (.05)	.02 (.02)	.01 (.02)	-.01 (.03)	-.08 (.04)	-.06 (.04)
Retiree HI* Ages 45-54	.06** (.02)	.06** (.01)	.06** (.01)	—	—	—	—	—
Retiree HI* Ages 55-64	.08** (.01)	.11** (.01)	—	.04 (.03)	—	—	—	—
Has spouse HI <sup>2</sup>	-.13** (.03)	-.14** (.01)	—	—	—	—	—	—
Has other HI <sup>2</sup>	-.10** (.02)	-.05** (.02)	-.15** (.04)	-.15** (.04)	—	—	—	—
High school diploma	.07** (.02)	-.03 (.03)	-.03 (.04)	.02 (.02)	.08** (.02)	.09** (.02)	.08** (.03)	.08* (.04)
Some college	.07** (.02)	-.03 (.03)	-.03 (.04)	.04 (.02)	.13** (.01)	.13** (.02)	.10** (.03)	.11** (.04)

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APPENDIX TABLE 3 (continued)

	Health insurance						Short-term disability		Long-term disability	
	Married		Single		Male (5)	Female (6)	Male (7)	Female (8)		
	Male (1)	Female (2)	Male (3)	Female (4)					Male	Female
College degree	.05* (.02)	-.03 (.03)	-.03 (.05)	.02 (.02)	.20** (.01)	.16** (.02)	.20** (.03)	.12** (.04)		
Weekly earnings/1000	.09** (.02)	.09** (.03)	.07 (.05)	.26** (.07)	-.10** (.03)	.14* (.05)	-.11** (.04)	.10 (.06)		
Children	.01 (.01)	-.03** (.01)	-.02 (.02)	-.02 (.02)	—	—	—	—		
Married	—	—	—	—	.09** (.02)	.03 (.03)	.13** (.03)	.03 (.03)		
Spouse working	.08* (.05)	.09** (.03)	—	—	.01 (.01)	.02 (.02)	.01 (.02)	.06 (.03)		
Home ownership	.01 (.01)	-.02* (.01)	.05* (.02)	.03 (.02)	.02 (.01)	.04* (.02)	.03 (.02)	.04 (.02)		
Has HI <sup>2</sup>	—	—	—	—	.23** (.02)	.07** (.02)	.40** (.03)	.31** (.03)		
Mean of dependent variable	0.94	0.82	0.93	0.94	0.82	0.87	0.71	0.62		
N observed	5664	3733	790	1254	6241	4902	5483	4182		
Pseudo R <sup>2</sup>	.10	.09	.14	.15	.10	.07	.09	.06		

Source: Authors' calculation using Employee Benefits Supplement to the 1993 April CPS.

The dependent variable equals 1 if the individual participates in the plan. Probit estimates indicate marginal probability effects calculated at the sample means. They measure the marginal effect of a one unit change in a continuous variable on the probability to enroll in a plan, and the average difference of the predicted probability of a dummy variable being 0 and 1. Adjusted CPS adult supplement weights are used. Omitted age, racial, and educational categories are ages 35–44, non-Hispanic white, and less than high school diploma respectively.

\* and \*\* denote significance at the 5 percent and 1 percent levels respectively.

<sup>1</sup> Insufficient variation to estimate the marginal effect.

<sup>2</sup> Variable treated as endogenous.

<sup>3</sup> Mean of the dependent variable estimated at the sample means of all exogenous variables.

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APPENDIX TABLE 4. Sample Means in Employer-Sponsored Health and Disability Insurance Equations(%): Full-Time Workers Offered and Eligible for Coverage

	Health insurance							
	Married		Single		Short-term disability		Long-term disability	
	Male (1)	Female (2)	Male (3)	Female (4)	Male (5)	Female (6)	Male (7)	Female (8)
Age 16-24	2.7	4.7	30.5	15.5	4.6	5.2	4.5	4.6
Age 25-34	26.8	29.9	35.4	31.5	27.9	29.8	27.0	29.0
Age 35-44	34.1	33.7	21.9	32.2	33.2	33.7	33.7	34
Age 45-54	24.6	23.7	10.8	13.2	23.3	23.2	23.6	24.1
Age 55-64	11.8	8.1	1.4	7.6	10.9	8	11.2	8.3
Non-Hispanic white	85.7	83.8	75.9	67.3	85.0	79.9	85.8	80.2
Non-Hispanic black	4.9	6.6	11.8	20.9	5.7	10.3	5.1	10.3
Non-Hispanic other	3.4	3.8	4.6	4.5	3.4	3.9	3.3	3.8
Hispanic	5.0	4.7	6.8	6.2	4.9	4.9	4.7	4.7
Retiree HI* Age 45-54	11.1	8.1	4.2	—	—	—	—	—
Retiree HI* Age 55-64	5.8	3.1	—	3.1	—	—	—	—
Has Spouse HI	13.6	35.7	—	—	—	—	—	—
Has Other HI	5.9	5.1	10.8	8.4	—	—	—	—
High school drop out	8.3	5.5	9.2	7.0	8.2	5.8	7.9	5.5
High school diploma	32.0	35.8	43.7	41.6	33.3	37.1	32.7	37.2
Some college	27.0	28.3	28.7	32.5	27.4	29.0	27.4	29.1
College degree	32.7	30.4	18.4	18.9	31.1	28.1	32.0	28.2
Weekly earnings (\$)	714	489	482	422	694	479	709	486
(standard deviation)	(377)	(261)	(291)	(226)	(375)	(256)	(380)	(259)
Children	60.5	51.5	31.3	52.1	—	—	—	—
Married	—	—	—	—	88.8	74.2	89.2	74.6
Spouse working (married only)	68.5	86.4	—	—	68.6	86.6	68.6	86.6
Home ownership	82.3	81.9	73.0	60.1	81.5	77.1	82.2	77.9
Has HI	—	—	—	—	91.6	81.9	91.4	81.6
Mean of dependent variable	0.94	0.82	0.93	0.94	0.82	0.87	0.71	0.62
N observed	5664	3733	790	1254	6241	4902	5483	4182

Source: See Appendix Table 3.

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1. We thus refer to 401(k) plans and non-401(k) defined contribution plans.
2. At the time the data used in this study were collected (1993), the limit on employee contributions was \$10,500 and the total of employee and employer contributions could not exceed the lesser of \$35,000 or 25 percent of the employee's salary. These limits were in effect through 2001 and were raised in the Economic Growth and Tax Relief Reconciliation Act of May 2001, effective 2002.
3. Some 40 percent of men and 46 percent of women among full-time workers do not know if their employer contributes to their retirement account. Our empirical analysis uses a two-stage procedure to first estimate the probability of an employer match as a function of individual, firm, and industry characteristics, controlling for knowledge of the match, and second we include the predicted value of the match in both participation and contribution equations.
4. We exclude tenure on the current job because there is no theoretical basis for including tenure in a savings function. Several analysts have found longer tenure, when included as an exogenous variable, associated with a higher probability of participating in a 401(k) plan (Andrews 1992; Even and Macpherson 1995; Munnell et al. 2000). Even and Macpherson (1999), however, found tenure insignificant when treated endogenously. Our preliminary analysis confirmed their findings so we omit it as a regressor in our analysis.
5. The 1993 supplement is the last of three CPS supplements (earlier surveys were in 1983 and 1988) providing detailed information on a number of employer-sponsored benefits. Currently there are no plans to continue this series. The samples from the 1993 supplement used in this analysis exclude part-time employees and the self-employed as well as workers for whom critical data are missing. We exclude part-time employees because the saving functions of the youngest and oldest workers in particular, whose decisions are of special interest in this study and who have relatively high rates of part-time employment, may differ depending on whether they are in part-time or full-time jobs. Overall, offer and participation rates are higher for full-time employees (39 and 68 percent, respectively) than for part-timers (14 and 41 percent, respectively).
6. Estimated mean participation rates are 0.63 for men and 0.53 for women (Appendix Table 2; this table also includes mean values of explanatory variables). These results are based on profit estimations of the probability of participation in 401(k) plans that control for education, earnings, home ownership, pension coverage, and whether the employer contributes to the 401(k) plan. Marginal probability estimates appear in Appendix Table 1, cols. 1 and 2. Reported marginal probabilities and differences by sex are based on an interaction model using a pooled sample.
7. Because we include a variable for whether an employee's spouse is working, the bar in Figure 1 for being married represents the effect of being married on 401(k) participation for employees with a nonworking spouse. The bar representing a working spouse shows the additional effect of having a working spouse. The effect on participation of being married and having a working spouse is measured by the sum of the two effects.
8. A number of other factors were found to significantly influence the participation decisions but these effects did not differ between men and women (see Appendix Table 1). A 10 percent increase in earnings increases the probability of participation by 3 percent among both men and women. Among men, having a college degree increases the probability of participation by 22 percent relative to participation among high school dropouts. Homeownership increases participation by women by 21 percent. Being covered by a defined benefit or non-401(k) defined contribution pension, treated as jointly determined with participation to remove

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unobserved tastes for saving, increases participation by women by 11 percent. The presence of an employer matching contribution, also treated as an endogenous influence, increases the probability of participation among men and women by 19 and 28 percent, respectively.

9. Specifically, survey respondents are asked whether they intend to make a contribution in the current year. Marginal probability estimates appear in Appendix Table 1 (cols. 3 and 4). Among employees with 401(k) accounts, the estimated mean probability of intending to contribute is 0.63 for men and 0.66 for women (Appendix Table 2). About 25 percent of account holders reported that they did not know if their employers matched their contributions.

10. Two other factors influence contribution decisions but do not differ significantly between men and women. As in the case of the participation decision, a college degree increases (by 22 percent) the likelihood that men will contribute to their accounts and having a pension increases (by 15 percent) the likelihood that women will contribute.

11. Marginal probability estimates appear in Appendix Table 1, cols. 5 and 6. The estimated mean probability of participation in new jobs is 0.47 for men and 0.40 for women (Appendix Table 2).

12. One other important influence on participation in 401(k) plans differs between all jobs and new jobs (see Appendix Table 1, cols. 5 and 6). For men and women at all tenure levels, an employer match is a powerful incentive to participate, but not for employees in new jobs. Other influences on participation are similar between the two groups of jobs. Among women, being a homeowner and having a pension plan increase the probability of participating in a 401(k) plan in both cases. Higher weekly earnings also increase participation in both cases for men and women alike.

13. Small cell sizes may contribute to the lack of significant contribution effects among workers in new jobs. Marginal probability estimates appear in Appendix Table 1, cols. 7 and 8. Contribution rates are significantly lower (by 26 percent) for men with nonworking spouses, and 31 percent higher for women whose employers match their contributions. Among employees in new jobs who have a 401(k) account, 61 percent of men and 64 percent of women expect to contribute in the current year (Appendix Table 2).

14. Based on data from the 1987 National Medical Expenditure Survey and the 1996 Medical Expenditure Panel Survey (MEPS), the authors find that the rate of access to job-based insurance for Hispanic workers fell from 71 percent in 1987 to 67 percent in 1996, although it remained stable for other groups. Take-up rates declined from 1987 to 1996 for all racial/ethnic groups, and take-up rates of Hispanic workers were significantly lower than those of white workers in both years.

15. As above, we exclude part-time employees, the self-employed, and those for whom critical data are missing.

16. The four subsamples consist of 5,664 married men, 3,733 married women, 790 single men, and 1,254 single women.

17. Workers in the omitted category, ages 35–44, may be in firms offering retiree insurance. To the extent that their decision to participate in their firm's health plan is influenced by this option (which we believe unlikely), the marginal effects for age 45+ represent lower-bound estimates of the effect of the availability of retiree insurance.

18. The results shown in Figure 4 are based on profit estimations of the probability of participation in employer-sponsored health insurance, and control for coverage under spousal and other types of insurance, weekly earnings, homeownership, and employment status of spouse. Marginal probability estimates appear in Appendix Table 3 (cols. 1 and 2).

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19. The bars above variables "Age 45–54" and "Age 55–64" indicate the probability of enrolling (relative to ages 35–44) of employees in firms not offering retiree insurance, while the interaction terms, "Retiree HI \*Age 45–54" and "Retiree HI \*Age 55–64," indicate the probability of participation by employees offered retiree health insurance (relative to ages 35–44).

20. This is not the case for women of other races, and the difference by sex is significant.

21. Several other control variables are significant but their effects do not differ by sex. Coverage under spouses' insurance reduces participation among men by 14 percent and among women by 17 percent; coverage under other insurance decreases participation by 11 by men and by six percent by women. (Both variables are treated as jointly determined with the decision to participate in one's own employer plan.) A 10 percent increase in weekly earnings increases participation by both men and women, although the magnitudes of the effects are small (about 1 percent). Having an employed spouse increases the likelihood of participation among men by 9 percent and among women by 11 percent. Homeownership decreases participation among women by 2 percent.

22. A number of other factors are important for the participation decision, however. Coverage under other insurance significantly reduces participation by both men and women by 16 percent. Ten percent higher earnings increase enrollment by women by 1 percent, and homeownership increases participation by men by 5 percent. The estimated mean probability of participation is .93 for single men and .94 for single women (Appendix Table 4).

23. In medium- and large-size private firms, the proportion of full-time employees participating in employer medical plans who were provided with the option of retiree health insurance fell from 45 percent in 1988 to 35 percent in 1997 for retirement below age 65, and from 37 to 34 percent for retirement at ages 65 and above (McDonnell and Fronstin 1999).

24. In medium and large establishments, 53 percent of full-time workers were covered by short-term disability and 42 percent by long-term disability insurance in 1995; among small establishments, comparable percentages were 29 and 22.

25. The samples used here consist of 6,451/5,660 male and 5,118/4,352 female full-time workers.

26. Among firms offering health insurance, 71 percent offered short-term disability insurance and 49 percent offered long-term disability insurance (Gruber 1998).

27. These estimates are biased if, within the sample of workers in firms offering health insurance, workers of a particular age would be more or less likely to match themselves with firms that also offer disability insurance.

28. Marginal probability estimates appear in Appendix Table 3 (cols. 5 and 6). The estimated mean probability of participation is 0.82 for men and 0.87 for women.

29. Also notable is the finding that education plays an important role in the decision to opt for short-term disability insurance, one of the rare instances in this study in which education influences the choice of employer-sponsored benefits. Among men, a high school diploma and above increases participation by 10 to 24 percent (depending on level of education) compared to participation among high school dropouts; among women, participation increases by 10 to 18 percent. Being married is associated with a higher likelihood of participation among men (by 11 percent), whereas homeownership increases participation by 5 percent among women.

30. Marginal probability estimates appear in Appendix Table 3, cols. 7 and 8. The estimated mean participation rate is 0.71 for men and 0.62 for women.

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31. Because of the limitations of the data, it is also possible that workers in this age group, while eligible for health insurance, are less likely to be employed in firms that offer long-term disability insurance.

32. Participation in the employer's health plan, controlling for unobserved preferences for insurance, is associated with higher participation among both men and women, in contrast to participation in short-term disability coverage (by 56 and 50 percent, respectively). Like enrollment in short-term disability insurance, higher education significantly increases the probability of participation among both men (from 11 to 28 percent) and women (13 to 19 percent).

33. See, for example, *Family Matters: A National Survey of Women and Men*, conducted for the National Partnership For Women and Families, February 1998 (<[www.nationalpartnership.org/survey/survey.htm](http://www.nationalpartnership.org/survey/survey.htm)>).

34. Johnson and Lo Sasso (2000) find that among adult children with surviving parents, 26 percent of women and 15 percent of men aged 53–63 reported that they spent at least one hundred hours caring for or helping parents during the previous twelve months. Women engaged in eldercare were found to have reduced hours of paid work by 43 percent on average and men by 28 percent.

35. The EBS data are at the firm level and employee characteristics are not available. The Establishment Surveys allow us to examine firm response to employee demand, while the Employees Surveys provide information on changes over a five-year period in the utilization of family benefits by the demographic characteristics of employees.

36. A flexible benefits plan, often called a cafeteria plan, allows participants to elect a combination of various taxable and tax-deferred forms of compensation, including cash, health insurance, 401(k) plan contributions, life insurance, child care, and additional vacation days. A flexible spending (reimbursement) account allows employees to set money aside on a pretax basis for qualified unreimbursed medical or dependent care expenses. These accounts may exist either within a full flexible benefit plan or separately as a stand-alone plan. They can be funded by salary-reduction arrangements, employer contributions, or both. Employees must determine how much they wish to contribute to the spending account in advance and they forfeit unused funds at the end of the year.

37. The 1993 Family and Medical Leave Act enables working families to take leave to meet essential caregiving responsibilities without the risk of losing their jobs or imposing undue burdens on employers. The FMLA obligates employers with more than 50 employees to provide 12 weeks of unpaid leave each year to employees for five reasons: own health; maternity leave; care for a new born, newly adopted, or placed foster child; care for spouse; or care for elderly parents. Leave provided under FMLA is job-protected, and requires covered employers to continue to maintain group health insurance benefits for eligible employees on FMLA leave. Prior to 1993, the United States had no national family and medical leave legislation, although the Pregnancy Discrimination Act of 1979 did require firms that offered temporary disability programs to cover pregnancy like any other disability. Some employees had access to leave through union contracts, employer policies, or state statutes, but coverage provided under these provisions was rarely as comprehensive as coverage under the FMLA. Many employees had no family or medical leave coverage prior to the FMLA.

38. Among those who indicated that they needed leave but did not take it, 78 percent said they could not afford to take leave. Many feared that either their job might have been lost (32 percent) or advancement would have been hurt (43 percent). In addition, 21 percent of leave-needers reported that their leave request was denied by their employer (Cantor et al. 2001).



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