DEFERRING INCOME IN EMPLOYER-SPONSORED RETIREMENT PLANS: THE DYNAMICS OF PARTICIPANT CONTRIBUTIONS

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Abstract

This paper describes contributions to employer-sponsored retirement accounts, using newly available longitudinal data that combine administrative earnings records with survey data. The results reveal a fair amount of individual variability in contribution rates over time. However, potential negative shocks to income and increases in current consumption needs do not appear to lead workers to curtail their contributions. Instead, workers appear to raise their contribution rates after they have achieved key milestones in the lifecourse, such as the birth of a child or the purchase of a home.

INTRODUCTION

As defined contribution plans have come to dominate the pension landscape, retirement income security increasingly depends on the ability and willingness of families to defer current consumption and save for their old age. In earlier generations, when traditional defined benefit plans were commonplace, many older people could rely on their employers to save on their behalf. Defined benefit plan participants have little say over the size of their pension benefits, which generally depend only on earnings and years of service. Typical defined benefit plans automatically enroll all eligible workers and rarely require explicit contributions from participants. Workers at firms that offer defined contribution plans, by contrast, must decide whether to participate in the plan, and participants much choose how much to set aside from each paycheck and invest in their retirement accounts. Future benefits depend on the level of contributions from participants and their employers and the returns that the contributions earn. Families must generally set aside funds over many years to accumulate significant retirement savings in their defined contribution plans.

However, families may be forced to delay or interrupt their retirement savings for a variety of reasons. For example, families may delay saving for retirement until after they purchase homes, focusing their efforts on accumulating enough savings for a downpayment before worrying about retirement. The expenses associated with a new baby may lead families to interrupt their retirement contributions near the birth of a child, especially if one parent spends less time at work in order to provide childcare. The loss of a spouse, through death or divorce, or a spell of unemployment by a spouse can also lead workers to curtail their retirement contributions and spend more of their earnings on current consumption. In addition, the onset of health problems for the worker or family members can derail savings plans, either because the

family must pay expensive medical bills or because poor health forces family members to curtail their labor supply, lowering family income. In short, any increase in current consumption needs or loss of current income can reduce contributions to retirement plans and threaten future retirement security.

This study uses newly available longitudinal data to describe contributions to employer-sponsored retirement plans over time for a large, nationally representative sample of workers. The analysis examines the share and characteristics of workers who contribute to retirement plans and the level of their contributions. It describes the patterns of plan contributions over time and how spouses coordinate their contributions. The analysis also shows how key lifecourse events, such as the birth of a child, changes in marital status, and the purchase of a home, affect the level of participation in defined contribution plans.

The results confirm many significant relationships found in other research. For example, we find that about one-quarter of all workers contribute to employer-sponsored tax-deferred retirement accounts, and that the median contribution rate is about 6 percent of earnings. We also find that participation rates and contributions increase with age, education, and earnings. Contrary to other research, our results reveal a fair amount of individual variability in contribution rates over time, but negative shocks to income and increases in current consumption needs do not appear to lead workers to curtail their contributions. Instead, workers appear to raise their contribution rates after they have achieved key milestones in the lifecourse, such as the birth of a child or the purchase of a home.

BACKGROUND

The share of workers with pension coverage on the current job has remained fairly steady over the past 20 years, at about 45 percent (Copeland 2002), but the type of coverage has

changed dramatically. Participation in defined benefit pension plans, long the most common type of retirement plan, has eroded over time, while defined contribution plans have become dominant. From 1980 to 1998, the share of covered private wage and salary workers with a primary defined contribution plan increased from 17 percent to 56 percent (U.S. Pension and Welfare Benefits Administration 2001-2002). During the same period, the share of private pension assets in defined contribution plans increased from 29 percent to 52 percent.[1]

Defined contribution plans, which include 401(k) plans, deferred profit sharing plans, and employee stock ownership plans, function essentially as tax-advantaged retirement savings accounts. Unlike traditional defined benefit plans, they do not promise to pay any particular benefit at retirement. Instead, participants in most defined contribution plans contribute to retirement accounts, which they hold in their own names and generally invest in equities, mutual funds, bonds, cash, and guaranteed investment contracts. At retirement, participants receive benefits equal to the balances that have accumulated in their accounts. In salary reduction plans such as 401(k) plans, which are now the most common type of defined contribution plan, participants defer federal and state personal income taxes on their contributions, up to certain limits. (In 2004, participants may defer taxes on contributions up to $13,000.) Employers also generally make contributions to their workers' retirement accounts. In some plans, employer contributions depend on how much the participant contributes, and some employers contribute only if the participant contributes. In other plans, employers do not contribute at all even when participants contribute.

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[1] Defined benefit plans have also experienced significant change in recent years. Many large employers that offer defined benefit plans have converted to cash balance and other types of hybrid plans that include features characteristic of defined contribution plans, even though they continue to be classified as defined benefit plans (Johnson and Uccello 2004). Thus, the movement away from traditional pension plans to defined contribution formats is even more pronounced than these statistics suggest.

Participation and Contribution Rates in Defined Contribution Plans

Participation in 401(k) plans is voluntary, and few eligible workers make the most of their plans. About one-quarter of eligible participants opt out completely (Copeland and VanDerhei 2000), and only 8 percent of participants contribute the maximum (Munnell and Sundén 2004). Among those who work for employers that offer defined contribution retirement plans and who qualify to participate, participation rates increase with earnings, income, education, and age (Andrews 1992; Bassett, Fleming, and Rodrigues 1998; Hinz and Turner 1998; Kusko, Poterba, and Wilcox 1998; Muller forthcoming; Munnell, Sundén, and Taylor 2003).[2] Participation rates are also higher in plans in which employers match at least part of the contributions made by workers than in plans in which employer contributions do not depend on whether the worker contributes (Basset et al. 1998; Clark, Goodfellow, Schieber, and Warwick 2000; Clark and Schieber 1998; Muller forthcoming; Papke, Petersen, and Poterba 1996). Workers are also more likely to participate when they can borrow from their funds (Munnell, Sundén, and Taylor 2003).

Most studies have found that employee contributions to employer-sponsored retirement plans and contribution rates increase with earnings, income, and age (Andrews 1992; Clark et al. 2000; Clark and Schieber 1998; Holden and VanDerhei 2001).[3] The evidence on the impact of employer match rates on contribution rates is mixed. Clark and Schieber (1998) found that employer match rates significantly increase participant contribution rates, but Andrews (1992) and Munnell et al. (2003) found that they depress participant contribution rates, possibly because

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[2] Muller (forthcoming) finds that the likelihood of participating increases until age 50, and then begins to decline.
[3] However, Andrews (1992) found that earnings has no effect on contribution rates, and Clark et al. (2000) found that contribution rates decline with earnings for workers with very high salaries.

many workers establish savings targets. When their employers contribute generously to their retirement accounts, they can reduce their own contributions and still reach their savings goals.

Most of the existing literature on retirement plans uses cross-sectional data. The few studies that use longitudinal data find that participation and contribution rates are fairly stable over time. For example, Kusko, Poterba, and Wilcox (1998) examined administrative plan data provided by Buck Consultants that tracked employees at a single large firm from 1988 to 1991. They found that most workers maintained the same contribution rate year after year, despite changes in the employer match rate.

Other studies have also found that relatively few people change their retirement savings behavior from one period to the next. For example, in one survey of employees at a large U.S. firm, 35 percent said they were saving too little in their retirement plans and intended to increase their contribution rates in the next few months (Choi, Laibson, Madrian and Metrick 2002). (No one in the survey expressed any plans to lower his or her contribution rate.) However, when the researchers re-interviewed these workers four month later, only 14 percent of the "under-savers" had actually increased their contribution rates. Madrian and Shea (2001) and Papke, Peterson, and Poterba (1996) also found a great deal of stability in participation and contribution rates among workers offered 401(k) plans.

Evidence also exists suggesting persistence in participation in Individual Retirement Accounts (IRAs). Skinner (1992), using a sample of tax returns for the period 1982 to 1986, found strong persistence in IRA contributions among those who first contributed to IRAs at the beginning of the period. Smith (2001) found somewhat less persistence in a panel of individual tax returns from 1987 to 1996, but most of the drop off in those making contributions in his sample occurred in the first four years after the initial contribution to the IRA. Only 45 percent

of eligible taxpayers contributed in 1992, among those who contributed in 1987. However, 40 percent continued to contribute through 1996.

Many of these longitudinal studies use administrative data, either from plan providers or from tax records. They probably provide more accurate information than the many cross-sectional studies based on surveys that collect self-reports of participation and contributions, because most workers are not well-informed about their retirement plans (Johnson, Sambamoorthi, and Crystal 2000; Mitchell 1988).[4] However, few administrative data sets include much information about participant characteristics. They generally lack data, for instance, on participants' marital status, health status, non-employment income, assets held outside of the retirement plan, home purchases, or the characteristics of the spouse. And plan data generally include no information about employees who do not participate. As a result, little is known about how key demographic and economic shocks that can occur over the lifecourse affect participation in retirement plans and the amounts that participants contribute.

Potential Disruptions to Retirement Savings

Economic theory maintains that people save in order to smooth consumption over time. The standard models predict that people defer current consumption and set money aside for the future so as to equalize the marginal utility of consumption in the present period with the expected marginal utility in future periods. This equilibrium condition implies that an unexpected increase in current consumption needs or an unexpected decline in current income will induce people to reduce savings, perhaps in part by lowering their contributions to employer-sponsored retirement plans. Possible examples of these shocks include the loss of a

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[4] A few cross-sectional studies have also used administrative data. These include Holden and VanDerhei (2001), which used data from plan providers, and Joulfaian and Richardson (2001), which used tax data to measure worker contributions to employer-sponsored retirement plans and IRAs.

spouse (due to death or divorce), the onset of health problems for a family member or oneself, and a spell of unemployment. Of course, the impact on retirement contributions may be insignificant if people are able to anticipate these events and plan accordingly.

Key lifecourse events, such as the birth of a child or the purchase of a home, can also lead people to reduce retirement contributions. But workers might choose to maintain their plan contributions and instead increase current spending by borrowing from their 401(k) plans, especially if the shock to income or consumption needs is temporary. Many plans allow workers to borrow from their retirement accounts. The most common reason for loans is to purchase a home or make home improvements or repairs (Munnell and Sundén 2004).[5]

METHODS

We examine contributions to employer-sponsored retirement plans over time and how they interact with key lifecourse events for a large sample of workers. The data come from the 1996 Survey of Income and Program Participation (SIPP), linked to administrative data from the Social Security Administration (SSA)'s Detailed Earnings Record. The SIPP data provide rich demographic, social, and economic information for a nationally representative sample of more than 36,000 households. The 1996 SIPP panel interviewed all household members ages 15 and older every four months, from 1996 until 2000/2001. The survey collected basic demographic data, including age, race, gender, marital status, and education, as well as information about employment status, income, and earnings.

Special topical modules in the SIPP survey provide additional information on marital histories, fertility histories, employment histories, disability, asset holdings, and employer-sponsored pension participation. In particular, the survey asked respondents with work

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[5] In 2001, 16 percent of 401(k) participants eligible to borrow had an outstanding loan, and the average loan balance amounted to 14 percent of the account balance net of the unpaid loan (Holden and VanDerhei 2003).

limitations about when their health problems started, and asked homeowners about when they

purchased their homes. Thus, the data allow us to identify the timing of key lifecourse events,

including marriages, divorces, widowhood, the birth of a child, the onset of health problems that

limit the ability to work, and the purchase of a home.[6] Because the survey interviewed all adult

members of the household, it also provides information about key transitions in the spouse's

life.[7]

The Detailed Earnings Record contains information collected from the Internal Revenue

Service's Form W-2, which employers must file to report salaries and benefits they pay to their

employees.[8] For those individuals in the SIPP who allowed their responses to be matched to

Social Security Administration data, the dataset provides annual information on total earnings,

earnings covered by Social Security, taxable earnings, and tax-deferred contributions to

employer-sponsored retirement accounts from 1990 to 2001.[9, 10] The earnings file also includes

an employer identification code, identifying those who change jobs over time.

We use the contemporaneous and retrospective SIPP data in combination with the

earnings file to create a longitudinal sample extending from 1990 to 2001. For each year, our

sample includes measures of total pre-tax earnings; the level of contributions to employer-

sponsored retirement plans; contributions as a share of pre-tax earnings; earnings and retirement

contributions for the spouse; the respondent's age, gender, race, education, and marital status; the

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[6] Because the survey asked only about the date of purchase of the current home in 1997, we cannot identify previous home purchases.

[7] Information is not available about the characteristics of former spouses from marriages that ended before the baseline 1996 survey, however.

[8] Because of privacy concerns, only researchers who obtain special permission from SSA can access the Detailed Earnings Record, and they can only be analyzed at secure computing facilities at SSA offices. The data are reported separately for self-employed and for wage and salary employees.

[9] Information on retirement plan contributions correspond to codes d through h in box 13 on the W-2 form: 401(k), SIMPLE, 403(b), 408(k)(6), SEP, 457(b), and 501(c)(18)(D) plans.

presence of any work limitations for the respondent or spouse; home ownership; and indicators of a change in marital status, the onset of work limitations (for the respondent or spouse), the purchase date of a home, and the loss of spousal income. All dollar amounts are expressed in constant 2004 dollars (indexed to changes in the Consumer Price Index).

An important limitation of our dataset is that it does not provide reliable information about defined contribution plan offers before 1997. The survey asked respondents in 1997 whether their employers offered defined contribution retirement plans and whether they were eligible to participate, but it did not ask about when the employer first began offering the plan. The survey did ask respondents about the number of years they have spent working for the employer (and the earnings file also provides employer identification codes that allow us to identify job changes), but some employers who offered plans in 1997 may not have offered them in 1990, especially given the growth in 401(k) plans that occurred during the 1990s. Thus, we cannot realistically assume that workers whose employers offered 401(k) plans in 1997 had access to them from the time they joined their employers. As a result, we cannot measure participation rates before 1997 conditional on eligibility (although we do construct this measure for 1997).

In addition, some measures that are likely to be associated with retirement plan contributions are not available before 1996, because the survey did not collect retrospective data on many topics. These unavailable measures include total family income, assets, and employer match rates.

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[10] We restrict the sample to SIPP wave 7 respondents with a match on the Detailed Earnings Record. About 16 percent of wave 7 respondents do not have a match on the Detailed Earnings Record, primarily because they refused to report their Social Security numbers.

We restrict the sample to workers ages 20 to 69 who report positive earnings in the given year. We exclude workers younger than 20 because many employers do not allow them to participate in retirement plans, and we exclude workers older than 69 because people must begin withdrawing funds from defined contribution plans at age 69-and-a-half. Our sample includes 373,971 observations between 1990 and 2001 on 65,430 individuals, 31,825 of whom had earnings in 1997.

We begin by tabulating participation rates, contribution levels, and contributions by year, age, gender, race, marital status, educational attainment, and earnings level. We also examine the correlation of contributions between husbands and wives. Next, we examine contribution patterns over time. Finally, we estimate logit models of the participation decision and linear regression models of the level of contributions, for workers contributing to their retirement plans. Predictors in the model include age and its square (to capture nonlinear effects of age), marital status, earnings, the number of children under age 18, the presence of a work limitation, the presence of a working spouse, and indicators (during the current year) of the onset of work limitations, the purchase of a home, the birth of a child, the death of a spouse, the dissolution of a marriage through divorce, and measures of unemployment and job change. We also experiment with lagging these indicators, to explore whether the impact on retirement contributions persists a few years after the event.

RESULTS

Participation in Defined Contribution Retirement Plans

About 27 percent of workers between the ages of 20 and 69 contributed to a tax-deferred employer-sponsored retirement plan between 1990 and 2001 (see table 1). Participation rates increased over the period, as more employers began offering these types of plans to their workers

and as workers became more familiar with them. Between 1990 and 2001, the share of workers contributing to defined contribution retirement plans doubled, rising from 17 percent to 34 percent. In every year, the participation rate increased with age until workers reached their mid-50s, and then fell at older ages (see figures 1 and 2).[11]

Participation rates also increased with both individual and family earnings (see figure 3). Interestingly, participation rates rose monotonically with family earnings, but they fell with own earnings once earnings levels exceeded $130,000 per year. This difference may be due to federal nondiscrimination rules that limit participation in retirement plans by highly compensated employees or by differences in the likelihood of participation between wage and salary workers and self-employed workers (since many of the high earners are self-employed). This surprising finding merits further exploration.

Although figure 1 reports participation rates for all workers, many employers do not offer tax-deferred plans to their employees. As noted earlier, SIPP did not collect retrospective information on employer plan offers, but it did collect data on plan offers in 1997. Only about 42 percent of workers were offered retirement plans by their employers in 1997 (see appendix table A2). When we restrict our sample to workers whose employers offered retirement plans, participation rates in 1997 rise from 30 percent to 72 percent (see figure 4). Conditioning the sample on the receipt of offers does not substantially change the patterns of participation. As we found in the full sample of workers, participation among workers with offers increased with age through about age 55 and then fell. Differences in participation rates between the full sample and the sample of workers with plan offers were greater for younger and older workers than for those ages 30 to 59. This finding implies that one reason for the low participation rate among young workers is that they tend to work in jobs that are less likely to offer retirement plans (see

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[11] More detailed results are available in the appendix tables.

figure 5). Similarly, we find that workers with low earnings are less likely to receive plan offers

from their employers than better-paid workers, explaining part of the difference in retirement

plan participation by earnings (see figure 6). However, participation rates among workers with

offers also increase with earnings.

Among workers offered tax-deferred retirement plans, participation rates were similar for

men and women, but differed along other demographic characteristics (see table 2). For

example, participation rates were higher for married workers than single workers and increased

with education. They were also higher for non-Hispanic whites than for blacks or Hispanics.

Contribution Levels and Rates

Over the period, mean real annual contributions among participants in employer-

sponsored retirement accounts were about $3,300 (in 2004 dollars), or 5.4 percent of total

earnings (see table 3). The level of real contributions generally increased during the 1990s,

rising from an average of about $3,000 in 1991 to $3,600 in 2001. The growth in real earnings

accounted for part of the increase, but age-specific contribution rates (contribution amount/total

earnings) also increased over time for participants younger than age 50.[12] Interestingly,

contribution rates appear to have fallen slightly over time for the oldest workers.

Average real contribution amounts among participants increased with both own and

family earnings (see figure 7). Contribution rates did not, however, rise monotonically with

earnings—instead, they exhibited more of an S-shaped pattern (see figure 8). The average

contribution rate was about 5 percent for participants earning less than $5,000 per year. The rate

then fell to about 4 percent for participants earning about $20,000 per year, increased to about 7

percent for participants earning about $90,000 per year, and fell back to about 5 percent for the

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[12] Contributions in 1990 appear to be unusually high, especially for older workers. This result could reflect start-up problems with the data collection system, and merits further investigation.

highest earners. Contribution limits and nondiscrimination rules prevent high earners from

contributing at higher rates. Despite these limits, the highest income group did contribute more

on average than any other group of workers. And at all levels of earnings, younger participants

tended to contribute a smaller share of their earnings than older participants.

The median contribution rate for participants between 1990 and 2001 was about 6

percent, and it increased with age (see figure 9). About 83 percent of 20- to 29-year-old

participants contributed less than 6 percent, compared with only 48 percent of 60- to 64-year-

olds.

Correlation of Participation Between Husbands and Wives

One of the key advantages of our data is that they include information on participation

and contribution levels for both husbands and wives. Table 4 shows the weighted number of

married couples ages 20 to 69 (husband's age) in 1997 by both the husband's and wife's

contribution levels. Of the nearly 40 million couples, 56 percent had no family tax-deferred

contributions in 1997. Only the husband contributed to a tax-deferred plan in 23 percent of

couples, and only the wife contributed in 12 percent of couples. Both spouses contributed in 10

percent of couples.

Generally, the husband's contribution increased with the wife's contribution. Figure 10

shows the distribution of husband's deferred contribution by the wife's contribution in 1997.

Among couples in which the wives did not contribute to an employer-sponsored retirement plan,

71 percent of their husbands did not contribute at all and only 8 percent of them made annual

contributions of $5,000 or more. The share of husbands who did not contribute fell as their

wives' contributions increased. For wives contributing $5,000 or more, only 42 percent of

husbands made no deferred contributions, whereas another 42 percent of husbands contributed $5,000 or more.

Tracking Individual Participation Rates Over Time

Another advantage of our data is that they allow us to track deferred contributions between 1990 and 2001 for our sample of workers. Among individuals ages 20 to 69 in 2001, 58 percent did not make any contributions to employer-sponsored tax-deferred retirement plans over the 12-year period (see table 5). Overall, 19 percent of workers contributed in 1 to 4 years during the period, another 17 percent contributed in 5 to 10 years, and 6 percent contributed in 11 to 12 years. The share of individuals with no contributions was especially high at both ends of the age distribution, because both older and younger people were less likely than others to have worked throughout the entire 12-year observation period and to have held jobs that offered defined contribution plans. Between ages 30 and 59, the number of years during the period in which workers participated generally increased with age. But even among workers ages 50 to 59, only 8 percent participated in every year. Men tended to have more years of participation than women, reflecting their stronger attachment to the labor force, but the differences were small.

Contribution Patterns Over Time

Next we explore contribution patterns over the 12-year period, that is, the variability of participation and contribution rates over time. We classify participants into the following five mutually exclusive categories:

1. Intermittent—individuals with more than one spell of deferred contributions (that is, those who had at least one complete calendar year with no contributions between years with positive contributions);

2. Steady—individuals with stable contribution rates (contributions divided by total earnings) over time. Specifically, the annual change in the contribution rate did not exceed one percentage point in any years with positive contributions;

3. Rising—individuals with rising contribution rates over time. Specifically, the annual increase in the contribution rate exceeded one percentage point in at least one year with positive contributions, and the contribution rate never fell by as much as one percentage point;

4. Falling—individuals with falling contribution rates over time. Specifically, the annual decrease in the contribution rate exceeded one percentage point in at least one year with positive contributions, and the contribution rate never increased by as much as one percentage point;

5. Fluctuating—individuals whose contribution rates rose and fell during the period.

We restrict the sample to individuals between the ages of 20 and 69 in 2001 who contributed to an employer-sponsored tax-deferred retirement plan at some point between 1990 and 2001.

About 27 percent of our sample made steady contributions and 24 percent had only rising contributions. Nearly half of all contributors had more variable contribution patterns. Nineteen percent had intermittent contributions, 8 percent had falling contribution rates, and 23 percent had fluctuating contributions (see figure 11). The variation in contribution rates is noteworthy, because it calls into question the finding from previous research that individuals rarely change their contribution behavior over time (Choi et al. 2002; Madrian and Shea 2001; Papke, Peterson, and Poterba 1996). Contribution patterns were more stable for younger workers, but they have had fewer years to contribute to plans.

Not surprisingly, contribution patterns become increasingly variable as the length of the contribution period increases (see figure 12). Among workers with 12 years of deferred contributions, for example, 53 percent had fluctuating contribution rates, compared with just 26 percent among those with 5 to 7 years of contributions. Although much of the rise in fluctuations with years of contributions may be due simply to increased exposure, contribution limits may also play a role, as workers' earnings increase over time. In fact, the share of workers with intermittent and fluctuating contributions increases with earnings. For example, the majority of lower-earning workers make steady contributions, compared with only about 5 percent of workers earning between $100,000 and $150,000 per year (see figure 13).

Contribution limits may cause the contribution rate to decline for high earners as earnings rise, but they should not reduce the amount contributed by highly compensated workers below the statutory cap. We explore whether contribution limits account for fluctuations over time in the contribution rate by re-defining our contribution profiles. Instead of defining our profiles on the basis of a one percentage point change in the contribution rate, we define them using a 10-percent change in the nominal contribution amount. Using our alternate definition of contribution profiles, we continue to find that a larger share of high-earning workers exhibit fluctuating contribution patterns than low-earning workers. This result implies that contributions fluctuate independent of the contribution limits. About 22 percent of high earners (with average earnings of $60,000 or more per year) have intermittent contributions.

Multivariate Estimates of Participation and Contributions

Table 6 reports logistic regression coefficient estimates for plan participation for workers offered employer-sponsored tax-deferred retirement plans in 1997. The most important predictor of participation was own earnings. As income rises, families are able to save more of their

earnings, and the tax advantages of saving in tax-deferred vehicles increase. Age is also important. The probability of participating increased with age, but at a decreasing rate. Controlling for earnings and other characteristics, married couples were less likely to participate than single individuals, especially when both spouses were employed, but the probability of participating increased the more the worker's spouse contributed. This result implies that couples share retirement saving goals, with both partners tending to contribute together. Having a defined benefit plan in addition to a defined contribution plan increased the worker's probability of participating in the defined contribution plan. Owning a home increased the probability of participating in a tax-deferred plan, but (contrary to our expectations) workers did not halt plan contributions in the period before they purchased their home. Changes in marital status do not appear to alter workers' participation decisions: None of the marital status change variables were significant. Participation rates declined slightly with the number of children under age 18, but the birth of a child in the current or previous year increased participation rates.

The presence of health problems that limit work did not have a significant impact on participation for the worker, but having a spouse with health problems increased the probability of contributing to a retirement plan.[13] Changing jobs and returning to work after a period of no employment (zero earnings for at least one calendar year) significantly reduced the probability that the worker contributed, probably because many employers impose minimum tenure requirements on new employees before they can participate in the plan. In addition, the probability of participating increased when the spouse changed jobs or returned to work, perhaps because these transitions increased family income. We found that the probability of participation was greater for workers who could borrow from their plans than for those who could not borrow,

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[13] The sample is restricted to working individuals offered a plan. This implies that any reported work limitations were not severe enough to prevent the respondent from remaining employed.

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but the probability of participation fell when the employer contributed to the plan. This result suggests that many workers may have particular savings targets, and that they choose to divert less of their current income to savings when their employers save on their behalf.

Table 7 reports results from our OLS regression of tax-deferred retirement contributions for participating workers. Holding other factors constant, contributions increased with earnings and age (after about age 33). Having a spouse who contributed to a deferred plan lowered contribution amounts, but own contributions increased when the spouse began making contributions and as the spouse's contributions rose. Own contributions were higher in the year after a spell of unemployment for both the worker and the spouse, perhaps because workers strive to catch-up on their retirement savings after a period with no earnings (and presumably no savings). Contributions decreased, however, after workers changed jobs, but they increased after their spouses changed jobs. Own and spouse work limitations did not significantly affect contribution levels. Contributions fell slightly with the number of children under age 18, but did not change significantly around the birth of a child. Changes in marital status did not significantly impact contribution amounts. Homeowners contributed more on average than renters, but contribution amounts declined slightly in the year of the home purchase. Neither employer contributions nor the ability to borrow from the retirement plan significantly affected the level of plan contributions.

CONCLUSIONS

Our exploratory analysis of SIPP data matched to the Detailed Earnings Record indicates that this newly available dataset provides a useful source of information on the dynamics of retirement plan contributions. Many of our results confirm findings from earlier studies. For example, we find that about one-quarter of all workers contribute to employer-sponsored tax-

deferred retirement accounts, and that the average contribution rate is about 6 percent of earnings. We also find that participation rates and contributions increase with age, education, and earnings, consistent with well-established results from previous work.

The data also reveal a few surprising patterns. In particular, we find that contribution rates fluctuated quite a bit over time. Among workers who ever contributed to tax-deferred plans through their employers between 1990 and 2001, only 27 percent contributed roughly the same share of earnings every year. And among those who contributed in all 12 years, 53 percent exhibited fluctuating contribution rates. These findings call into question the commonly held belief that retirement plan participants passively accept default options and rarely adjust their retirement plan contributions.

Workers appear to revise their retirement contributions as they progress over the lifecourse. Many increase their contribution rates after they have achieved key milestones, such as the birth of a child or the purchase of a home. With these experiences under their belts, they may be better able (psychologically or financially) to begin preparations for retirement. The results also show that participation rates and contribution amounts decreased after job changes, reflecting the fact that many employers do not allow new workers to participate in their retirement plans until they have spent at least one year on the job. A spell of unemployment reduced the probability of participation, but increased contribution amounts among those who did participate after they were re-employed. It appears, then, that many unemployed people try to "catch up" in their retirement savings when they resume work. We found little evidence, however, that other potential negative shocks to income or increases in current consumption needs — such as the onset of health problems or the loss of a spouse — lead workers to curtail their retirement plan contributions. But workers could react to these financial pressures by

borrowing money from their 401(k) plans or taking lump-sum distributions, which might threaten retirement security even if they maintain their plan contributions.

With the erosion of traditional defined benefit pension plans and the growth in defined contribution vehicles, sound retirement planning increasingly depends on the commitment of individuals to invest in tax-deferred retirement accounts throughout their work lives. Our results suggest that relatively few workers take full advantage of the retirement savings options available to them. Participation rates in employer-sponsored tax-deferred retirement plans are low at younger ages, and contributions fluctuate over time. Policies that encourage higher participation and contribution levels throughout workers' careers could significantly enhance retirement security.

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Figure 1. Participation Rates for Workers by Age and Year, 1990, 1995, and 2001
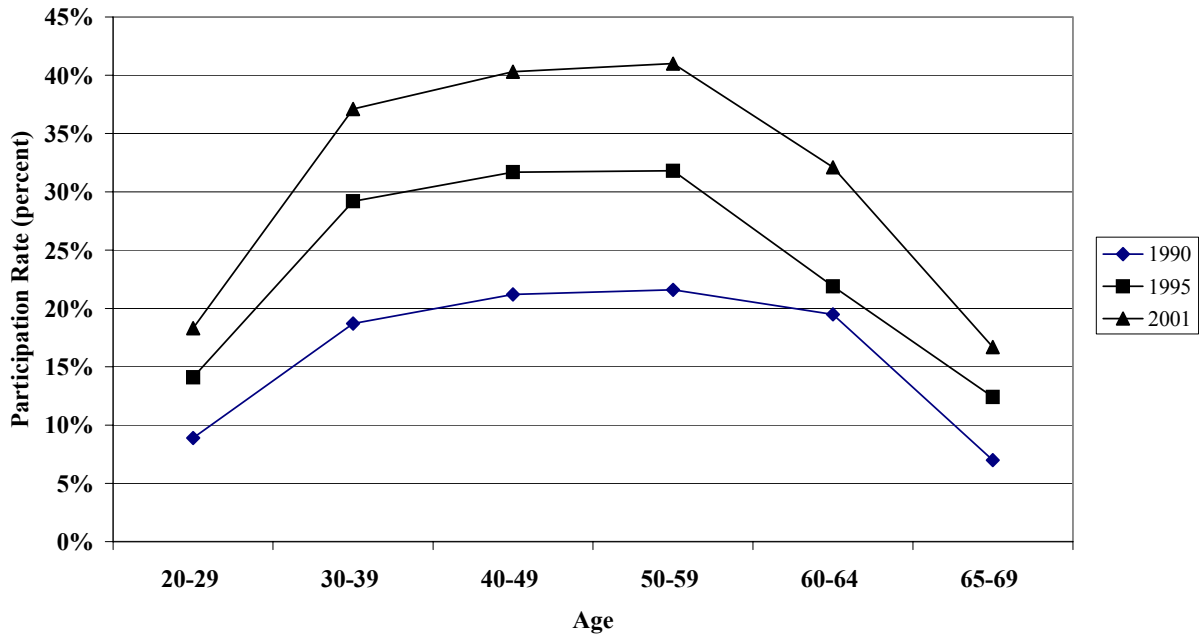
Note: The sample includes all workers ages 20 to 69, including those not offered defined contribution retirement plans by their employers. There were 29,195 observations in 1990, 31,005 observations in 1995, and 32,964 observations in 2001.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 2. Participation Rates for Workers by Age, 1990 to 2001
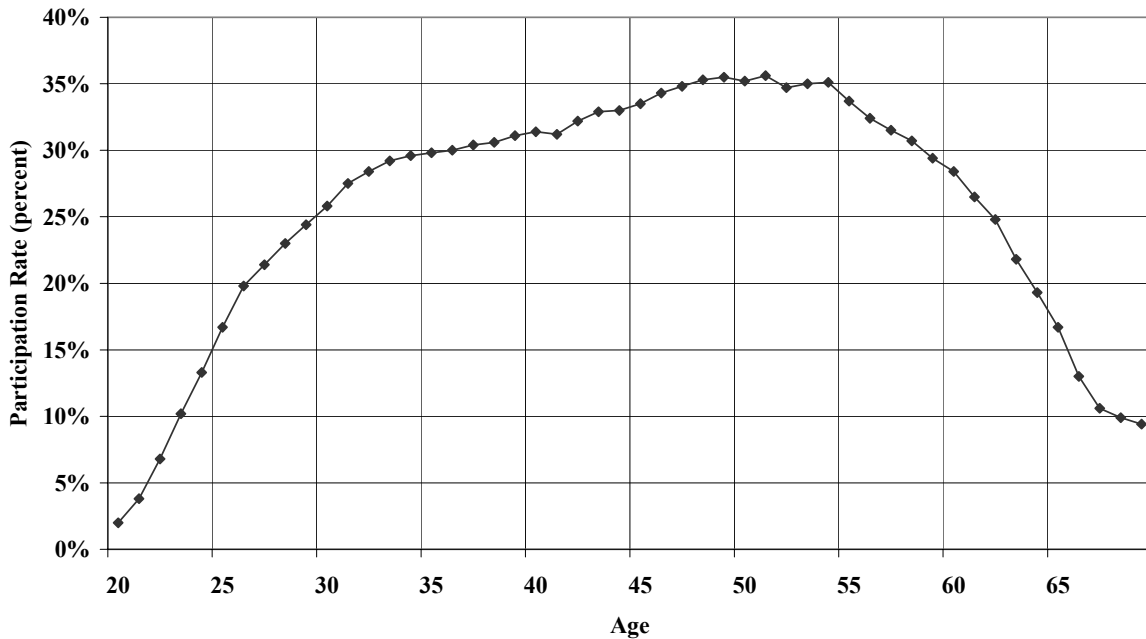
Note: The sample consists of 373,971 observations between 1990 and 2001 on workers ages 20 to 69, including those not offered defined contribution retirement plans by their employers.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 3. Participation Rates for Workers by Own and Family Earnings, 1990 to 2001
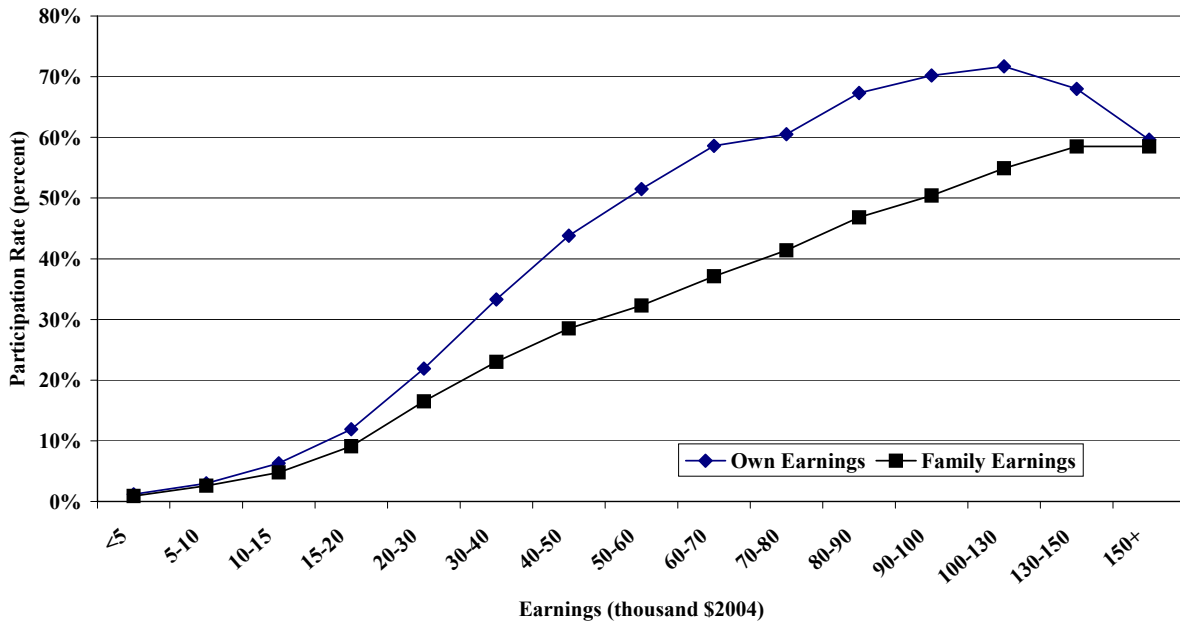
Note: The sample consists of 373,971 observations between 1990 and 2001 on workers ages 20 to 69, including those not offered defined contribution retirement plans by their employers.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 4. Participation Rates by Age for All Workers and Those with Plan Offers, 1997

Note: The sample consists of 31,825 workers ages 20 to 69 in 1997, including 13,108 workers whose employers offered them tax-deferred retirement plans.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 5. Share of Workers Offered a Tax-Deferred Retirement Plan and Participation Rates Among Those With Offers, by Age, 1997

Note: The sample consists of 31,825 workers ages 20 to 69 in 1997, including 13,108 workers whose employers offered them tax-deferred retirement plans.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 6. Share of Workers Offered a Tax-Deferred Retirement Plan and Participation Rates Among Those With Offers, by Earnings, 1997
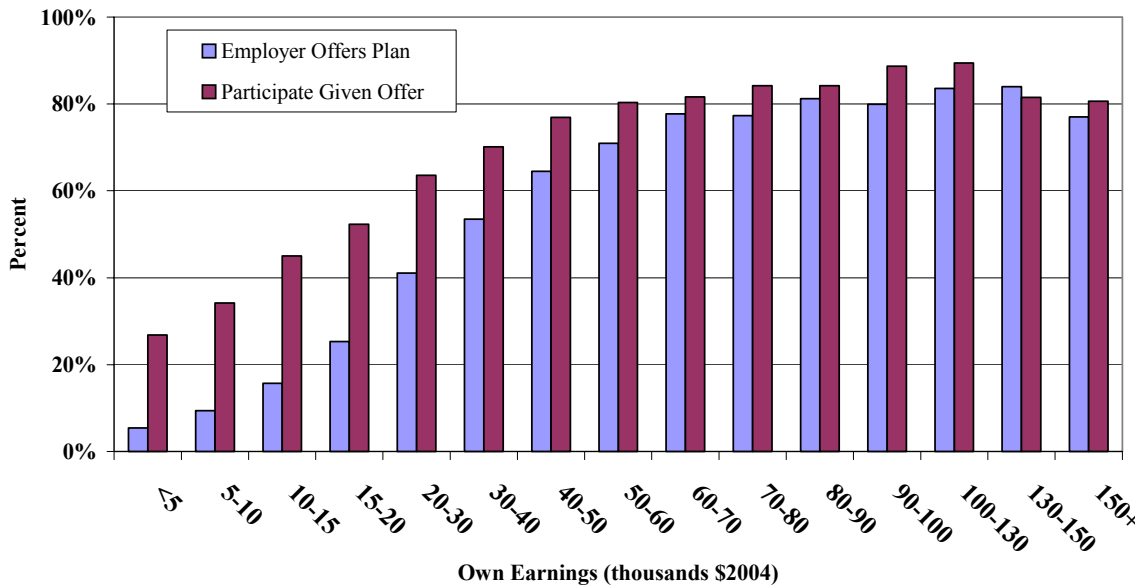
Note: The sample consists of 31,825 workers ages 20 to 69 in 1997, including 13,108 workers whose employers offered them tax-deferred retirement plans.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 7. Average Annual Real Contribution Amounts Among Plan Participants, by Own and Family Real Earnings, 1990 to 2001
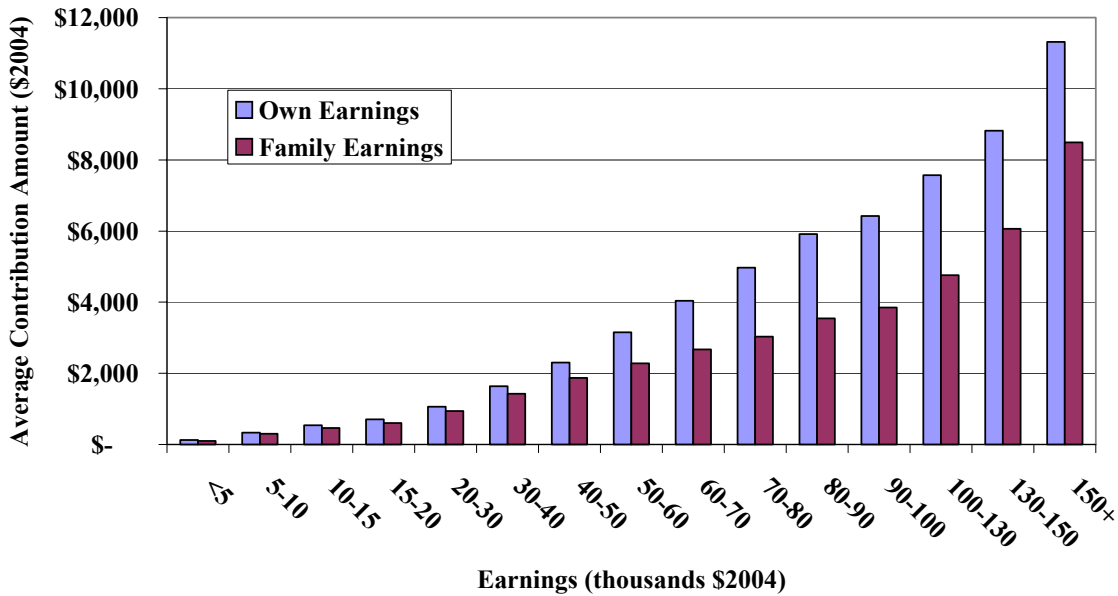
Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. Annual earnings and contribution amounts are expressed in constant 2004 dollars.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 8. Average Contribution Rates Among Plan Participants, by Own Earnings and Age, 1990 to 2001
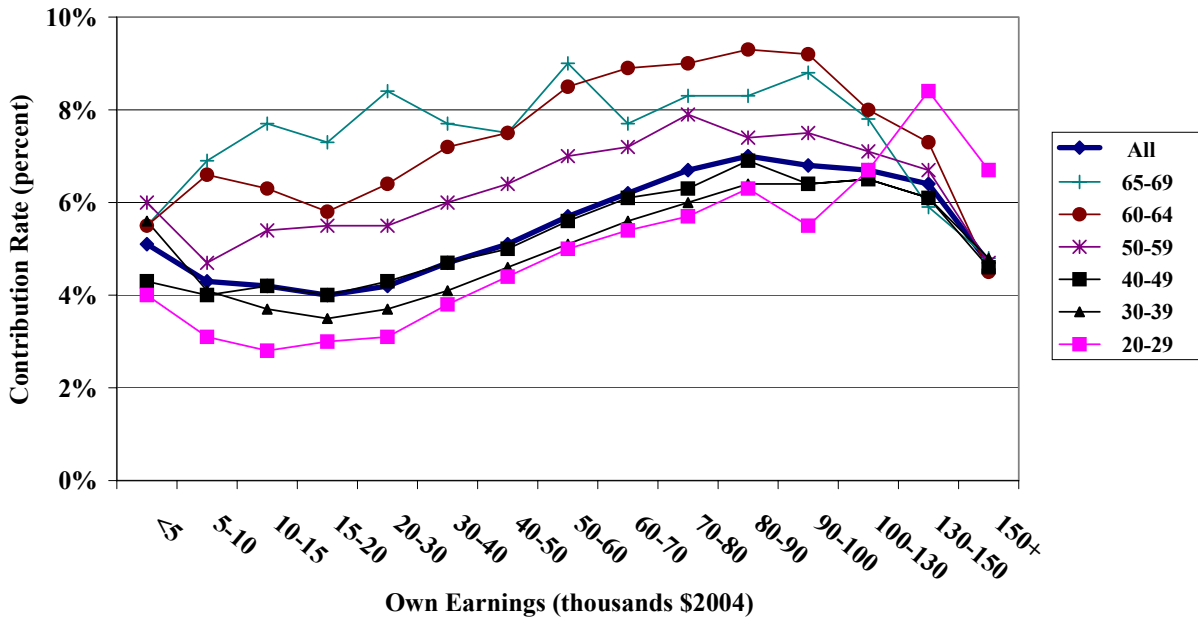
Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. Annual earnings and contribution amounts are expressed in constant 2004 dollars. The contribution rate is defined as the annual contribution amount divided by total annual earnings.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 9. Distribution of Contribution Rates for Participants by Age, 1990 to 2001
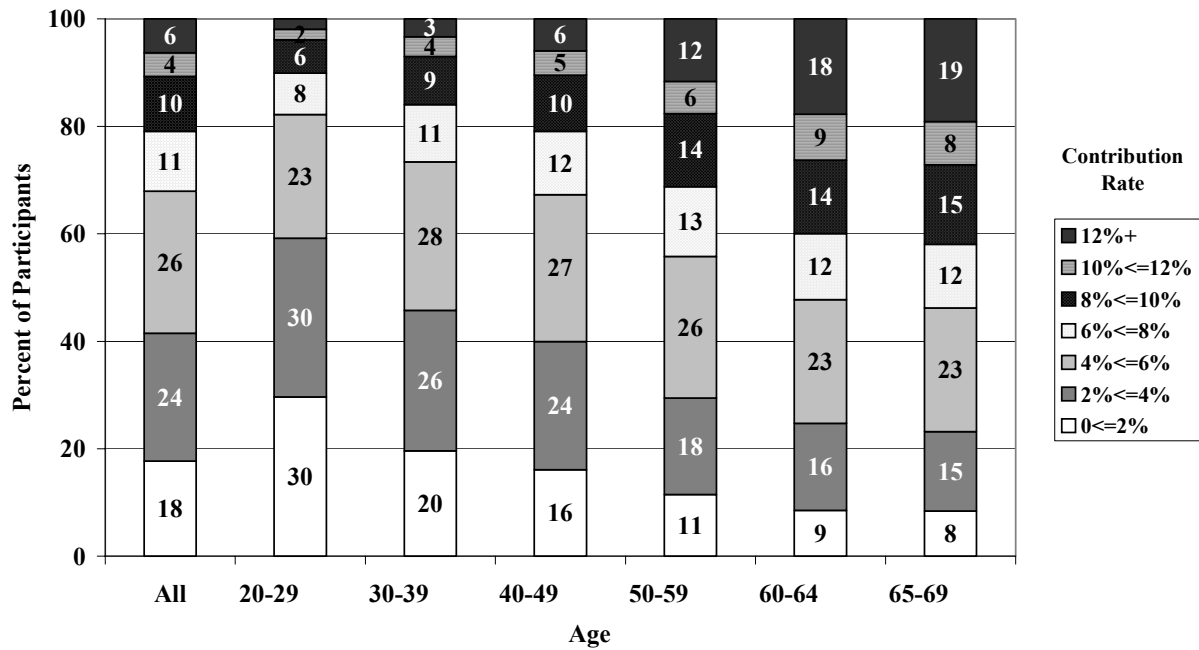
Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. The contribution rate is defined as the annual contribution amount divided by total annual earnings.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 10. Distribution of Husband's Contributions by Wife's Contribution, 1997
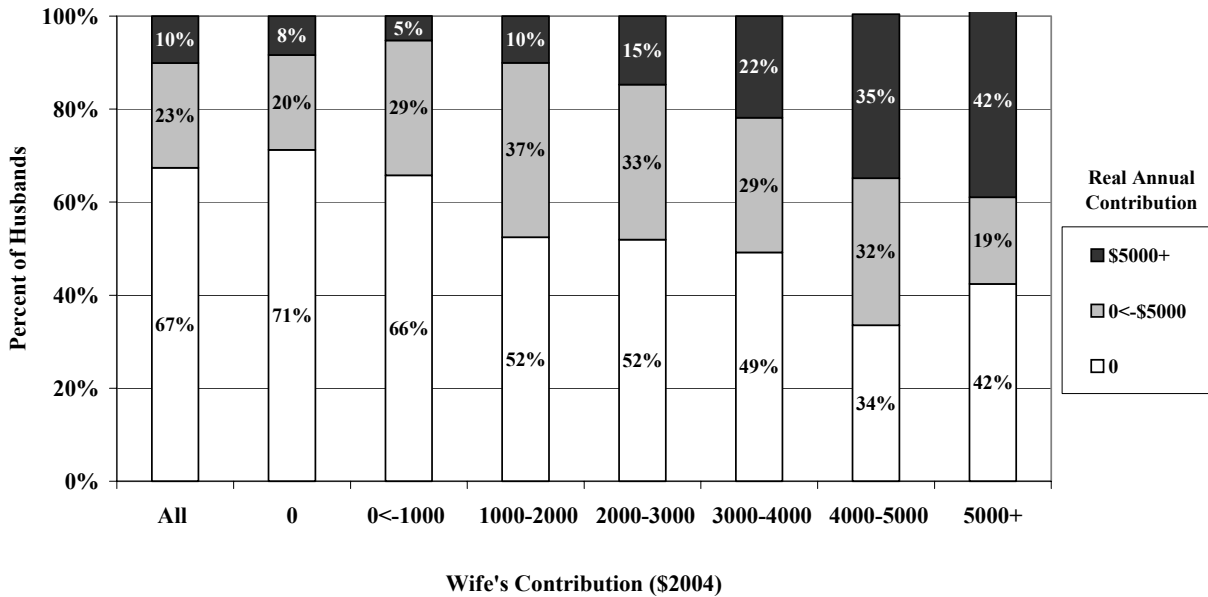
Note: The sample consists of 11,221 married couples in 1997, in which the husband was between the ages of 20 and 69 and information from the Detailed Earnings Record was available for both spouses. The sample includes respondents regardless of employment status or plan offers. Contribution amounts are expressed in constant 2004 dollars.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 11. Distribution of Contribution Patterns between 1990 and 2001, by Age
(Defining Patterns Using a One-Percentage-Point Change in the Contribution Rate)
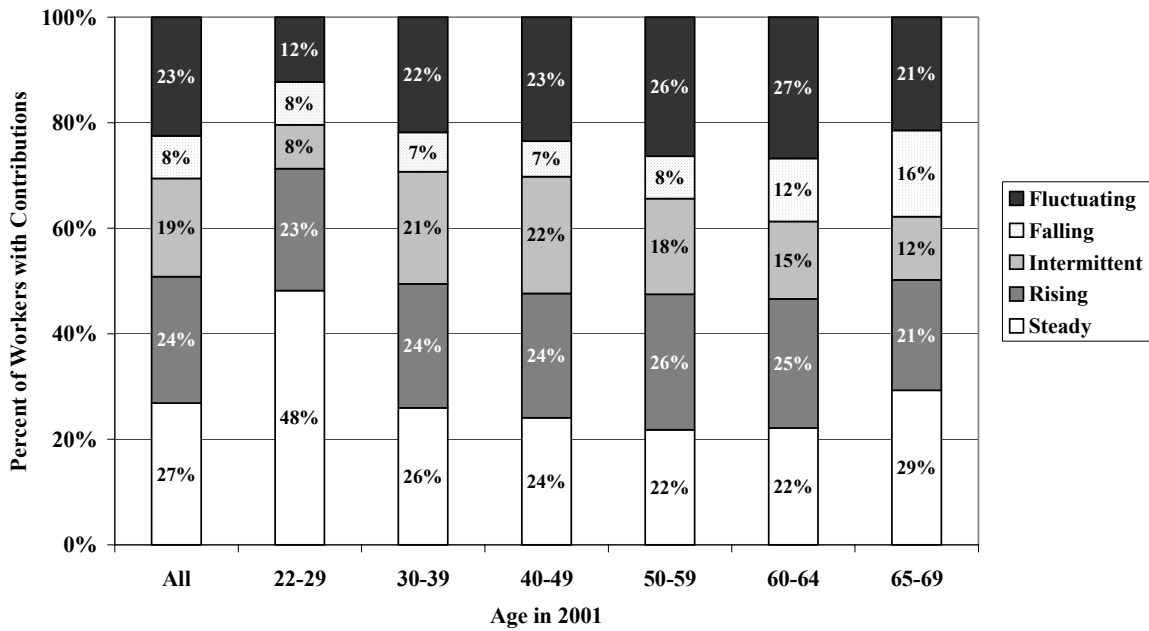
Note: The sample includes 17,266 respondents ages 20 to 69 in 2001 who contributed to an employer-sponsored tax-deferred retirement plan at some point between 1990 and 2001. Definitions of contribution patterns are provided in the text.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 12. Distribution of Contribution Patterns between 1990 and 2001, by Years of Contributions
(Defining Patterns Using a One-Percentage-Point Change in the Contribution Rate)

Note: The sample includes 17,266 respondents ages 20 to 69 in 2001 who contributed to an employer-sponsored tax-deferred retirement plan at some point between 1990 and 2001. Definitions of contribution patterns are provided in the text.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 13. Distribution of Contribution Patterns between 1990 and 2001, by Average Real Earnings
(Defining Patterns Using a One-Percentage-Point Change in the Contribution Rate)

Note: The sample includes 17,266 respondents ages 20 to 69 in 2001 who contributed to an employer-sponsored tax-deferred retirement plan at some point between 1990 and 2001. Definitions of contribution patterns are provided in the text. Earnings are expressed in constant 2004 dollars.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Figure 14. Distribution of Contribution Patterns between 1990 and 2001, by Average Real Earnings
(Defining Patterns Using a 10% Change in the Nominal Contribution Amount)
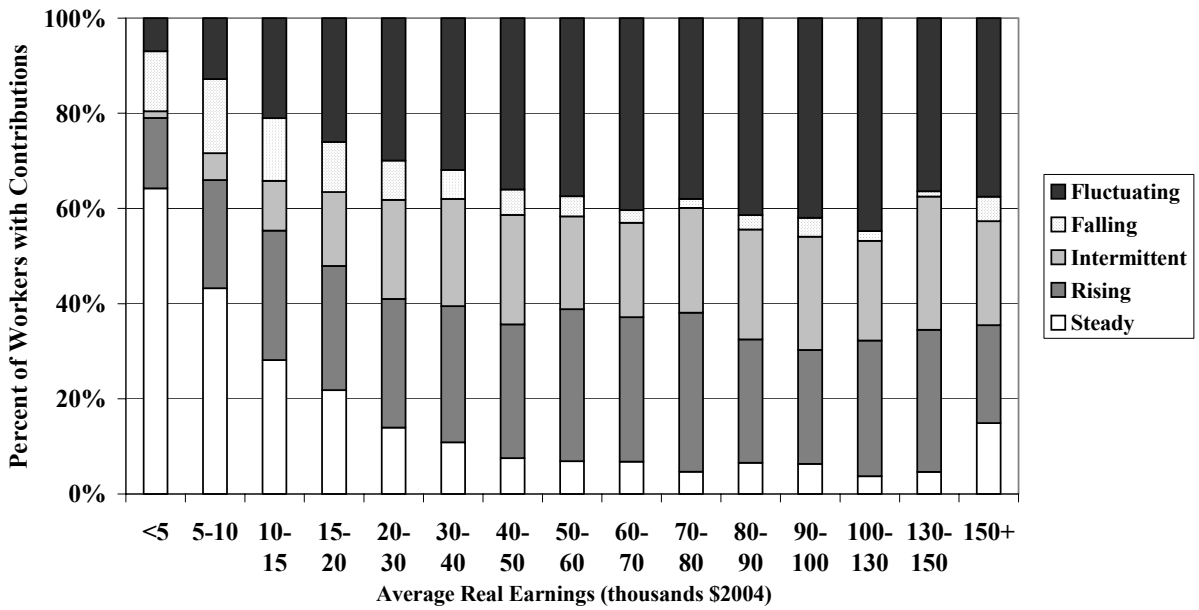
Note: The sample includes 17,266 respondents ages 20 to 69 in 2001 who contributed to an employer-sponsored tax-deferred retirement plan at some point between 1990 and 2001. Definitions of contribution patterns are provided in the text. Earnings are expressed in constant 2004 dollars.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 1

PARTICIPATION RATES FOR WORKERS AGES 20 TO 69 BY YEAR, 1990 to 2001

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
Year							
All	0.27	0.14	0.29	0.33	0.34	0.25	0.12
1990	0.17	0.09	0.19	0.21	0.22	0.20	0.07
1991	0.19	0.11	0.22	0.24	0.25	0.19	0.12
1992	0.21	0.12	0.23	0.27	0.27	0.20	0.11
1993	0.22	0.12	0.25	0.28	0.28	0.19	0.09
1994	0.24	0.13	0.27	0.30	0.30	0.21	0.12
1995	0.26	0.14	0.29	0.32	0.32	0.22	0.12
1996	0.28	0.15	0.31	0.34	0.34	0.23	0.13
1997	0.30	0.17	0.33	0.36	0.36	0.26	0.13
1998	0.31	0.18	0.35	0.38	0.38	0.28	0.14
1999	0.33	0.18	0.35	0.40	0.40	0.31	0.14
2000	0.33	0.18	0.36	0.41	0.41	0.31	0.14
2001	0.34	0.18	0.37	0.40	0.41	0.32	0.17

Note: The sample consists of 373,971 observations between 1990 and 2001 on workers ages 20 to 69, including those not offered defined contribution retirement plans by their employers.

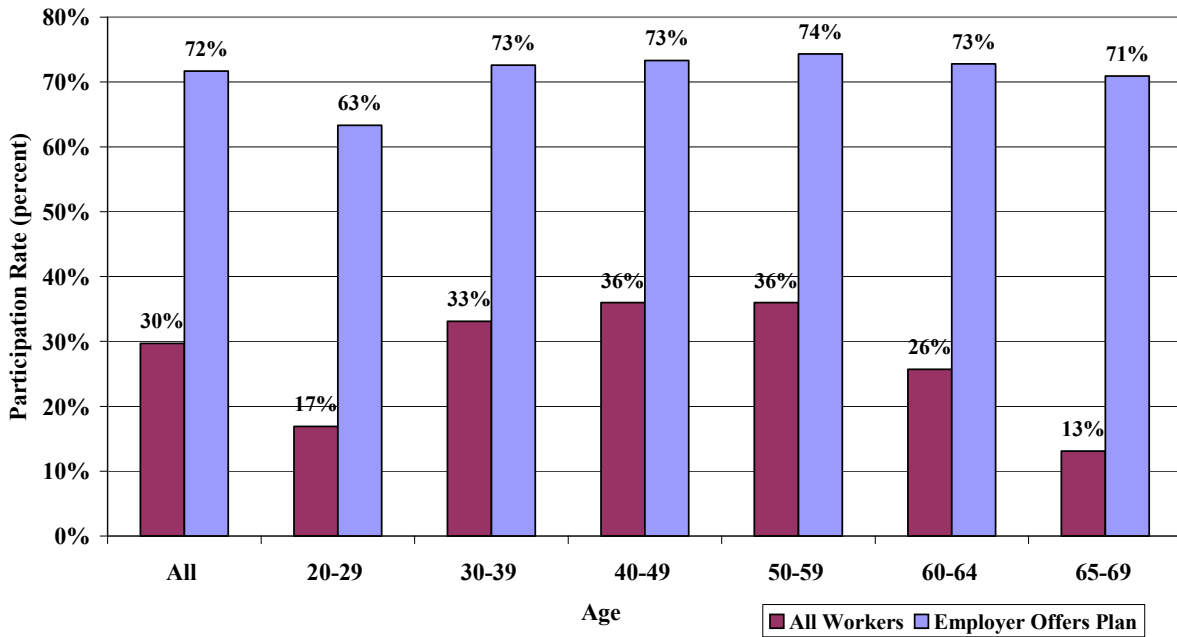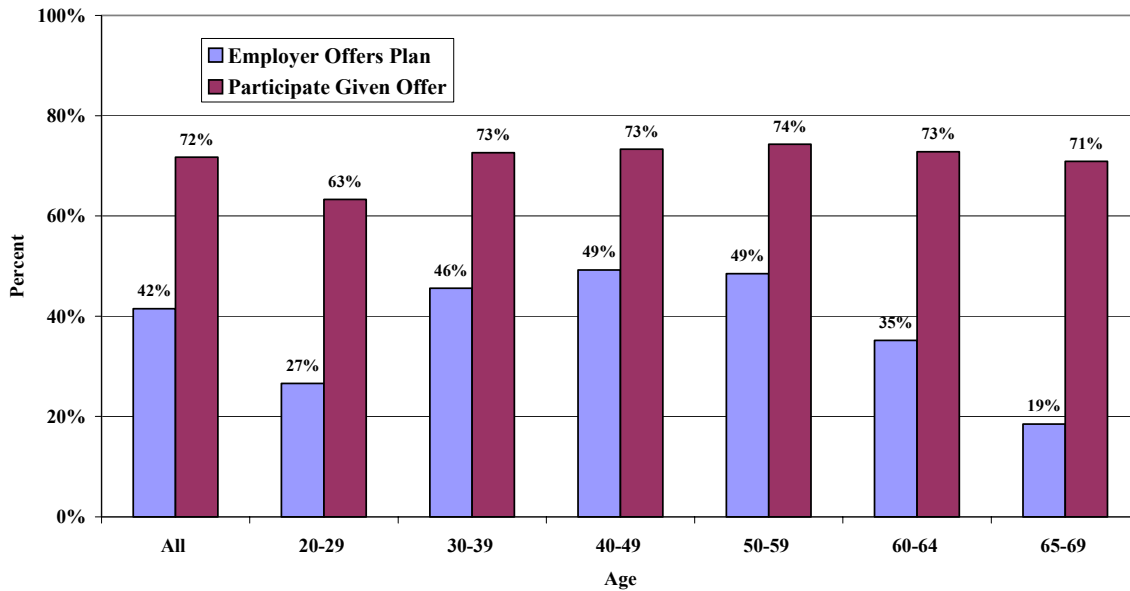Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 2
PARTICIPATION RATE AMONG WORKERS OFFERED A PLAN,
BY PERSONAL CHARACTERISTICS, 1997

	All	Age 20-29	30-39	40-49	50-59	60-64	65-69
All	0.72	0.63	0.73	0.73	0.74	0.73	0.71
Sex							
Male	0.72	0.63	0.74	0.72	0.74	0.74	0.67
Female	0.72	0.64	0.71	0.75	0.75	0.72	0.75
Marital Status							
Never Married	0.67	0.61	0.73	0.72	0.72	0.52	0.66
Married	0.73	0.67	0.73	0.75	0.75	0.73	0.67
Widowed	0.73	.	0.66	0.60	0.72	0.91	0.75
Divorced	0.70	0.54	0.68	0.69	0.73	0.71	0.95
Race/Ethnicity							
Non-Hispanic White	0.73	0.65	0.73	0.74	0.74	0.74	0.70
Non-Hispanic Black	0.67	0.53	0.68	0.70	0.70	0.82	0.36
Hispanic	0.66	0.59	0.69	0.63	0.75	0.58	1.00
Other	0.76	0.72	0.77	0.75	0.80	0.59	1.00
Education							
Did Not Complete High School	0.58	0.44	0.54	0.60	0.62	0.65	0.72
High School Graduate	0.69	0.60	0.70	0.70	0.73	0.72	0.73
College Graduate	0.78	0.71	0.79	0.80	0.78	0.77	0.67

Note: The sample consists of 13,108 workers ages 20 to 69 in 1997 whose employers offered them tax-deferred retirement plans.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 3

AVERAGE ANNUAL REAL CONTRIBUTION AMOUNT AND CONTRIBUTION RATE AMONG
PLAN PARTICIPANTS, BY AGE AND YEAR, 1990 to 2001

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
Year				**Average Annual Contribution Amount ($2004)**			
All	3,288	1,750	2,899	3,596	4,219	4,351	3,713
1990	3,158	1,488	2,427	3,791	4,546	4,527	6,301
1991	2,958	1,770	2,429	3,244	4,146	4,478	4,108
1992	2,986	1,813	2,426	3,279	4,180	4,450	3,437
1993	3,038	1,413	2,598	3,427	4,187	4,318	3,952
1994	3,049	1,530	2,572	3,457	4,129	4,065	4,007
1995	3,043	1,458	2,599	3,474	4,061	3,757	4,119
1996	3,113	1,571	2,726	3,416	4,087	4,074	3,589
1997	3,208	1,685	2,948	3,446	4,082	4,253	3,496
1998	3,413	1,913	3,067	3,628	4,357	4,390	3,727
1999	3,482	1,825	3,249	3,708	4,179	4,822	3,158
2000	3,719	1,897	3,497	4,100	4,367	4,405	2,980
2001	3,637	2,275	3,494	3,735	4,278	4,385	3,558
				Average Contribution Rate (deferred contribution/total earnings)			
All	5.4%	3.9%	4.8%	5.4%	6.5%	7.5%	7.6%
1990	5.0%	3.6%	4.3%	5.1%	6.8%	7.5%	8.6%
1991	4.9%	3.6%	4.3%	5.0%	6.4%	7.8%	7.6%
1992	5.0%	3.7%	4.4%	5.0%	6.4%	7.8%	7.7%
1993	5.1%	3.5%	4.6%	5.2%	6.6%	7.7%	8.3%
1994	5.2%	3.9%	4.6%	5.3%	6.5%	7.4%	8.1%
1995	5.2%	3.7%	4.7%	5.3%	6.4%	6.8%	8.3%
1996	5.3%	3.8%	4.8%	5.4%	6.5%	7.3%	7.7%
1997	5.4%	4.1%	4.9%	5.4%	6.5%	7.3%	7.6%
1998	5.5%	4.3%	5.0%	5.5%	6.6%	7.3%	7.4%
1999	5.6%	4.1%	5.2%	5.5%	6.5%	7.5%	7.4%
2000	5.6%	4.1%	5.2%	5.6%	6.5%	7.6%	7.0%
2001	5.7%	4.3%	5.2%	5.7%	6.5%	7.6%	7.3%

Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69 who contributed to employer-sponsored tax-deferred retirement plans. Contribution amounts are expressed in constant 2004 dollars.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 4

NUMBER OF MARRIED COUPLES BY CONTRIBUTIONS TO EMPLOYER-SPONSORED
TAX-DEFERRED RETIREMENT PLANS, 1997

				Wife's Contribution ($2004)				
	All	**0**	**0<-1000**	**1000-2000**	**2000-3000**	**3000-4000**	**4000-5000**	**5000+**
				Thousands of Couples				
Husband's Contribution ($2004)								
All	39,867	31,093	2,763	1,990	1,428	746	462	1,384
0	26,865	22,153	1,817	1,044	742	367	155	587
0<-1000	2,217	1,627	306	140	72	28	12	32
1000-2000	2,343	1,637	281	217	92	64	23	29
2000-3000	1,918	1,333	94	177	158	40	43	73
3000-4000	1,439	997	57	141	76	47	37	85
4000-5000	1,069	750	63	71	78	37	31	39
5000+	4,016	2,596	146	200	210	163	163	579
				Column Percent				
All	100%	100%	100%	100%	100%	100%	100%	100%
0	67%	71%	66%	52%	52%	49%	34%	42%
0<-1000	6%	5%	11%	7%	5%	4%	3%	2%
1000-2000	6%	5%	10%	11%	6%	9%	5%	2%
2000-3000	5%	4%	3%	9%	11%	5%	9%	5%
3000-4000	4%	3%	2%	7%	5%	6%	8%	6%
4000-5000	3%	2%	2%	4%	5%	5%	7%	3%
5000+	10%	8%	5%	10%	15%	22%	35%	42%
				Row Percent				
0	100%	82%	7%	4%	3%	1%	1%	2%
0<-1000	100%	73%	14%	6%	3%	1%	1%	1%
1000-2000	100%	70%	12%	9%	4%	3%	1%	1%
2000-3000	100%	69%	5%	9%	8%	2%	2%	4%
3000-4000	100%	69%	4%	10%	5%	3%	3%	6%
4000-5000	100%	70%	6%	7%	7%	3%	3%	4%
5000+	100%	65%	4%	5%	5%	4%	4%	14%

Note: The sample consists of 11,221 married couples in 1997, in which the husband was between the ages of 20 and 69 and information from the Detailed Earnings Record was available for both spouses. The sample includes respondents regardless of employment status or plan offers. Contribution amounts are expressed in constant 2004 dollars.
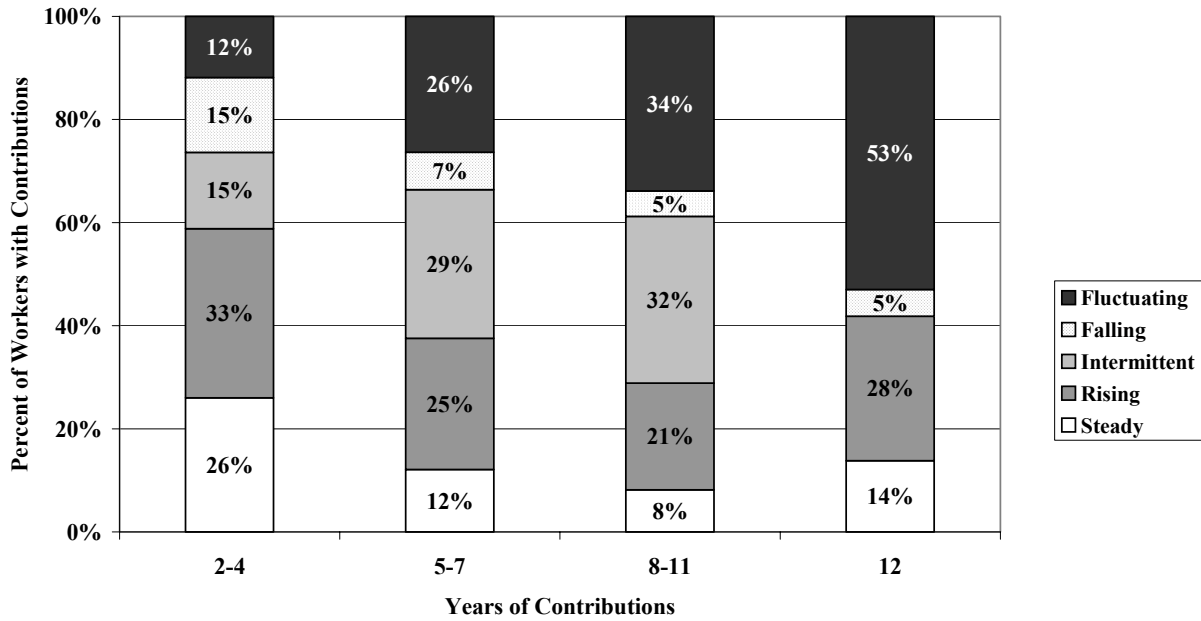
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 5

SHARE OF INDIVIDUALS AGES 20 TO 69 in 2001, BY THE NUMBER OF YEARS WITH
CONTRIBUTIONS TO TAX-DEFERRED RETIREMENT PLANS, 1990 TO 2001

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
Number of Years with Contributions							
				Percent of Individuals			
0	58%	77%	50%	51%	53%	61%	72%
1	5%	8%	6%	5%	4%	2%	3%
2-4	14%	12%	19%	14%	12%	10%	9%
5-6	7%	2%	9%	8%	7%	7%	6%
7-10	10%	1%	11%	13%	14%	12%	8%
11-12	6%	0%	4%	10%	12%	7%	2%
All	100%	100%	100%	100%	100%	100%	100%
				Percent of Men			
0	55%	77%	47%	47%	49%	55%	69%
1	5%	8%	6%	4%	4%	2%	3%
2-4	14%	12%	19%	14%	11%	12%	10%
5-6	7%	2%	11%	8%	7%	8%	7%
7-10	11%	1%	13%	14%	15%	14%	8%
11-12	8%	0%	5%	12%	14%	9%	3%
All	100%	100%	100%	100%	100%	100%	100%
				Percent of Women			
0	61%	77%	54%	54%	56%	67%	75%
1	5%	8%	6%	5%	4%	2%	4%
2-4	14%	12%	19%	14%	12%	8%	8%
5-6	6%	3%	8%	8%	7%	6%	4%
7-10	9%	1%	10%	11%	12%	11%	7%
11-12	5%	0%	3%	8%	9%	6%	1%
All	100%	100%	100%	100%	100%	100%	100%

Note: The sample consists of 41,781 individuals between the ages of 20 and 69 in 2001, including those who were never offered tax-deferred retirement plans by their employers.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 6

LOGISTIC REGRESSION ESTIMATES OF WHETHER WORKERS WITH PLAN

OFFERS CONTRIBUTE TO TAX-DEFERRED RETIREMENT PLANS, 1991 TO 1997

	Parameter Estimate	Standard Error
Intercept	-12.1935**	0.1650
Log of total earnings	1.0742**	0.0145
Age	0.0322**	0.0058
Age squared	-0.0002**	0.0001
Married	-0.0779**	0.0210
Two earners	-0.5843**	0.0208
Spouse contributes to a DC plan	0.0129	0.0356
Spouse's contribution rate (contribution/earnings)	2.9906**	0.4992
Purchase a home this year	0.0420	0.0444
Purchase a home last year	0.1019	0.0460
Own a home	0.2065**	0.0175
Become divorced this year	-0.1575	0.0659
Become widowed this year	-0.0002	0.1943
Get married this year	-0.0207	0.0448
Number of dependents	-0.0279**	0.0082
Have a baby this year	0.1925**	0.0394
Have a baby last year	0.1400**	0.0386
Currently work limited	-0.0078	0.0530
Spouse currently work limited	0.2027**	0.0439
Become work limited this year	0.0112	0.1698
Become work limited last year	0.1377	0.1640
Have a DB plan	0.0793**	0.0150
Gets a job this year after unemployment	-1.6343**	0.1196
Spouse gets a job this year after unemployment	0.2478**	0.0603
Change jobs this year	-0.4575**	0.0186
Spouse changes jobs this year	0.0805**	0.0193
Change jobs this last year	-0.3575**	0.0209
Spouse changes jobs last year	0.0425	0.0221
Spouses loses a job this year	-0.0335	0.0581
Spouse begins to contribute to DC plan this year	0.0957	0.0494
Employer contributes to plan	-0.1082**	0.0163
Can borrow from pension plan	0.1377**	0.0164
N (person years)	90634	
-2 log likelihood	107498	

Note: The sample consists of individuals ages 20 to 69 who were working in 1997 and whose employers offered tax-deferred retirement plans.

   ** $p < 0.001$;   * $p < 0.01$

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE 7

OLS ESTIMATES OF ANNUAL DEFERRED CONTRIBUTION AMOUNTS

FOR PARTICIPANTS AGES 20 TO 69, 1991 TO 1997

	Parameter Estimate	Standard Error
Intercept	-31690.00**	320.841
Log of total earnings	3430.85**	25.882
Age	-149.44**	11.269
Age squared	2.14**	0.132
Married	20.50	39.773
Two earners	-1619.24**	38.815
Spouse contributes to a DC plan	-1612.02**	60.251
Spouse's contribution rate (contribution/earnings)	18399.00**	750.627
Purchase a home this year	-255.60**	76.215
Purchase a home last year	-121.44	77.076
Own a home	219.61**	30.390
Become divorced this year	-241.93	127.520
Become widowed this year	-197.44	357.376
Get married this year	-131.89	86.436
Number of dependents	-101.51**	15.199
Have a baby this year	133.71	73.090
Have a baby last year	57.77	71.584
Currently work limited	-24.59	100.125
Spouse currently work limited	168.04	77.420
Become work limited this year	-185.17	316.055
Become work limited last year	-45.51	298.275
Have a DB plan	168.33**	27.679
Gets a job this year after unemployment	1349.78**	307.626
Spouse gets a job this year after unemployment	919.92**	110.164
Change jobs this year	-369.55**	36.339
Spouse changes jobs this year	198.53**	36.027
Change jobs this last year	-174.91**	40.203
Spouse changes jobs last year	118.91*	41.006
Spouses loses a job this year	-94.63	102.014
Spouse begins to contribute to DC plan this year	385.13**	82.812
Employer contributes to plan	13.92	30.127
Can borrow from pension plan	12.13	29.832
N (person-years)	43830	
R-squared	0.3496	

Note: The sample consists of workers ages 20 to 69 who contributed to employer-sponsored tax-deferred retirement plans. Contribution amounts are in constant 2004 dollars.

 ** $p< 0.001$; * $p < 0.01$

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

PARTICIPATION RATES AMONG WORKERS AGES 20 TO 69 BY YEAR, AGE,
AND OTHER PERSONAL CHARACTERISTICS, 1990 TO 2001

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
All	0.27	0.14	0.29	0.33	0.34	0.25	0.12
Year							
1990	0.17	0.09	0.19	0.21	0.22	0.20	0.07
1991	0.19	0.11	0.22	0.24	0.25	0.19	0.12
1992	0.21	0.12	0.23	0.27	0.27	0.20	0.11
1993	0.22	0.12	0.25	0.28	0.28	0.19	0.09
1994	0.24	0.13	0.27	0.30	0.30	0.21	0.12
1995	0.26	0.14	0.29	0.32	0.32	0.22	0.12
1996	0.28	0.15	0.31	0.34	0.34	0.23	0.13
1997	0.30	0.17	0.33	0.36	0.36	0.26	0.13
1998	0.31	0.18	0.35	0.38	0.38	0.28	0.14
1999	0.33	0.18	0.35	0.40	0.40	0.31	0.14
2000	0.33	0.18	0.36	0.41	0.41	0.31	0.14
2001	0.34	0.18	0.37	0.40	0.41	0.32	0.17
Gender							
Male	0.28	0.15	0.32	0.35	0.36	0.24	0.11
Female	0.25	0.14	0.27	0.31	0.31	0.25	0.14
Race/Ethnicity							
Non-Hispanic White	0.29	0.16	0.31	0.35	0.35	0.26	0.13
Non-Hispanic Black	0.21	0.10	0.23	0.28	0.28	0.21	0.07
Hispanic	0.17	0.11	0.19	0.21	0.22	0.19	0.10
Other	0.27	0.14	0.32	0.34	0.31	0.24	0.14
Education							
Less than High School	0.11	0.05	0.10	0.14	0.15	0.14	0.07
High School Graduate	0.24	0.13	0.25	0.30	0.32	0.24	0.13
College Graduate	0.39	0.22	0.44	0.45	0.46	0.36	0.17
Marital Status							
Never Married	0.18	0.12	0.28	0.31	0.29	0.21	0.13
Married	0.30	0.19	0.30	0.34	0.34	0.25	0.12
Widowed	0.22	0.09	0.16	0.23	0.28	0.24	0.13
Divorced	0.29	0.16	0.26	0.32	0.34	0.27	0.16
Total Own Earnings ($2004)							
0<-5000	0.01	0.01	0.02	0.01	0.02	0.02	0.01
5000-10000	0.03	0.02	0.03	0.03	0.04	0.05	0.04
10000-15000	0.06	0.05	0.07	0.06	0.08	0.12	0.09
15000-20000	0.12	0.09	0.13	0.14	0.15	0.16	0.17
20000-30000	0.22	0.19	0.21	0.23	0.26	0.26	0.24
30000-40000	0.33	0.31	0.34	0.34	0.36	0.34	0.27
40000-50000	0.44	0.44	0.45	0.44	0.44	0.39	0.31
50000-60000	0.52	0.53	0.52	0.51	0.52	0.47	0.39
60000-70000	0.59	0.60	0.59	0.58	0.59	0.56	0.43
70000-80000	0.61	0.59	0.62	0.61	0.61	0.55	0.47
80000-90000	0.67	0.64	0.69	0.67	0.71	0.56	0.50
90000-100000	0.70	0.73	0.71	0.72	0.70	0.64	0.41
100000-130000	0.72	0.70	0.71	0.73	0.74	0.66	0.43
130000-150000	0.68	0.67	0.70	0.66	0.70	0.69	0.48
150000+	0.60	0.77	0.64	0.59	0.57	0.58	0.39
Family Earnings ($2004)							
0<-5000	0.01	0.01	0.01	0.01	0.02	0.02	0.01
5000-10000	0.03	0.02	0.02	0.03	0.04	0.05	0.05
10000-15000	0.05	0.04	0.05	0.04	0.06	0.10	0.08
15000-20000	0.09	0.07	0.10	0.10	0.12	0.11	0.13
20000-30000	0.17	0.14	0.16	0.18	0.20	0.22	0.16
30000-40000	0.23	0.21	0.23	0.23	0.27	0.28	0.20
40000-50000	0.29	0.26	0.29	0.29	0.31	0.29	0.22
50000-60000	0.32	0.29	0.32	0.34	0.33	0.32	0.23
60000-70000	0.37	0.34	0.37	0.38	0.38	0.40	0.42
70000-80000	0.41	0.36	0.42	0.41	0.44	0.43	0.30
80000-90000	0.47	0.40	0.48	0.46	0.51	0.46	0.46
90000-100000	0.50	0.45	0.51	0.50	0.53	0.52	0.40
100000-130000	0.55	0.50	0.55	0.54	0.59	0.52	0.36
130000-150000	0.59	0.52	0.57	0.58	0.62	0.63	0.50
150000+	0.59	0.57	0.62	0.57	0.59	0.56	0.40

Note: The sample consists of 373,971 observations between 1990 and 2001 on workers ages 20 to 69, including those not offered defined contribution retirement plans by their employers. Annual earnings are expressed in constant 2004 dollars.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

SHARE OF WORKERS AGES 20 TO 69 OFFERED AN EMPLOYER-SPONSORED TAX-DEFERRED RETIREMENT PLAN,
BY AGE AND OTHER PERSONAL CHARACTERISTICS, 1997

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
All	0.42	0.27	0.46	0.49	0.49	0.35	0.19
Gender							
Male	0.44	0.28	0.50	0.52	0.52	0.35	0.17
Female	0.39	0.26	0.41	0.46	0.44	0.35	0.21
Race/Ethnicity							
Non-Hispanic White	0.44	0.29	0.49	0.51	0.51	0.36	0.20
Non-Hispanic Black	0.34	0.21	0.37	0.43	0.45	0.29	0.06
Hispanic	0.29	0.20	0.33	0.36	0.31	0.30	0.10
Other	0.41	0.25	0.46	0.47	0.43	0.40	0.39
Education							
Less than High School	0.21	0.11	0.20	0.25	0.28	0.26	0.16
High School Graduate	0.38	0.25	0.42	0.46	0.47	0.34	0.16
College Graduate	0.55	0.36	0.62	0.61	0.60	0.45	0.27
Marital Status							
Never Married	0.31	0.23	0.45	0.47	0.42	0.42	0.18
Married	0.45	0.33	0.46	0.49	0.49	0.35	0.19
Widowed	0.35	0.00	0.36	0.41	0.41	0.33	0.17
Divorced	0.45	0.31	0.42	0.50	0.50	0.38	0.16
Total Own Earnings ($2004)							
0<-5000	0.05	0.05	0.08	0.06	0.04	0.05	0.02
5000-10000	0.09	0.08	0.10	0.11	0.12	0.10	0.06
10000-15000	0.16	0.14	0.18	0.16	0.15	0.18	0.18
15000-20000	0.25	0.20	0.28	0.28	0.28	0.29	0.22
20000-30000	0.41	0.39	0.41	0.41	0.45	0.44	0.49
30000-40000	0.54	0.52	0.55	0.54	0.54	0.46	0.42
40000-50000	0.65	0.67	0.65	0.64	0.64	0.58	0.57
50000-60000	0.71	0.71	0.73	0.70	0.71	0.59	0.76
60000-70000	0.78	0.88	0.78	0.77	0.78	0.78	0.40
70000-80000	0.77	0.76	0.77	0.80	0.77	0.73	0.39
80000-90000	0.81	0.84	0.80	0.84	0.81	0.66	0.73
90000-100000	0.80	0.66	0.86	0.75	0.82	0.77	0.87
100000-130000	0.84	0.89	0.85	0.86	0.82	0.79	0.42
130000-150000	0.84	1.00	0.79	0.85	0.86	0.78	1.00
150000+	0.77	0.77	0.87	0.78	0.72	0.78	0.22
Family Earnings ($2004)							
0<-5000	0.05	0.04	0.08	0.09	0.05	0.03	0.02
5000-10000	0.08	0.08	0.09	0.10	0.11	0.08	0.05
10000-15000	0.13	0.12	0.13	0.11	0.13	0.17	0.17
15000-20000	0.22	0.18	0.26	0.22	0.25	0.25	0.19
20000-30000	0.33	0.31	0.31	0.35	0.36	0.35	0.26
30000-40000	0.40	0.37	0.41	0.39	0.44	0.38	0.40
40000-50000	0.47	0.46	0.49	0.47	0.47	0.47	0.29
50000-60000	0.50	0.48	0.51	0.51	0.51	0.43	0.36
60000-70000	0.57	0.61	0.53	0.59	0.57	0.54	0.50
70000-80000	0.61	0.56	0.62	0.61	0.61	0.68	0.21
80000-90000	0.64	0.68	0.66	0.61	0.67	0.64	0.42
90000-100000	0.66	0.61	0.61	0.67	0.72	0.71	0.81
100000-130000	0.70	0.81	0.71	0.68	0.74	0.58	0.39
130000-150000	0.73	0.65	0.72	0.76	0.72	0.83	0.71
150000+	0.74	0.58	0.80	0.73	0.70	0.76	0.64

Note: The sample consists of 31,825 workers ages 20 to 69 in 1997. Annual earnings are expressed in constant 2004 dollars.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE A.3

PARTICIPATION RATES AMONG WORKERS AGES 20 TO 69 OFFERED EMPLOYER-SPONSORED TAX-DEFERRED
RETIREMENT PLANS, BY AGE AND OTHER PERSONAL CHARACTERISTICS, 1997

				Age			
	All	**20-29**	**30-39**	**40-49**	**50-59**	**60-64**	**65-69**
All	0.72	0.63	0.73	0.73	0.74	0.73	0.71
Gender							
Male	0.72	0.63	0.74	0.72	0.74	0.74	0.67
Female	0.72	0.64	0.71	0.75	0.75	0.72	0.75
Race/Ethnicity							
Non-Hispanic White	0.73	0.65	0.73	0.74	0.74	0.74	0.70
Non-Hispanic Black	0.67	0.53	0.68	0.70	0.70	0.82	0.36
Hispanic	0.66	0.59	0.69	0.63	0.75	0.58	1.00
Other	0.76	0.72	0.77	0.75	0.80	0.59	1.00
Education							
Less than High School	0.58	0.44	0.54	0.60	0.62	0.65	0.72
High School Graduate	0.69	0.60	0.70	0.70	0.73	0.72	0.73
College Graduate	0.78	0.71	0.79	0.80	0.78	0.77	0.67
Marital Status							
Never Married	0.67	0.61	0.73	0.72	0.72	0.52	0.66
Married	0.73	0.67	0.73	0.75	0.75	0.73	0.67
Widowed	0.73	.	0.66	0.60	0.72	0.91	0.75
Divorced	0.70	0.54	0.68	0.69	0.73	0.71	0.95
Total Own Earnings ($2004)							
0<-5000	0.27	0.26	0.31	0.14	0.50	0.17	0.20
5000-10000	0.34	0.33	0.31	0.26	0.33	0.67	0.50
10000-15000	0.45	0.40	0.49	0.42	0.50	0.45	0.65
15000-20000	0.52	0.47	0.49	0.58	0.55	0.62	0.64
20000-30000	0.64	0.62	0.63	0.65	0.63	0.72	0.83
30000-40000	0.70	0.68	0.72	0.68	0.71	0.70	0.82
40000-50000	0.77	0.80	0.77	0.76	0.77	0.77	0.74
50000-60000	0.80	0.82	0.83	0.79	0.80	0.66	0.72
60000-70000	0.82	0.87	0.84	0.79	0.80	0.84	0.83
70000-80000	0.84	0.90	0.83	0.87	0.80	0.79	1.00
80000-90000	0.84	0.93	0.84	0.84	0.83	0.81	0.85
90000-100000	0.89	1.00	0.87	0.88	0.91	0.92	0.69
100000-130000	0.89	0.92	0.91	0.89	0.89	0.90	0.50
130000-150000	0.82	1.00	0.76	0.77	0.88	1.00	0.80
150000+	0.81	0.79	0.85	0.75	0.83	0.91	1.00
Family Earnings ($2004)							
0<-5000	0.26	0.24	0.29	0.03	0.59	0.46	0.26
5000-10000	0.32	0.26	0.25	0.36	0.35	0.54	0.60
10000-15000	0.38	0.33	0.40	0.36	0.41	0.42	0.65
15000-20000	0.47	0.46	0.42	0.49	0.55	0.39	0.66
20000-30000	0.62	0.60	0.60	0.63	0.59	0.74	0.86
30000-40000	0.64	0.62	0.68	0.59	0.69	0.67	0.69
40000-50000	0.72	0.73	0.72	0.70	0.71	0.75	0.65
50000-60000	0.73	0.72	0.73	0.77	0.72	0.62	0.61
60000-70000	0.72	0.72	0.73	0.71	0.71	0.74	0.89
70000-80000	0.76	0.74	0.76	0.78	0.76	0.77	0.58
80000-90000	0.79	0.79	0.81	0.76	0.80	0.85	0.78
90000-100000	0.83	0.93	0.83	0.82	0.80	0.89	0.76
100000-130000	0.83	0.82	0.84	0.82	0.86	0.80	0.49
130000-150000	0.83	1.00	0.81	0.83	0.80	0.96	1.00
150000+	0.84	0.92	0.87	0.81	0.85	0.92	0.81

Note: The sample consists of 31,825 workers ages 20 to 69 in 1997. Annual earnings are expressed in constant 2004 dollars.
Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

AVERAGE REAL CONTRIBUTION AMOUNTS AMONG PLAN PARTICIPANTS AGES 20 TO 69
BY YEAR, AGE, AND OTHER PERSONAL CHARACTERISTICS, 1990 TO 2001

	All	**20-29**	**30-39**	**Age 40-49**	**50-59**	**60-64**	**65-69**
All	3,288	1,750	2,899	3,596	4,219	4,351	3,713
Year							
1990	3,158	1,488	2,427	3,791	4,546	4,527	6,301
1991	2,958	1,770	2,429	3,244	4,146	4,478	4,108
1992	2,986	1,813	2,426	3,279	4,180	4,450	3,437
1993	3,038	1,413	2,598	3,427	4,187	4,318	3,952
1994	3,049	1,530	2,572	3,457	4,129	4,065	4,007
1995	3,043	1,458	2,599	3,474	4,061	3,757	4,119
1996	3,113	1,571	2,726	3,416	4,087	4,074	3,589
1997	3,208	1,685	2,948	3,446	4,082	4,253	3,496
1998	3,413	1,913	3,067	3,628	4,357	4,390	3,727
1999	3,482	1,825	3,249	3,708	4,179	4,822	3,158
2000	3,719	1,897	3,497	4,100	4,367	4,405	2,980
2001	3,637	2,275	3,494	3,735	4,278	4,385	3,558
Gender							
Male	3,818	1,947	3,317	4,198	4,923	5,111	4,588
Female	2,630	1,536	2,346	2,863	3,308	3,485	2,879
Race/Ethnicity							
Non-Hispanic White	3,429	1,782	3,005	3,740	4,388	4,478	3,701
Non-Hispanic Black	2,154	1,174	1,768	2,407	2,862	3,513	4,723
Hispanic	2,332	1,276	2,322	2,647	2,962	3,171	3,812
Other	4,039	3,287	4,054	4,200	4,446	4,119	2,392
Education							
Less than High School	1,656	808	1,210	1,846	2,002	1,863	1,404
High School Graduate	2,549	1,427	2,153	2,768	3,403	3,426	2,833
College Graduate	4,479	2,298	3,968	4,850	5,832	6,691	6,208
Marital Status							
Never Married	2,577	1,850	2,813	3,352	3,922	4,461	5,679
Married	3,538	1,675	3,021	3,774	4,409	4,602	3,939
Widowed	2,848	1,955	2,844	3,100	2,864	2,880	2,327
Divorced	2,838	1,240	2,149	2,852	3,600	3,804	3,498
Total Own Earnings ($2004)							
0<-5000	126	107	122	108	152	137	167
5000-10000	332	238	315	316	347	528	530
10000-15000	540	364	470	537	699	791	968
15000-20000	707	526	618	704	976	1,026	1,286
20000-30000	1,064	788	953	1,094	1,408	1,613	2,066
30000-40000	1,637	1,311	1,443	1,663	2,105	2,507	2,676
40000-50000	2,301	1,969	2,060	2,262	2,880	3,390	3,393
50000-60000	3,152	2,715	2,789	3,079	3,844	4,654	4,845
60000-70000	4,040	3,471	3,628	3,937	4,683	5,772	4,903
70000-80000	4,973	4,225	4,504	4,679	5,887	6,720	6,287
80000-90000	5,915	5,379	5,456	5,816	6,327	7,908	7,059
90000-100000	6,420	5,256	6,104	6,081	7,046	8,689	8,361
100000-130000	7,570	7,413	7,288	7,280	8,013	9,142	8,602
130000-150000	8,825	11,640	8,416	8,451	9,318	10,078	8,278
150000+	11,320	21,830	11,509	11,190	10,450	11,259	12,270
Family Earnings ($2004)							
0<-5000	102	72	99	90	114	128	143
5000-10000	299	214	277	217	286	512	487
10000-15000	463	328	381	399	534	697	936
15000-20000	602	507	519	541	766	873	1,205
20000-30000	937	731	836	923	1,192	1,428	1,969
30000-40000	1,425	1,196	1,217	1,438	1,758	2,298	2,268
40000-50000	1,869	1,574	1,662	1,855	2,351	2,779	3,033
50000-60000	2,283	1,894	1,992	2,288	2,827	3,885	4,344
60000-70000	2,670	2,044	2,310	2,717	3,270	4,517	4,192
70000-80000	3,033	2,123	2,611	2,994	3,953	4,997	5,091
80000-90000	3,543	2,610	3,026	3,581	4,329	5,825	5,602
90000-100000	3,852	2,949	3,409	3,737	4,537	6,463	7,197
100000-130000	4,762	3,627	4,333	4,538	5,586	7,072	7,623
130000-150000	6,063	5,611	5,676	5,694	6,802	8,142	6,096
150000+	8,490	11,434	8,270	8,188	8,640	9,934	10,159

Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. Annual earnings and contribution amounts are expressed in constant 2004 dollars.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE A.5
AVERAGE CONTRIBUTION RATES AMONG PLAN PARTICIPANTS AGES 20 TO 69
BY YEAR, AGE, AND OTHER PERSONAL CHARACTERISTICS, 1990 TO 2001

	All	20-29	30-39	Age 40-49	50-59	60-64	65-69
All	5.4%	3.9%	4.8%	5.4%	6.5%	7.5%	7.6%
Year							
1990	5.0%	3.6%	4.3%	5.1%	6.8%	7.5%	8.6%
1991	4.9%	3.6%	4.3%	5.0%	6.4%	7.8%	7.6%
1992	5.0%	3.7%	4.4%	5.0%	6.4%	7.8%	7.7%
1993	5.1%	3.5%	4.6%	5.2%	6.6%	7.7%	8.3%
1994	5.2%	3.9%	4.6%	5.3%	6.5%	7.4%	8.1%
1995	5.2%	3.7%	4.7%	5.3%	6.4%	6.8%	8.3%
1996	5.3%	3.8%	4.8%	5.4%	6.5%	7.3%	7.7%
1997	5.4%	4.1%	4.9%	5.4%	6.5%	7.3%	7.6%
1998	5.5%	4.3%	5.0%	5.5%	6.6%	7.3%	7.4%
1999	5.6%	4.1%	5.2%	5.5%	6.5%	7.5%	7.4%
2000	5.6%	4.1%	5.2%	5.6%	6.5%	7.6%	7.0%
2001	5.7%	4.3%	5.2%	5.7%	6.5%	7.6%	7.3%
Gender							
Male	5.3%	4.1%	4.9%	5.4%	6.3%	7.0%	7.3%
Female	5.4%	3.8%	4.8%	5.4%	6.8%	8.0%	8.0%
Race/Ethnicity							
Non-Hispanic White	5.5%	4.0%	4.9%	5.5%	6.7%	7.6%	7.7%
Non-Hispanic Black	4.2%	3.1%	3.8%	4.3%	5.1%	6.5%	6.9%
Hispanic	4.5%	3.4%	4.5%	4.6%	5.4%	6.1%	8.1%
Other	6.0%	4.9%	5.7%	6.2%	6.9%	7.0%	6.4%
Education							
Less than High School	4.5%	2.9%	3.7%	4.4%	5.2%	5.3%	5.9%
High School Graduate	5.0%	3.6%	4.4%	5.0%	6.4%	7.4%	7.6%
College Graduate	5.9%	4.5%	5.5%	6.0%	6.9%	8.3%	8.4%
Marital Status							
Never Married	4.7%	4.0%	5.0%	5.5%	6.3%	7.0%	6.5%
Married	5.6%	4.0%	4.9%	5.5%	6.7%	7.6%	7.8%
Widowed	6.0%	6.6%	4.8%	4.9%	5.7%	6.9%	7.3%
Divorced	4.9%	3.2%	4.0%	4.8%	5.9%	7.5%	7.4%
Total Own Earnings ($2004)							
0<-5000	5.1%	4.0%	5.6%	4.3%	6.0%	5.5%	5.5%
5000-10000	4.3%	3.1%	4.1%	4.0%	4.7%	6.6%	6.9%
10000-15000	4.2%	2.8%	3.7%	4.2%	5.4%	6.3%	7.7%
15000-20000	4.0%	3.0%	3.5%	4.0%	5.5%	5.8%	7.3%
20000-30000	4.2%	3.1%	3.7%	4.3%	5.5%	6.4%	8.4%
30000-40000	4.7%	3.8%	4.1%	4.7%	6.0%	7.2%	7.7%
40000-50000	5.1%	4.4%	4.6%	5.0%	6.4%	7.5%	7.5%
50000-60000	5.7%	5.0%	5.1%	5.6%	7.0%	8.5%	9.0%
60000-70000	6.2%	5.4%	5.6%	6.1%	7.2%	8.9%	7.7%
70000-80000	6.7%	5.7%	6.0%	6.3%	7.9%	9.0%	8.3%
80000-90000	7.0%	6.3%	6.4%	6.9%	7.4%	9.3%	8.3%
90000-100000	6.8%	5.5%	6.4%	6.4%	7.5%	9.2%	8.8%
100000-130000	6.7%	6.7%	6.5%	6.5%	7.1%	8.0%	7.8%
130000-150000	6.4%	8.4%	6.1%	6.1%	6.7%	7.3%	5.9%
150000+	4.7%	6.7%	4.8%	4.6%	4.7%	4.5%	4.8%
Family Earnings ($2004)							
0<-5000	4.3%	2.9%	5.2%	3.5%	4.8%	4.8%	5.5%
5000-10000	4.0%	3.0%	3.6%	2.9%	4.0%	6.6%	6.8%
10000-15000	3.8%	2.6%	3.0%	3.3%	4.3%	5.8%	7.7%
15000-20000	3.5%	2.9%	3.0%	3.1%	4.6%	5.1%	7.0%
20000-30000	3.8%	3.0%	3.4%	3.7%	4.9%	5.9%	8.4%
30000-40000	4.3%	3.6%	3.7%	4.3%	5.4%	7.0%	7.3%
40000-50000	4.7%	4.0%	4.2%	4.6%	5.8%	6.9%	7.6%
50000-60000	5.0%	4.3%	4.4%	4.9%	6.0%	8.1%	8.9%
60000-70000	5.2%	4.2%	4.6%	5.1%	6.3%	8.3%	8.1%
70000-80000	5.4%	4.2%	4.9%	5.3%	6.8%	8.1%	7.3%
80000-90000	5.8%	4.8%	5.2%	5.8%	6.9%	8.5%	7.8%
90000-100000	5.9%	4.9%	5.3%	5.8%	7.0%	9.2%	10.5%
100000-130000	6.5%	5.3%	6.0%	6.2%	7.6%	8.8%	8.7%
130000-150000	7.1%	7.0%	6.6%	6.7%	7.9%	8.7%	6.2%
150000+	6.6%	6.9%	6.6%	6.3%	7.0%	6.9%	6.1%

Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. The contribution rate is defined as the annual contribution amount divided by total annual earnings.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

	Contribution Rate (%)							
	All	**0<=2**	**2<=4**	**4<=6**	**6<=8**	**8<=10**	**10<=12**	**12<=14**	**14+**
All	100	18	24	26	11	10	4	4	2
Year									
1990	100	20	25	27	10	8	4	3	3
1991	100	21	25	28	10	8	4	2	2
1992	100	19	26	28	10	8	4	3	2
1993	100	19	26	27	10	9	4	3	2
1994	100	18	25	26	11	10	4	3	2
1995	100	19	24	27	10	10	4	4	2
1996	100	17	24	27	11	10	4	4	2
1997	100	18	24	26	11	10	5	4	2
1998	100	17	23	26	12	11	5	4	2
1999	100	16	23	26	12	11	5	5	2
2000	100	17	23	25	12	11	5	5	3
2001	100	16	22	26	12	12	5	5	2
Gender									
Male	100	17	23	28	12	11	4	4	1
Female	100	19	25	25	10	10	4	5	3
Race/Ethnicity									
Non-Hispanic White	100	17	23	27	11	11	5	4	3
Non-Hispanic Black	100	26	30	24	8	7	2	2	1
Hispanic	100	22	31	23	10	8	3	2	1
Other	100	16	19	25	13	13	6	5	3
Education									
Less than High School	100	24	30	23	9	9	2	2	1
High School Graduate	100	20	26	27	10	9	4	3	2
College Graduate	100	14	21	27	13	12	6	5	3
Marital Status									
Never Married	23	26	25	9	9	4	3	1	0
Married	16	23	27	12	11	5	4	3	0
Widowed	17	23	22	10	9	5	8	5	0
Divorced	20	26	25	11	9	3	3	2	0
Total Own Earnings ($2004)									
0<-5000	100	27	26	16	14	8	3	3	3
5000-10000	100	34	24	18	10	8	2	2	2
10000-15000	100	32	26	19	8	6	2	3	3
15000-20000	100	31	30	21	7	4	2	2	2
20000-30000	100	27	31	24	7	5	2	2	2
30000-40000	100	22	28	27	8	8	2	2	2
40000-50000	100	17	25	29	11	9	3	3	2
50000-60000	100	14	22	28	12	11	4	5	3
60000-70000	100	12	19	27	12	13	5	7	4
70000-80000	100	10	17	26	13	14	7	8	5
80000-90000	100	9	15	26	13	13	10	11	3
90000-100000	100	9	16	25	14	16	13	7	2
100000-130000	100	7	14	24	18	25	11	1	1
130000-150000	100	5	12	27	27	26	2	0	1
150000+	100	14	27	35	20	1	0	0	1
Family Earnings ($2004)									
0<-5000	100	33	29	16	10	4	2	2	3
5000-10000	100	37	23	16	11	7	2	3	2
10000-15000	100	38	26	19	7	4	2	2	2
15000-20000	100	36	31	18	7	4	2	1	1
20000-30000	100	31	31	23	6	4	2	2	1
30000-40000	100	25	30	24	8	7	2	2	1
40000-50000	100	21	28	27	9	8	2	3	1
50000-60000	100	19	27	28	10	9	3	3	2
60000-70000	100	18	25	28	10	9	3	4	2
70000-80000	100	16	24	28	11	10	4	4	2
80000-90000	100	14	21	29	12	12	5	6	2
90000-100000	100	12	19	30	13	12	6	5	3
100000-130000	100	10	18	26	14	16	8	5	3
130000-150000	100	7	14	25	15	20	8	7	4
150000+	100	9	17	28	17	13	7	6	4

Note: The sample consists of 98,734 observations between 1990 and 2001 on workers ages 20 to 69, who contributed to employer-sponsored tax-deferred retirement plans. The contribution rate is defined as the annual contribution amount divided by total annual earnings.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

TABLE A.7
SUMMARY STATISTICS FOR LOGISTIC REGRESSION SAMPLE

	Mean	Standard Deviation	Minimum	Maximum
Contribute to deferred plan	0.484	0.500	0	1
Married	0.665	0.472	0	1
Two earners	0.547	0.498	0	1
Number of dependents	0.779	1.057	0	8
Have a baby this year	0.039	0.193	0	1
Have a baby last year	0.041	0.198	0	1
Purchase a home this year	0.029	0.169	0	1
Purchase a home last year	0.027	0.163	0	1
Own a home	0.322	0.467	0	1
Become work limited this year	0.002	0.045	0	1
Become work limited last year	0.002	0.048	0	1
Log of total earnings	10.650	1.551	0	16.363
Become divorced this year	0.013	0.113	0	1
Become widowed this year	0.001	0.038	0	1
Get married this year	0.030	0.170	0	1
Spouse contributes to a DC plan	0.179	0.383	0	1
Spouse's contribution rate (contribution/earnings)	0.010	0.026	0	0.5
Employer contributes to plan	0.607	0.488	0	1
Age	38.977	10.371	20	69
Age squared	1626.740	844.109	400	4761
Have a DB plan	0.412	0.492	0	1
Currently work limited	0.025	0.157	0	1
Spouse currently work limited	0.029	0.168	0	1
Gets a job this year after unemployment	0.015	0.122	0	1
Spouse gets a job this year after unemployment	0.016	0.125	0	1
Change jobs this year	0.253	0.435	0	1
Spouse changes jobs this year	0.228	0.420	0	1
Change jobs last year	0.157	0.364	0	1
Spouse changes jobs last year	0.141	0.348	0	1
Spouses loses a job this year	0.018	0.133	0	1
Spouse begins to contribute to DC plan this year	0.026	0.158	0	1
Can borrow from pension plan	0.372	0.483	0	1

Note: The sample consists of 90,634 person-year observations between 1991 and 1997 on individuals ages 20 to 69 who were working in 1997 and whose employers offered tax-deferred retirement plans.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

Table A8
SUMMARY STATISTICS FOR OLS REGRESSION SAMPLE

	Mean	Standard Deviation	Minimum	Maximum
Real Deferred Contributions ($2004)	3143.120	3473.950	0.241	246006.4
Married	0.719	0.450	0	1
Two earners	0.587	0.492	0	1
Number of dependents	0.796	1.048	0	7
Have a baby this year	0.038	0.192	0	1
Have a baby last year	0.040	0.195	0	1
Purchase a home this year	0.035	0.183	0	1
Purchase a home last year	0.034	0.181	0	1
Own a home	0.396	0.489	0	1
Become work limited this year	0.002	0.045	0	1
Become work limited last year	0.002	0.047	0	1
Log of total earnings	11.112	0.635	4.621	16.363
Become divorced this year	0.012	0.107	0	1
Become widowed this year	0.001	0.038	0	1
Get married this year	0.026	0.159	0	1
Spouse contributes to a DC plan	0.230	0.421	0	1
Spouse's contribution rate (contribution/earnings)	0.014	0.031	0	0.5
Employer contributes to plan	0.610	0.488	0	1
Age	41.105	9.700	20	69
Age squared	1783.760	825.024	400	4761
Have a DB plan	0.454	0.498	0	1
Currently work limited	0.023	0.149	0	1
Spouse currently work limited	0.032	0.176	0	1
Gets a job this year after unemployment	0.002	0.044	0	1
Spouse gets a job this year after unemployment	0.016	0.127	0	1
Change jobs this year	0.178	0.382	0	1
Spouse changes jobs this year	0.209	0.407	0	1
Change jobs last year	0.135	0.342	0	1
Spouse changes jobs last year	0.135	0.342	0	1
Spouses loses a job this year	0.019	0.138	0	1
Spouse begins to contribute to DC plan this year	0.032	0.175	0	1
Can borrow from pension plan	0.389	0.487	0	1
Age 30-39	0.333	0.471	0	1
Age 40-49	0.333	0.471	0	1
Age 50-59	0.177	0.382	0	1
Age 60-69	0.031	0.175	0	1

Note: The sample consists of 43,830 person-year observations between 1991 and 1997 on workers ages 20 to 69 who contributed to employer-sponsored tax-deferred retirement plans.

Source: Urban Institute tabulations of the 1996 SIPP matched to the Detailed Earnings Record.

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