

Table 3.1 Subjects Making an Advance Choice of an Unhealthy Snack

		Future State	
		Hungry	Satiated
Current State	Hungry	78%	56%
	Satiated	42%	26%

Source: Data reprinted from Read and van Leeuwen (1998, 198) with permission from Elsevier.

Figure 4.1 Statistics of the Three Groups

Tax and spend: We are interested in how you think government expenditures should affect the distribution of income taxes. All governments spend money enforcing their own laws and regulations. Many other expenses are optional. We are concerned here with five categories of spending: national defense; basic health care; basic education; social security; and “all other functions” (law enforcement, etc.). For purposes of these questions, assume:

- The government spends the same amount on each of the five categories.
- The national government pays for all of these services, if any government does.
- The government contributes to a regional defense force (in the “other functions” category), so it does not absolutely need national defense.
- Otherwise, the country is like your own country in standard of living.
- The government pays \$2,000 each year for each good or service for each household.
- If the government does not provide health care, education, or social security, people must pay at least that much on their own.

Each screen shows several possible distributions of income tax among three groups of households: low, middle, and high pre-tax household income. (We exclude a small proportion of households that have little or no income, pay no tax, and receive some sort of assistance.) The three groups have the same proportion of all the pre-tax income. You see the average tax for each group. Here are some statistics for the three groups (approximately correct for the United States):

	Low	Middle	High
Percentage of all income	33.3%	33.3%	33.3%
Percentage of households in group	60%	30%	10%
Average annual household income	\$20,000	\$50,000	\$130,000

Government can redistribute money from those with high incomes to those with low incomes. It can have a negative tax, in which it gives money to some people in order to accomplish this redistribution. Negative taxes are shown as bars to the left.

Source: Authors' compilation.

Figure 4.2 Fairest Distribution of Income Taxes

In this case, suppose the government provides:

- NATIONAL DEFENSE
- BASIC EDUCATION
- ALL OTHER FUNCTIONS OF GOVERNMENT

But the government does not provide:

- BASIC HEALTH CARE
- SOCIAL SECURITY

When the government does not provide a service that people must pay for themselves, the extra annual household cost is \$2,000, regardless of income. How much extra will each household have to pay per year, on the average, because of what the government does not provide in this case? (Pick the closest.) \$0 \$2,000 \$4,000 \$6,000

Which of the following is the fairest distribution of income taxes among the three income groups, in this case? [A button was provided next to each of the six distributions.]



Source: Authors' compilation.

Note: The average annual pre-tax incomes of the three groups are, respectively, \$130,000, \$50,000, and \$20,000.

Figure 4.3 Response Options for Experiment 3

Here is the extra cost that each of the three income groups must pay as a result of what the government does not provide.

Top	\$5,000	████████
Middle	\$5,000	████████
Bottom	\$5,000	████████

Which of the following is the fairest distribution of income taxes among the three income groups, in this case? (All raise the same total amount.)

Flat tax in dollars (everyone pays the same number of dollars):

Top	\$5,769	████████
Middle	\$5,769	████████
Bottom	\$5,769	████████

Flat tax in percent (everyone pays the same percent):

Top	\$18,750	████████████████████
Middle	\$7,500	████████████
Bottom	\$3,000	████

Graduated, varying in amount of graduation and position of middle group:

Top	\$25,000	████████████████████
Middle	\$7,500	████████████
Bottom	\$2,000	████

Top	\$31,250	████████████████████
Middle	\$7,500	████████████
Bottom	\$1,000	██

Top	\$27,500	████████████████████
Middle	\$10,500	██████
Bottom	\$4,000	████████

Top	\$37,500	████████████████████
Middle	\$7,500	████████████
Bottom	\$0	

Top	\$33,750	████████████████████
Middle	\$10,500	████████████
Bottom	-\$600	██

Top	\$43,750	████████████████████
Middle	\$7,500	████████████
Bottom	-\$1,000	██

Top	\$40,000	████████████████████
Middle	\$10,500	████████████
Bottom	-\$1,600	██

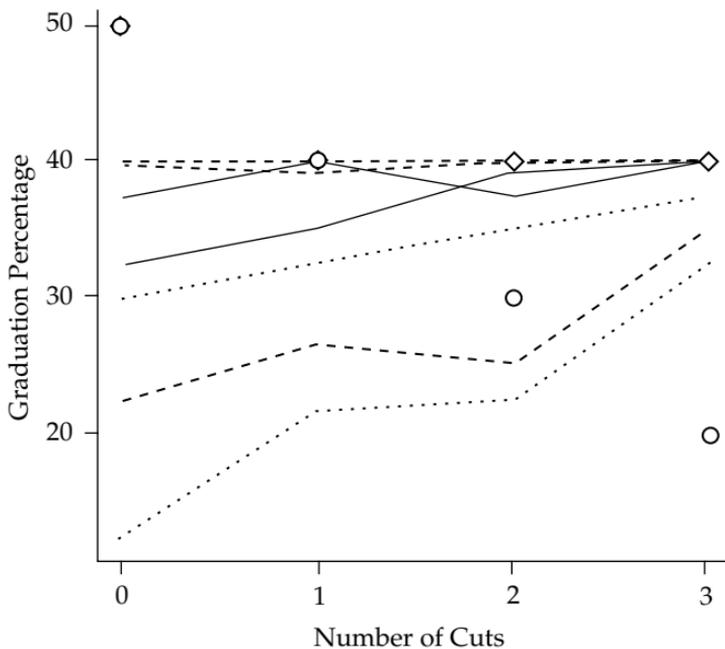
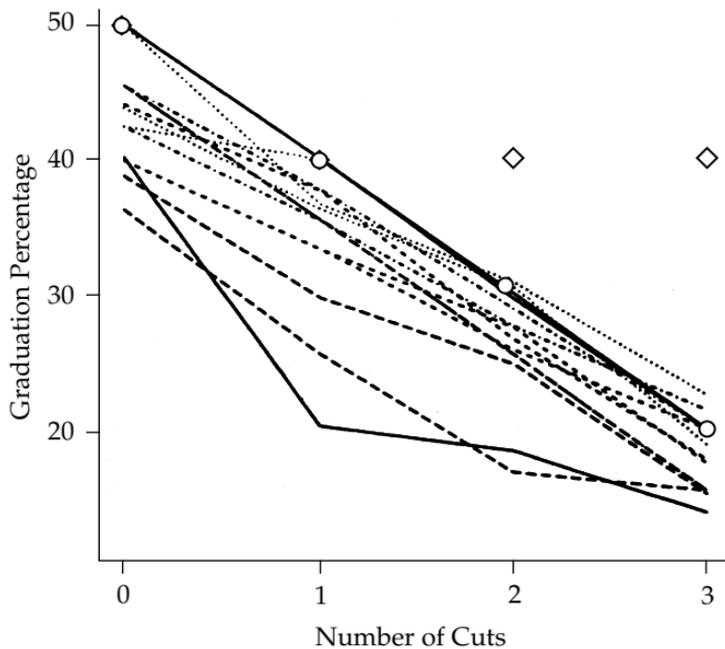
Figure 4.3 *Continued*

Graduated, lowest group pays zero. (Note: These may be identical to distributions listed earlier. If so, they are equivalent answers.)

Top	\$37,500	
Middle	\$7,500	
Bottom	\$0	
Top	\$31,875	
Middle	\$9,750	
Bottom	\$0	

Source: Authors' compilation.

Figure 4.4 Subjects with a Maximum Graduation Greater than 30 Percent



**Table 4.1 Mean Ratings on One to Nine Scale of Payment Mechanisms,
Experiment 1**

Method	Cycle 1	Cycle 2
Government pays	4.70	4.87
Reimburse	3.58	3.69
Deduction	4.07	3.79
No deduction	2.51	2.51
Ability to pay	3.80	3.98

Source: Authors' compilation.

Table 4.2 Correlations of Subject Means Across the 104 Subjects

	Payment Mechanisms				
	Government Pays	Reimburse	Deduction	No Deduction	Ability to Pay
Should be graduated	0.18	-0.05	-0.10	-0.27	0.34
Rich benefit more	-0.11	-0.12	-0.14	-0.02	-0.02
Better for me if government pays	0.41	0.06	-0.23	-0.29	0.12
Better for me if rich pay more	0.01	0.09	0.05	-0.11	0.11

Source: Authors' compilation.

$r > .16$ is "significant" at $p < .05$ one tailed, for $N = 104$

Table 4.3 Correlations Across the Ten Items, Computed for Each Subject and Then Averaged Across Subjects

	Payment Mechanisms				Ability to Pay
	Government Pays	Reimburse	Deduction	No Deduction	
Should be graduated	0.59	0.75	0.85	-0.78	0.85
Rich benefit more	-0.14	0.21	0.45	-0.23	0.40
Better for me if government pays	0.97	0.77	0.64	-0.91	0.59
Better for me if rich pay more	0.46	0.72	0.75	-0.69	0.88

Source: Authors' compilation.

$r > .55$ is "significant" at $p < .05$ one tailed, for $N = 10$

Table 4.4 Mean Responses and Inferred Responses for Presence and Absence of Health Care, Education, and Social Security, Experiment 2

		No Cuts	
Top	33.6%		
Middle	22.5%		
Bottom	11.4%		
		Three Cuts, Raw Responses	
Top	18.9%		
Middle	7.5%		
Bottom	-3.9		
		Three Cuts, Responses Plus Out-of-Pocket Cost	
Top	23.4%		
Middle	19.5%		
Bottom	26.1%		

Source: Authors' compilation.

Table 4.5 Mean Responses and Inferred Responses for Presence and Absence of Health Care, Education, and Social Security, Experiment 3

No Cuts		
Top	36.7%	
Middle	25.0%	
Bottom	13.3%	
Three Cuts, Raw Responses		
Top	18.5%	
Middle	10%	
Bottom	1.5%	
Three Cuts, Responses Plus Out-of-Pocket Cost		
Top	24.5%	
Middle	25.0%	
Bottom	39.0%	

Source: Authors' compilation.

Table 4.6 Strategy Use, Experiment 3

Strategy	Percentage Who Never Choose	Percentage Who Always Choose	Mean Percentage for the Rest
Flat tax	39.0	12.7	30.0
Zero for low income	26.6	7.6	30.0
Negative tax	51.9	0	14.2
Maximum graduation	31.6	2.5	26.7
Maximum graduation, no negative	26.6	2.5	24.7
Graduation with adjustment	N.A.	N.A.	30.4
Graduation, no adjustment	N.A.	N.A.	69.6

Source: Authors' compilation.

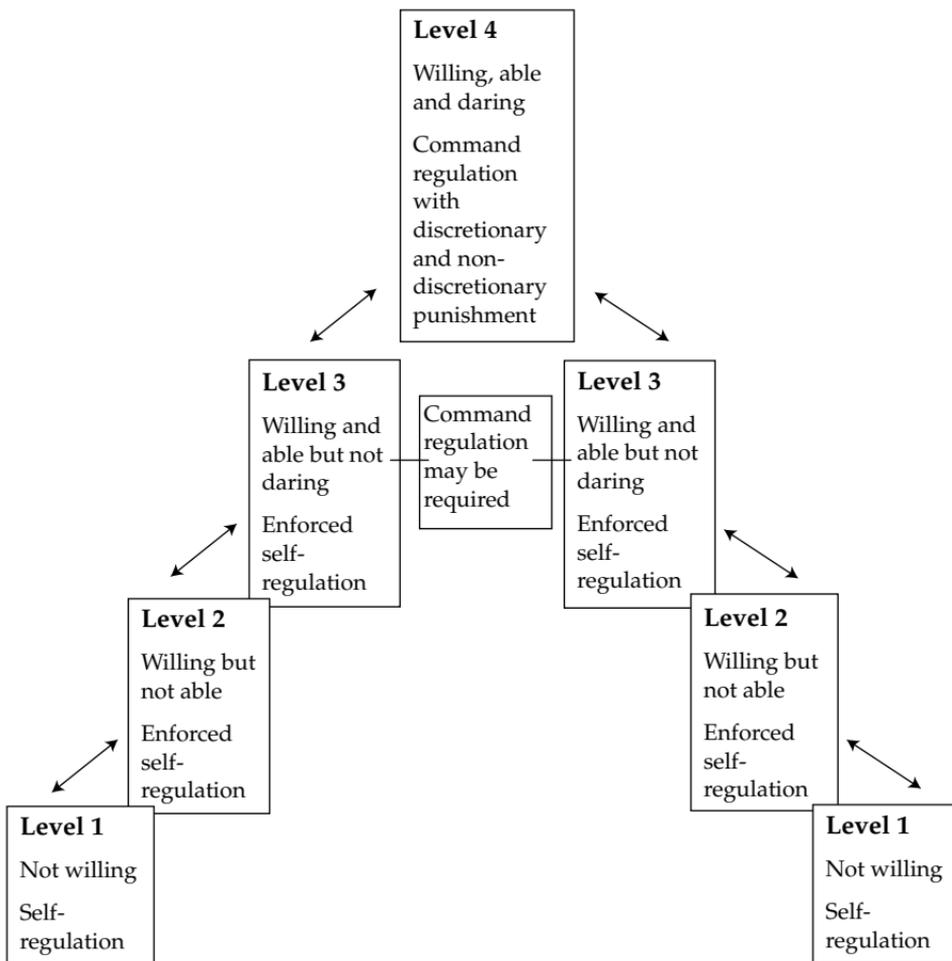
Table 5.1 Legal Policies Affecting Work-Life Balance

	Maternity Leave Provision 1999 to 2001	Legal Maximum Weekly Working Hours 1990s	Legal Maximum Weekly Opening Hours (8 to 24 hours) 1990s
North America			
Canada	8.25	none	—
Mexico	12	57	—
United States	0	none	112
Asia			
Japan	8.4	none	—
South Korea	8.5	56	—
Europe			
Austria	16	50	—
Belgium	11.55	50	73
Czech Republic	19.32	51	—
Denmark	30	48	63.5
Finland	36.4	45	80
France	16	48	112
Germany	14	60	66.5
Greece	8	48	112
Hungary	24	52	—
Ireland	9.8	60	112
Italy	17.2	60	66
Luxembourg	16	48	—
Netherlands	16	60 (maximum average over 13 weeks is 48)	55
Norway	42	50	80
Poland	18	—	—
Portugal	24.3	54	112
Slovak Republic	25.2	—	—
Spain	16	47	112
Sweden	40.32	48 or 52	112
Switzerland	—	61 or 66	—
Turkey	7.92	—	—
United Kingdom	7.92	none	102
Oceania			
Australia	0	none	—
New Zealand	0	none	—

Sources: The index of national maternity leave provision is the product of the number of weeks of maternity leave and the rate of pay during those weeks. Data is from OECD *Employment Outlook 2001*, table 4.7, columns 4 and 5. Legal maximum weekly working hours data is from OECD *Employment Outlook 1998*, table 5.10, column 3. Data for legal maximum weekly opening hours of shops is from Pilat (1997).

Note: — = data not available.

Figure 7.1 Tax Compliance Model of Taxpayer and Tax Regulator



Source: Authors' compilation.

Table 7.1 Summary of the Differences Between VAT Compliers and Noncompliers

Variable	t	χ^2	d.f.	p <	Noncompliers		Compliers		Effect Size
					Mean	Standard Deviation	Mean	Standard Deviation	
Underdeclaring contributes to profit	-7.08		221	.001	3.87	1.1	2.47	1.4	1.12
Egoism	-5.94		222	.001	35.91	8.8	28.11	8.3	0.91
What friends say	-5.08		217	.001	4.36	1.2	3.26	1.4	0.85
Attitude to evasion	-5.65		213	.001	2.02	1.2	1.24	.71	0.81
Quality of service	3.87		223	.001	14.31	3.9	16.61	3.8	0.60
Equity	2.98		222	.005	3.69	1.6	4.56	1.9	0.50
VAT rules acceptable	3.05		223	.005	2.83	1.2	3.36	1.1	0.46
Reputation	2.81		221	.01	3.17	1.3	3.71	1.2	0.43
Age	2.48		222	.05	2.42	.81	2.72	.73	0.39
Understand how VAT works	2.46		222	.05	2.94	1.3	3.42	1.2	0.38
Reported by other businesses	2.26		222	.05	2.33	1.1	2.72	1.1	0.35
Penalty for errors	-2.25		223	.05	3.28	1.4	2.83	1.3	0.33
Books written up	-2.05		222	.05	2.53	1.1	2.20	.98	0.31
Purpose		4.67	1	.05					
Advice sought		9.30	1	.005					

Source: Authors' compilation.

Note: Only differences significant at the 0.05 level or more are shown. Variables are ordered by effect size, with those having the largest effect size at the top

Table 7.2 Results of Logistic Regression Analysis on the Two Compliance Groups

Variable	Percentage Cases Classified Correctly	Chi Squared		
		Model	Improvement	N
Underdeclaration				
leads to profit	76.6	34.45***	34.45***	198
What friends say	82.8	50.71***	16.26**	198
Egoism	84.3	60.43***	9.71*	198
Attitude to evasion	83.3	65.50***	5.07*	198
Purpose of VAT	84.3	70.46***	4.61*	198

Source: Authors' compilation.

* $p < .05$; ** $p < .001$; *** $p < .0001$

Table 7.3 Summary of Differences Between Self-Reported Compliers and Noncompliers

Variable	t	d.f.	p <	Noncompliers		Compliers		Effect Size
				Mean	Standard Deviation	Mean	Standard Deviation	
Guilt	6.40	142	.001	5.11	2.5	7.69	1.8	1.12
Morality	5.10	138	.001	12.46	3.5	15.44	2.9	0.90
Mental accounting	-3.52	142	.001	6.80	2.6	5.15	2.9	0.60
Equity	-3.02	131	.005	14.02	3.9	11.84	3.9	0.60
Dread inspection	-2.50	142	.05	5.64	2.8	4.49	2.4	0.40

Source: Authors' compilation.

Note: Only differences significant at the 0.05 level or more are shown. Variables are ordered by effect size, with those having the largest effect size at the top.

Table 7.4 Results of Logistic Regression Analysis on the Two Compliance Groups

Variable	Percentage Cases Classified Correctly	Chi Squared		
		Model	Improvement	N
Dread inspections	64.8	16.23***	16.23***	198
Guilt	68.7	28.52***	12.30***	198
Equity	74.2	44.77***	16.25***	198

Source: Authors' compilation.

* $p < .05$; ** $p < .001$; *** $p < .0001$

Figure 9.1 Types of Decision Model

		Individual Cognitive Capabilities	
		Faultless Optimization	“Flawed,” Bounded Rationality
Objective Function	Narrow Income, Wealth, Value Maximization	1	3
	Wider or Enhanced Utility	2	4

Source: Authors' compilation.

Table 9.1 Least-Cost Decisions and the Brain

	Emotional Costs	Cognitive Costs
Certain gain	Low	Low
Risky gain	Low	High
Certain loss	High	High
Risky loss	High-ish	High

Source: Authors' compilation.

Table 9.2 Within Subjects Effects

	F	SIG (Three Decimal Places)
PROB	100.973	.000
PROB x FRAMETAX	2.847	NS
PROB x DEGR	9.419	.000
PROB x FRAMEINS	2.313	NS
PROB x FRAMETAX x DEGR	0.131	NS
PROB x FRAMETAX x FRAMEINS	0.206	NS
PROG x DEGR x FRAMEINS	0.781	NS
PROG x FRAMETAX x DEGR x FRAMEINS	0.192	NS

Source: Authors' compilation.

Table 9.3 Academic Unit Studied Times Audit Probability

Audit Probability	Income Declared (Mean)	
	Psychology Unit	Economics Unit
1%	£16,830	£13,322
5%	£18,175	£15,820
25%	£19,562	£18,459

Source: Authors' compilation.

Table 9.4 Between Subject Effects

	F	SIG (Three Decimal Places)
FRAMETAX	5.841	.016
DEGR	18.100	.000
FRAMEINS	0.458	NS
FRAMETAX x DEGR	0.736	NS
FRAMETAX x FRAMEINS	0.943	NS
DEGR x FRAMEINS	0.943	NS
FRAMETAX x DEGR x FRAMEINS	0.862	NS

Source: Authors' compilation.

Table 9.5 The Tax Framing Effect

Audit and Frame	Tax Not Yet Deducted	Already Deducted Based on Previous Year's Income
1%	£13,419	£15,516
5%	£15,967	£17,245
25%	£18,368	£19,291

Source: Authors' compilation.

Box 10.1 A Brief History of Disclosure Statements for TIAA-CREF Participants

An interesting source of comparison for the Social Security Statement is the annual statement that TIAA-CREF sends to its participants. Originally, the TIAA-CREF statements reported only projected levels of annual retirement income that participants could be expected to receive under the organization's standard annuity option. Over time, however, participants began requesting information on the projected value of their accounts at retirement. Reportedly, participants were interested in comparing the value of other TIAA-CREF accounts to other sorts of savings.

Over the course of the 1990s, the TIAA-CREF statements evolved to include information on current account balances on a quarterly statement and projected annuities based on current account balances on the annual statement, which also contained a second set of projections based on projected account balances assuming a continuation of current contributions and then projected levels of retirement income based on total projected accumulations. Typically, these projections were based on an assumed rate of return along with a higher and lower estimated rates of return.

In the past few years, TIAA-CREF has simplified its statements to report only current accumulations on the quarterly statement and no longer provides an annual statement with written estimates of either projected account balances or projected levels of retirement income. A number of factors apparently contributed to this change, including the expansion of TIAA-CREF's investment options to include mutual funds. NASD regulations also apparently imposed some constraints on reporting projected yields, presumably out of fear of industry abuse. In addition, as TIAA-CREF expanded the range of annuity payout options available to its participants, it became less clear which annuity options were appropriate to use for projecting retirement income. Finally, the availability of web-based software provided an alternative mechanism for allowing participants to make their own projections. This web-based software now provides the principal mechanism through which TIAA-CREF participants can obtain projected account balances and projected levels of retirement income. Participants can also call to request income illustrations.

The TIAA-CREF experience offers an interesting point of comparison. The current Social Security Statement is similar to the original TIAA-CREF statements, which were focused on projected levels of retirement income. In the 1990s, TIAA-CREF moved to a model of annual statements similar to the alternative approach discussed in this chapter: including current balances and also projections of retirement income levels based on both current and projected balances.

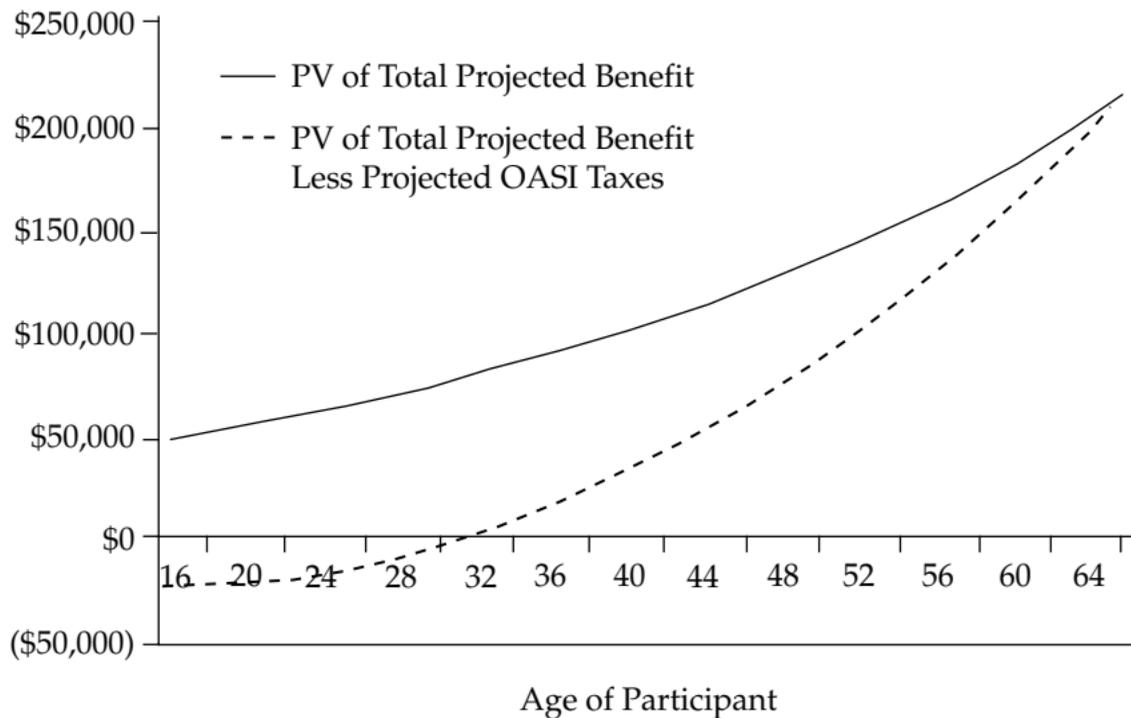
Box 10.2 Disclosures Under the Swedish Public Pension System

In the 1990s, Sweden reformed its public pension program to include, as its most prominent component, a notional defined contribution plan, in which participants receive annual credits equal to 16 percent of earnings. Over the course of participants' working lives, these account balances grow at the real rate of increase of per capita earnings in Sweden. Then, at retirement, each participant's account balances are converted into an annuity reflecting the life expectancy of the participant's age cohort. The Swedish notional defined contribution plan is conceptually similar to cash balance plans that are increasingly popular in the United States.

The disclosure forms that Swedish officials have developed for their notional defined contribution plan are quite similar to the alternative format outlined earlier. Like the current Social Security Statement, the Swedish forms project expected levels of monthly retirement benefits under the assumption that participants will remain employed until retirement. On top of these projections, the disclosure then includes information about the current value of account balances, the participant's most recent year's contribution, and an indexation component—akin to an interest payment—reflecting growth in average Swedish wages. Participants also pay an annual administrative charge for the notional defined contribution plan and receive an annual inheritance payment, which distributes the account balances of members of participants' age cohort who die before retirement. The statement also reports adjustments in account balances for each year's administrative charges and inheritance gains. The Swedish disclosure forms thus highlight both the current value of participants' interest in the notional defined contribution program as well as the manner in which account balances change over the course of a year.

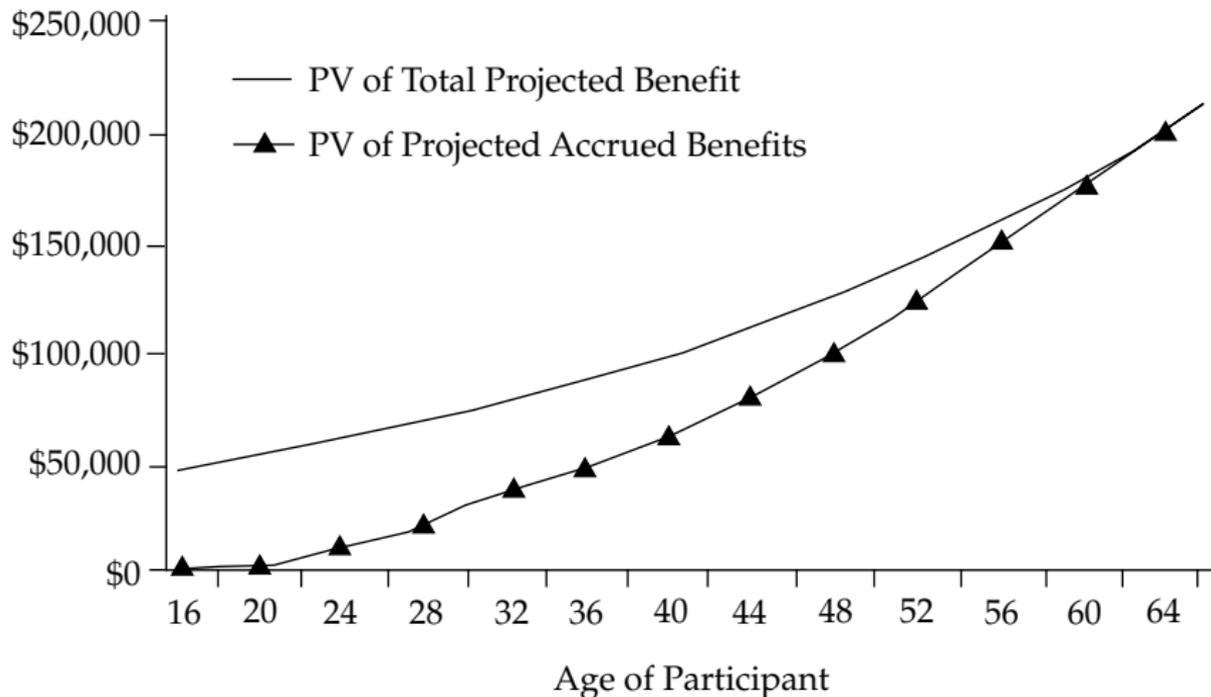
Source: Author's compilation, but for an introduction to the Swedish pension plan, see Sundén (2000).

Figure 10.1 Total Projected Benefits and Total Projected Benefits Less Projected OASI Taxes



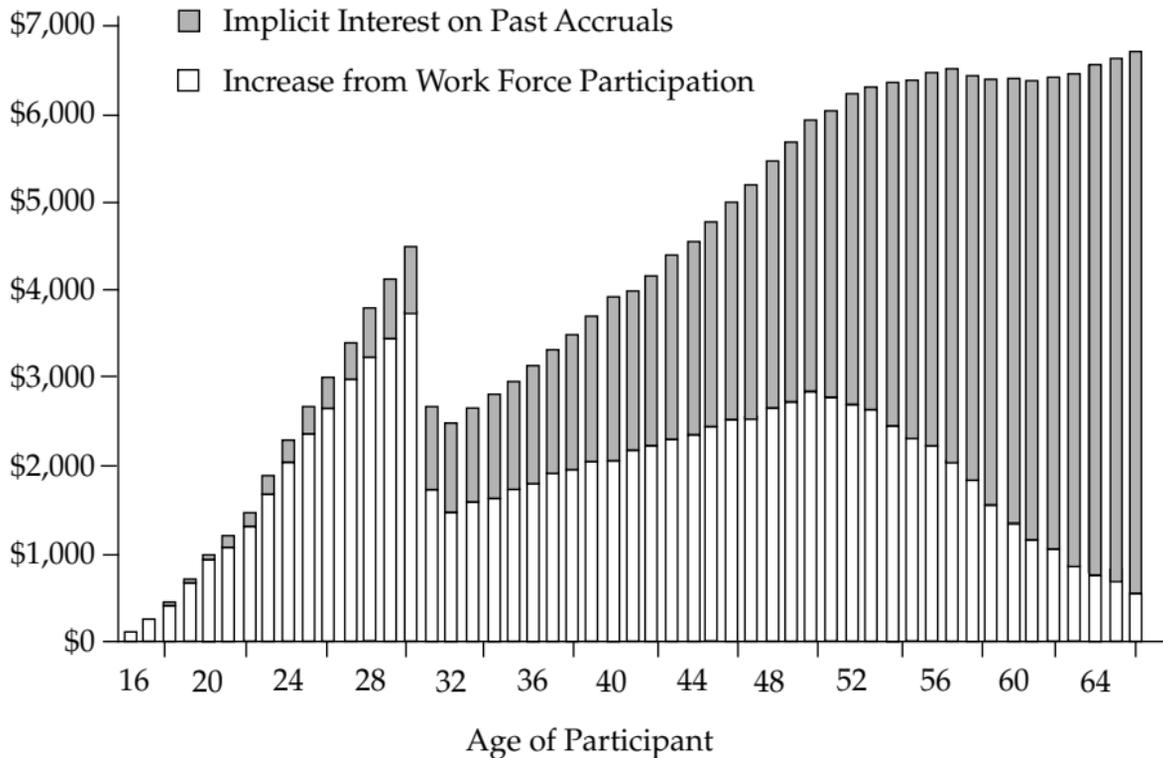
Source: Author's compilation.

Figure 10.2 Total Projected Benefits and Projected Accrued Benefits



Source: Author's compilation.

Figure 10.3 Components of Annual Increases in Accrued Benefits



Source: Author's compilation.

Figure 10.4 Supplemental Disclosure for Wanda Worker (12/31/03)

Retirement Benefits

In 2003, you and your employer each paid \$2,173 in payroll taxes for a combined payroll tax of \$4,326. As a result of your participation in the Social Security program last year, the value of your accrued retirement benefits under the Social Security program is estimated to have increased as follows:

Value of Retirement Benefit (as reported for 12/31/02)	\$56,158
Implicit Interest on Previously Accrued Benefits	\$3,004
New Benefits Accrued in 2003	<u>\$1,993</u>
Value of Retirement Benefit (as of 12/31/03)	\$61,154

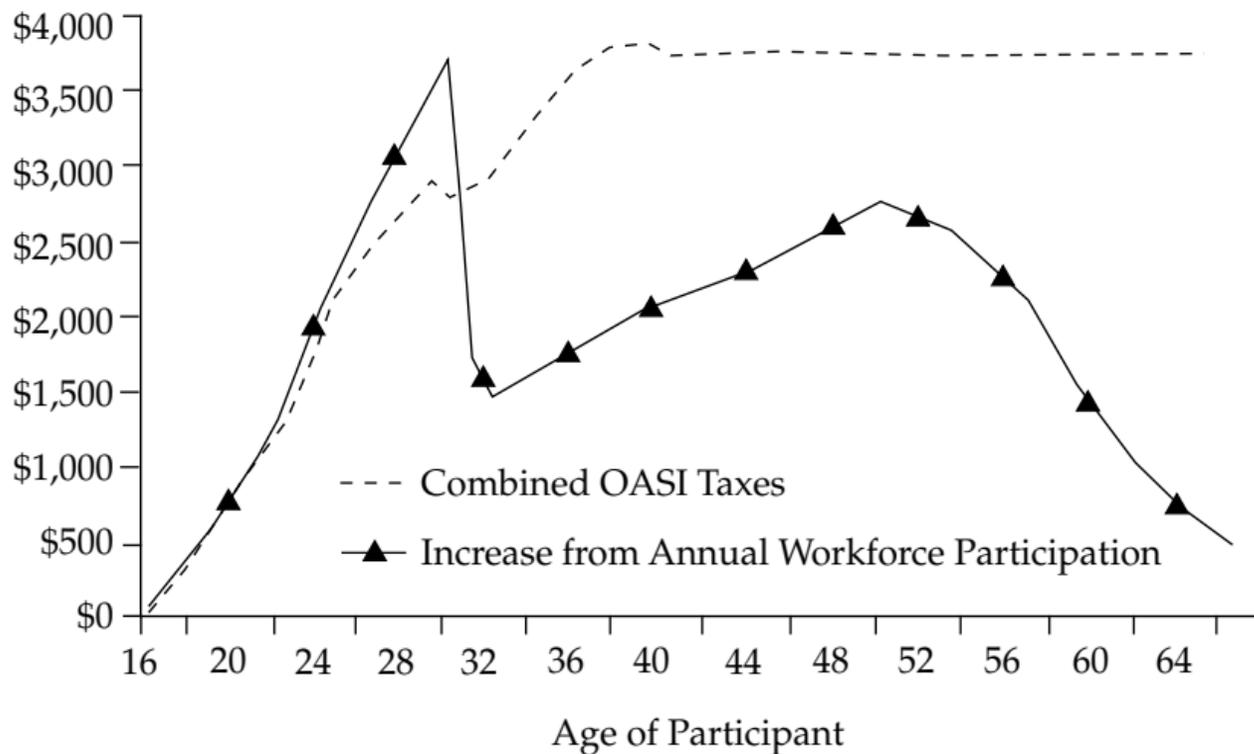
Ancillary Benefits

In addition, as a result of your participation in the Social Security program last year, you received ancillary benefits estimated to have the following values:

Value of Disability Insurance Coverage in 2003:	\$631
Value of Survivors Insurance Coverage in 2003:	<u>\$300(?)</u>
Total Value of Ancillary Benefits:	\$931

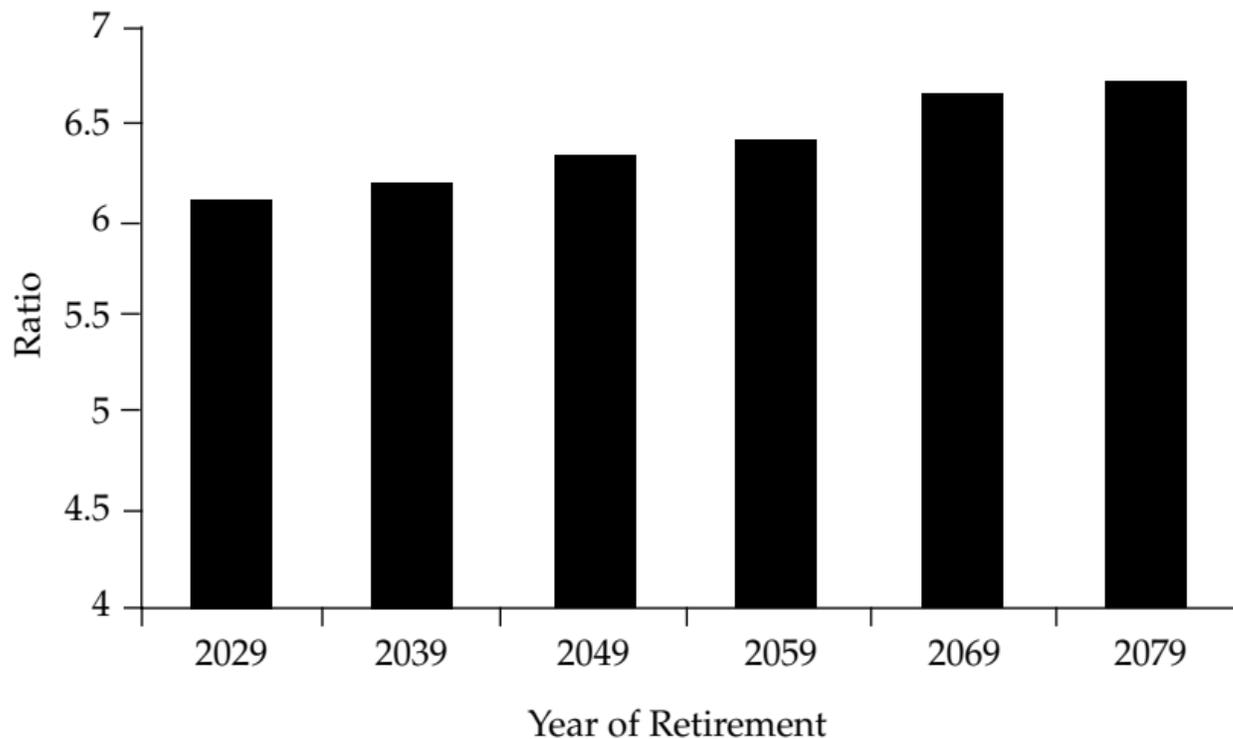
Source: Author's compilation.

Figure 10.5 Taxes to Increases in Accrued Benefits



Source: Author's compilation.

Figure 10.6 Projected Benefit to Average Indexed Annual Salary



Source: Author's compilation.

Table 10.1 Your Estimated Benefits

Retirement	<p>You have earned credits to qualify for benefits. At your current earnings rate, if you stop working and start receiving benefits At age 62, your payment would be about . . . \$882 a month If you continue working until . . . Your full retirement age (67 years), your payment would be about . . . \$1,278 a month Age 70, your payment would be about . . . \$1,594 a month</p>
Disability	<p>You have earned enough credits to qualify for benefits. If you became disabled right now, Your payment would be about . . . \$1,169 a month</p>
Family	<p>If you get retirement or disability benefits, your spouse and children also may qualify for benefits.</p>
Survivors	<p>You have earned enough credits for your family to receive survivors benefits. If you die this year, certain members of your family may qualify for the following benefits. Your child . . . \$911 a month Your spouse who is caring for your child . . . \$911 a month Your spouse, if benefits start at full retirement age . . . \$1,215 a month Total family benefits cannot be more than . . . \$2,233 a month Your spouse or minor child may be eligible for a special one-time death benefit of \$255.</p>
Medicare	<p>You have enough credits to qualify for Medicare at age 65. Even if you do not retire at age 65, be sure to contact Social Security three months before your 65th birthday to enroll in Medicare.</p>

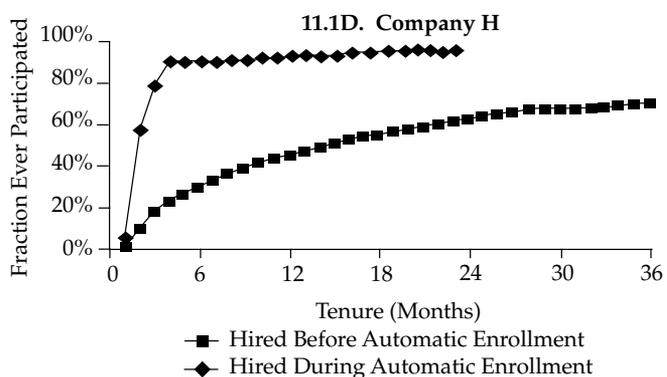
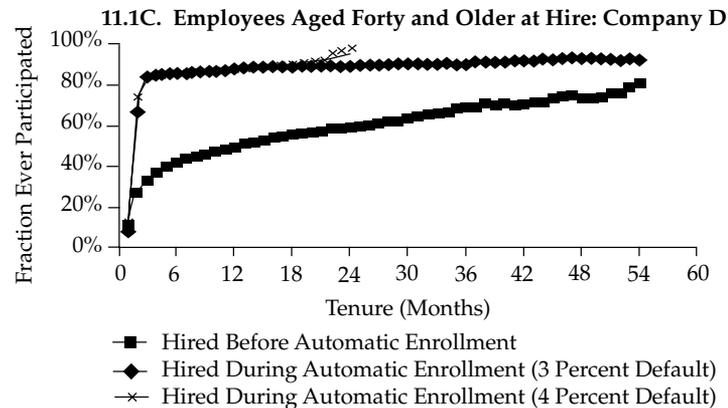
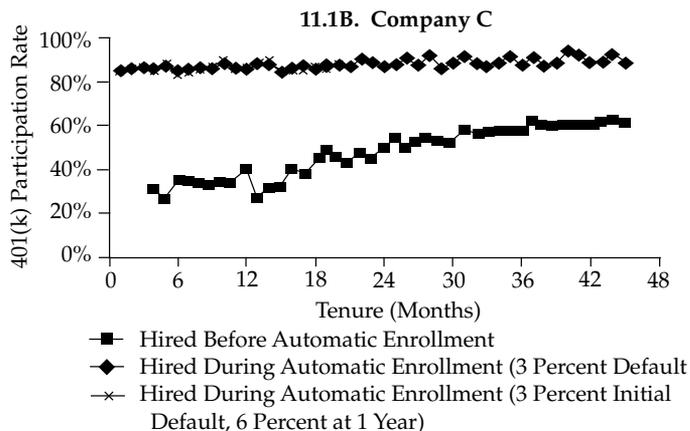
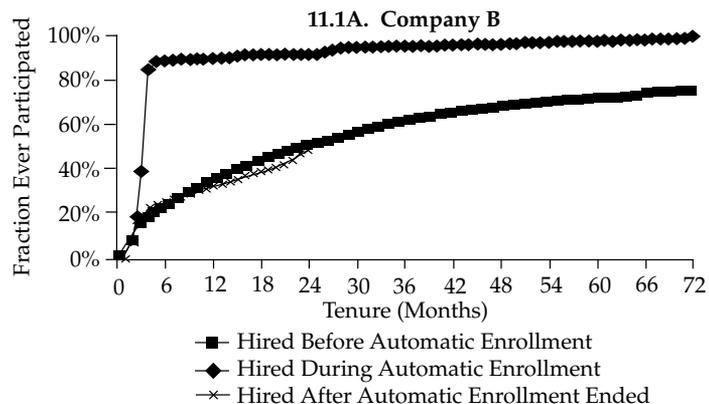
Your estimated benefits are based on current law. Congress has made changes to the law in the past and can do so at any time. The law governing benefit amounts may change because, by 2042, the payroll taxes collected will be enough to pay only about 73 percent of scheduled benefits.

We based your benefit estimates on these facts:

Your name . . .	Wanda Worker
Your date of birth . . .	May 5, 1963
Your estimated taxable earnings per year after 2003 . . .	\$35,051
Your Social Security number (only the last four digits are shown to help prevent identity theft) . . .	XXX-XX-2004

Source: Author's compilation from U.S. Social Security Administration (2005b).

Figure 11.1 401(k) Participation



Source: Authors' calculations.

Figure 11.2 Distribution of 401(k) Contributions

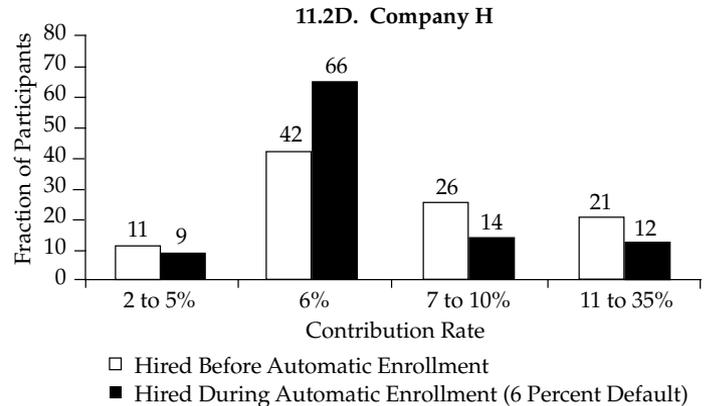
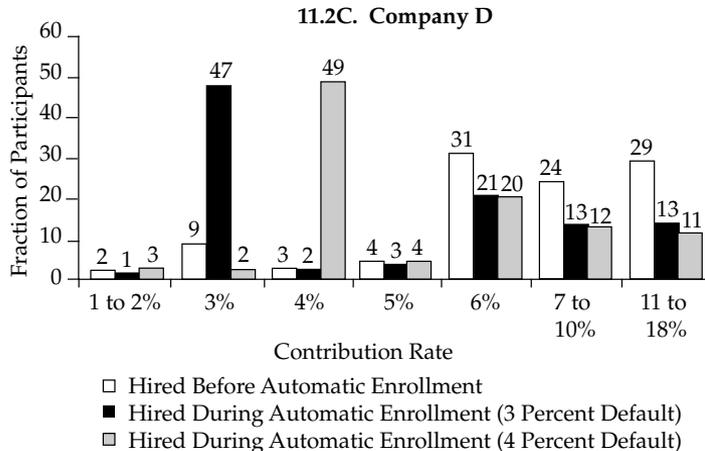
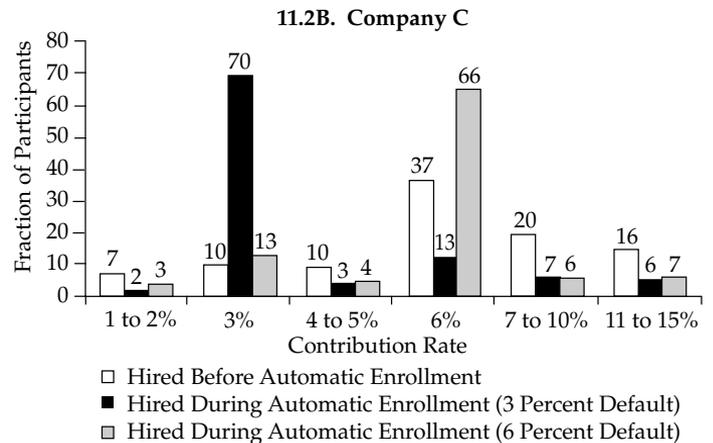
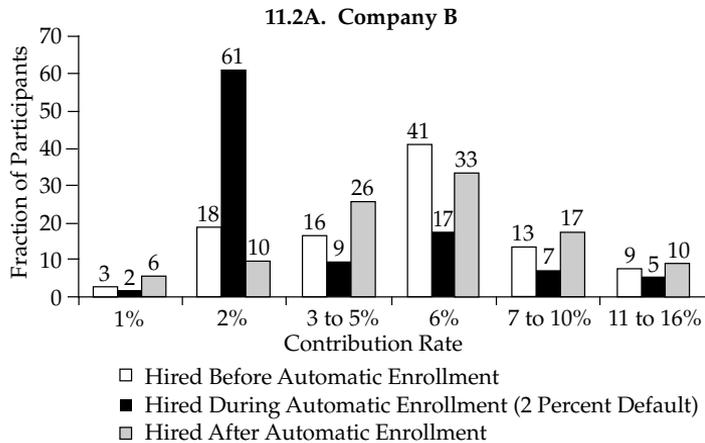
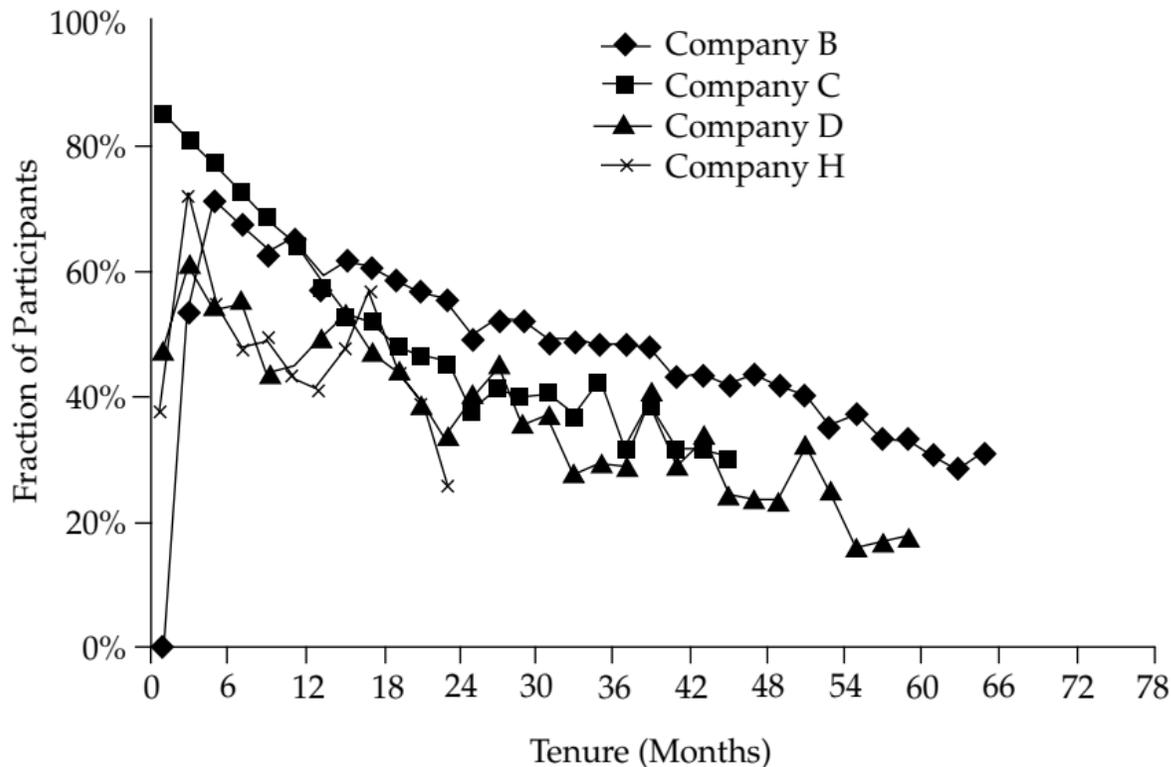
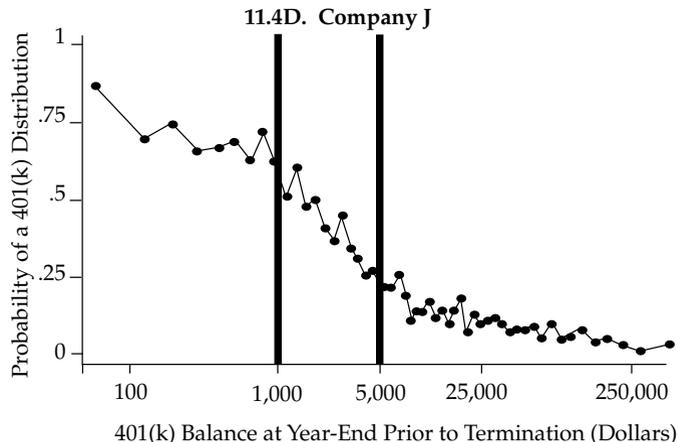
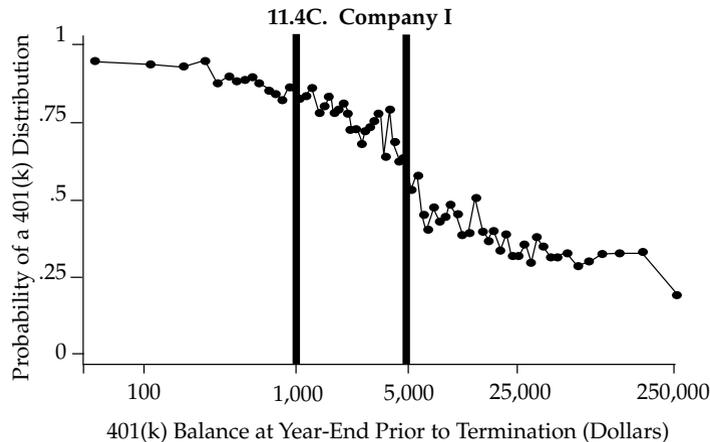
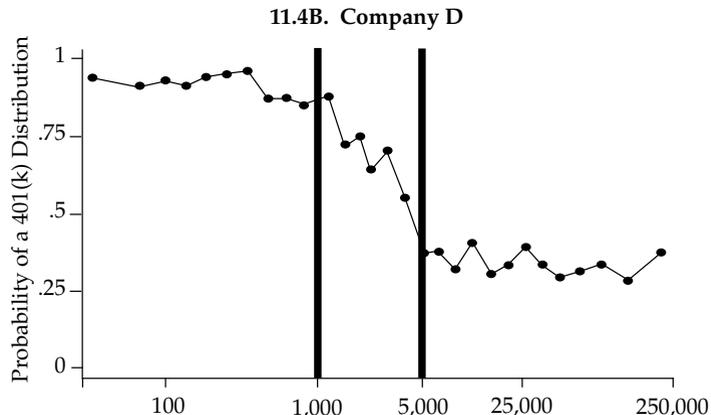
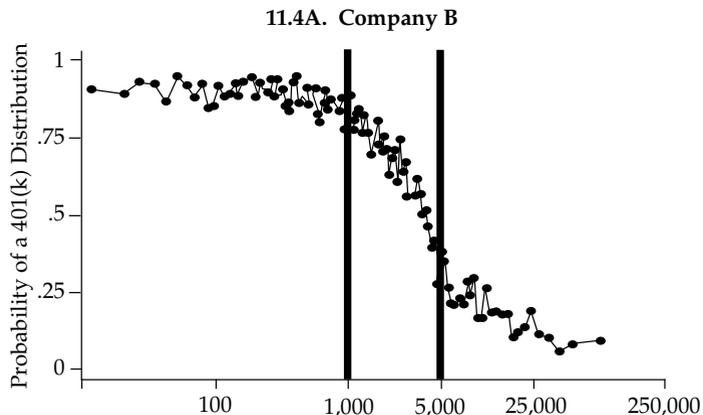


Figure 11.3 Participants Hired During Automatic Enrollment at Defaults

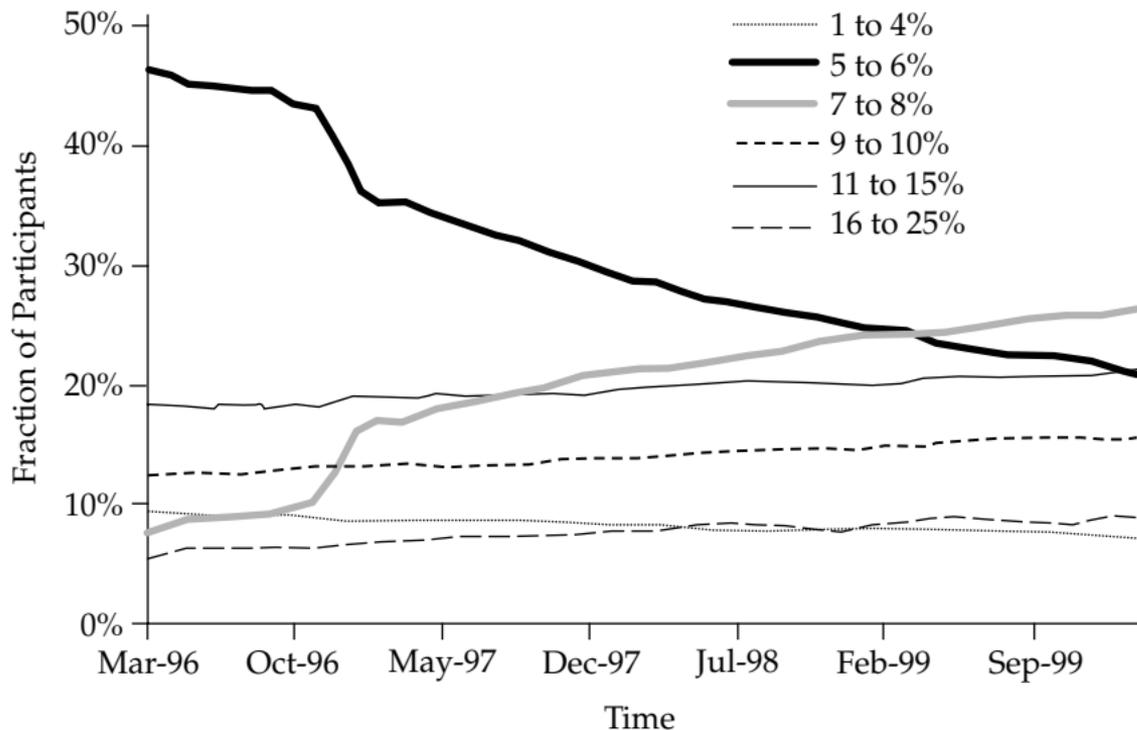


Source: Authors' calculations.

Figure 11.4 Balances and the Probability of a Cash Distribution

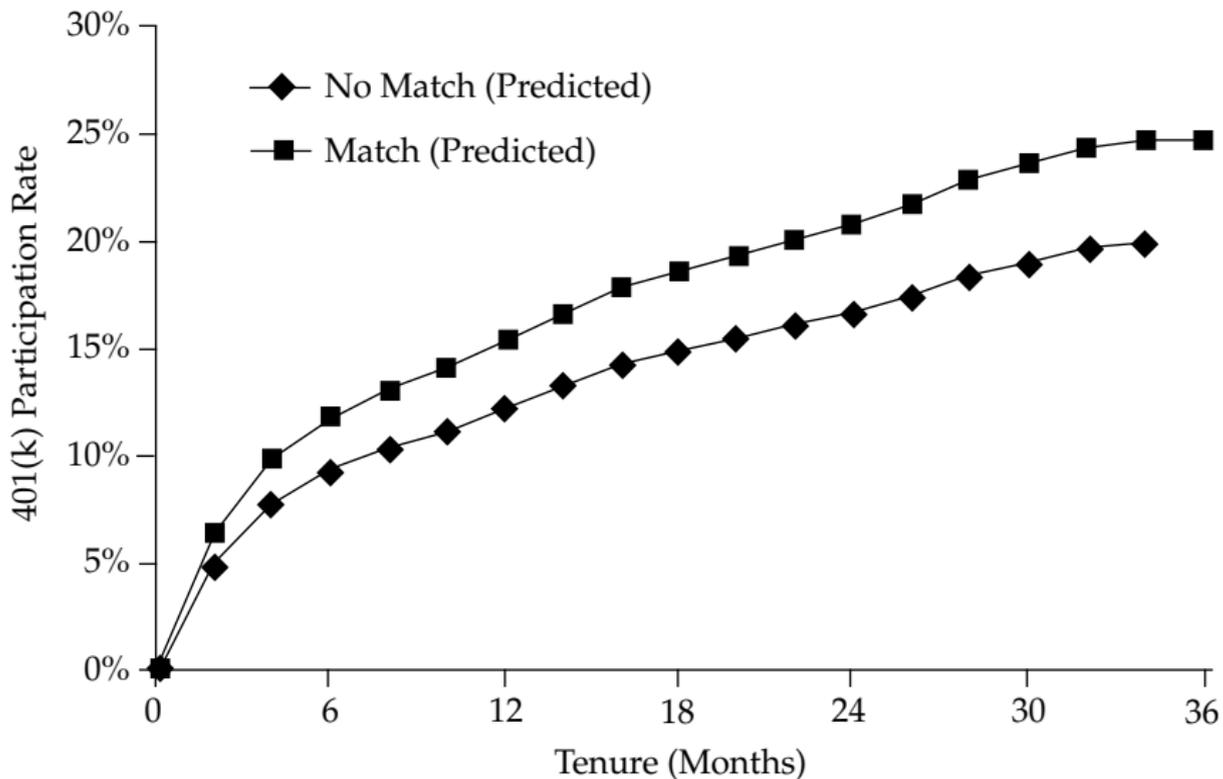


**Figure 11.5 Evolution of the 401(k) Contribution Rate Distribution:
Company E**



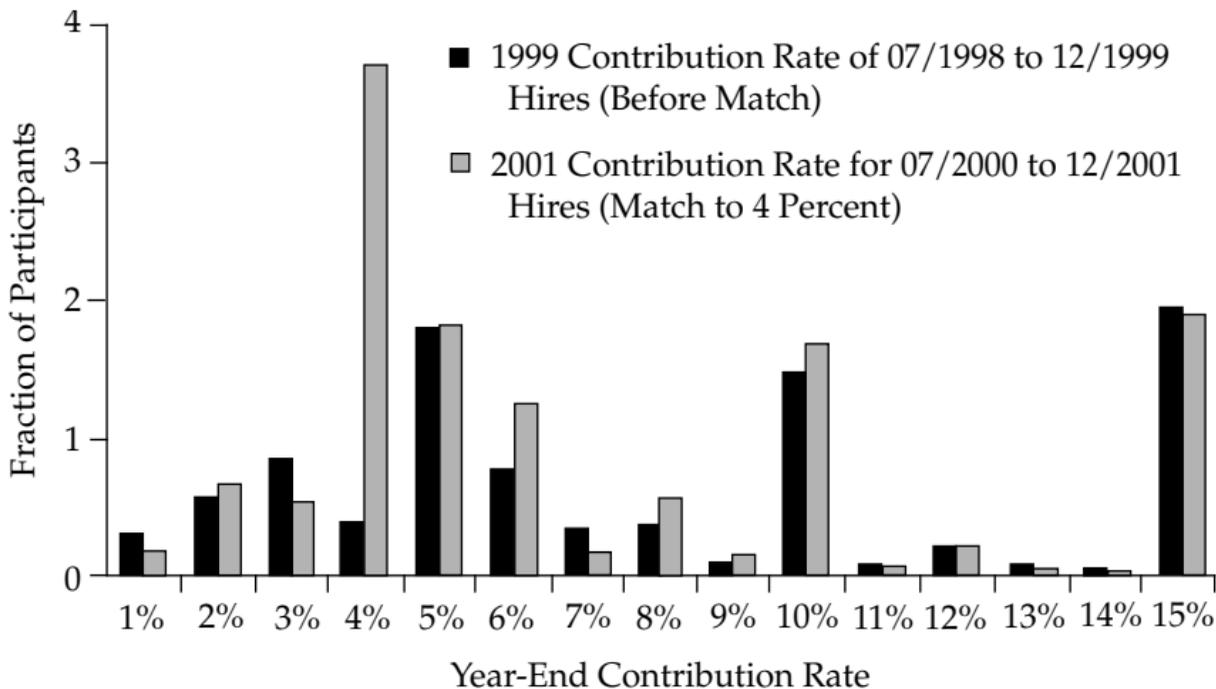
Source: Authors' calculations.

Figure 11.6 Employer Matching and 401(k) Participation: Company F



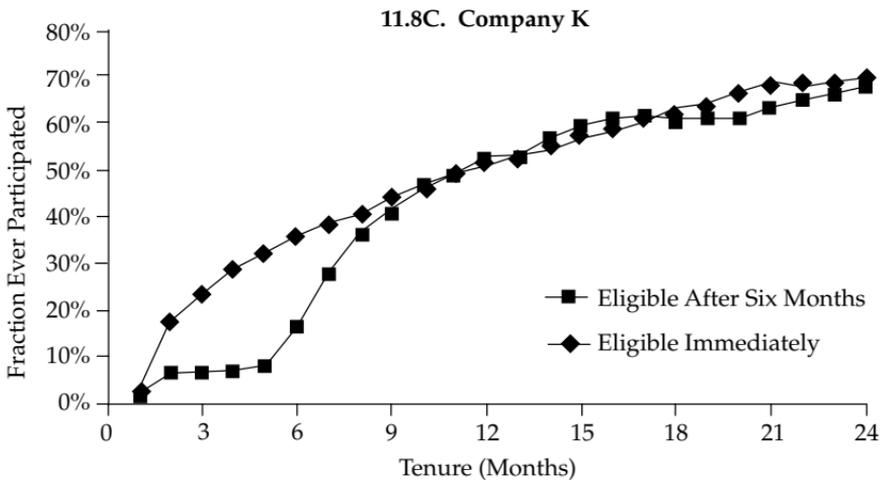
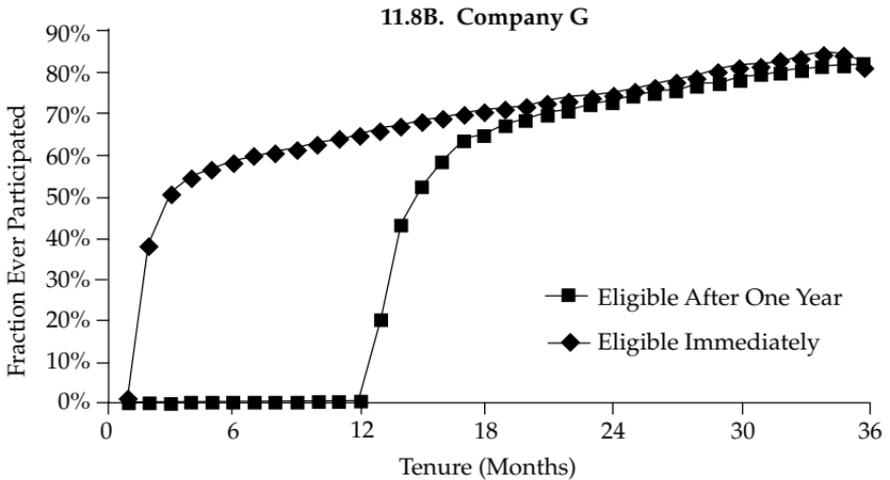
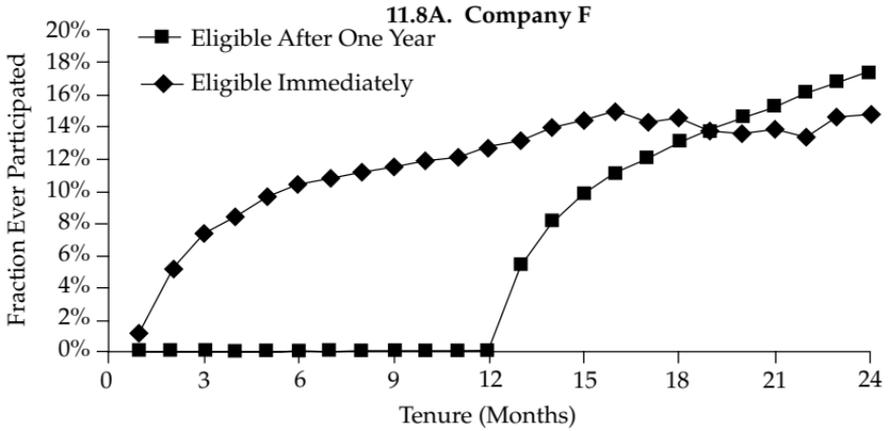
Source: Authors' calculations.

**Figure 11.7 Distribution of Contribution Rates by Date of Initial Hire:
Company F**



Source: Authors' calculations.

Figure 11.8 Waiting Periods and 401(k) Participation



Source: Authors' calculations.

Table 11.1 Company 401(k) Plan Changes or Other Interventions

Company	Industry	Size ^a	Plan Change or Intervention	Date of Change or Intervention
A	Food	10,000	Savings survey	January 2001
B	Office equipment	30,000	Adopted automatic enrollment	January 1997
C	Insurance	30,000	Eliminated automatic enrollment	January 2001
			Adopted automatic enrollment	April 1998
			Financial education seminars	January to December 2000
D	Food	20,000	Changed automatic enrollment defaults	May 2001
			Adopted automatic enrollment	January 1998
			Increased default contribution rate	January 2001
E	Utility	10,000	Increased match threshold	January 1997
F	Consumer packaged goods	40,000	Changed eligibility	July 1998
			Instituted employer match	October 2000
G	Insurance	50,000	Changed eligibility	January 1997
H	Manufacturing		Adopted automatic enrollment	January 2001
I	Retail	130,000	None	NA
J	Financial Services	50,000	None	NA
K	Pharmaceutical	10,000	Changed eligibility	January 1996

Source: Authors' calculations.

^a Number of employees (rounded to the nearest 10,000) on December 31, 1998 (company K), December 31, 2000 (Companies A, B, D, E, F, G, I, and J), June 30, 2000 (company C) or December 31, 2001 (company H).

Table 11.2 Self-Reported Retirement Savings Adequacy (Company A)

	Distribution of 401(k) Contribution Rates as Fraction of Income		
	0 to 4 percent	5 to 8 percent	9 to 12 percent
Respondents who describe their savings rate as “too low” ^a	36%	36%	27%
Respondents who describe their savings rate as “about right” ^a	12%	15%	73%

Source: Authors' calculations.

^a See question 11 from the survey reproduced at the end of this chapter. We aggregate the categories “far too low” and “a little too low” into one category (“too low”).

Table 11.3 Fraction of 401(k) Participants with Balances in Automatic Enrollment Default Fund(s)

	Any Balances	All Balances
Company B		
Hired before automatic enrollment	43.9	12.7
Hired during automatic enrollment	71.6	59.6
Hired after automatic enrollment	27.7	6.8
Company C (partitioned on the basis of differences in the default contribution rate under automatic enrollment)		
Hired before automatic enrollment	17.7	5.2
Hired during automatic enrollment (3 percent default)	88.5	73.5
Hired during automatic enrollment (3 percent initial default, 6 percent at one year)	89.4	73.5
Company C (partitioned on the basis of differences in the default investment fund under automatic enrollment)		
Hired before automatic enrollment	17.7	5.2
Hired during automatic enrollment (money market fund default)	88.7	73.7
Hired during automatic enrollment (lifestyle fund default)	96.5	90.1
Company D		
Hired before automatic enrollment	36.4	14.2
Hired during automatic enrollment (3 percent default)	65.9	53.8
Hired during automatic enrollment (4 percent default)	70.1	61.5
Company H		
Hired before automatic enrollment	3.7	2.5
Hired during automatic enrollment	50.8	45.8

Source: Authors' calculations.

Note: The sample for companies B, C and H is 401(k)-eligible employees. The sample for company D is 401(k)-eligible employees aged forty plus at the time of hire. For company D, the data for those hired before automatic enrollment includes only employees not yet subject to automatic enrollment when it was applied to previously hired nonparticipants.

Table 11.4 Employer Matching and 401(k) Participation

Independent Variable	Company E (Hazard Ratio)	Company F (Hazard Ratio)
Female	0.8964 (-1.21)	0.9890 (-0.25)
Age	1.1376** (3.54)	1.1238** (6.53)
Age ²	0.9985** (-3.25)	0.9987** (-5.89)
Threshold change	0.7976 (-1.69)	—
Match introduction	—	1.2711** (5.12)

Source: Authors' calculations.

Notes: Coefficients estimated from a Cox proportional hazard model of 401(k) participation with time-varying covariates. For company E, the sample is employees hired during 1996 or 1997 and still employed at year-end 1998, 1999 or 2000. For company F, the sample is employees hired on or after January 1, 1998, and still employed at year-end 1998, 1999, 2000 or 2001. In company E, the variable *Threshold change* is a dummy variable that equals 1 after the match threshold was raised in company G (on January 1, 1997). In company F, *Match introduction* is a dummy variable that equals 1 after the company match was announced to employees (on July 1, 2000). The reported coefficients are hazard ratios, with corresponding z-statistics in parentheses.

** indicates that the coefficient is significantly different from unity at the 1 percent level.

Table 11.5 Financial Education and Savings Changes (Company C)

Planned Action	Seminar Attendees		Non-Attendees
	Planned Change	Actual Change	Actual Change
Nonparticipants			
Enroll in 401(k) plan	100%	14%	7%
401(k) participants			
Increase contribution rate	28%	8%	5%
Change fund selection	47%	15%	10%
Change fund allocation	36%	10%	6%

Source: Authors' calculations.

Notes: The sample is active 401(k)-eligible employees at company locations that offered financial education seminars from January-June 2000. Actual changes in savings behavior are measured over the period from December 31, 1999, through June 30, 2000. Planned changes are those reported by seminar attendees in an evaluation of the financial education seminars at the conclusion of the seminar. The planned changes from surveys responses of attendees have been scaled to reflect the 401(k) participation rate of seminar attendees.