

This paper compares participation rates in three existing voluntary individual account-type plans—Individual Retirement Accounts (IRAs), 401(k)s, and the federal Thrift Savings Plan (TSP)—in an effort to analyze who might participate in a voluntary individual account system.

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Participation in Voluntary Individual Savings Accounts: An Analysis of IRAs, 401(k)s, and the TSP

*by Glenn R. Springstead and Theresa M. Wilson**

Summary

New voluntary individual savings accounts have been proposed by some as a part of, or in addition to, Social Security. The success of these proposals would depend greatly on how many workers participate.

This paper compares participation rates in three existing voluntary individual account-type plans—Individual Retirement Accounts (IRAs), 401(k)s, and the federal Thrift Savings Plan (TSP)—to clarify expectations about who might participate in a voluntary individual account system. It finds that participants in IRAs, 401(k)s, and the TSP tend to be disproportionately male, higher earners, older, full-time workers, and either white or nonblack minorities compared with the population at large. Differences in earnings explain much of the difference between participation rates of men and women, however, but less of the difference between participation rates of workers of different races.

Whether participation in a new system of voluntary individual accounts would resemble participation in IRAs, 401(k)s, or the TSP would depend on a number of factors. For instance, the population covered by 401(k)s and the TSP is much smaller than that covered by Social Security. Average earnings are also higher among 401(k) and TSP participants than for workers covered by Social Security, which, based on these findings, suggests that participation rates could be lower in a universal system. Participation would also depend on many other factors, however, such as

the extent of matching contributions or other financial incentives, the investment options available, and the amount of education provided to potential participants.

I. Background

Concerns about Social Security's long-range solvency have generated a wide range of proposals that would introduce individual savings accounts as a part of, or in addition to, Social Security. For a number of these proposals, workers would make voluntary contributions to their accounts.

How many workers are likely to participate in these accounts if they are voluntary? Are some workers more likely to participate compared with others? This paper examines participation in three existing voluntary account systems—Individual Retirement Accounts (IRAs), 401(k) plans, and the federal Thrift Savings Plan (TSP)—to clarify expectations about participation in voluntary individual accounts.¹

This section provides information on current voluntary individual account proposals and the structure and rules surrounding IRAs, 401(k)-type plans, and the TSP. The next section discusses the findings, and the conclusion summarizes our results and adds a few qualifications to the findings.

The Traditional IRA

A traditional Individual Retirement Account (IRA) is a personal savings

account that offers tax advantages to set aside funds for retirement. Annual contributions of up to \$2,000 are fully tax-deductible for workers not covered under employer-sponsored pensions, for single workers with earnings under \$32,000, and for married workers filing jointly with earnings under \$52,000. Workers may also make nondeductible or partially deductible contributions. Investment earnings for all contributions accumulate tax-free and are not taxed until funds are distributed. The Taxpayer Relief Act of 1997 created Roth IRAs, which differ from traditional IRAs in that contributions are made with after-tax dollars but distributions are tax-free. Since the Roth IRA is new, there are no comparable participation data, and it is not considered here.

401(k)-Type Plans

Salary reduction plans are one type of employer-sponsored defined contribution pension plan. These plans include 401(k) plans for the private sector, 403(b) plans for the nonprofit sector,² and 457 plans for state and local governments. Based on available data, only 401(k)-type plans for the private sector are used in this paper. Employees contribute a portion of their salary tax-deferred to a qualified retirement plan. Contributions are limited by the tax code to a maximum amount, which changes annually. Employers typically match some portion of the employee contribution, and investment earnings accumulate tax-free until withdrawn.

The Federal Thrift Savings Plan (TSP)

The TSP is a voluntary defined contribution plan for federal employees that was initiated in 1986. As in 401(k)-type plans, contributions are not taxed as income, and they accumulate, along with investment earnings, tax-free until withdrawn. Employees in the Federal Employees Retirement System (FERS) may contribute a maximum of 10 percent of their earnings to the TSP, with the federal government matching up to 5 percent. Civil Service Retirement System (CSRS) participants, who are not covered by Social Security, may contribute 5 percent of their earnings to the TSP, but they do not receive any matching contributions. The federal government makes a 1-percent contribution to TSP accounts for all employees covered under FERS regardless of whether or not they elect to participate. The figures on TSP participation cited here exclude those who do not make individual contributions and the 1-percent contribution made on their behalf.

II. Findings

The findings that follow highlight the distinguishing features of plan participation for IRAs, 401(k)s, and the TSP for 1992, 1993, and 1997, respectively. Data were obtained from the Department of Labor, the Employee Benefit Research Institute (EBRI), and the Federal Retirement Thrift Investment Board, except where otherwise noted. Where applicable, we discuss

reasons for variations among participants and between plans.

Participation Higher for 401(k)s and TSPs Than for IRAs

Among plan types, the TSP has the highest overall participation rate, 79 percent, followed by 401(k)s with 67 percent of eligible workers participating. Participation in IRAs is much lower with only 8 percent of eligible individuals participating (table 1).

Higher participation in 401(k)s and the TSP may reflect the fact that these plans are administered by the employer and not solely by the individual, as is the case with IRAs. Employer administration may offer several advantages that enhance participation such as responsibility for management and oversight, as well as payroll deduction. The employer-matching provisions of the TSP and some 401(k)s are also thought to play a role in encouraging participation.³ In addition, employers generally provide extensive education to participants in 401(k) plans and in the TSP by holding informational meetings and preparing educational materials, which are thought to raise participation levels.⁴ Participants in 401(k) plans are also, on average, more highly educated and have higher earnings compared with the general population, which includes those who can contribute to an IRA. Finally, early access to fund balances through withdrawals and loan provisions, which are available through the TSP and some 401(k)s, has been linked to higher participation for some groups.⁵

Participation Increases with Earnings

Participation in IRAs, 401(k)s, and the TSP consistently increases as earnings increase (chart 1). Participation was

Table 1.—Overall participation in IRA, 401(k), and TSP plans, 1993

[Number in millions]			
Item	IRA ¹	401(k) plans	TSP ²
Number of—			
Workers offered a plan.....	105.8	31.0	1.5
Eligible workers participating.....	8.2	20.7	1.2
Percent of eligible workers participating.....	8	67	79

¹IRAs are available to all workers, but, as mentioned in the previous section, not all workers are eligible to make tax-deductible contributions. This analysis does not distinguish between deductible and nondeductible contributions.

²Represents full-time permanent workers; part-time workers are not eligible. Full-time workers typically must wait until the open enrollment period following the date of hire before joining the TSP.

Source: U.S. Department of Labor, *Pension and Health Benefits of American Workers: New Findings from the April 1993 Current Population Survey*, 1994; Federal Retirement Thrift Investment Board, *Analysis of 1997 Thrift Savings Plan Participant Demographics*, December 1998; and Employee Benefit Research Institute, *EBRI Databook on Employee Benefits*, 4th ed., 1997, table 15.4.

highest in the TSP for all wage groups, followed by 401(k)s. IRAs had dramatically lower participation rates compared with 401(k) plans and the TSP. For each plan, however, participation increases as earnings increase.

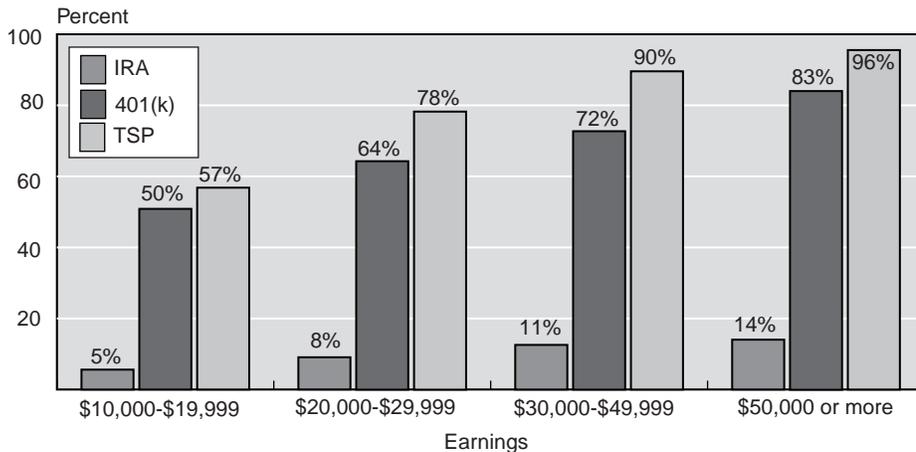
Participation may increase with earnings because higher paid workers may find participation more affordable than their lower paid counterparts and because the tax benefits of participation are higher for higher paid workers, providing them with a greater incentive to participate. The value of the tax exclusion associated with pre-tax contributions for 401(k)s and the TSP increases with income, meaning that higher income individuals receive a greater tax benefit for contributing. The following

tabulation shows the dollar value of a \$1,000 exclusion resulting from a contribution to a 401(k) plan or the TSP by marginal tax rate (the marginal tax rate is the rate of tax paid on the next dollar of income received):

Tax rate	15%	28%	31%	36%	39.6%
Dollar value	\$150	\$280	\$310	\$360	\$396

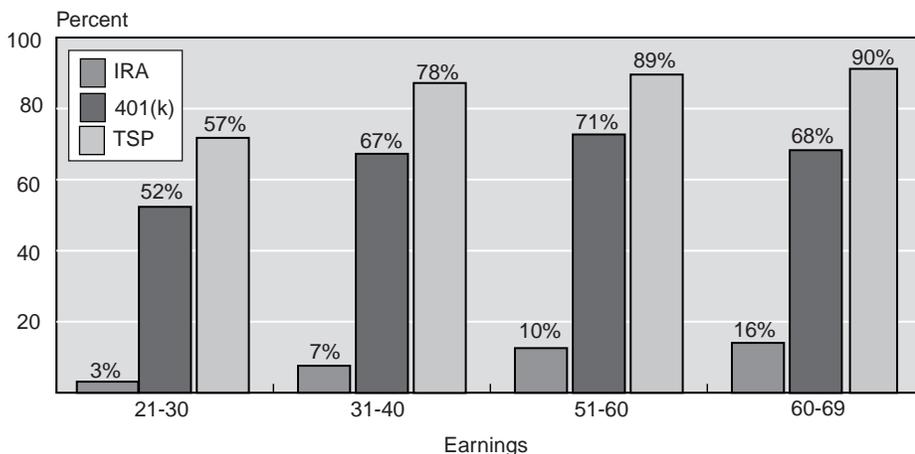
The same principle applies to tax-deductible IRAs; if a participant qualifies for the deduction, contributions may be taken as an above-the-line deduction on the tax form so that a taxpayer does not have to itemize deductions in order to benefit from the deduction. Similar to the effect of an exclusion, an above-the-line deduction is worth the dollar amount of the deduction times the taxpayer's marginal tax rate.

Chart 1.—Participation increases with earnings across all three plans



Source: Employee Benefit Research Institute, *EBRI Databook on Employee Benefits*, 4th ed., 1997, tables 12.2 and 15.4; Federal Retirement Thrift Investment Board, *Analysis of 1997 Thrift Savings Plan Participant Demographics*, December 1998.

Chart 2.—Participation increases with age¹



¹IRA data include deductible and nondeductible contributions; 401(k) data include all types of salary reduction plans.

Source: Federal Retirement Thrift Investment Board, *Analysis of 1997 Thrift Savings Plan Participant Demographics*, December 1998; and Employee Benefit Research Institute, *EBRI Databook on Employee Benefits*, 4th ed., 1997, table 15.4.

Participation Higher for Full-Time Workers

Although there are no data for IRAs or the TSP, 401(k) plan participation is highest among full-time workers. Of workers who are offered a 401(k) plan, 67 percent of full-time workers participate, compared with 39 percent of part-time workers.⁶ A possible explanation is that part-time workers generally have lower earnings than their full-time counterparts. As shown in the previous section, lower earnings are associated with lower participation.

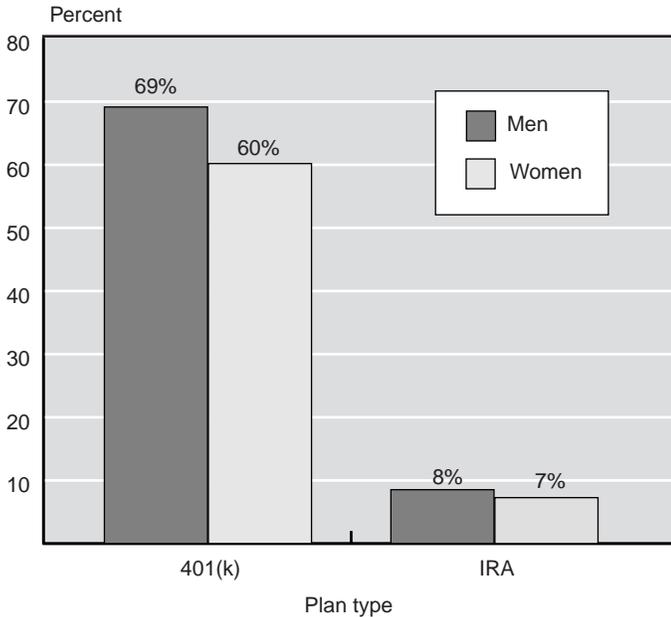
Participation Increases with Age

In most cases, as age increases, so does plan participation (chart 2). Participation was highest for each age group in the TSP, with 78 percent of eligible workers aged 31 or older participating. Participation in 401(k)s was slightly lower than in the TSP, and participation in IRAs by age was significantly lower than either in 401(k)s or the TSP. The only decline in participation by age is for those aged 60 to 69 in 401(k)s. It is likely that participation increases with age because earnings tend to increase with age, and older workers are more likely to be concerned about retirement security.

Participation Higher for Men

In both IRAs and 401(k)s, men have a higher participation rate than women. The TSP does not provide data for participation by gender. With respect to

Chart 3.—Higher participation for men compared with women in 401(k)s and IRAs



Source: Employee Benefit Research Institute, *EBRI Databook on Employee Benefits*, 4th ed., 1997, tables 12.2 and 15.4.

401(k)s, women’s participation was 9 percentage points lower than men’s—69 percent of eligible men participated compared with 60 percent of women (chart 3). IRA participation was also higher for men—8 percent of men participated compared with 7 percent of women. This may be due in part to the fact that until recently, nonworking women could not make tax-deductible IRA contributions.⁷

However, gender differences in participation become much smaller when earnings are held constant (chart 4). In fact, participation rates are higher among women compared with men for those earning \$35,000 or less a year. For men and women earning \$55,000 or more a year, participation rates are about equal—88 percent for men and 87 percent for women.

Among part-time workers, women’s participation is comparable with that of men (table 2). In 1993, women working part time had a slightly higher participation rate in 401(k) plans than men, 40 percent compared with 39 percent, respectively.

The combination of these findings—women have lower participation overall, but have similar participation compared with men when controlling for income—may indicate that the lower overall participation rate for women is due primarily to their lower average earnings.

Participation Lower for Blacks

For both IRAs and 401(k)s, “all other races” participate at the highest rate, followed by whites and then blacks.⁸ Among workers eligible for 401(k)s in 1993, 71 percent of “other” workers participated, compared with 68 percent of white workers and 53 percent of black workers. With respect to IRAs, participation rates were also highest among “other races” at 9 percent, followed by whites at 8 percent and blacks at 3 percent (chart 5).

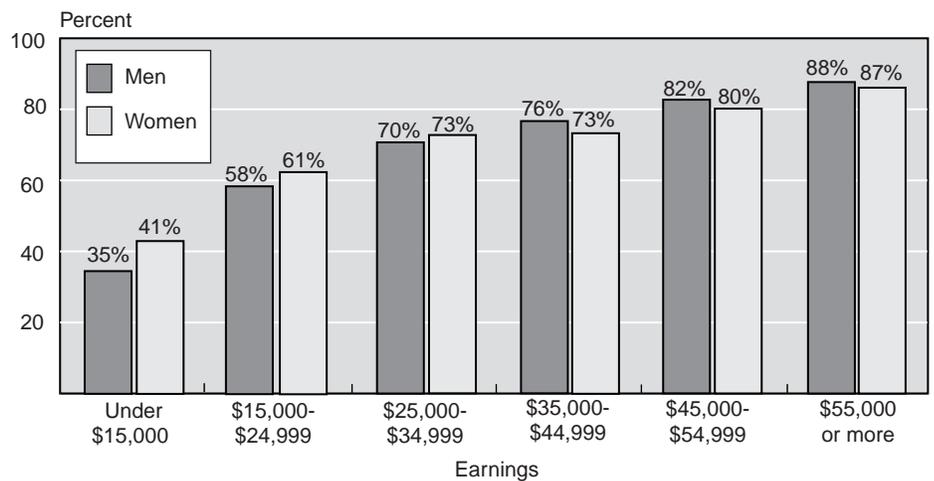
Differences in participation by race are only partly explained by differences in earnings (chart 6). Even when earnings are held constant, blacks have lower participation than whites across all levels.

It is unclear why blacks have lower participation in 401(k) than whites when earnings are held constant. Studies on saving in general have not found major differences in the propensity to save by race.⁹ But a recent survey of families with incomes of \$50,000 and higher suggests that a lack of a family history of saving and investing and a lack of exposure to savings and investing institutions may lead to lower savings for blacks. The same survey also found that blacks are more likely to support family members outside of their home, which may reduce a family’s ability to save.¹⁰

III. Conclusion

Voluntary individual accounts have been proposed by some as a means to increase retirement income of the elderly. On the basis of participation in IRAs, 401(k)s, and the TSP, we found that participation increased with earnings across all three plans, and that participation in IRAs and 401(k) plans was higher among males, white workers, and nonwhite minorities. We also found that earnings explained much of the variation in participation by gender but less of the variation by race.

Chart 4.—Similar 401(k) participation rates for men and women when earnings held constant



Source: U.S. Department of Labor, tabulations of the Employee Benefits Supplement to the April 1993 Current Population Survey.

Table 2.—Participation in 401(k) plans, by gender and employment status, 1993

[In percent]		
Employment status	Men	Women
Total.....	69	60
Part time.....	39	40
Full time.....	70	62

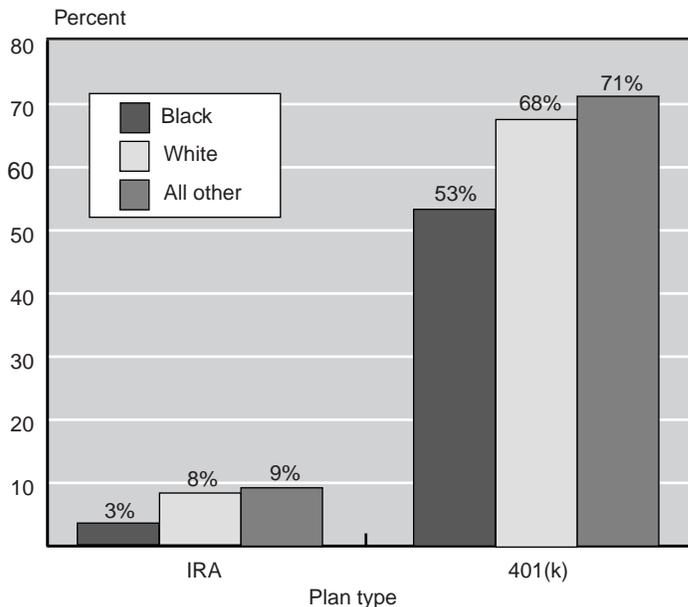
Source: U.S. Department of Labor, *Pension and Health Benefits of American Workers: New Findings from the April 1993 Current Population Survey*, 1994.

Certainly, whether or not voluntary participation in individual accounts would resemble participation in IRAs, 401(k)s, or the TSP depends on the similarity between any proposed individual account plans and existing ones. Two of the most notable differences between any proposed voluntary individual accounts and the retirement plans examined in this paper are the potential number of participants, and earnings, of the covered population. Although the retirement plans discussed herein may have millions of participants, a national voluntary individual account plan is likely to be much larger in scale, and the potential universe may be all workers. This is likely to have important administrative implications for a voluntary individual account system.

Furthermore, the earnings of Social Security covered workers as a whole are much lower than the earnings of those participating in 401(k)s and the TSP: in 1997, median earnings for Social Security covered workers were \$17,460,¹¹ compared with \$38,642 for TSP participants.¹² Although 401(k) data were not available for 1997, median earnings for 401(k) participants in 1993 were \$30,472.¹³ This, too, has important implications for a voluntary account system.

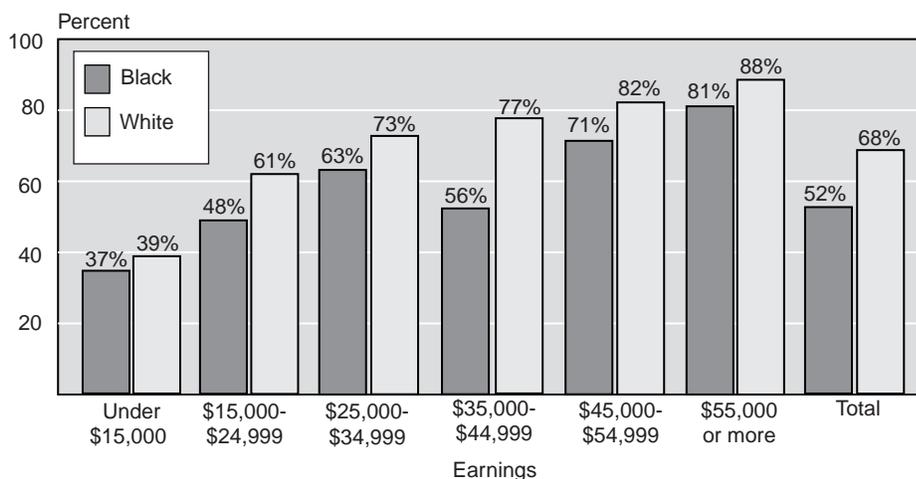
Nevertheless, while individuals participating in all three plans tend to have higher earnings, significant numbers of eligible lower earning individuals do participate in 401(k) plans as well as the TSP. Participation in 401(k)s and the TSP was 55 and 57 percent, respectively, among workers earning \$10,000 to \$20,000 a year. Thus, it may be desirable to determine the components of these two programs that lead to higher participation among lower earning workers and replicate them in a national voluntary system. These factors may include the fact that the programs are employer-sponsored and are thus accompanied by payroll deduction, in most cases by an employer match, and often by extensive investor education.

Chart 5.—401(k) and IRA participation among eligible workers by race¹



¹The 401(k) data are from 1993; IRA data are from 1992. Source: U.S. Department of Labor, *Pension and Health Benefits of American Workers: New Findings from the April 1993 Current Population Survey*, 1994; and Employee Benefit Research Institute, *Databook on Employee Benefits*, 4th ed., 1997, table 15.4.

Chart 6.—Participation in 401(k) plans among eligible workers, by earnings, and race, 1993



Source: U.S. Department of Labor, tabulations of the Employee Benefits Supplement to the April 1993 Current Population Survey.

In addition, participation could also depend on a host of other factors, including the existence and nature of tax deductions or other financial incentives offered by the government to encourage participation, investment options available under the account, and the existence of other investment options available to a worker or family.

Notes

¹ This paper does not examine contribution amounts or plan distributions.

² Nonprofit sectors include private schools, nonprofit hospitals, and other tax-exempt organizations.

³ William E. Even and David A. MacPherson, “Factors Influencing Participation and Contribution Levels in 401(k) Plans,” Department of Labor, Pension and Welfare Benefits Administration, May 1997.

⁴ Robert L. Clark and Sylvester J. Schieber, *Factors Affecting Participation and Contribution Levels in 401(k) Plans*, Washington, DC: Watson Wyatt Worldwide, May 1996.

⁵ U.S. General Accounting Office, “401(k) Pension Plans: Loan Provisions Enhance Participation But May Affect Income Security for Some,” October 1997. GAO/HEHS-98-5.

⁶ U.S. Department of Labor, *Pension and Health Benefits of American Workers: New Findings from the April 1993 Current Population Survey*, 1994.

⁷ Employee Benefit Research Institute, *EBRI Databook on Employee Benefits*, 4th ed., 1997. The Small Business Job Protection Act, or the Pension Simplification Act of 1996, extended deductible IRA eligibility to spouses not in the workforce.

⁸ Comparable data for the TSP are not available. “All other races” consists primarily of Asians but includes Indians, American Indians, and Alaskan Natives. Hispanics are considered an ethnic designation and may be of any race.

⁹ Francine D. Blau and John W. Graham, “Black-White Differences in Wealth and Asset Composition,” *Quarterly Journal of Economics*, vol. 105, May 1990, pp. 321-339.

¹⁰ Michelle Singletary, “When Family Is First, Investing Is Second,” *The Washington Post*, May 16, 1999, p. H-1. The survey by Yankelovich Partners was commissioned by Ariel Capital Management and Charles Schwab and Company.

¹¹ Unpublished data from the Social Security Administration, Office of the Chief Actuary.

¹² Federal Retirement Thrift Investment Board, *Analysis of 1997 Thrift Savings Plan Participant Demographics*, December 1998, p. C-1.

¹³ U.S. Department of Labor, *Pension and Health Benefits of American Workers*, p. C-15.